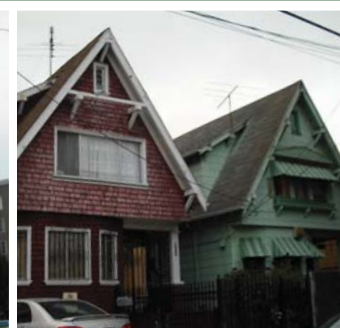
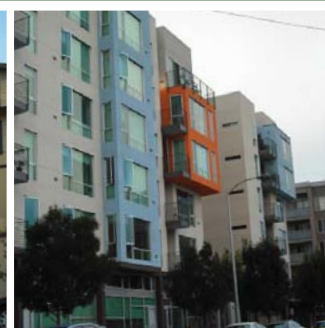
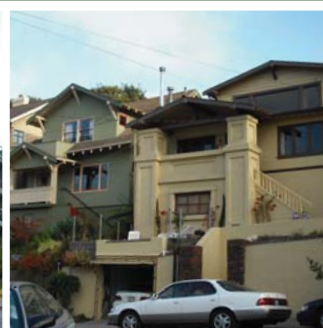




City of Oakland Housing Element



January 1, 2007-June 30, 2014

INITIAL STUDY

Draft

September 21, 2009

City of Oakland Housing Element



January 1, 2007-June 30, 2014

INITIAL STUDY

Draft

Prepared for:

City of Oakland
Community and Economic Development Agency
Planning Division
250 Frank H. Ogawa Plaza, Suite 3515
Oakland, CA 94612
(510) 238.3550

Prepared by:



353 Sacramento Street, Suite 1000
San Francisco, CA 94111
(415) 362.1500

September 21, 2009

**NOTICE OF PREPARATION (NOP) OF A
DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)
CITY OF OAKLAND GENERAL PLAN – HOUSING ELEMENT UPDATE 2007-2014**

The Oakland Community and Economic Development Agency, Planning and Zoning Division, is preparing a Draft Environmental Impact Report (EIR) for the City of Oakland General Plan – Housing Element Update 2007-2014 as identified below, and is requesting comments on the scope and content of the EIR. The EIR will address the potential physical, environmental effects for each of the environmental topics outlined in the California Environmental Quality Act (CEQA).

The City has prepared an Initial Study that identified areas of probable environmental effects. The Initial Study is available at the Planning Division office, City of Oakland, Community and Economic Development Agency, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA 94612. The Initial Study may also be reviewed at the following website: <http://www.oaklandnet.com/government/ceda/revised/planningzoning/MajorProjectsSection/environmentaldocuments.html>.

The City of Oakland is the Lead Agency for the Project and is the public agency with the greatest responsibility for approving the Project or carrying it out. This notice is being sent to Responsible Agencies and other interested parties. Responsible Agencies are those public agencies, besides the City of Oakland, that also have a role in approving or carrying out the Project. When the Draft EIR is published, it will be sent to all Responsible Agencies and to others who respond to this NOP or who otherwise indicate that they would like to receive a copy. Responses to this NOP and any questions or comments should be directed in writing to: Devan Reiff, Project Manager, City of Oakland, Community and Economic Development Agency, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA 94612; (510) 238-3550 (phone); (510) 238-6538 (fax); or e-mailed to DReiff@oaklandnet.com. Comments on the NOP must be received at the above mailing or e-mail address **by 5:00 p.m. on October 21, 2009**. Please reference file number ER08-0009 in all correspondence. In addition, comments may be provided at the EIR Scoping Meeting to be held before the City Planning Commission. Comments should focus on 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 EIR's purpose to provide useful and accurate information about such factors.

PUBLIC HEARINGS:

- 1) The City Planning Commission will conduct a public scoping hearing on the Draft EIR for the project on October 7, 2009, at 6 p.m. in Hearing Room One, City Hall, 1 Frank H. Ogawa Plaza.
- 2) The Landmarks Preservation Advisory Board will conduct a public scoping hearing on the historic resources issues identified in the Initial Study for the project on October 19, 2009, at 6 p.m. in Hearing Room One, City Hall, 1 Frank H. Ogawa Plaza.

PROJECT TITLE: City of Oakland General Plan – Housing Element Update 2007-2014

PROJECT LOCATION: The City of Oakland (City) is located in northern Alameda County (County) on the east side of the San Francisco Bay (Bay). The City is bounded by the Cities of Berkeley and Emeryville to the north, the City of San Leandro to the south, the East Bay Regional Park District to the east, and the City of Alameda to the west. The City is approximately 15 miles east of the City of San Francisco and 90 miles southwest of the City of Sacramento. Interstate 80 (I-80) provides access to the City from the northwest, while Interstates 580 (I-580) and 980 (I-980) provide access from the southeast.

PROJECT SPONSOR: City of Oakland, Community and Economic Development Agency

EXISTING CONDITIONS: The City encompasses 56 square miles of land and 24 square miles of water, and is mostly urbanized. The City contains a wide range of residential, commercial, industrial, public, and open space land uses. Residential areas vary from very dense neighborhoods, exceeding 25,000 persons per square mile, to semi-rural neighborhoods with one-acre lots. The City has an estimated population of 420,183.

The 1998 LUTE EIR identified over 100 sites in the City of Oakland as being on the State's "Cortese List" of hazardous waste sites. The California State Regional Water Quality Control Board "GeoTracker" database identifies underground hazardous substance storage tanks on 23 of the 224 opportunity sites listed under *2007-2014 Housing Element*. Of the 23, there are three sites with a status of "remediation" and 20 sites with a status of "site assessment."

PROJECT DESCRIPTION: In accordance with State law, the City of Oakland proposes to adopt a General Plan Amendment (GPA) for the City of Oakland General Plan - Housing Element Update 2007-2014 (proposed project or *2007-2014 Housing Element*) as a part of the City's *General Plan*. According to the ABAG RHNA numbers, the City must accommodate 14,629 new housing units between January 2007 and June 2014 to meet its "fair share" of the State's housing need. Since January 1, 2007, 1,128 units have been constructed. In addition to the units built or under construction, the *2007-2014 Housing Element* identifies that between January 2007 and August 2008, 4,442 market-rate units had planning approvals (entitlements) and 563 affordable units were funded, but neither group has started construction. During the same time period, there were 7,022 market rate units and 48 affordable units in pre-development.

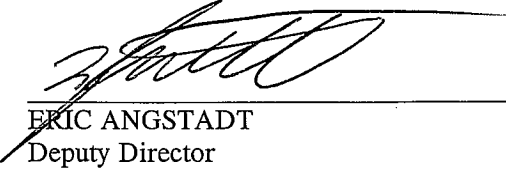
Based on housing unit construction and approvals since January 1, 2007, the City has already committed to developing 90 percent of the units needed to satisfy the RHNA requirement in the planning period. The remaining 1,426 units required to meet the RHNA allocation of 14,629 units could be accommodated on City-identified housing opportunity sites. Approximately 225 housing opportunity sites are located throughout the City, divided into the 12 Planning Areas.

PROBABLE ENVIRONMENTAL EFFECTS:

The Initial Study screened out environmental factors that will not be further studied in the Draft EIR. These factors include: aesthetics, agricultural resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water, land use and planning, mineral resources, population and housing, public services, recreation, and utilities. However, the Draft EIR will address the potential environmental effects for air quality, climate change, noise, and transportation. All other impacts would be mitigated to less-than-significant levels.

The Draft EIR will also examine a reasonable range of alternatives to the Project, including the CEQA-mandated No Project Alternative, and other potential alternatives that may be capable of reducing or avoiding potential environmental effects.

9/21, 2009
File No.: ER08-0009


ERIC ANGSTADT
Deputy Director
Community and Economic Development Agency
Environmental Review Officer

City of Oakland General Plan – Housing Element Update 2007-2014

I.	Project Information	1
	Environmental Factors Potentially Affected.....	13
	Determination	14
	Purpose and Organization of this Initial Study.....	15
II.	Evaluation Of Environmental Impacts	17
I.	Aesthetics, Shadow, and Wind	19
II.	Agriculture	41
III.	Air Quality	43
IV.	Biological Resources	45
V.	Cultural Resources.....	63
VI.	Geology And Soils	77
VII.	Hazards and Hazardous Materials.....	95
VIII.	Hydrology And Water Quality.....	119
IX.	Land Use	147
X.	Mineral Resources	161
XI.	Noise	163
XII.	Population and Housing.....	165
XIII.	Public Services	175
XIV.	Recreation	189
XV.	Transportation/Traffic.....	195
XVI.	Utilities and Service Systems	197
XVII.	Mandatory Findings of Significance	219
III.	Initial Study Authors, Consultants, and Project Sponsor Team.....	223

Appendix A – Standard Conditions of Approval as of 9-17-08

List of Figures

Figure 1	Regional Location.....	2
Figure 2	Housing Opportunity Sites and Planning Area Boundaries	10
Figure 3	Visual Landmarks.....	21
Figure 4	Visual Gateways and Scenic Routes	23
Figure 5	Natural Communities.....	46
Figure 6	Sensitive Species and Critical Habitat	50
Figure 7	Selected Areas with High Concentration of Designated Historic Properties	65
Figure 8	Regional Geologic Map.....	78
Figure 9	Geologic Hazards	82
Figure 10	Fire Hazards	96
Figure 11	Public Safety	98
Figure 12	Hazardous Materials.....	99
Figure 13	Flood Hazards	143

List of Tables

Table 1	Actual Housing Production and Balance of Units to be Provided	8
Table 2	Designated Beneficial Uses of Surface Waters Within the City of Oakland	120
Table 3	City of Oakland and Alameda County Population.....	166
Table 4	City of Oakland and Alameda County Households.....	167
Table 5	City of Oakland Jobs to Employed Residents and Jobs to Housing Ratios.....	169
Table 6	East Bay Municipal Utility District Water Demands (mgd)	203
Table 7	EBMUD Water Supply and Demanda in Normal, Dry, and Multiple Dry Years	206
Table 8	Projected Demands from cities of Oakland, Alameda, Berkeley (Central) (mgd)	213

INITIAL STUDY AND ENVIRONMENTAL REVIEW CHECKLIST

California Environmental Quality Act (CEQA)

I. PROJECT INFORMATION

1. Project Title:

City of Oakland General Plan – Housing Element Update 2007-2014

2. Lead Agency Name and Address:

City of Oakland
Community and Economic Development Agency, Planning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

3. Contact Person and Phone Number:

Devan Reiff, AICP
Planner II
(510) 238-3550
Email: dreiff@oaklandnet.com

4. Project Location:

The City of Oakland (City) is located in northern Alameda County (County) on the east side of the San Francisco Bay (Bay) (See Figure 1, Regional Location). The City is bounded by the Cities of Berkeley and Emeryville to the north, the City of San Leandro to the south, the East Bay Regional Park District to the east, and the City of Alameda to the west.

The City is approximately 15 miles east of the City of San Francisco, and 90 miles southwest of the City of Sacramento. Interstate 80 (I-80) provides access to the City from the northwest, while Interstates 580 (I-580) and 980 (I-980) provide access from the southeast.

5. Project Sponsor's Name and Address:

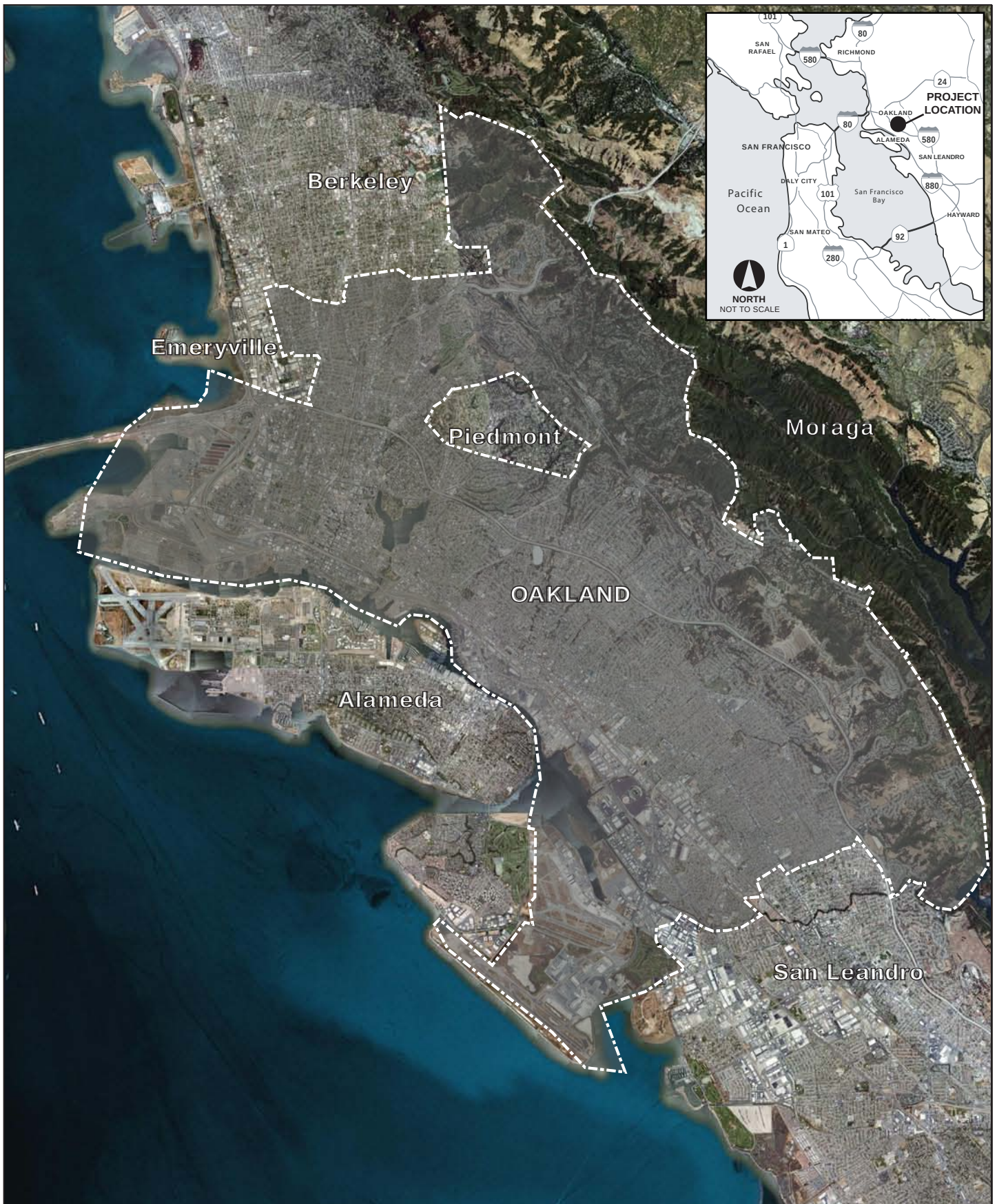
City of Oakland (see #2 above for address)

6. General Plan Designation:

Citywide – All General Plan Designations

7. Zoning:

Citywide – All Zoning Designations



8. Description of Project:

Introduction

In accordance with State law, the City of Oakland proposes to adopt a General Plan Amendment (GPA) for the City of Oakland General Plan – Housing Element Update 2007-2014 (proposed project or *2007-2014 Housing Element*) as a part of the City's *General Plan*. An updated Housing Element is required of each city in the State of California (State) to address the housing needs of all residents, in all income levels, over the planning period (2007-2014). The City's previous Housing Element for the 1999-2006 planning period was adopted on June 15, 2004. The *2007-2014 Housing Element* identifies opportunities to improve and expand the City's housing stock; it does not, however, result in the actual new construction or revitalization of housing units in the City.

The City's current draft of the *2007-2014 Housing Element* may be viewed and printed by going to the City's web site at <http://www.oaklandnet.com/government/hcd/policy/he2009.html>. A copy of the *2007-2014 Housing Element* may also be obtained at the City's Community and Economic Development Agency (see contact information under Items 2 and 3 on page 1 of this Checklist). As previously indicated, the contact person for this project is Devan Reiff, Planner II, who can be contacted at (510) 238-3550 or dreiff@oaklandnet.com.

Initial Study

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA), which can be found in the State Public Resources Code (PRC), Section 21000 et. seq., and the *CEQA Guidelines*, found in State Code of Regulations, Title 14, Chapter 3, Section 15000 et. seq., as amended.

The Initial Study (IS) identifies the potential environmental impacts, and associated Standard Conditions of Approval and Mitigation Measures designed to substantially reduce/eliminate such impacts, resulting from adoption and implementation of the City's *2007-2014 Housing Element*, including the remaining 13,501 housing units needed to be built in order to meet the RHNA target (14,629 total less 1,128 built).

The Lead Agency for the *2007-2014 Housing Element* is the City of Oakland. The decision-making body is the City Council.

IS Approach

This IS evaluates the environmental impacts of the *2007-2014 Housing Element*. This document focuses on the overall physical environmental effects resulting from adoption and implementation of the Housing Element in the City, as well as Standard Conditions of Approval and Mitigation Measures designed to substantially reduce/eliminate such impacts.

The analysis contained in this IS does not examine the effects of individual, site-specific projects, which may occur within the overall umbrella of this program in the future.

General Plan elements, such as the Housing Element, include proposed policies and implementation actions or programs, some of which are intended to be general, with details to be worked out during implementation. For example, the Housing Element identifies potential locations within City where additional housing units can be constructed, called “Housing Opportunity Sites.” As of the date of this IS, there are no applications with the City to develop any of these sites into housing, so details on the intensity, orientation, massing, access, and other site-specific features of a potential build out on these sites is, at best, informed speculation. Accordingly, many of the impacts associated with implementation of the *2007-2014 Housing Element* on sites where there are currently no development applications can only be described in general terms.

The goal of developing 14,629 dwelling units under the Housing Element would be subject to the goals, policies, and programs of the City’s *General Plan* and its Conformity Guidelines; the City’s Municipal Code (which includes the City’s Planning and Building Codes); the City’s Standard Conditions of Approval (SCA) (included as Appendix A, Standard Conditions of Approval, of this document); and the State’s redevelopment laws, which permit the creation of defined redevelopment areas where property taxes assessed in the district are spent on affordable housing citywide and redevelopment area-specific improvements. All of these other adopted policies and regulations are assumed to apply to the Housing Element and serve to address many of the impacts that might otherwise occur in the City.

Project Overview

The purpose of a Housing Element is to identify current and projected housing needs, and set goals, policies, and programs to address those needs. The *2007-2014 Housing Element* is an update to the Housing Element of the City’s *General Plan*. The current Housing Element was adopted by the City Council, and was subsequently certified as legally adequate by the State Department of Housing and Community Development (HCD), in 2004. The *2007-2014 Housing Element* is a statement by the City of its current and future housing needs and proposed actions to facilitate the provision of housing to meet those needs at all income levels, and presents a comprehensive set of housing policies and actions between January 1, 2007 and June 30, 2014. The *2007-2014 Housing Element* satisfies the requirements of State law, and is consistent with the other elements of the City’s *General Plan*, adopted in 1998. The City’s housing policies and strategies have been developed within a broader regulatory and policy context that includes these major initiatives over the last few years:

- *Consolidated Plan (May 2005)*. The City’s affordable housing strategy is outlined in the Consolidated Plan for Housing and Community Development prepared in May 2005. The Consolidated Plan – which is required as part of the City’s federally-funded housing and community development programs – sets forth the City’s needs, market conditions,

strategies, and actions for addressing the housing needs of very low and low income households.

- *Blue Ribbon Commission on Housing (September 2007).* A Blue Ribbon Commission was devised by the City Council in 2006 to develop recommendations for a comprehensive housing strategy to ensure that housing (both rental and homeownership) is affordable to all income levels within the City.
- *Mayor's Task Force on Housing (February 2008).* In February 2008, Mayor Dellums proposed a comprehensive housing policy based on findings from the Blue Ribbon Commission; however, note that it has not yet been implemented. Further discussion will continue during the Housing Element planning period.

Project Objectives

The *2007-2014 Housing Element* is focused on the following eight goals that provide direction and guidance for meeting the City's housing needs through 2014:

- *Goal 1: Provide adequate sites suitable for housing for all income groups.* This goal is designed to encourage the City to maintain an adequate supply of land to meet the regional housing share under the ABAG Regional Housing Needs Determination, specifically, targeting development and marketing resources in the downtown area, and along the City's major corridors, which are easily accessible to transit, jobs, shopping, and services and encouraging the re-use of industrial and commercial buildings for joint living quarters and working spaces.. The City will also support the construction of secondary units in single-family zones and recognize these units as a source of affordable housing, and provide for the inclusion of mobile homes and manufactured housing in appropriate locations. Consistent with the *General Plan Land Use and Transportation Element*, adopted in 1998, the City will review and revise the residential development regulations with the intent of encouraging and sustaining a diverse mix of housing types and densities throughout the City for all income levels.
- *Goal 2: Promote the development of adequate housing for low- and moderate-income households.* As stated in the title, this goal is designed to encourage the financing for development of affordable housing for low- and moderate-income households. The City's financing programs will promote a mix of housing types, including homeownership, multifamily rental housing, and housing for seniors and persons with special needs and develop and promote programs and mechanisms to expand opportunities for lower-income households to become homeowners. The City will also continue to refine and implement programs to permit projects to exceed the maximum allowable density set by zoning, if they include units set aside for occupancy by very low-, low-, and moderate-income households and/or seniors, and consider a comprehensive housing policy that addresses concerns from all constituents.
- *Goal 3: Remove constraints to the availability and affordability of housing for all income groups.* This goal is designed to promote intergovernmental coordination in review and approval of residential development proposals when more than one governmental agency has jurisdiction. This goal would also encourage the City to continue to implement permit processes that facilitate the provision of housing and annually review and revise permit approval processes, allow flexibility in the application of zoning, building, and other regulations, and reduce the cost of development through reasonable fees and improvement standards.

- *Goal 4: Conserve and improve older housing and neighborhoods.* This goal would work in several ways to Conserve and improve older housing and neighborhoods. First, the City will abate blighting conditions through a combination of code enforcement, financial assistance, and public investment. Support the preservation and rehabilitation of existing housing stock with an emphasis on housing occupied by senior citizen, disabled, and low-income populations. Second, by encouraging the relocation of structurally sound housing units scheduled for demolition to compatible neighborhoods, when appropriate land can be found. And third, by providing varieties of loan programs to assist with the rehabilitation of owner-occupied and rental housing for very low and low-income households and assist senior citizen and disabled population with housing rehabilitation so that they may remain in their homes.
- *Goal 5: Preserve affordable rental housing.* The City will seek to preserve the affordability of subsidized rental housing for lower-income households that may be at-risk of converting to market rate housing by working with owners of assisted projects that have substantial needs for capital improvements to maintain the use of the properties as decent affordable housing and continuing to administer programs to protect existing tenants from unreasonable rent increases. The City will also seek mechanisms for protecting and improving the existing stock of residential hotels, which provide housing of last resort for extremely low-income households and continuing to use regulatory controls to limit the loss of housing and rental housing units due to their conversion to non-residential use.
- *Goal 6: Promote equal housing opportunity.* The City will actively support efforts to provide education and counseling regarding housing discrimination, to investigate discrimination complaints, and to pursue enforcement when necessary. The City will also provide reasonable accommodations to persons with disabilities in access to public facilities, programs, and services and encourage future regional housing allocations by ABAG to avoid over-concentration of low-income housing in communities with high percentages of such housing. The City will work to promote fair lending practices throughout the City to ensure that low-income and minority residents have fair access to capital resources needed to acquire and maintain housing.
- *Goal 7: Promote sustainable development and sustainable communities.* The City will develop and promote programs to foster the incorporation of sustainable design principles, energy efficiency and smart growth principles into residential developments and encourage the incorporation of energy conservation design features in existing and future residential development beyond minimum standards required by State building code. The City will also continue to direct development toward existing communities and encourage infill development at densities that are higher than—but compatible with—the surrounding communities and work with developers to encourage construction of new housing that, where feasible, reduces the footprint of the building and landscaping, preserves green spaces, and supports ecological systems. The City will encourage linkage of land use planning with public health planning as a way to improve the health of Oakland's residents, reduce personal and government health costs and liabilities, and create more disposable income for housing.
- *Goal 8: Increase public access to information through technology.* As part of a comprehensive update to the City's Permit Tracking System, the City will increase public access to information on City policies, programs, regulations, permit processes, and the status of specific parcels through electronic means and expand the availability of information regarding meetings, hearings, programs, policies and housing-related issues through development and improvement of its web site. The City will also update the it's

Geographic Information System (GIS) to provide more accurate and user-friendly access to information about parcels and neighborhoods.

In fulfilling these goals, the primary objectives of the *2007-2014 Housing Element* are to 1) make sure there is consistency between the *2007-2014 Housing Element* and the other elements of the City's *General Plan*, and 2) meet the requirements of State law by providing the following:

- an assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs; this includes identifying a zone or zones where emergency shelters are allowed as a permitted use without a conditional use permit or other discretionary permit (known as "SB2");
- a statement of the community's goals, quantified objectives, and policies relative to the maintenance, preservation, improvement, and development of housing;
- an inventory of developable sites capable of accommodating development of housing for a range of income types to meet the City's share of the Regional Housing Need Allocation (RHNA); and
- a program which sets forth a schedule of actions through 2014 to implement the policies and achieve the goals and objectives of the housing element.

Regional Housing Need Allocation

Under State law, new housing construction need is determined, at a minimum, through a RHNA process.¹ In the RHNA process, the State HCD determines the amount of housing needed for all income groups in each region, based on existing housing need and expected population growth. In April 2007, the State HCD determined that, at a minimum, the nine-county Bay Area needed to provide 214,500 units between 2007 and 2014 to satisfy regional demand.

Each city's share of regional housing demand is based on a plan prepared by the Association of Bay Area Governments (ABAG), the Regional Housing Needs Determination, which was adopted in May 2008. The City (along with all other cities and counties in the State) must plan to accommodate its share of the housing need of persons at all income levels. Under the ABAG plan, the City must accommodate 14,629 new housing units between January 2007 and June 2014 to meet its "fair share" of the State's housing need. The allocation is equivalent to an annual need of 1,951 housing units for the seven-and-a-half-year planning period (2007-2014).

Of the 14,629 new housing units required in Oakland's RHNA:

- 1,900 should be affordable to very low income households (those making below 50 percent of the median area income);

¹ California Government Code, Section 65584.

- 2,089 should be affordable to low income households (those making below 80 percent of the median area income);
- 3,142 should be affordable to moderate income households (those making below 120 percent of median area income); and
- 7,489 should be market rate units (or “above moderate income units”).

Planned and Proposed Housing Production

The proposed project includes plans and implementation strategies to meet the City’s RHNA of 14,629 units of varying affordability. The City intends to meet this target as shown in Table 1.

Table 1		
Actual Housing Production and Balance of Units to be Provided		
	# units	# units
Regional Housing Needs Allocation	14,629	
Units Constructed (1/1/07-6/08)		1,128
Units with Planning Approvals (entitlements or funded with subsidies)		5,005
Units Planned (site acquisition or pre-development)		7,070
Subtotal		13,203
Remaining units to be accommodated through 2014	1,426	

Source: Public Review Draft Housing Element, Table 4-2, 2009.

Each of the categories of housing production indicated in Table 1 is described below.

Units Constructed. Since January 1, 2007, 1,128 units have been constructed, satisfying eight percent of the City’s RHNA. These figures include:

- 115 units of market rate and affordable housing, with a building permit that has been “finalized” by the City’s Building Services division; and
- 1,013 units of market rate or affordable housing that is under construction (with a building permit issued by the City’s Building Services division).

It should be noted that these units are part of the project and help satisfy the Housing Element’s RHNA target; however, under CEQA, these already constructed units are regarded as part of the existing built environment and are, thus, part of the setting against which new units (the remaining 13,501 units needed to meet the RHNA target) would be evaluated for their impacts.

Units with Planning Approvals. In addition to the units built or under construction, the *2007-2014 Housing Element* identifies that between January 2007 and August 2008, 4,442 market-rate units had planning approvals (entitlements) and 563 affordable units were funded, but neither group has started construction. These 5,005 units represent 34 percent of the RHNA.

Units Planned. During the same time period, there were 7,022 market rate units and 48 affordable units in pre-development, meaning either with a formal zoning pre-application on file with the City's Planning and Zoning Division, or, in the case of the affordable housing units, with preliminary funding commitments or site acquisition assistance from the City. These 7,070 units make up 48 percent of the RHNA.

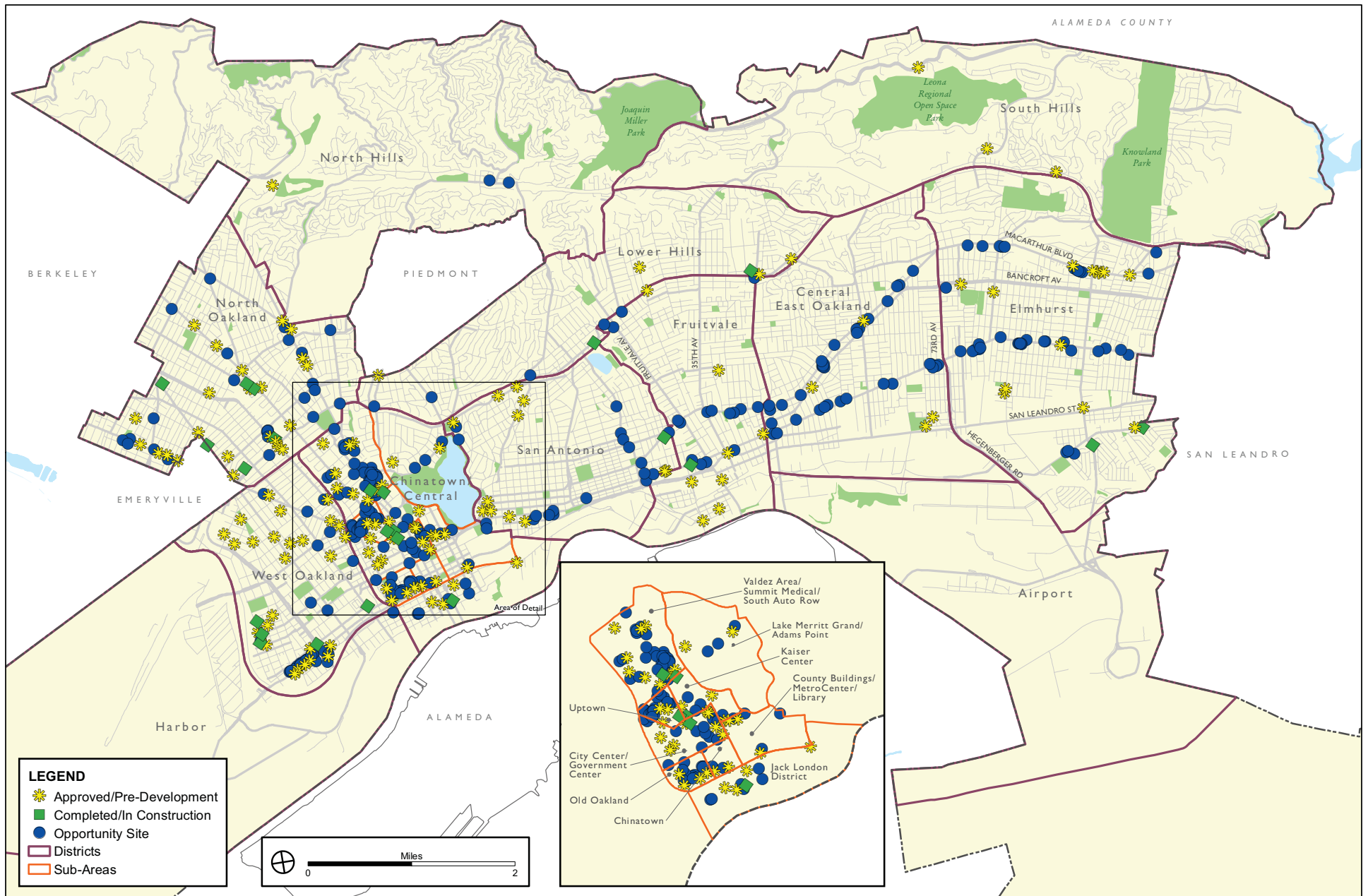
Remaining Units. Based on housing unit construction and approvals since January 1, 2007, the City has already committed to developing 90 percent of the units needed to satisfy the RHNA requirement in the planning period. The remaining 1,426 units required to meet the RHNA allocation of 14,629 units could be accommodated on City-identified housing opportunity sites. The housing opportunity sites, illustrated in Figure 2, Housing Opportunity Sites and Planning Area Boundaries, could accommodate up to 10,190 units. Nearly 100 percent of the City's development capacity consists of higher density housing sites (densities exceeding 30 du/acre), all of which are located within developed areas already served with needed infrastructure, including sewer, water, stormwater, and transportation facilities.

Figure 2 identifies approximately 225 opportunity sites, divided into the 12 Planning Areas. Development at the housing opportunity sites would not require changes to the City's *General Plan* land use designations. As a result, implementation of the policies, programs, and other actions contained in the *2007-2014 Housing Element* would not change the pattern of development anticipated by the *Land Use and Transportation Element (LUTE)* of the City's *General Plan*.

In sum, the Initial Study identifies the potential environmental impacts, and associated Standard Conditions of Approval and Mitigation Measures designed to substantially reduce/eliminate such impacts, resulting from adoption and implementation of the City's *2007-2014 Housing Element*, including the remaining 13,501 units needed to meet the RHNA target (14,629 total less 1,128 built).

Housing Element Update Process

In February 2009, the City made the draft *2007-2014 Housing Element* available to the public on the City's website, and sent a draft to the State HCD, for preliminary review. A community workshop was held on April 14, 2009 to present the *Housing Element* to residents and members of the for-profit and non-profit housing communities. Following changes requested by HCD, the Revised Public Review draft of the *Element* will be presented at a public hearing of the Oakland City Planning Commission on June 3, 2009. After the Planning Commission recommends the *Housing Element* to the City Council, it will be scheduled for a public meeting before the City Council's Community and Economic Development Committee;



following that committee's recommendation, the City Council will hold a public hearing to consider adopting the *2007-2014 Housing Element*. HCD will then receive the adopted Housing Element, and consider certifying it after a period of review.

Relationship of the Housing Element to the City's General Plan

State law requires that a *General Plan* and its constituent elements "...comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." ² This implies that all elements have equal legal status and no one element is subordinate to any other element. The Housing Element must be consistent with land use goals and policies set forth in the Land Use and Transportation Element (LUTE) of the *General Plan*.

Reliance on Previous CEQA documents

An array of policies and regulations govern the construction and location of new housing in the City. As previously stated, these include the City's *General Plan* and its Conformity Guidelines; the City's Municipal Code; the City's SCA; and the State's redevelopment laws. The City adopted Environmental Impact Reports (EIR) for the *LUTE* and *Historic Preservation Element* in 1998. Separate MNDs were adopted by the City for the *Open Space, Conservation and Recreation Element* (1996), *1999-2006 Housing Element* (2004), *Safety Element* (2004), and *Noise Element* (2005) of the City's *General Plan*. Another relevant and recent CEQA document includes the 2007 EIR for the Bicycle Master Plan. These documents are incorporated by reference into this IS.

9. Surrounding Land Uses and Setting:

The City encompasses 56 square miles of land and 24 square miles of water, and is mostly urbanized. The City is physically defined by the Bay and Estuary to the southwest, and the crest of the Oakland Hills to the northeast. The shoreline extends for 19 miles, from the City of Emeryville to the City of San Leandro. Topography is varied; portions of the City are rolling or hilly, with elevations within the City limits rising from sea level to 1,760 feet at Grizzly Peak.

More than a dozen named creeks traverse the City, generally flowing from the crest of the hills south, to the Bay. It has been modified extensively by past land filling activities and creation of a shipping channel between the City and the City of Alameda. The City also contains a number of lakes, including Lake Merritt, Lake Temescal, and a portion of Lake Chabot. Most of the City's natural hydrology has been altered by urban development, including major flood control project that buried or culverted many of the flatland creeks.

The City includes a number of distinct plant and animal communities. Approximately 20 percent of the land area in the City limits can be characterized as non-urbanized woodland,

² California Government Code, Section 65300.5.

brushland, grassland, or wetland. Most of the City's natural vegetation has been modified, first by redwood logging, then by grazing, agriculture, and planting of non-native species, and finally by urbanization. The City's natural landscape is complimented by an urban landscape that includes yards, street trees, gardens, and "urban" wildlife.³

Most of the City's existing urban development is located on the coastal shelf, near the Bay and Estuary, which varies in width from two to four miles. The City contains a wide range of residential, commercial, industrial, public, and open space land uses. Residential areas vary from very dense neighborhoods, exceeding 25,000 persons per square mile, to semi-rural neighborhoods with one-acre lots. The City has an estimated population of 420,183.⁴

10. Actions/Permits which may be Required, and for which this Document Provides CEQA Clearance, Include without Limitation:

The City's *2007-2014 Housing Element* will be adopted by the City Council following review and recommendation by the City's Planning Commission. Individual housing development projects would be reviewed and approved as required by the procedures of the City's *Planning Code*.

Although the project does not require other public agency approvals, the City is required to submit a draft of the *2007-2014 Housing Element* to the State HCD, per Section 65585 of the State Government Code, and consider the State HCD's findings on the Housing Element before it can be adopted by the City Council as a GPA.

11. Other Public Agencies Interested in the Project:

To date, no other public agencies have expressed interest in the proposed project.

³ City of Oakland. *Oakland General Plan Land Use and Transportation Element*. October 31, 1997. Pages II-1-3.

⁴ 2008 data from the Demographics Research Unit of the State Department of Finance, Table E-5.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages, which will be further studied in the EIR. No other environmental factors will be further studied in the EIR.

- | | | |
|--|--|--|
| ☐ Aesthetics | ☐ Agricultural Resources | ☒ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Geology/Soils |
| ☐ Hazards/Hazardous Materials | ☐ Hydrology/Water Quality | ☐ Land Use/Planning |
| ☐ Mineral Resources | ☒ Noise | ☐ Population/Housing |
| ☐ Public Services | ☐ Recreation | ☒ Transportation/Traffic |
| ☐ Utilities/Service Systems | ☒ Mandatory Findings of Significance | |

DETERMINATION

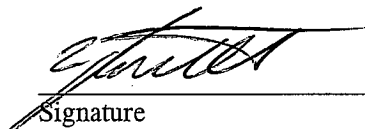
On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment with Uniformly Applied Development Standards imposed as Standards Conditions of Approval, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures and Uniformly Applied Development Standards (imposed as Standard Conditions of Approval) have been imposed on the project. A MITIGATED NEGATIVE DECLARATION will be prepared. ☐

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in earlier document(s) pursuant to applicable legal standards, and 2) has been addressed by mitigation measures or Uniformly Applied Development Standards (imposed as Standard Conditions of Approval) based on the earlier analysis, and, in part, on CEQA Guidelines section 15183. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed, which are limited to air quality, climate change, noise, and transportation. No other environmental factors will be further studied. ☒

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐


Signature

9/21/2009
Date

Eric Angstadt
Deputy Director of the Community and Economic Development Agency
Environmental Review Officer

PURPOSE AND ORGANIZATION OF THIS INITIAL STUDY

The purpose of this Initial Study and Environmental Review Checklist (IS) is to evaluate whether the City of Oakland General Plan – Housing Element Update 2007-2014 (referred throughout the document as “proposed project” or *2007-2014 Housing Element*) would have a significant effect on the environment.

The environmental topics are presented in alphabetical order (i.e., Aesthetics, Agricultural Resources, Air Quality through Utilities).

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II. EVALUATION OF ENVIRONMENTAL IMPACTS

CEQA requires that an explanation of all answers be provided along with this checklist, including a discussion of ways to mitigate any significant effects identified.

Once the lead agency has determined that a particular physical impact may occur, and then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, less than significant with development standards, or less than significant. As defined here, a “Potentially Significant Impact” is appropriate if the significant effect is considered to have a substantial or potentially substantial adverse effect on the environment. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required. This Initial Study has determined that “Potentially Significant Impacts” on air quality, climate change, noise, and transportation could occur as a result of the *2007-2014 Housing Element*. As such, an EIR will be prepared and will further analyze these potential impacts, but no other impacts will be further analyzed.

A “Less than Significant with Mitigation” answer applies where incorporation of a mitigation measure has reduced an effect from a “Potentially Significant Impact” to a “Less-than-Significant Impact” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

A “Less than Significant with Standard Condition of Approval” answer applies where incorporation of a development standard has reduced an effect from a “Potentially Significant Impact” to a “Less-than-Significant Impact.” The City’s Uniformly Applied Development Standards (contained in a separate document) are incorporated into projects as Standard Conditions of Approval regardless of a project’s environmental determination. As applicable, the Standard Conditions of Approval are adopted as requirements of an individual project when it is approved by the City and are designed to, and will, substantially mitigate environmental effects, in part, pursuant to CEQA Guidelines section 15183. In reviewing project applications, the City determines which of the standard conditions are applied, based upon the zoning district, community plan, and the type(s) of permit(s)/approvals(s) required for the project. Depending on the specific characteristics of the project type and/or project site, the City will determine which standard conditions apply to each project; for example, standard conditions related to creek protection permits will only be applied projects on creekside properties.

The Standard Conditions of Approval incorporate development policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection, Stormwater Water Management and Discharge Control Ordinance, Oakland Tree Protection Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, California Building Code, and Uniform Fire Code, among others), which have been found to substantially mitigate environmental effects. Where there are peculiar circumstances associated with a project or project site that will result in significant environmental impacts despite implementation of the Standard Conditions,

the City will determine whether there are feasible mitigation measures to reduce the impact to less than significant levels in the course of appropriate CEQA review (mitigated negative declarations or EIRs). Refer to Appendix A for a complete listing of the City's Standard Conditions of Approval

A "Less-than-Significant Impact" answer applies where the project creates no substantial or potentially substantial adverse effect on the environment.

A "No Impact" answer applies where a project does not create any impact in that category. A "No Impact" answer needs to be adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply doesn't apply to projects like the one under involved. A "No Impact" answer should be explained where it is based on project -specific factors as well as general standards.

Mitigation Measures and Standard Conditions

Project-specific mitigation measures and Standard Conditions of Approval are identified throughout the IS to reduce the effects of significant environmental impacts and: 1) would be included as part of the design, construction, and operations of the proposed project; 2) would be made conditions of approval for the project; and 3) would be subject to the monitoring and reporting requirements of CEQA and the terms of the discretionary approvals of the project.

Mitigation measures, Standard Conditions of Approval, and other applicable federal, State, and local policies are presented throughout this document in order to reduce impacts regarding the following factors to a less-than-significant level: aesthetics, agricultural resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, and utilities. However, impacts regarding air quality (including climate change), noise, and transportation could have a potentially significant impact and will therefore be discussed in more detail in an EIR.

I. AESTHETICS, SHADOW, AND WIND

1. Setting

Visual Character.⁵ Visual character consists of spatial and scale relationships, and the line, form, color, and texture of an area's natural features and man-made elements. Natural features include landforms, street trees, rock outcrops, vegetation, and water bodies. Man-made elements include buildings, structures, parking areas, roads, roadway interchanges and overpasses, above-ground utilities, signs, and lighting fixtures. The City is framed by the ridgeline of the Oakland-Berkeley Hills on the east and the estuary shoreline and Bay on the west. The Oakland-Berkeley Hills, which rise to an elevation of 1,761 feet above sea level, run in a northwest-southeast direction; therefore, the City's topography generally slopes down in a southwesterly direction towards the Bay. Within the City, individual neighborhoods and districts are defined by creeks, ridges, canyons, and hills, and also by railroads, freeways, and major thoroughfares. Topography has had dramatic effects on the overall form of the City.

The City features disparate manmade elements, which result in visual incompatibility in various parts of the City. In Oakland, there are strong distinctions in the visual character in the flatland neighborhoods versus hill neighborhoods and the residential areas versus non-residential areas. In the older residential neighborhoods, there is a contrast between high density development and single-family housing; there are also varying architectural styles, and front yard landscapes and streetscapes. Industrial or commercial uses are interspersed with residential development and there is an appearance of urban blight in some areas. Nonetheless, the City features visually distinctive manmade structures, which are discussed under Scenic Resources below. A discussion of the visually significant natural features in the City is also provided under Scenic Resources below.

The visual character of development in large parts of the City has been further affected by social and economic conditions, including the decline in manufacturing and resulting large number of vacant buildings; the loss of retail trade to the suburbs and resulting large numbers of empty storefronts and underutilized commercial land; and urban problems such as poverty, blight, and graffiti. Those neighborhoods that have retained high visual quality tend to be those with consistent or unique architecture, street trees, interesting topography or views, a clear street pattern, separation from other areas by physical features, or proximity to a landmark or focal point.⁶

Along the waterfront, visual character varies from intense maritime activities at the Port of Oakland to natural scenes along San Leandro Bay. However, in general, Oakland's waterfront has an industrial character, reflecting its long history for shipping, manufacturing, military, and aviation use.

⁵ Visual character information is primarily from: City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997, as updated by changes in circumstances and new information.

⁶ City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997.

Construction of the airport, harbor, and Nimitz Freeway effectively divided the City from the waterfront, creating a physical and visual barrier that persists in many areas today. Several of the proposed housing sites under the *2007-2014 Housing Element* are located in the vicinity of the waterfront.

A discussion of the significant manmade structures in the City is provided under Scenic Resources below.

Scenic Resources. The *LUTE EIR* identifies physical and built features as visual landmarks and contribute to the City's character. Significant built features include the Claremont Hotel, the Mormon Temple, the Bay Bridge, the County Courthouse, container cranes at the Port, the Coliseum, factory towers at Con Agra, and the former Safeway headquarters, Highland Hospital, the Kaiser and Ordway Buildings, the Federal Building, City Hall, the Tribune tower, and the APL tower. Clusters of office buildings on Pill Hill and near the Oakland Airport also provide visual landmarks within the City. Some housing sites are located adjacent to, or within the vicinity of, these significant built features. Refer to Figure 3, Visual Landmarks for the locations of these built features that contribute to the City's character in relation to the housing sites.⁷

Significant natural landmarks in the City include Lake Merritt, Dimond and Leona Canyons (located in the Oakland-Berkeley Hills), the Emeryville Crescent and San Leandro Bayshore, the eucalyptus trees along creek courses, and the redwood groves of the Oakland-Berkeley Hills. Refer to Figure 3 for the locations of these natural landmarks that contribute to the City's character in relation to the housing sites. The hills as a whole provide orientation but appear as a monolithic "wall" from the flatlands below rather than a discrete landmark. Individual peaks and knolls within the Oakland-Berkeley Hills are perceivable from some neighborhoods. These include the "Sugarloaf" beside Merritt College, Dunsmuir Ridge, and the King Estates "mound." Some of the most identifiable Oakland landmarks are not in the City at all but are visible from many neighborhoods and trafficways. These include the UC Berkeley campanile, the cluster of high-rise buildings in Emeryville, the San Francisco skyline, Mount Tamalpais, Treasure Island, and Alcatraz. Some housing sites are located adjacent to, or within the vicinity of, these significant natural landmarks. Refer to Figure 3 for the locations of these natural landmarks that contribute to the City's character in relation to the housing sites.

In addition to the aforementioned scenic resources, trees contribute to the visual framework of the City by providing scale, color, silhouette, and mass. Trees also provide screens and buffers to separate land uses, landmarks of the city's history, and represent a critical element of nature in the midst of urban settlement.⁸ As defined by the City of Oakland's Protected Trees Ordinance, a protected tree is a Coast Live Oak four inches or larger in diameter, measured four and a half feet above the ground, or any other species nine inches in diameter or larger, except Eucalyptus and Monterey Pine trees.

⁷ The *LUTE EIR* also identifies the Leona Quarry as a visual landmark; however, since the adoption of the *LUTE EIR*, Leona Quarry has been developed into a residential community and is no longer an active quarry.

⁸ City of Oakland, City of Oakland Municipal Code, Codified through Ordinance 12899, passed November 3, 2008. (Supplement No. 45), Chapter 12.36, "Protected Trees."

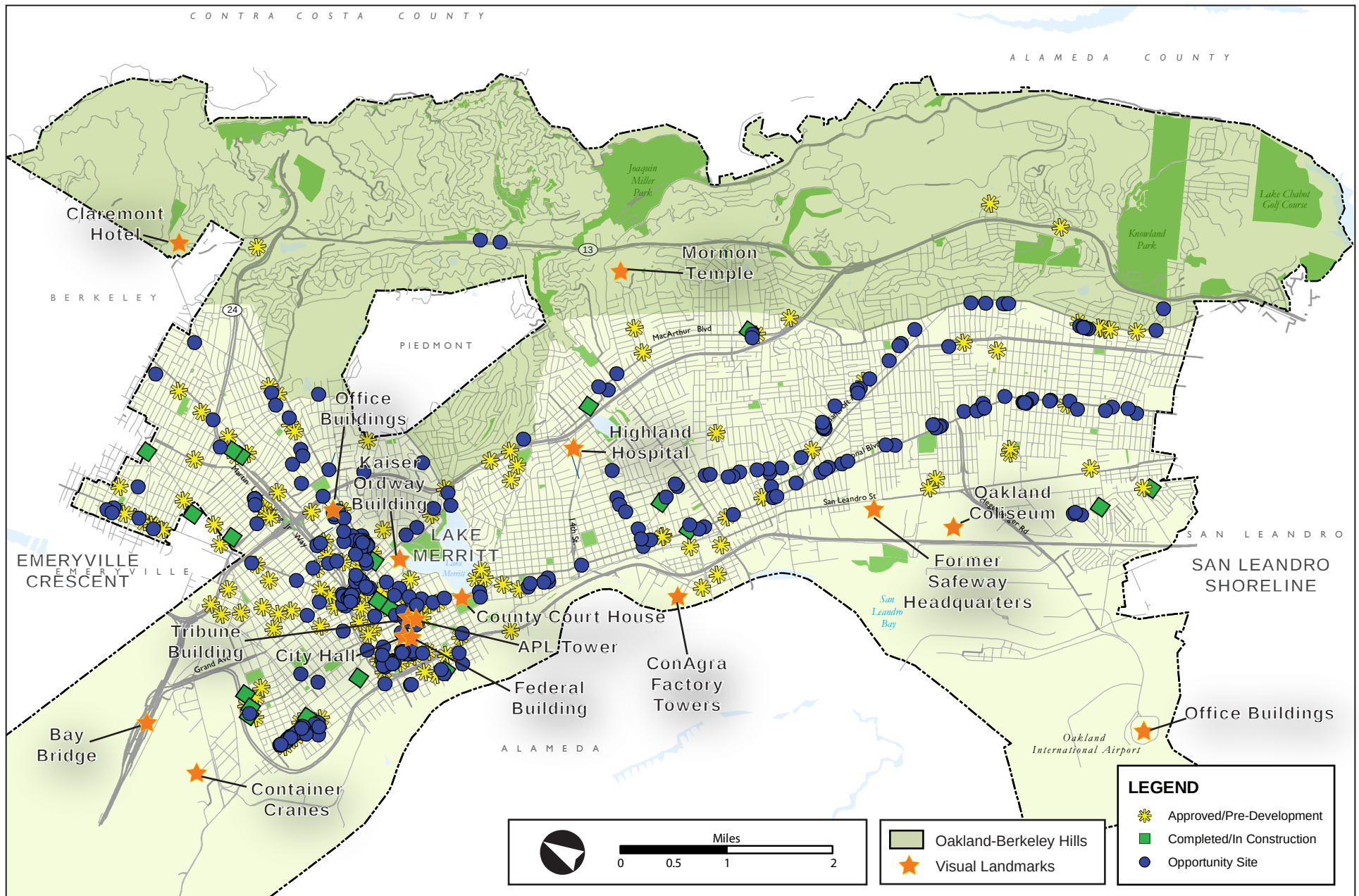


FIGURE 3
Visual Landmarks

100006401

Source: City of Oakland, General Plan Land Use and Transportation EIR, 1997.

City of Oakland General Plan – Housing Element Update 2007-2014

Eucalyptus trees are not protected under the ordinance and no permit is required. Monterey Pines also do not require a permit; however, the species must be verified by city staff prior to removal. A permit must be applied for before removing a protected tree or before the start of construction activities that could damage or destroy a protected tree.⁹

Scenic Views and Vistas.¹⁰ A scenic vista is a location that offers a high quality, harmonious, and visually interesting view. The irregular topography in the City provides opportunity for expansive views. On open hillsides and from roadside clearings, the viewer can see as far south as the Santa Cruz Mountains, as far north as the Napa Valley, and as far west as the Farallones Islands. Along Skyline Ridge, the views are east to Mount Diablo and the rolling hills of the regional parks and watershed lands. From flatland neighborhoods, views take in the broad sweep of hillside on the eastern horizon and features across the water like Mount Tamalpais and San Francisco. Between the shoreline and the hills, there are panoramic views afforded by the City's gently rolling terrain.

The City of Oakland *General Plan*, Open Space and Conservation Element, calls for protection of views, particularly: (a) views of the Oakland-Berkeley 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.

Designated Scenic Routes.¹¹ According to the Scenic Highways Element of the City of Oakland's *General Plan*, scenic routes are distinctively attractive roadways that traverse the City and the visual corridors which surround them. Current and future scenic routes may include officially designated State scenic highways, municipally designated City roadways or informally recognized local scenic byways; however, the City currently has only two designated scenic routes. According to the Scenic Highways Element, the two designated scenic routes in the City of Oakland are the MacArthur Freeway and Skyline Boulevard/Grizzly Peak. The location of these two scenic routes is shown in Figure 4, Visual Gateways and Scenic Routes. The MacArthur Freeway/Route 580, in its entirety, was included in the State Scenic Highway System in 1970 by an act of the State legislature. In turn, the Oakland City Council resolved in 1971 to conduct the appropriate studies to qualify that portion of Route 580 within the Oakland city limits as an "Official Scenic Highway." The MacArthur Freeway/Route 580 is depicted in green in Figure 4.

Skyline Boulevard/Grizzly Peak has been an unofficial scenic route since the 1930s when most of the existing right-of-way was acquired. Possible other designations might include the Grove-Shafter Freeway; the Warren Freeway; Park Boulevard, Joaquin Miller Road, Golf Links Road; the Embarcadero and Oak Street up to and around the lake. The Skyline Boulevard/Grizzly Peak is depicted in blue in Figure 4.

⁹ City of Oakland Public Works Agency, "Protected Tree Ordinance," December 2005, accessed at: <http://www.oaklandpw.com/Page551.aspx>, accessed on: June 24, 2009.

¹⁰ All scenic views and vistas information is from: City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997.

¹¹ All designated scenic routes information is from: Scenic Highways: An Element of the Oakland Comprehensive Plan, City of Oakland, September, 1974.

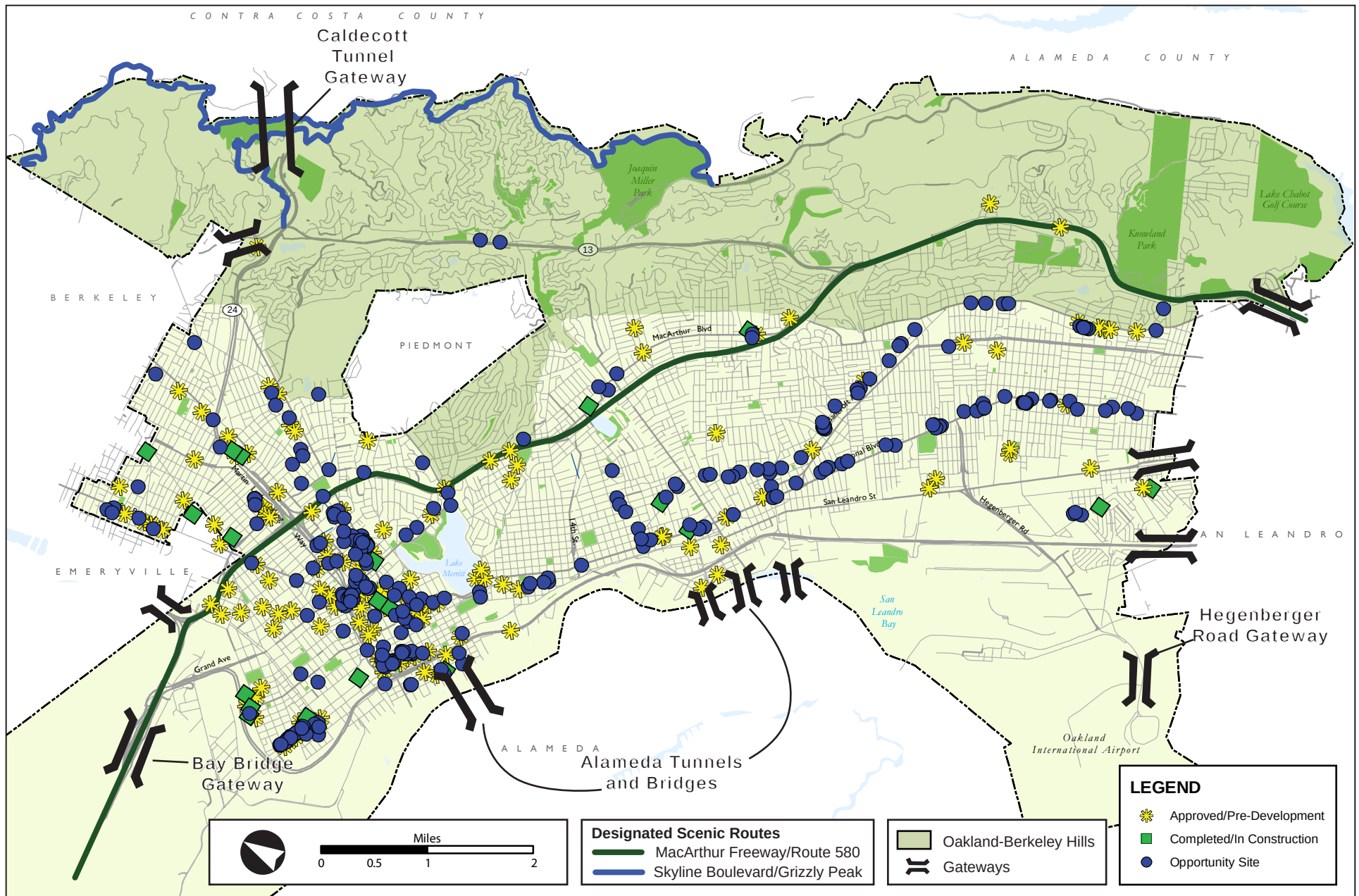


FIGURE 4
Visual Gateways & Scenic Routes

100006401

Source: City of Oakland, General Plan Land Use and Transportation EIR, 1997.

City of Oakland General Plan – Housing Element Update 2007-2014

Gateways. The City's visual features also include a number of "gateways," including the Bay Bridge, the Caldecott Tunnel, the Alameda tunnels and bridges, and freeways entering the City from Emeryville and San Leandro. Other gateways include Hegenberger Road at Oakland Airport and many of the City's arterial streets which enter Oakland from Berkeley on the north and San Leandro on the south. In addition, a "gateway district" is located in the downtown area. These gateways provide impressions of Oakland and an image imparted to visitors. Refer to Figure 4 for a map of the designated gateways in the City.

Solar Collectors. Solar collectors gather the sun's energy, transform its radiation into heat, then transfer that heat to water, solar fluid,¹² or air. The solar thermal energy can be used in solar water-heating systems, solar pool heaters, and solar space-heating systems. Solar collectors can be mounted anywhere but need to face the sun, and be clear of shadows during peak daylight hours. In the northern hemisphere, a south-facing roof is ideal. Solar collectors and passive solar design features are located throughout the City.

Winds. Winds in Oakland are generally from the west, off the Bay and Pacific Ocean.¹³ Wind speeds, in general, are greatest in the spring and summer, and least in fall. Daily variation in wind speed is evident, with the strongest wind in the late afternoon and lightest winds in the morning.

2. Environmental Checklist

The proposed project would have a significant impact on visual quality, shadows, and wind if 'potentially significant' is checked under items Ia-j, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Have a substantial adverse effect on a scenic vista? ¹⁴	☐	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state or locally designated scenic highway?	☐	☐	☒	☐	☐

¹² Solar fluid is typically a mixture of water, propylene glycol, and corrosion inhibitors. The propylene glycol allows the fluid to reach temperatures in excess of 100 degrees Celsius without boiling.

¹³ 200-228 Broadway Mixed-Use Project: Draft Environmental Impact Report, Chapter 3H Shadow and Wind, City of Oakland, February, 2002.

¹⁴ Only impacts to scenic views enjoyed by members of the public generally (but not private views) are potentially significant.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area?	☐	☐	☒	☐	☐
e) Introduce landscape that now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code Section 25980-25986)?	☐	☐	☐	☒	☐
f) Cast shadows that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors?	☐	☐	☐	☒	☐
g) Cast a shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space?	☐	☐	☐	☒	☐
h) Cast shadow on an historic resource, as defined by CEQA 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 Historic Resources or a historical resource survey form (DPR Form 523) with a rating of 1-5?	☐	☐	☐	☒	☐
i) Require an exception (variance) to the policies and regulations in the <i>General Plan</i> , <i>Planning Code</i> , or Uniform Building Code, and the exception causes a fundamental conflict with policies and regulations in the <i>General Plan</i> , <i>Planning Code</i> , and Uniform Building Code addressing the Provision of adequate light related to appropriate uses?	☐	☐	☐	☐	☒
j) Create winds exceeding 36 mph for more than 1 hour during daylight hours during the year? ¹⁵	☐	☐	☐	☒	☐

Notes:

- a. SCA = Standard Conditions of Approval.
- b. MM = Mitigation Measures

¹⁵ The wind analysis only needs to be done if the project's height is 100 feet or greater (measured to the roof) and one of the following conditions exist: a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or b) the project is located in Downtown.

3. Discussion

Comment on Question Ia (Scenic Vistas): A project would have an impact to a scenic vista if it would obstruct views from the vista or introduce visual elements that would dominate or upset the textures, colors, lines, or overall visual quality of the view. Development under the *2007-2014 Housing Element* could have direct impacts to existing scenic vistas. Out of the 14,629 housing units under the *2007-2014 Housing Element*, only 1,426 units have yet to be planned, approved, and constructed, while 12,075 have been approved or are in pre-approval stages. Some of the sites for which approvals have been issued could feature scenic vistas, which could be impacted by the construction of new dwelling units. Private scenic vistas as seen from the housing sites are not protected under the City of Oakland *General Plan*. As such, scenic views seen from the individual housing sites are not discussed further.

The sites for some of the 13,501 housing units proposed under the *2007-2014 Housing Element* have the potential to encroach into a scenic vista and alter the appearance of the vista. As shown in Figure 3 and Figure 4, a few of the housing sites are located within the Oakland-Berkeley Hills, although most of the proposed housing sites are within lower areas west of the hills. Construction of housing within the Oakland-Berkeley Hills would not substantially alter views of the hills as a whole. However, from discrete locations in the flatlands, focused views of the housing sites within the Oakland-Berkeley Hills could be apparent, and potential increased massing and loss of vegetation due to new housing could adversely alter the views.

In addition, several housing sites would be constructed in the downtown area, in the vicinity of Lake Merritt, and along the shoreline. Construction at these sites could impact views of these areas by potentially increasing building mass, which would block views, and removing existing vegetation, which would degrade views of these valued areas.

The panoramic views from the City's designated scenic routes, Skyline Boulevard/Grizzly Peak Road and MacArthur Freeway/Route 580, as shown in Figure 4, could also be impacted from the construction of housing throughout the City. The proposed housing units would include increased massing on currently vacant or underutilized properties, potentially resulting in obstructed or altered views from these scenic routes. In addition, the housing sites could introduce visual elements that could dominate or upset the textures, colors, lines, and overall visual quality of the view.

However, as explained in the Setting, views of the Oakland-Berkeley Hills from the flatlands, downtown, Lake Merritt, and the shoreline, along with panoramic views from Skyline Boulevard/Grizzly Peak Road, are protected by the *General Plan*. Therefore, compliance with the following *General Plan* policies and the Municipal Code would reduce the impacts to less than significant because these policies and conditions protect views and scenic vistas.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* goals and policies with regard to impacts on scenic vistas:

Land Use and Transportation Element

- *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.
- *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.

Open Space, Conservation, and Recreation Element

- *Policy OS-7.3: Waterfront Appreciation.* Promote a greater appreciation of the Oakland waterfront by preserving and enhancing waterfront views.
- *Objective OS-10: Scenic Resource.* To protect scenic views and improve visual quality.
- *Policy OS-10.1: View Protection.* Protect the character of existing scenic views in Oakland, paying particular attention to: (a) views of the Oakland-Berkeley Hills from the flatlands; (b) views of downtown and Lake Merritt; (c) views of the shoreline; and (d) panoramic views from Skyline Boulevard, Grizzly Peak Road, and other hillside locations.
- *Policy OS-10.2: Minimizing Adverse Visual Impacts:* Encourage site planning for new development which minimizes adverse visual impacts and takes advantage of opportunities for new vistas and scenic enhancement.
- *Action OS-10.2.1: Visual Analysis for New Development.* On an on-going basis, the Office of Planning and Building will require visual analysis for new developments which could significantly impact views and vistas.

Scenic Highways Element

- *Specific Policy Related to the MacArthur Freeway 3:* Panoramic vistas and interesting views now available to the motorist should not be obliterated by new structures.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the following titles and chapters of the Oakland Municipal Code with regards to scenic vistas:

- *Title 15: Buildings and Construction*
 - o *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.

Compliance with the *LUTE* policies, *OSCAR Element* policies, Scenic Highway Element policies, and Chapter 15.52 of the Municipal Code would reduce scenic view and vistas impact to less than significant.

Comments to Question Ib (Scenic Resources within Designated Scenic Routes): The MacArthur Freeway/Route 580, in its entirety, was included in the State Scenic Highway System in 1970 by an act of the State legislature. As demonstrated in Figure 1-2, the *2007-2014 Housing Element* proposes

construction on housing sites that are adjacent to MacArthur Freeway/Route 580. Views as seen from this scenic route could be impacted by adding building mass that could obstruct existing views from this freeway, as discussed in more detail under Comments to Question Ia, above. In addition, construction adjacent to a State scenic route could impact scenic resources, such as the removal of mature trees or significant rock outcroppings, thereby impacting the visual quality along the routes. Therefore, the implementation of the *2007-2014 Housing Element* could have direct impacts to designated scenic highways.

However, as mentioned above, prior to issuance of approvals from the City of Oakland, each of the proposed projects on sites adjacent to MacArthur Freeway/Route 580 would be subject to CEQA review, as well as to the City of Oakland Municipal Code, the *LUTE EIR*, the Standard Conditions of Approval, and the goals and policies of the City of Oakland's *General Plan* described below. Given these requirements, the potential impacts to scenic highways resulting from development of projects on any of the approved sites would be mitigated on a site-by-site basis, as would the remaining 1,426 housing units that have yet to be approved. Compliance with *General Plan* objectives and policies and the City's Municipal Code would reduce any impacts on scenic highways to a less-than-significant level. The policies and conditions that would apply to the proposed project are described below.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* goals, policies, and actions with regard to impacts on a state- or locally-designated scenic highway:

Land Use and Transportation Element

- *Policy T6.5: Protecting Scenic Routes.* The City should protect and encourage enhancement of the distinctive character of scenic routes within the City, through prohibition of billboards, design review, and other means.

Open Space, Conservation, and Recreation (OSCAR) Element

- *Action OS3.6.1: Landscape Screening Along Freeways.* Require retention of existing landscape screening as a condition of development approval for any property adjacent to Highway 13, Highway 580, or Highway 24.

Scenic Highways Element

- *Goal:* To protect and enhance the distinctive character of scenic routes within the City.
- *Goal:* To improve Oakland's physical environment and to preserve the natural qualities of Oakland's setting.
- *General Policy 3:* Urban development should be related sensitively to the natural setting.
- *General Policy 4:* High standards for preserving and enhancing natural landforms and vegetation should be established and maintained to regulate all activities related to earthwork and the removal of trees, shrubs, or ground cover.
- *Specific Policy Related to the MacArthur Freeway 2:* Visual intrusions within the scenic corridor should be removed, converted, buffered, or screened from the motorist's view.

- *Specific Policy Related to the MacArthur Freeway 4:* New construction within the scenic corridor should demonstrate architectural merit and a harmonious relationship with the surrounding landscape.

Compliance with the *LUTE* policies, *OSCAR Element* policies, and Scenic Highway Element policies, would result in less-than-significant impacts to scenic resources within designated scenic routes.

Comments to Question 1c (Existing Visual Character): As described under the Setting, development character in the City features disparate structures and is visually incoherent in many areas since residential uses are interspersed with commercial and industrial uses. There are also signs of urban blight in the City. Because visual incoherency is an existing condition, development of new housing would not create new visual incompatibilities nor could new housing substantially exacerbate this existing condition. Also, development of new housing would potentially improve signs of blight in the City. However, construction of the 13,501 units that have yet to be constructed could increase massing and remove vegetation in areas of the City that feature harmonious character and are aesthetically pleasing. Therefore, the implementation of the *2007-2014 Housing Element* could have direct impacts to existing visual quality. Moreover, during construction, streetscape and views from residences along those streets, could be dominated by construction activities and equipment within the housing sites. Although temporary, this impact could be significant due to the proximity of the residences to the demolition sites and the timeline of construction.

In addition to visual incompatibilities, impacts to designated scenic resources would also affect the visual character of an area. The construction of 13,501 housing units throughout the City would directly affect scenic resources identified in the Setting, including significant physical and built features, natural landmarks, or protected trees. Increased building massing under the *2007-2014 Housing Element* could occur in the vicinity of significant landmarks at Lake Merritt, and could potentially detract from the character of Lake Merritt, as well as adjacent landmarks. Construction of housing units, especially within the downtown area, has the potential to be visually incompatible with existing significant structures. Refer to Figure 3 for a map of scenic resources in relation to the housing sites. In addition, housing construction could remove protected trees and other landscaping, which would degrade visual character.

As mentioned above, prior to issuance of approvals from the City of Oakland, housing development would be subject to CEQA review and applicable plans and policies of the City. These plans and policies seek to protect visual character and scenic resources in the City. Given these requirements, the potential impacts to existing visual character resulting from housing development projects on any of the approved sites would be mitigated on a site-by-site basis. In addition, development of the housing sites would require design review (per Municipal Code Chapter 17.136) and would be against applicable design review criteria. Compliance with applicable plans and policies would reduce any impacts on existing visual quality to a less-than-significant level. The applicable policies and conditions are described below.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* goals, objectives, and policies with regard to existing visual character:

Land Use and Transportation Element

- *Policy T6.2: Improving Streetscapes.* The City should make major efforts to improve the visual quality of streetscapes.
- *Policy D1.1: Defining Characteristics of Downtown.* The characteristics that make downtown Oakland unique should be enhanced and used to strengthen the downtown as a local and regional asset.
- *Policy D1.5: Planning for the Gateway District.* New development and rehabilitation in the Gateway district should contribute to greater neighborhood cohesion and identity, emphasizing mixed housing type and urban density residential development.
- *Objective D2: Enhance the visual quality of downtown by preserving and improving existing housing stock and encouraging new, high quality, development.*
- *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 D10.3: Downtown residential areas should generally be within the urban and Central Business District density range.* The height and bulk should be reflective of existing and desired district character, the overall city skyline, and the existence of historic structures or areas.
- *Policy D10.5: Designing Housing.* Housing in the downtown should be safe and attractive, of high quality design, and respect the downtown's distinct neighborhoods and its history.
- *Policy D12.5: Incorporating Art in the Downtown.* Art should be part of the fabric of the downtown, located in public and private facilities, and in public spaces.
- *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 area.
- *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 W12.5: Mitigating Land Use Conflicts.* Incompatibilities [in the Fruitvale Waterfront] should be mitigated through appropriate site planning, landscaping, and buffering.
- *Policy W12.6: Specifying Public Access and Linkages.* With a residential community, efforts should be made to create inviting, landscape, and signed connections and gateways to the waterfront.
- *Policy W12.7: Defining Design Criteria.* Development in this area should be designed to enhance direct access to and along the water's edge, maximize waterfront views and vistas, and make public pedestrian access and spaces inviting. Development and amenities must be sensitive to immediate surroundings.
- *Policy N1.8: Making Compatible Development.* The height and bulk of commercial development in the "Neighborhood Mixed-Use Center" and "Community Commercial" areas should be compatible with that which is allowed for residential development.

- *Policy N3.8: Required High-Quality Design.* High-quality design standards should be required of all new residential construction.
- *Policy N3.10: Off-street parking for residential buildings* should be adequate in amount and conveniently located and laid out, but its visual prominence should be minimized.
- *Policy N7.1: Ensuring Compatible Development.* New residential development in Detached Unit and Mixed Housing Type areas should be compatible with the density, scale, design, and existing or desired character of surrounding development.
- *Policy N7.8: Coordinating Covenants, Conditions, and Restrictions.* Private development should maintain local CC&Rs that are compatible with City development standards such as lot size, setbacks, and height.
- *Policy N8.2: Making Compatible Interfaces Between Densities.* The height of development in urban residential and other higher density residential areas should step down as it nears lower density residential areas to minimize conflicts at the interface between the different types of development.
- *Policy N9.5: Marking Significant Sites.* Identify locations of interest and historic significance by markers, signs, public art, landscape, installations, or by other means.
- *Policy N9.7: Creating Compatible but Diverse Development.* Diversity in Oakland's built environment should be as valued as the diversity in population. Regulations and permit processes should be geared towards creating compatible and attractive development, rather than "cookie cutter" development.

Open Space, Conservation, and Recreation Element

- *Policy OS-4.1: Provisions of Usable Open Space.* Continue to require new multi-family development to provide useable outdoor open space for its residents.
- *Policy OS-4.2: Protection of Residential Yards.* Recognize the value of residential yards as a component of the City's open space system and discourage excessive coverage of such areas by buildings or impervious surfaces.
- *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 numbers of vacant lots.
- *Objective OS-9: Landform.* To retain Oakland's natural features and topography wherever possible and recognize their important role in defining the character and image of the City and its neighborhoods.
- *Policy OS-9.1: 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.
- *Policy OS-9.2: 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 the sense of arrival at

the major entrances to the City. Use public art, landscaping, and signage to create stronger City and neighborhood gateways.

- *Objective OS-12: Street Trees.* To “green” Oakland’s residential neighborhoods and commercial areas with street trees.
- *Policy OS-12.1: Street Tree Selection.* Incorporate a broad and varied range of tree species which is reflected on a City-maintained list of approved trees.
- *Policy OS-12.3: Street Tree Removal.* Remove street trees only if they are hazardous, severely and incurably infested with insects or blight, or are severely and irreversibly damaged and deformed. Provide replacement trees in all cases where the site is suitable for street trees.
- *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: Discourage the removal of large trees on already developed sites unless removal is required for biological, public safety, or public works reasons.*

LUTE EIR. The Visual and Aesthetic Conditions section of the *LUTE EIR* (page III.F-1 – III.F-12) adequately addresses the project’s potential impacts to aesthetic resources. The *LUTE EIR* determined that development under the *General Plan* would not adversely affect existing visual resources with the implementation of *LUTE* goals, objectives, policies, and actions. Mitigation measures in the *LUTE EIR* require the development of design guidelines for height and bulk in the Downtown, for all Neighborhood Commercial areas, and for parking facilities to ensure the preservation of significant visual characteristics. Those previously imposed mitigation measures are listed below.

Mitigation Measure F.2a: Develop guidelines or a “step back” ordinance for height and bulk for new development projects in the downtown area. Projects should be encouraged to be designed at pedestrian-scale on the street-side, with high towers or strong vertical elements stepping back from the street.

Mitigation Measure F.2c: Develop standard design guidelines for all Neighborhood Commercial areas that require continuous or nearly continuous storefronts located along the front yard setback, promote small scale commercial activities rather than large scale establishments at the ground level, restrict front yard parking lots and driveways, require small scale pedestrian oriented signage, have a relatively low height limit, and promote the development of pedestrian- friendly amenities at the street level. The standard design guidelines may be expanded to capture the unique or desired character of certain areas.

Mitigation Measure F.3b: Ensure that structures and sites are designed in an attractive manner which harmonizes with or enhances the visual appearance of the surrounding environment by preparing and adopting industrial and commercial design guidelines.

Mitigation Measure F.3c: Develop design guidelines for parking facilities of all types.

2007-2014 Housing Element. The following actions and policies apply to existing visual character and would be adhered to with the implementation of the *Housing Element*:

- *Action 1.3.3: High Density Residential Development Standards.* As part of the *Planning Code* update, development standards which incorporate design standards will be reviewed to ensure high quality design of multi-family and high density residential development.
- *Policy 4.2:* To improve housing and neighborhood conditions, the City will abate blighting conditions through a combination of code enforcement, financial assistance, and public investment.
- *Action 4.2.2: Housing Code Enforcement.* Enforce housing codes to ensure decent, safe, and sanitary housing conditions. Orders to abate will be followed up with additional actions. The City may correct deficiencies itself and then place a lien against the property for the cost of repairs.
- *Policy 7.4: Minimize Environmental Impacts from New Housing.* Work with developers to encourage construction of new housing that, where feasible, reduces the footprint of the building and landscaping, preserves green spaces, and supports ecological systems.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the following titles and chapters of the Oakland Municipal Code with regards to existing visual quality:

- *Title 8: Health and Safety*
 - *Chapter 8.24: Property Blight.* This chapter requires a level of maintenance of residential, commercial, and industrial property that will protect and preserve the livability, appearance, and social and economic stability of the City.
- *Title 12: Streets, Sidewalks and Public Places*
 - *Chapter 12.32: Street Trees.* This chapter outlines the provisions for protecting street trees. No new development shall make any tree or shrub improvement, or destroy, deface, or mutilate any tree or shrub along a public street without having first obtained a written permit from the City of Oakland Director of Parks and Recreation.
 - *Chapter 12.36: Protected Trees.* It is the interest of the City of Oakland and the community to protect and preserve trees by regulating their removal; to prevent unnecessary tree loss and minimize environmental damage from improper tree removal; to encourage appropriate tree replacement plantings; to effectively enforce tree preservation regulations; and to promote the appreciation and understanding of trees.
- *Title 16: Subdivisions*
 - *Chapter 16.16: Design Standards*
 - *Chapter 16.20: Improvements*
 - *Chapter 16.28: Hillside Subdivisions*
- *Title 17: Planning.* Under the *Planning Code*, every zone within the City requires that new residential developments are subject to a design review process. No Local Register Property, residential facility, mixed-use development, telecommunications facility, sign, or other associated structure shall be constructed, established, or altered in exterior appearance unless the plans have been approved pursuant to the design review procedure in Chapter 17.136 (described in more detail below). Title 17 also outlines sign limitations, height restrictions,

usable open space requirements, and minimum yards for residential developments located in each zone.

- o *Chapter 17.124: Landscaping and Screening Standards.* The purpose of the provisions outlined in this chapter is to prescribe standards for development and maintenance of planting, fences, and walls; for the conservation and protection of property; and through improvements of the appearance of individual properties, neighborhoods, and the City.
- o *Chapter 17.136: Design Review Procedure.* The purpose of the provisions outlined in this chapter is to prescribe the procedure for the review of proposals located in areas or on site, or involving uses, which require special design treatment and consideration of relationships to the physical surroundings. This procedure will be applied to all proposals for which design review is required by the zoning regulations. An application for design review must be made by the owner of the affected property on a form prescribed by the City Planning Department and then filed with this department. The application must be accompanied by certain information, including, but not limited to, site and building plans, elevations, and relationships to adjacent properties.

Standard Conditions of Approval. The following Standard Conditions of Approval are applicable to the 2007-2014 Housing Element:

SCA-12 Required Landscape Plan for New Construction and Certain Additions to Residential Facilities.

Submittal and approval of a landscape plan for the entire site is required for the establishment of a new residential unit (excluding secondary units of five hundred (500) square feet or less), and for additions to Residential Facilities of over five hundred (500) square feet. The landscape plan and the plant materials installed pursuant to the approved plan shall conform with all provisions of Chapter 17.124 of the Oakland *Planning Code*, including the following:

- a) Landscape plan shall include a detailed planting schedule showing the proposed location, sizes, quantities, and specific common botanical names of plant species.
- b) Landscape plans for projects involving grading, rear walls on downslope lots requiring conformity with the screening requirements in Section 17.124.040, or vegetation management prescriptions in the S-11 zone, shall show proposed landscape treatments for all graded areas, rear wall treatments, and vegetation management prescriptions.
- c) Landscape plan shall incorporate pest-resistant and drought-tolerant landscaping practices. Within the portions of Oakland northeast of the line formed by State Highway 13 and continued southerly by Interstate 580, south of its intersection with State Highway 13, all plant materials on submitted landscape plans shall be fire-resistant. The City Planning and Zoning Division shall maintain lists of plant materials and landscaping practices considered pest-resistant, fire-resistant, and drought-tolerant.
- d) All landscape plans shall show proposed methods of irrigation. The methods shall ensure adequate irrigation of all plant materials for at least one growing season.

SCA-13 Landscape Requirements for Street Frontages. All areas between a primary Residential Facility and abutting street lines shall be fully landscaped, plus any unpaved areas of abutting rights-of-way of improved streets or alleys, provided, however, on streets without sidewalks, an unplanted strip of land five (5) feet in width shall be provided within the right-of-way along the edge of the pavement or face of curb, whichever is applicable. Existing plant materials may be incorporated into the proposed landscaping if approved by the Director of City Planning.

In addition to the general landscaping requirements set forth in Chapter 17.124, a minimum of one (1) fifteen-gallon tree, or substantially equivalent landscaping consistent with city policy and as approved by the Director of City Planning, shall be provided for every twenty-five (25) feet of street frontage. On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet, the trees to be provided shall include street trees to the satisfaction of the Director of Parks and Recreation.

SCA-14 Assurance of Landscaping Completion. The trees, shrubs and landscape materials required by the conditions of approval attached to this project shall be planted before the certificate of occupancy will be issued; or a bond, cash, deposit, or letter of credit, acceptable to the City, shall be provided for the planting of the required landscaping. The amount of such (or a bond, cash, deposit, or letter of credit) shall equal the greater of two thousand five hundred dollars (\$2,500.00) or the estimated cost of the required landscaping, based on a licensed contractor's bid.

SCA-15 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. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

SCA-16 Landscape Requirements for Downslope Lots. On downslope lots where the height of the rear elevation of the primary Residential Facility exceeds twenty-eight (28) feet, landscaping that meets the following requirements shall be planted to screen the rear face of the building:

- a) A minimum of one (1) fifteen-gallon tree or five (5) five-gallon shrubs, or substantially equivalent landscaping as approved by the Director of City Planning, shall be provided for each fifteen (15) feet of lot width, measured at the rear face of the residence.
- b) The landscape screening shall be elected and maintained such that it is sufficient in size within five (5) years of planting to screen, at a minimum, the lower ten (10) feet of the structure.

SCA-17 Landscape Requirements for Street Frontages. On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet and does not interfere with access requirements, a minimum of one (1) twenty-four (24) inch box tree shall be provided for every twenty-five (25) feet of street frontage, unless a smaller

size is recommended by the City arborist. The trees to be provided shall include species acceptable to the Tree Services Division.

SCA-18 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. All required irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

In addition to the aforementioned Standard Conditions of Approval, SCA-45, SCA-46, and SCA-47 would also be applicable to retaining and *enhancing* the existing visual character. However, these Standard Conditions of Approval apply to both this section and the Biological Resources section. A full description of these conditions (SCA-45 Tree Removal Permit, SCA-46 Tree Replacement Plantings, and SCA-47 Tree Protection During Construction) can be found in Section IV, Biological Resources.

Compliance with the aforementioned *LUTE* policies, *OSCAR Element* policies, previously imposed mitigation measures from the *LUTE EIR*, the *2007-2014 Housing Element* policies and actions, Municipal Code regulations, and Standard Conditions of Approval would reduce impacts to the existing visual character to a less than significant level.

Comments to Question Id: (Light and Glare)

Development under the *2007-2014 Housing Element* could create new sources of light and glare through the use of exterior lighting and reflective materials and could adversely affect nighttime and daytime views. Additional exterior lighting from proposed dwelling units could adversely affect nighttime views in the area. Exterior lighting could also potentially spill off-site and onto nearby residential properties if proper controls are not incorporated. Glare can result from daytime reflection of sunlight off flat and reflective building surfaces, and could annoy residences and impair motorists driving by along roads that have direct views of the reflective material. Without regulation, light and glare would thus result in a potentially significant impact resulting from the *2007-2014 Housing Element*.

However, housing development is subject to requirements from the City's Standard Conditions of Approval and Municipal Code that prevent significant impacts from light and glare. The policies and conditions that would apply to the *2007-2014 Housing Element* are described in more detail below.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the following titles and chapters of the Oakland Municipal Code with regard to light and glare:

- *Title 9: Public Peace, Morals, and Welfare*
 - *Chapter 9.16.060: Lighting* – Approval of the City before energy is supplied. This section mandates that no person shall make any electric service connection to, or supply any electrical energy to, any ornamental street lighting installation until the

Electrical Department shall have inspected and approved such installation as conforming to this code and to ordinances, rules, and regulations of the City.

- *Title 17: Planning Code.* This title discusses the building requirements for residential structures within various zones throughout the City. A majority of the zones have regulations eliminating objectionable glare and spillover light that would affect adjacent residential properties.

Standard Conditions of Approval. The following Standard Conditions of Approval are applicable to the *2007-2014 Housing Element*:

SCA-40 Lighting Plan The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning and Zoning Division and the Electrical Services Division of the Public Works Agency for review and approval. All lighting shall be architecturally integrated into the site.

Compliance with Titles 9 and 17 of the Municipal Code and SCA-40 would reduce light and glare impacts to a less than significant level.

Comments to Question Ie – Ii (Shadow Impacts): Development under the *2007-2014 Housing Element* could potentially cast shadows on solar collectors or the passive solar design of neighboring buildings, since solar features are dispersed throughout the City. If new development projects cast shadows on solar features, functionality could be compromised and a significant impact could result. However, the City tracks the locations of solar collectors through the permitting process. New solar collectors are issued an “SE” permit through the Building Services division. This permit is given to new photovoltaic arrays, typically installed on rooftops, as described in the Setting section. As part of the standard design review and environmental review required for each individual development application in the City, potential impacts from new buildings on existing solar collectors are routinely analyzed by staff, and design changes are requested of applicants to avoid such impacts, prior to approval of any project. Therefore, impacts from development under the *2007-2014 Housing Element* on existing solar collectors and/or passive solar design would be reduced to less-than-significant through the City’s design and environmental review process, and no impact would occur.

In addition, development could potentially cast shadows on public and quasi-public parks, lawns, gardens, or open spaces, which could cause a significant impact. The City of Oakland has 104 public parks and many other lawns and open spaces which are all dispersed throughout the City. Likewise, the housing sites proposed under the *2007-2014 Housing Element* are dispersed throughout the City. Therefore, the shadows the new structures generate could potentially impact public and quasi-public parks, lawns, gardens, and open spaces.

Furthermore, development could potentially cast shadows on historical resources, as defined by CEQA Section 15064.5(a), which could cause a significant impact. The City of Oakland contains hundreds of historical resources that are located throughout the City (see Section V, Cultural Resources, of this document for more detailed information on the City’s historical resources). Likewise, the housing sites

proposed under the *2007-2014 Housing Element* are dispersed throughout the City. Therefore, the shadows the new structures generate could potentially impact historical resources.

While the City's *General Plan* objectives and policies, the *LUTE EIR* mitigation measures, and the Standard Conditions of Approval do not expressly contain regulations regarding shadows created by new structures or landscaping, the regular design review criteria in the *Planning Code*¹⁶ does include a finding "that the proposed design will protect, preserve, or enhance desirable neighborhood characteristics;" this finding is used by Planning staff to evaluate potential shadow impacts, often through shadow studies. In addition to this finding, the City's CEQA Initial Study Checklist requires further analysis of shadow impacts from new buildings (Questions Ie-h). As such, shadow impacts on neighboring solar panels, solar collectors, open spaces, parks, or historical structures would be less than significant.

Comments to Question Ii (Exceptions and Variances): All dwelling units proposed under the *2007-2014 Housing Element* would be subject to Title 17 of the City *Planning Code*, which contains lighting requirements for various land uses. In addition, the residential uses proposed in the *2007-2014 Housing Element* would be maintained by private individuals or private homeowner associations, who are expected to install lighting as needed. Therefore, there would be no impact in relation to adequate light being provided for residential uses.

Comments to Question Ij (Winds): Ground-level wind accelerations near buildings are controlled by exposure, massing, and orientation. Exposure is a measure of the extent that the building extends above surrounding structures and into the wind stream. A building that is surrounded by taller structures is not likely to cause adverse wind accelerations at ground level, while even a small building can cause wind problems if it is freestanding and exposed. Massing is important in determining wind impact because it controls how much wind is intercepted by the structure and whether building-generated wind acceleration occur above-ground or ground level. Orientation determines how much wind is intercepted by the structure, a factor that directly determines wind acceleration. In general, buildings that are oriented with their long axis across the prevailing wind direction will have a greater impact on ground-level winds than a building oriented with its long axis along the prevailing wind direction.

Implementation of the *2007-2014 Housing Element* could alter wind speeds because new structures could intercept existing wind flows and alter the winds course, potentially focusing the wind through a break between structures. This disruption and potential focusing of the wind can cause wind speeds to accelerate to levels that are uncomfortable for pedestrians. However, prior to issuance of approvals from the City of Oakland, any individual project that would meet the City of Oakland's criteria for requiring a wind analysis would be subject to CEQA review. The City requires a wind analysis when the project's height is 100 feet or greater (measured to the roof) and one of the following conditions exist: a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or b) the project is located in Downtown. While the City's *General Plan*

¹⁶ See O.M.C. 17.136.050 (A) 2

objectives and policies, the *LUTE EIR* mitigation measures and the Standard Conditions of Approval do not contain express regulations regarding the impacts of wind created by new structures or landscaping, the regular design review criteria in the *Planning Code*¹⁷ does include a finding “that the proposed design will protect, preserve, or enhance desirable neighborhood characteristics.” This finding is used by Planning staff to evaluate, when appropriate, potential wind impacts from new construction. In addition to this finding, Question Ij of the City’s CEQA Initial Study Checklist requires analysis of wind impacts, in certain situations (see above). As such, wind impacts due to the development of housing under the *2007-2014 Housing Element* would be less than significant.

4. Cumulative Impacts

The geographic area considered for the aesthetic cumulative analysis includes the City of Oakland. As analyzed above, the development of the *2007-2014 Housing Element* housing sites would not result in a significant aesthetic impact. The development of the housing sites would be consistent with the City’s *General Plan* Land Use designation and together with the majority of past, present, existing, pending, and reasonably foreseeable future development projects, would be subject to the City’s design review process. The purpose of the design review process is to consider the design treatment and relationship of buildings to the surrounding built environment and ensure no significant adverse aesthetic impacts would result. Thus, development under the *2007-2014 Housing Element* would not combine with, or augment, any potential adverse aesthetic impacts that may be associated with other cumulative development.

Cumulative development, in combination with the *2007-2014 Housing Element*, has and would continue to result in new buildings of varying size and scale being developed on infill or vacant sites throughout the City. Housing development under the *2007-2014 Housing Element* would be generally consistent with adopted plans and the overall vision for the City. As such, the *2007-2014 Housing Element* would not contribute to any significant adverse cumulative aesthetic impacts when considered together with past, present, current, pending, and reasonably foreseeable future development.

5. Conclusion

The *2007-2014 Housing Element* would comply with the goals, policies, and programs of the City’s *General Plan* (Policies W2.10, W3.2, W3.4, W12.5, W12.6, W12.7, OS-4.1, OS-4.2, OS-4.4, OS-7.3, OS-9.1, OS-9.2, OS-9.3, OS-10.1, OS-10.2, OS-12.1, OS-12.3, CO-7.3, CO-7.4, T6.2, T6.5, D1.1, D1.5, D2.1, D10.3, D10.5, D12.5, N1.8, N3.8, N3.9, N3.10, N7.1, N7.8, N8.2, N9.5, N9.7, and Objectives OS9, OS10, OS12, and D2); Municipal Code (Titles 8, 9, 12, 15, 16, 17,); the Goals and Policies of the Scenic Highway Element; Housing Element Policies 4.2 and 7.4; Standard Conditions of Approval 12, 13, 14, 15, 16, 17, 18, 40, 45, 46, and 47; and *LUTE EIR* Mitigation Measures F2a, F.2c, F.3b, and F.3c. Compliance would ensure that development under the *2007-2014 Housing Element* would not have a substantial adverse effect on a scenic vista, visual character, or create impacts in relation to new sources of light, glare, shadows, and wind, and would not conflict

¹⁷ See O.M.C. 17.136.050 (A) 2

with existing policies and regulations concerning adequate light related to appropriate uses. As such, the proposed project would have a less-than-significant impact on aesthetics, shadow, and wind.

II. AGRICULTURE

1. Setting

The County of Alameda contains 3,957 acres of Prime Farmland, 1,290 acres of Farmland of Statewide Importance, and 2,442 acres of Unique Farmland.¹⁸ However, as discussed in the *General Plan OSCAR Element* and *LUTE*, agricultural resources and/or land(s) currently zoned for agricultural uses are not present within Oakland's planning area.¹⁹ All of the 2007-2014 *Housing Element* housing opportunity sites are located in urbanized and developed areas. Based on the history of development in the area, there are no agricultural resources located on or near the opportunity sites.

2. Environmental Checklist

The proposed project would have a significant impact on the environment if "potentially significant" is checked under items IIa-c, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resource Agency, to non-agricultural use?	☐	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☐	☒

Notes:

- a. SCA = Standard Conditions of Approval
- b. MM = Mitigation Measures

¹⁸ Department of Conservation, Farmland Mapping and Monitoring Program, "Alameda County Important Farmland 2008," April 2009, accessed at <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/ala08.pdf>, on May 10, 2009.

¹⁹ City of Oakland, *Open Space, Conservation, and Recreation Element*, June 1996.

3. Discussion

Comments on Questions IIa-c (Farmland Impacts): According to the 2008 *Farmland Mapping and Monitoring Program* from the State Department of Conservation, the opportunity sites in the City of Oakland are located in an area that is designated as urban, built-up land.²⁰ The opportunity sites are also not zoned for agricultural use or under a Williamson Act contract. The *2007-2014 Housing Element* involves the development of residential land within an already developed area that does not include any farmland, and the construction of the housing would not result in the conversion of farmland to a non-agricultural use. The *2007-2014 Housing Element* would thus have no impact on agricultural resources.

4. Cumulative Impacts

The geographic area considered for the agricultural cumulative analysis is the City of Oakland. Construction activities associated with the *2007-2014 Housing Element* and past, present, current, pending, and reasonably foreseeable future projects within the City would not impact agricultural resources. As stated above, no agricultural lands exist within the City. Therefore, *2007-2014 Housing Element* would result in no cumulative impact to agricultural resources.

5. Conclusion

The opportunity sites identified in the *2007-2014 Housing Element* for potential future development are located within the City of Oakland planning area, which is urbanized. No conversion of agricultural lands to non-agricultural uses would occur and there would be no impacts related to agricultural resources.

²⁰ Department of Conservation, Farmland Mapping and Monitoring Program, “Alameda County Important Farmland 2008,” April 2009, accessed at <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/ala08.pdf>, on May 10, 2009.

III. AIR QUALITY

1. Environmental Checklist

The proposed project would have a significant impact on air quality if ‘potentially significant’ is checked under items IIIa-o, below, and there is no mitigation measure or SCA identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
Project Impacts					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐	☐
e) Frequently create substantial objectionable odors affecting a substantial number of people?	☒	☐	☐	☐	☐
f) Contribute to CO concentrations exceeding the State AAQS of 9 ppm averaged over 8 hours and 20 ppm for 1 hour?	☒	☐	☐	☐	☐
g) Result in total emissions of ROG, NOx, or PM10 of 15 tons per year or greater, or 80 pounds (36 kilograms) per day or greater?	☒	☐	☐	☐	☐
h) Result in potential to expose persons to substantial levels of Toxic Air Contaminants (TAC), such that the probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million?	☒	☐	☐	☐	☐
i) Result in ground level concentrations of non-carcinogenic TACs such that the Hazard Index would be greater than 1 for the MEI?	☒	☐	☐	☐	☐
j) Result in a substantial increase in diesel emissions?	☒	☐	☐	☐	☐

Cumulative Impacts	☒	☐	☐	☐	☐
k) Result in any of the above project-specific significant impacts?	☒	☐	☐	☐	☐
l) Result in a fundamental conflict with the local general plan, when the general plan is consistent with the regional air quality plan? When the general plan fundamentally conflicts with the regional air quality plan, then if the contribution of the proposed project is cumulatively considerable when analyzed the impact to air quality should be considered significant?	☒	☐	☐	☐	☐
Plan Impacts					
m) Fundamentally conflict with the currently adopted Bay Area Clean Air Plan (CAP) because population growth for the jurisdiction exceeds values in the CAP, based on population projections in ABAG's currently adopted Projections?	☒	☐	☐	☐	☐
n) Fundamentally conflict with the CAP because the rate increase in vehicle miles traveled (VMT) in the jurisdiction is greater than the rate of increase in population?	☒	☐	☐	☐	☐
o) Fundamentally conflict with the CAP because the project does not demonstrate reasonable efforts to implement transportation control measures (TCMs) in the CAP?	☒	☐	☐	☐	☐

Notes:

- a. SCA = Standard Conditions of Approval.
- b. MM = Mitigation Measures

2. Discussion

Air Quality impacts will be analyzed in the EIR. Comment on Question XI a-o: The EIR will analyze a) through o) in the checklist above. The EIR will discuss regional and local air quality setting as it pertains to the *2007-2014 Housing Element*, and identify applicable federal, State, and local air quality policies, regulations, and standards. The analysis in the EIR will discuss existing emissions and emissions likely to be generated by the *2007-2014 Housing Element*, including greenhouse gases, which will have a separate EIR section. The latest version of the Urban Emissions Inventory Model, URBEMIS2007, will be used to estimate criteria air pollutant emissions from the *2007-2014 Housing Element*.

IV. BIOLOGICAL RESOURCES

1. Setting

When the City was first settled, groves of coast live oak lined the shoreline and redwood forests crowned the hills. Much of the shoreline was marshy and San Leandro Bay was a vast wetland. The City of Alameda was part of the mainland, and the Lake Merritt channel, which now separates Alameda from the City, was a tidal slough. Until the mid-1800s, Oakland's animal population included grizzly bears and mountain lions, among other wildlife. Today, very little of the City's native landscape remains intact. Even in the City's parks and open spaces, much of the native vegetation has been overtaken by exotic and introduced species. While deer, raccoon, rabbits, and other mammals remain, most of the animal population consists of species that have adapted to an urban environment.²¹

Many natural areas in the City have been completely developed and the hillsides have been graded extensively. Existing vegetation within the City consists primarily of landscaping trees and ornamental shrubs; however, as shown in Figure 5, Natural Communities, the natural communities of the City may be broadly categorized as woodlands, brushlands, grasslands, and marsh/wetlands.²² Also, in some cases, urbanized areas, can provide suitable habitat for wildlife. Nearly 7,000 acres of wildland areas remain within the City, on parks, college campuses, vacant lots, at the airport, and on private lands in the Oakland hills.

According to the California Natural Diversity Database (CNDDDB) the following sensitive species and their habitat, have been recorded within the City and surrounding areas;²³ the Alameda whipsnake (*Masticophis lateralis euryxanthus*), Presidio clarkia (*Clarkia franciscana*), and most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*) have been recorded within the City and surrounding areas. The Presidio clarkia and most beautiful jewel-flower are designated as "endangered" by both the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG), and non-listed/sensitive, respectively.²⁴ Alameda whipsnake habitat has been designated as "critical" by the USFWS, with the whipsnake itself being designated as "threatened" by the USFWS. In addition, according to the CNDDDB, the northern maritime chaparral community has been known to occur in the Oakland/Berkeley Hills area.²⁵ This vegetation community is considered rare by the CDFG, and provides suitable habitat for sensitive species such as the Alameda whipsnake and the

²¹ City of Oakland. *General Plan – Land Use and Transportation Element: Environmental Impact Report*. February 1998. Page III.H-1.

²² City of Oakland. *General Plan – Land Use and Transportation Element: Environmental Impact Report*. February 1998. Page III.H-1.

²³ California Department of Fish and Game. 2009. *California Natural Diversity Database*. April 4.

²⁴ California Department of Fish and Game. 2009. *California Natural Diversity Database*. April 4.

²⁵ California Department of Fish and Game. 2009. *California Natural Diversity Database*. April 4.

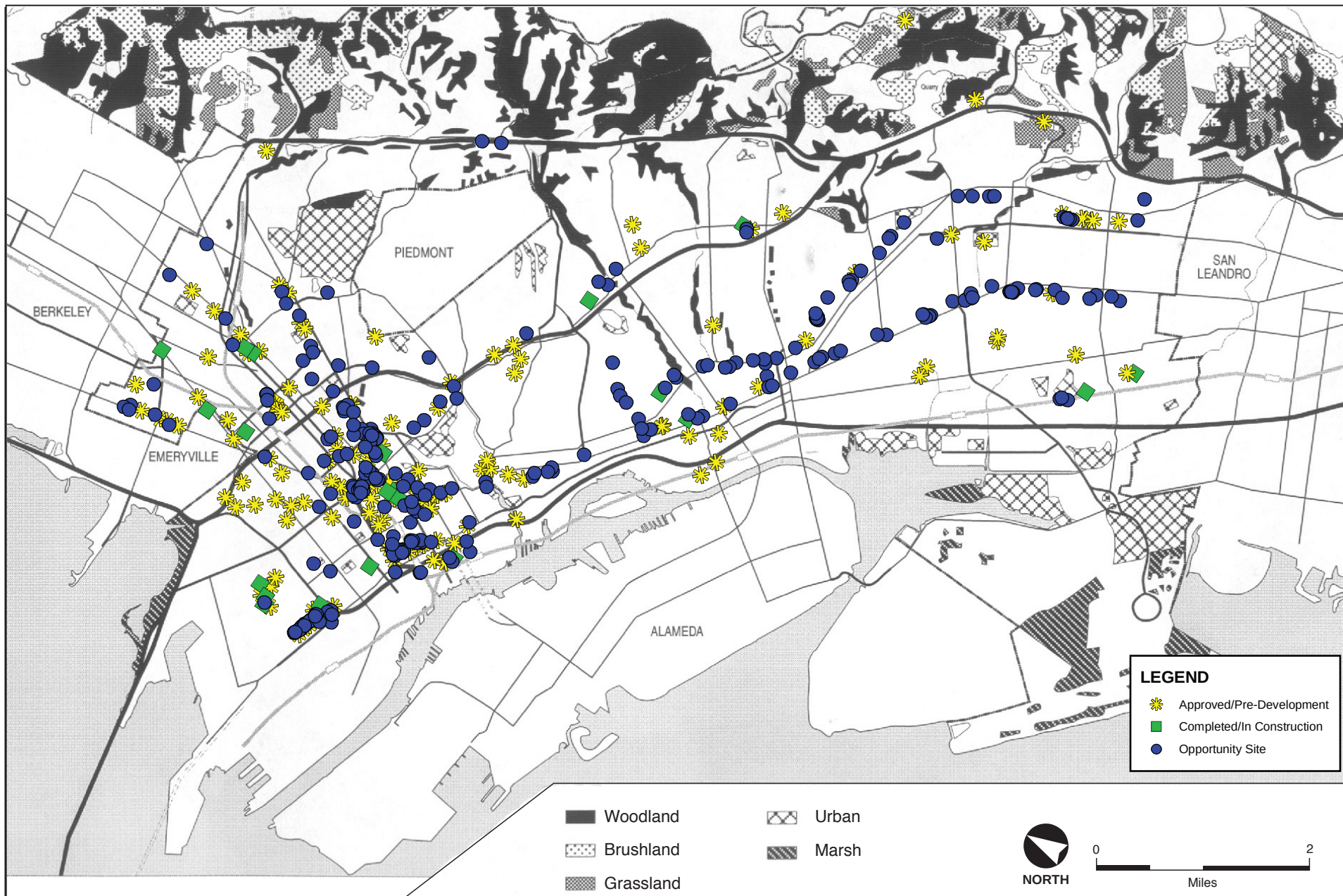


FIGURE 5
Natural Communities

100006401

Source: City of Oakland, *General Plan Land Use and Transportation Element EIR*, 1997.

City of Oakland General Plan – Housing Element Update 2007-2014

Pallid manzanita (*Arctostaphylos pallida*). The Pallid manzanita has been designated as “threatened” by the USFWS, and “endangered” by CDFG.²⁶

2. Environmental Checklist

The proposed project would have a significant impact on the environment if ‘potentially significant’ is checked under items IVa-IVg, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands (as defined by Section 404 of the Clean Water Act) or state protected wetlands, through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐	☐
e) Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐	☒

²⁶ U.S. Fish and Wildlife Service. 2002. *Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay*, California. Region 1, Portland, OR. xvi + 306 pp.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
f) Fundamentally conflict with the City of Oakland Tree Preservation Ordinance (Oakland Municipal Code (OMC) Chapter 12.36) by removal of protected trees under certain circumstances? 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) the protected trees to remain, with special consideration given to native trees. Protected trees include the following: <i>Quercus agrifolia</i> (California or coast live oak) measuring four inches diameter at breast height (dbh) or larger, and any other tree measuring nine inches dbh or larger except <i>eucalyptus</i> and <i>pinus radiata</i> (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.	☐	☐	☒	☐	☐
g) Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources. 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 aquatic habitat through:					
i discharging a substantial amount of pollutants into a creek;	☐	☐	☒	☐	☐
ii significantly modifying the natural flow of the water;	☐	☐	☒	☐	☐
iii. depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability; or	☐	☐	☒	☐	☐
iv. adversely impacting the riparian corridor by significantly altering vegetation or wildlife habitat?	☐	☐	☒	☐	☐

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

3. Discussion

Comments to Questions IVa and IVd (Plant and Wildlife Species)

Development under the *2007-2014 Housing Element* would largely occur as infill in an urbanized and built-out City. As stated in the Setting section the Alameda whipsnake, Presidio clarkia, and most beautiful jewel-flower have all been recorded within the City and surrounding areas.²⁷ As shown in Figure 6, Sensitive Species and Critical Habitat, all future development associated with the *2007-2014 Housing Element* is located well outside of whipsnake habitat. Therefore, the proposed project would not impact Alameda whipsnake habitat. In addition, as shown in Figure 6, future development associated with the *2007-2014 Housing Element* is not located within the known range of historic occurrences of the Presidio clarkia and most beautiful jewel-flower.

As shown in Figure 5, housing development could occur in proximity to existing natural communities, including woodland, brushland, and grassland, and urban areas, which can provide suitable habitat for sensitive plant and wildlife species, including the Presidio clarkia and most beautiful jewel-flower. While development under the *2007-2014 Housing Element* would occur primarily in already urbanized areas, and would not have a substantial adverse effect on sensitive plant and wildlife species, the effects of individual, site-specific projects on such species must be determined at the project level. Compliance with the City's *General Plan* Policies CO-7.1, CO-9.1, and CO-11.1 (found in the *OSCAR Element*) would ensure the protection of sensitive plant and wildlife species and their habitats. Therefore, a less-than-significant impact would occur, including potential impacts to any previously undiscovered occurrences of the Presidio clarkia and most beautiful jewel-flower.

While there are no known major wildlife corridors or native wildlife nursery sites, there is the potential for migratory birds to use existing trees for nesting and for migratory fish or other aquatic species to use creeks. Development under the *2007-2014 Housing Element* could result in the removal of existing vegetation, including trees, and creekside development could interfere with the movement of aquatic species. However, compliance with the City's *General Plan* Policy CO-11.2 and the City's SCA-44 (discussed in detail under Comment to Question IVf [Trees]) and 87, discussed below, would ensure the protection of any localized wildlife movement, nesting migratory birds, and migratory fish. Therefore, a less-than-significant impact would occur.

²⁷ California Department of Fish and Game. 2009. California Natural Diversity Database. April 4.

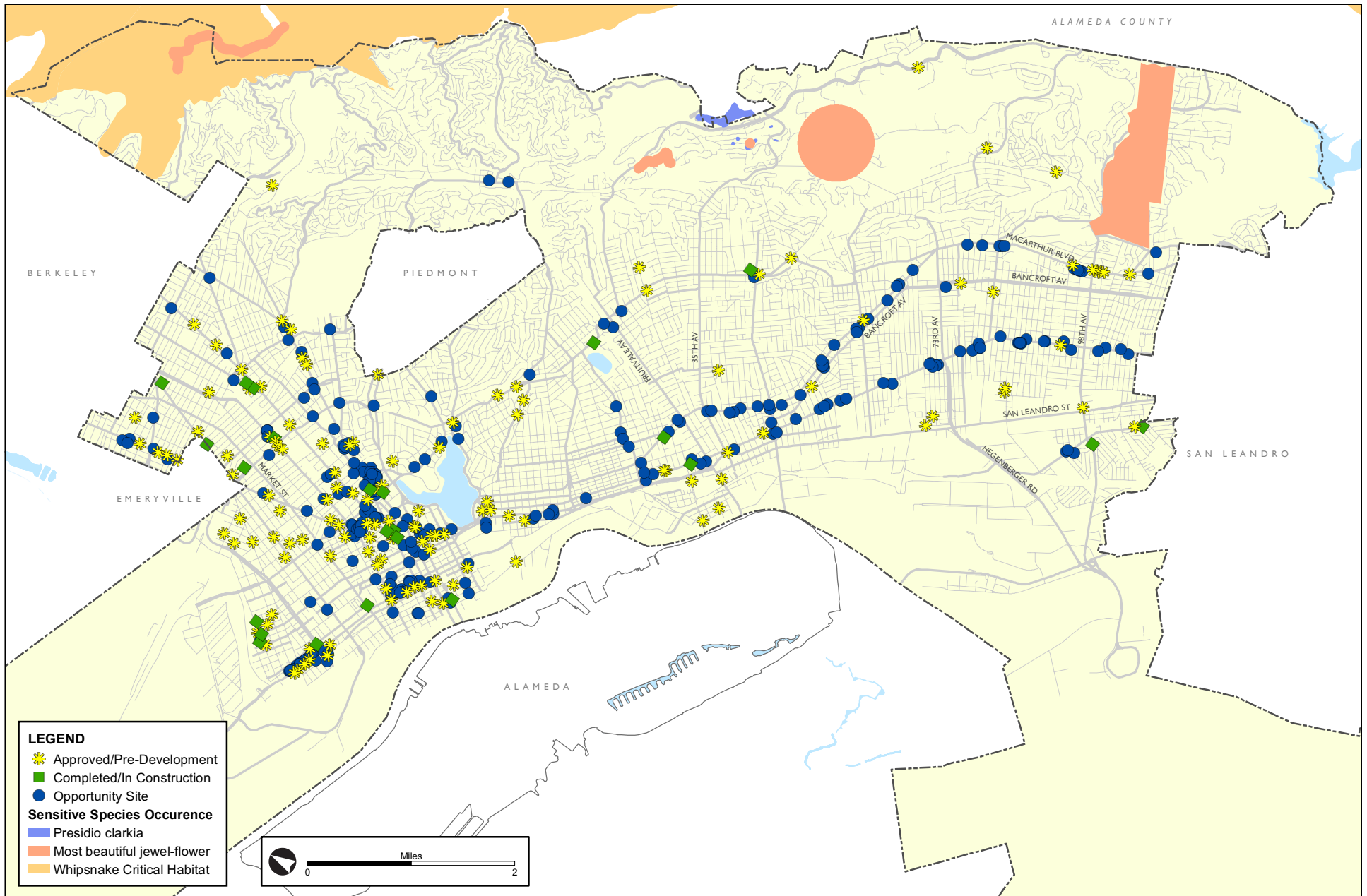


FIGURE 6
Sensitive Species and Critical Habitat

Source: CA Dept. Fish & Game, CNDDB, June 2009.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* policies with regard to biological resources – impacts to plant and wildlife species (found in the *OSCAR Element*):

Open Space, Conservation, and Recreation Element

- *Policy CO-7.1:* 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-9.1:* 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:* Protect wildlife from the hazards of urbanization, including loss of habitat and predation by domestic animals.
- *Policy CO-11.2:* 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.

Standard Conditions of Approval. Development under the *2007-2014 Housing Element* would be subject to the following Standard Conditions of Approval with regard to biological resources – impacts to plant and wildlife species:

SCA-87 Creek Dewatering and Aquatic Life:

- a) 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 aquatic life (native fish, native amphibians, and western pond turtles) below the dam or other artificial obstruction.
- b) The project applicant shall hire a biologist, and obtain all necessary State and federal permits (e.g. California Department of Fish and Game (CDFG) Scientific Collecting Permit), to relocate all native fish/native amphibians/pond turtles within the work site, prior to dewatering. The applicant shall first obtain a project-specific authorization from the CDFG and/or the U.S. Fish and Wildlife Service (USFWS), as applicable to relocate these animals. Captured native fish/native amphibians/pond turtles shall be moved to the nearest appropriate site on the stream channel downstream. The biologist/contractor 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 CDFG and/or the USFWS, as applicable.

Other. Development under the *2007-2014 Housing Element* would be subject to the aforementioned *General Plan* policies and SCA 87. In addition, the following federal and State regulations would apply to housing construction under the *2007-2014 Housing Element* with regard to biological resources – impacts to plant and wildlife:

Federal Endangered Species Act. The Federal Endangered Species Act (FESA) (16 USC, Section 1531 *et seq.*) defines “endangered” species as those in danger of extinction throughout all or a significant portion of their range. A “threatened” species is any species that is likely to become an “endangered” species within the foreseeable future throughout all, or a significant portion of its range. Additional special-status species include “candidate” species and “species of concern.” “Candidate” species are those for which the USFWS has on file enough information to propose listing as endangered or threatened. “Species of concern” are those for which listing is possibly appropriate but for which the USFWS lacks sufficient information to support a listing proposal. A species that has been “delisted” is one whose population has met its recovery goal target and is no longer in jeopardy of extinction. Taking of a federally listed species is prohibited under Section 9 of the FESA. Taking is defined by FESA (§ 3[19]) to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” An incidental take of a listed species requires consultation with the USFWS, or National Marine Fisheries Service (NMFS), as appropriate.

California Endangered Species Act. The California Endangered Species Act (CESA) and the Native Plant Protection Act authorize the California Fish and Game Commission to designate endangered, threatened, and rare species and to regulate the taking of these species (Fish and Game Code, Sections 2050-2098). CESA defines “endangered” species as those whose continued existence in California is jeopardized. State-listed “threatened” species are those not currently threatened with extinction, but that may become endangered if their environments change or deteriorate. In addition, interim protection is provided to candidate species while they are being reviewed by the Fish and Game Commission. The California Code of Regulations (Title 14, Section 670.5) lists animal species considered by the state to be endangered and threatened. Section 2080 of the Fish and Game Code prohibits the taking of state-listed plants and animals. Formal consultation must be initiated with the CDFG for projects that may have an adverse effect on a state-listed species. If no state-listed species will be affected by a proposed project, environmental documentation is provided to CDFG at the discretion of the lead agency.

California Department of Fish and Game Fully Protected Species and Species of Concern. The CDFG also designates “fully protected” species as those that may not be taken or possessed (Fish and Game Code § 3511 [Fully Protected Birds], § 4700 [Fully Protected Mammals], § 5050 [Fully Protected Reptiles and Amphibians] and § 5515 [Fully Protected Fish]). Species designated as fully protected or protected may or may not be listed as endangered or threatened. The CDFG also maintains a list of animal “Species of Special Concern,” most of which are species whose breeding populations in California may face extirpation. Although these species have no protected legal status, the CDFG recommends consideration of them during analysis of the impacts of proposed projects to protect declining populations and avoid the need to list them as endangered in

the future. Under provisions of the California Environmental Quality Act, the lead agency, and the CDFG, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFG considers species of concern and species on Lists 1A, 1B, or 2 of the *California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik 1994) as qualifying for consideration under this CEQA provision. Species on the Native Plant Society's List 3 or 4 may, but generally do not, qualify for protection under this provision.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act of 1918 (16 USC §§ 703-711) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR 30 Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered “take” and is potentially punishable by fines and/or imprisonment.

Compliance with *OSCAR* policies, SCA 87, and the above federal and State regulations would reduce impacts on sensitive plant and wildlife species, as identified by the CDFG or the USFWS, to less than significant.

Comment to Question IVb, IVc, and IVg (Wetlands and Other Habitat)

Wetlands and riparian areas are typically found within or adjacent to watercourses such as creeks. In addition, according to the CNDDDB, the northern maritime chaparral community has been known to occur in the Oakland/Berkeley Hills area.²⁸ This vegetation community is considered rare by the CDFG, and provides suitable habitat for sensitive species such as the Alameda whipsnake and pallid manzanita.²⁹ While development under the *2007-2014 Housing Element* would occur primarily in urbanized areas and would not have a substantial adverse effect on riparian or other sensitive natural communities, the effects of individual, site-specific projects on such communities must be determined at the project level. Compliance with the City's *General Plan* Policies CO-2.4, CO-6.1, and CO-6.5, as well as CO-7.1 (discussed under Comment to Question IVf [Trees]), and W-3.1, W-3.2, and W-3.3, Chapter 13.16 of the Municipal Code, and the City's SCA-72 (discussed in Section VII Hazards and Hazardous Materials), 75 through 86 (discussed in Section VIII, Hydrology and Water Quality), 87 (discussed in detail under Comment to Question IVa and IVd [Plant and wildlife species]), and 88 would ensure protection of riparian habitat or other sensitive natural communities. Therefore, a less-than-significant impact would occur.

As development under the *2007-2014 Housing Element* would largely occur in urbanized areas, it not likely that federally- and state-protected wetlands would be impacted. Nonetheless, development in or near a wetland, or improvements that would impair or interrupt hydrological flow into such a wetland,

²⁸ California Department of Fish and Game. 2009. *California Natural Diversity Database*. April 4.

²⁹ U.S. Fish and Wildlife Service. 2002. *Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay*, California. Region 1, Portland, OR. xvi + 306 pp.

could result in adverse effects to those wetlands. Compliance with the City's *General Plan* Policies CO-8.1, W-3.1, W-3.2, and W-3.3, Chapter 13.16 of the Municipal Code, and the City's SCA-72 and 75 through 88 would ensure protection of federally- and state-protected wetlands. Therefore, a less-than-significant impact would occur including to any previously undiscovered occurrences of the pallid manzanita.

As all development under the *2007-2014 Housing Element* would be required to comply with the City's Creek Protection Ordinance, conflicts with this ordinance would be less than significant. Moreover, compliance with the City's *General Plan* Policies CO-5.3, CO-6.1, CO-6.4, CO-6.5 (found in the *OSCAR Element*), W-3.1, W-3.2, and W-3.3 (found in the *LUTE*), as well as the City's SCA-72 and 75 through 88 would further ensure protection of riparian and aquatic habitats. Therefore, a less-than-significant impact would occur. Also see Section VIII, Hydrology and Water Quality, for more information on impacts to surface waters, including creeks.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* and policies with regard to biological resources, impacts to wetlands and other habitat:

- *Policy CO-2.4:* Minimize hillside cuts and fills and the removal of desirable vegetation. Limit large scale grading to those areas where it is essential to development. Where hillside grading does occur, reshape the terrain in smooth, natural appearing contours rather than flat, terraced benches. Immediately replant and reseed graded areas to reduce soil loss.
- *Policy CO-5.3:* 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 functions.
- *Policy CO-6.1:* 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-6.4:* 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 the 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 CO-6.5:* Protect the surface waters of the San Francisco Estuary system, including San Francisco Bay, San Leandro Bay, and the Oakland Estuary. Discourage shoreline activities which negatively impact marine life in the water and marshland areas.
- *Policy CO-8.1:* Work with federal, state, and regional agencies on an on-going basis to determine mitigation measures for development which could potentially impact wetlands. Strongly discourage development with unmitigatable adverse impacts.

- *Policy W-3.1:* Waterfront objectives, policies, and actions regarding geology, land stability, erosion, soils, water quality, flood hazards, wetland plant and animal habitats, and air quality and pollutants, shall be consistent and in compliance with the 1996 *Open Space, Conservation, and Recreation Element* of the City's *General Plan*.
- *Policy W-3.2:* 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 man-made environment along the waterfront.
- *Policy W-3.3:* Native plant communities, wildlife habitats and sensitive habitats should be protected and enhanced.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the Oakland Municipal Code with regard to biological resources, impacts to wetlands and other habitat, specifically:

Chapter 13.16: City of Oakland Creek Protection, Storm Water Management, and Discharge Control Ordinance. The storm water management and discharge control ordinance was adopted in 1997 to provide stronger provisions to manage and safeguard creeks. It includes permitting guidelines for construction near creeks within the City of Oakland. According to the ordinance, a creek is defined as a watercourse that is a naturally occurring swale or depression, or engineered channel, which carries fresh or estuarine water either seasonally or year round within City boundaries. Creeks are capable of supporting riparian, wetland and other aquatic habitats within and along the banks of the channels.

Standard Conditions of Approval. Since activities within and alongside creeks (i.e., dewatering) can affect riparian, wetland and other aquatic habitats, development under the *2007-2014 Housing Element* would be subject to the following Standard Conditions of Approval with regard to biological resources – impacts to wetlands and other habitat [see also SCA-72 (discussed in Section VII. Hazards and Hazardous Materials), 75 through 86 (discussed in Section VIII. Hydrology and Water Quality), and 87 (discussed in detail under Comment to Question IVa and IVd):

SCA-88 Creek Dewatering and Diversion: If installing any dewatering or diversion device(s), the project applicant shall develop and implement a detailed dewatering and diversion plan for review and approval by the Building Services Division. All proposed dewatering and diversion practices shall be consistent with the requirements of the Streambed Alteration Agreement issued by the California Department of Fish and Game:

- a) Ensure that construction and operation of the devices meet the standards in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Control Board (RWQCB).
- b) Construct +coffer dams and/or water diversion system of a non-erodible material which will cause little or no siltation. Maintain coffer dams and the water diversion system in place and functional throughout the construction period. If the coffer dams or water diversion system fail, repair immediately based on the recommendations of a qualified

environmental consultant. Remove devices only after construction is complete and the site stabilized.

- c) Pass pumped water through a sediment settling device before returning the water to the stream channel. Provide velocity dissipation measures at the outfall to prevent erosion.

Other. Development under the *2007-2014 Housing Element* would be subject to the following federal and State regulations with regard to biological resources, impacts to wetlands and other habitat:

Clean Water Act. Under Section 404 of the CWA (33 USC, Section 1344), the U.S. Army Corps of Engineers (Corps) regulates the disposal of dredged and fill materials into “waters of the United States.” Waters of the United States include intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, and wetlands adjacent to any water of the United States (CFR 33, Part 328). In areas subject to tidal influence, Section 404 jurisdiction extends to the high tide line. Certain waters of the United States are considered “special aquatic sites” because they are generally recognized as having particular ecological value. Such sites include sanctuaries and refuges, mudflats, wetlands, vegetated shallows, coral reefs, and riffle and pool complexes. Special aquatic sites are defined by the U.S. Environmental Protection Agency and may be afforded additional consideration in the permit process for a project. Special aquatic sites include habitats such as wetlands, mudflats, and eelgrass beds. Currently, EPA’s CWA regulations at 40 CFR 122.3(a) exclude from regulation under the National Pollutant Discharge Elimination System (NPDES), “...any other discharge incidental to the normal operation of a vessel.” Therefore, ballast water discharges have not been and are currently not being regulated under the Clean Water Act.

Rivers and Harbors Act. The Corps also regulates navigable waters under Section 10 of the Rivers and Harbors Act. Navigable waters are defined as “...those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce” (33 CFR, Part 322.2). A permit from the Corps must be obtained for any work within jurisdictional waters of the United States.

Regional Water Quality Control Board 401 Certification (associated with Section 404 of the Clean Water Act). The Regional Water Quality Control Board (RWQCB) must conduct a separate review of all projects subject to Section 404 to determine whether they require a Section 401 Water Quality Certification or a waiver of discharge requirements. Section 401 refers to the section of the Clean Water Act that gives states authority to issue, waive, or deny certification that the proposed activity is in conformance with state water quality standards.

Section 1602 of the Fish and Game Code of California. The CDFG asserts jurisdiction over fish, wildlife, and plant resources, as well as their habitats. When any alteration of a lake, stream, or river occurs within the State, the CDFG is empowered under Section 1602 of the Fish and Game Code of California to issue a Streambed Alteration Agreement, which is designed to ensure protections of said resources.

Compliance with *OSCAR* policies, *LUTE* policies, Municipal Code Chapter 13.16, Standard Condition of Approval 87, and the above federal and State regulations would reduce impacts on wetland habitats and creeks to less than significant.

Comment to Question IVe (Conflicts with applicable habitat conservation plans)

Development of the opportunity sites identified in the *2007-2014 Housing Element* would not fundamentally conflict with any applicable habitat conservation plan (HCP) or natural community conservation plan (NCCP); as previously stated, development under the *2007-2014 Housing Element* would occur primarily in already urbanized areas. The closest major HCP/NCCP is the East Contra Costa County HCP, which encompasses the County of Contra Costa, and the cities of Brentwood, Clayton, Oakley, and Pittsburg. Therefore, no impact on applicable HCPs would occur.

Comment to Question IVf (Trees)

Removal of any protected trees resulting from housing development under the *2007-2014 Housing Element* would be subject to the provisions of the City's Tree Preservation Ordinance, and thus conflicts with this ordinance would be less than significant. Moreover, compliance with the City's *General Plan* Policies CO-7.1, CO-7.3, and CO-7.4 (found in the *OSCAR Element*), and the City's SCA-43 through 47 would further ensure the protection of trees within the City. Therefore, a less-than-significant impact would occur.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* policies with regard to biological resources, impacts to trees:

- *Policy CO-7.1:* 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-7.3:* Make every effort to maintain the wooded or forested character of tree-covered lots when development occurs on such lots.
- *Policy CO-7.4:* Discourage the removal of large trees on already developed sites unless removal is required for biological, public safety, or public works reasons.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the Oakland Municipal Code with regard to biological resources, impacts to trees:

Chapter 12.36: City of Oakland Tree Ordinance. The tree ordinance requires property owners to obtain a permit before removing protected trees from their property.

Standard Conditions of Approval. Development under the *2007-2014 Housing Element* would be subject to the following Standard Conditions of Approval with regard to biological resources, impacts to trees:

SCA-43 Tree Removal Permit on Creekside Properties: Prior to removal of any tree located on the project site which is identified as a creekside property, the project applicant must secure the applicable creek protection permit, and abide by the conditions of that permit.

SCA-44 Tree Removal During Breeding Season: To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of raptors shall not occur during the breeding season of March 15 and August 15. If tree removal must occur during the breeding season, all sites 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 start of work from March 15 through May 31, and within 30 days prior to the start of work from June 1 through August 15. The pre-removal surveys shall be submitted to the Planning and Zoning Division and the Tree Services Division of the Public Works Agency. If the survey indicates the potential presences 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 CDFG, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

SCA-45 Tree Removal Permit: Prior to removal of any protected trees, per the Protected Tree Ordinance, located on the project site or in the public right-of-way adjacent to the project, the project applicant must secure a tree removal permit from the Tree Division of the Public Works Agency, and abide by the conditions of that permit.

SCA-46 Tree Replacement Plantings: Replacement plantings shall be required for erosion control, groundwater replenishment, visual screening and wildlife habitat, and in order to prevent excessive loss of shade, in accordance with the following criteria:

- 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.
- Replacement tree species shall consist of *Sequoia sempervirens* (Coast Redwood), *Quercus agrifolia* (Coast Live Oak), *Arbutus menziesii* (Madrone), *Aesculus californica* (California Buckeye) or *Umbellularia californica* (California Bay Laurel) or other tree species acceptable to the Tree Services Division.
- Replacement trees shall be at least of twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.
- Minimum planting areas must be available on site as follows:
 - o For *Sequoia sempervirens*, three hundred fifteen square feet per tree; and
 - o For all other species listed in #2 above, seven hundred (700) square feet per tree.

- In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee as determined by the master fee schedule of the city may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.
- Plantings shall be installed prior to the issuance of a final inspection of the building permit, subject to seasonal constraints, and shall be maintained by the project applicant until established. The Tree Reviewer of the Tree Division of the Public Works Agency may require a landscape plan showing the replacement planting and the method of irrigation. Any replacement planting which fails to become established within one year of planting shall be replanted at the project applicant's expense.

SCA-47 Tree Protection During Construction: 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:

- a) 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 City Tree Reviewer. 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.
- b) 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 City Tree Reviewer 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.
- c) 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 Tree Reviewer 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 tree reviewer. 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.
- d) 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.
- e) 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 Agency of such damage. 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.

- f) 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.

Compliance with *OSCAR* policies, Municipal Code Chapter 12.36, Standard Conditions of Approval 43 through 47, and the above federal and State regulations would reduce impacts on trees to less than significant.

4. Cumulative Impacts

The geographic area considered for the biological resources cumulative analysis is the City of Oakland. As explained above, most natural areas in the City have been completely developed and the hillsides have been graded extensively; however, several sensitive species and a rare vegetation community still exist within the City. As such, development under the *2007-2014 Housing Element*, as well as other past, present, current, pending, and future projects around the City, could have a significant cumulative impact on these species.

Nonetheless, housing projects under the *2007-2014 Housing Element* and other future projects in the 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 biological resources. Additionally, new projects would be required to demonstrate that they would not have significant effects on these biological resources, although it is possible that some projects may be approved even though they would have significant, unavoidable impacts on biological resources. As explained in more detail above, biological impacts resulting from the *2007-2014 Housing Element* are considered less than significant. Therefore, given the heavily urbanized context, the effect of the project on biological resources, in combination with other foreseeable similar projects, would likely be less than significant. Given the number of similar development projects currently in progress, as well as those proposed at this time within the geographic context of this analysis, the incremental contribution of development under the *2007-2014 Housing Element* towards cumulative biological impacts is not considerable and is considered to be less than cumulatively considerable.

5. Conclusion

Development at the opportunity sites identified in the *2007-2014 Housing Element* would largely occur as infill, in an urbanized and built-out City. Compliance with policies CO-2.4, CO-5.3, CO-6.1, CO-6.4, CO-6.5, CO-7.1, CO-7.3, CO-7.4, CO-8.1, CO-9.1, CO-11.1, CO-11.2, W-3.1, and W-3.2 contained in the City's *General Plan*, *OSCAR* and *LUTE* elements, Chapters 13.16 and 12.36 of the Municipal Code, and SCA-43 through 47, 72, 75 through 86, 87, and 88 would ensure that development under the *2007-2014 Housing Element* would comply with federal, State, and local laws, and would result in a less-than-significant impact. The *General Plan* policies listed above have been crafted to ensure that future development would comply with federal and State laws in regards to biological resources, and the City's Municipal Code would ensure that future development is in compliance with the standards established by the State, as enforced by the City, and would have a less-

than-significant impact. In addition, future development under the *2007-2014 Housing Element* would be required to protect trees, wetlands, and other biological resources that may be suitable habitat for sensitive or special status species. As such, the proposed project would have a less-than-significant impact related to biological resources.

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V. CULTURAL RESOURCES

1. Setting³⁰

The East Bay's earliest known inhabitants were aboriginals called Ohlones, or Costanoans, who inhabited the Oakland area for at least 3,500 years. By the time of European contact, the territory of the Ohlone people extended along the coast from the Golden Gate in the north to just beyond Carmel in the south, and as much as 60 miles inland. This territory encompassed a lengthy coastline as well as several inland valleys. The Ohlones were hunter-gathers who relied heavily on acorns and seafood.

The earliest European explorers of the area arrived in 1772 (Fages and Crespi) and in 1776 (Anza). Following, seven Spanish missions were founded in Ohlone territory between 1777 and 1797. The Oakland area was then established as part of the rancho of Luis Maria Peralta, granted in 1820, and divided among his four sons in 1842. In 1850, Edson Adams, Andrew Moon, and Horace Capentier settled on 480 acres of Vicente Peralta's land, and proceeded to sell lots to fellow squatters. This settlement was incorporated in 1852 as the City of Oakland, and included what is now downtown and West Oakland up to approximately 22nd Street. The City quickly expanded and the population more than tripled when Oakland was selected as the land terminus of the first transcontinental railroad, which was completed in 1869. With the extensive rail network and the development of ports and wharfs, the City grew as an industrial and commercial center.

The opportunity sites of the *2007-2014 Housing Element* are located throughout the City of Oakland (see Figure 2, Housing Opportunity Sites and Planning Area Boundaries, in the Project Description), where cultural resources are known to exist. For the purposes of this analysis, cultural resources are defined as archeological resources, historic resources, and paleontological resources.

Historical Resources. "Historical resource" is a term with a defined statutory meaning. (See Public Resources Code, section 21084.1 and CEQA Guidelines, section 15064.5, subdivisions (a) and (b).) An historical resource is defined as any object, building, structure, site, area, place, record, or manuscript that possesses integrity, as defined by 36 CFR 60.4, and meets one of four criteria laid out in the CEQA Guidelines, section 15064.5 (a)(3)). The State Office of Historic Preservation has determined that buildings and structures 50 years and older may be of historic value, depending on the integrity of the structure and other criteria that link it to an historic event, person, or the distinctive characteristics of an architectural type, period, or method of construction.

Since World War II, Oakland has lost large numbers of historically or architecturally significant properties, either through demolition or insensitive alteration. These include hundreds of Victorian houses, most of the downtown's pre-1900 commercial buildings, and several large churches and civic buildings. Nonetheless, Oakland still has a broad array of existing significant older properties, reflective of a rich multicultural history.

³⁰ All setting information is from: City of Oakland, *Historic Preservation Element*, August 1998.

Historical structures and sites are located in different areas and neighborhoods throughout the City. Figure 7, *Selected Areas with High Concentration of Designated Historic Properties*, indicates areas in Oakland with the greatest concentration of historic properties. Figure 7 also shows the project opportunity sites, including sites where housing has been constructed or is approved, in proportion to these historic areas.

Figure 7 depicts historic resources and opportunity sites throughout the City; however, a high proportion of the historic properties and opportunity sites are located Downtown. Half of the City's National Register listings and three of the five preservation zoning districts are in the Downtown area. Other major concentrations of older buildings are located east of Lake Merritt and in West Oakland. Historic Districts and other concentrated areas of historic resources recognized by the City are listed below:³¹

- *Central Business District.* The Central Business District contains Oakland's most concentrated area of historic resources. Historic buildings are concentrated in the southwest quadrant of Downtown, along Broadway, around the County Courthouse, in the retail/entertainment district near Telegraph and 20th, and along Franklin, Webster, and Harrison Streets. Several of the *2007-2017 Housing Element* opportunity sites are located in the Central Business District.
- *Estuary Shoreline.* The Estuary shoreline includes a large concentration of 19th century buildings in the Jack London area, particularly around the Produce Market, and scattered historic sites and buildings to the east along the San Antonio and Fruitvale waterfronts. Opportunity sites under *2007-2017 Housing Element* are located within the Estuary Shoreline area.
- *Coliseum Area (San Leandro Street Industrial Corridor).* The San Leandro Street corridor includes a mix of older, mostly single-family wood-frame cottages and industrial properties ranging from small single story buildings to large manufacturing complexes. Opportunity sites under the *2007-2017 Housing Element* are located within the Coliseum Area.
- *Transit Corridors.* Transit corridors are centered along some of Oakland's earliest streets. Most of the streets date back to the City's establishment and most served as important travel routes between Oakland and outlying communities during the late 1800s. Consequently, the likelihood of historic sites and buildings along the corridors is high. The corridors also include notable examples of "vintage" highway-commercial architecture, including motels along MacArthur and car dealerships along Broadway. Several of the *2007-2017 Housing Element* opportunity sites are located along the main transit corridors.
- *Transit-Oriented Districts.* The transit villages with the greatest potential for impacts on historic structures are within West Oakland and Fruitvale. The West Oakland station lies immediately adjacent to 7th Street, which at one time was a major commercial artery connecting downtown with the ferry and railroad terminals. In addition, the Fruitvale area includes a high concentration of post 1906-earthquake commercial construction, as well as a high number of homes pre-dating 1910. Several of the *2007-2017 Housing Element* opportunity sites are located within transit-oriented districts.

³¹ City of Oakland, Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation Element EIR*, October 31, 1997.

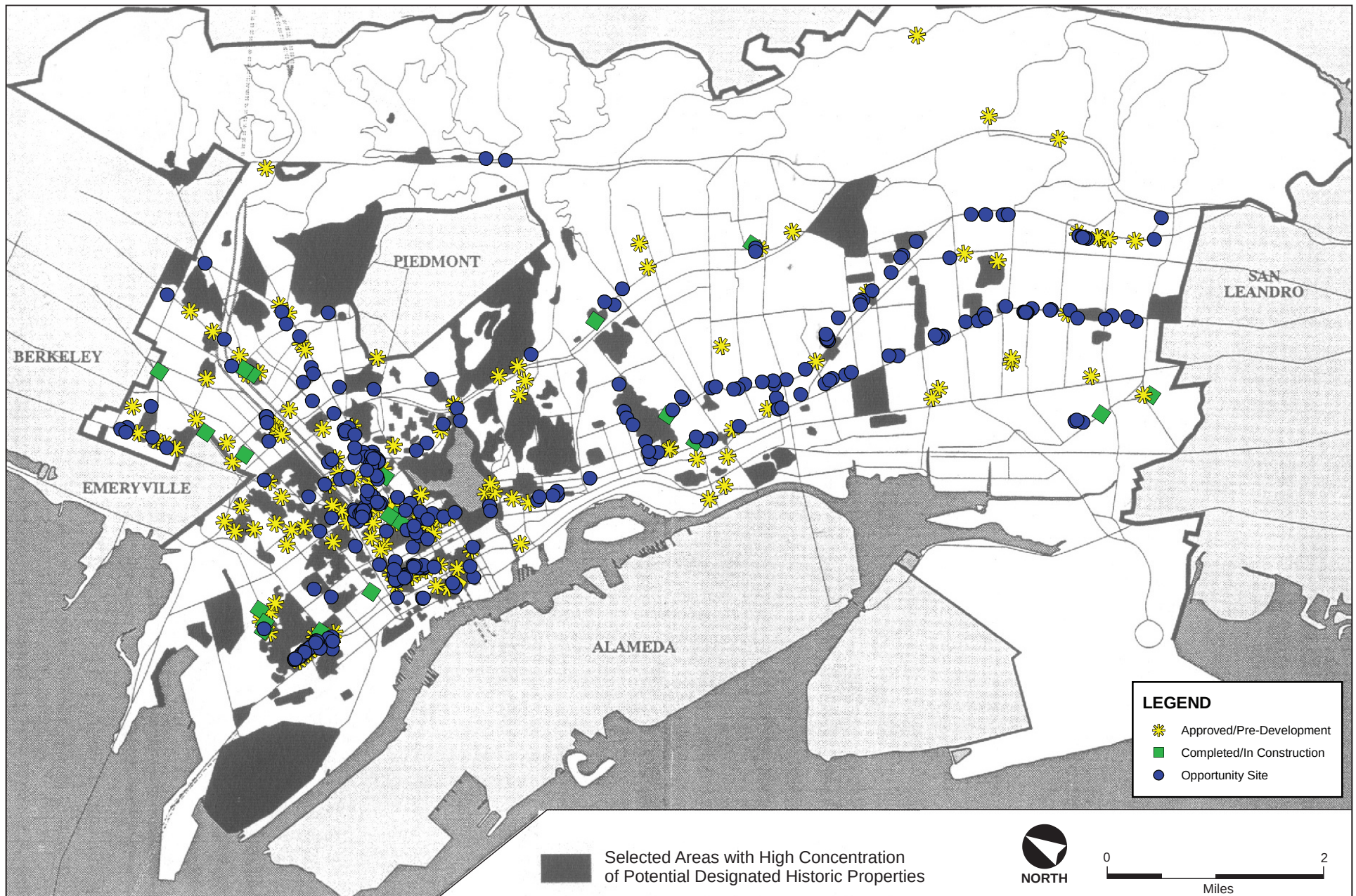


FIGURE 7
Selected Areas with High Concentration of Designated Historic Properties

Source: City of Oakland, General Plan Land Use and Transportation Element EIR, 1997.

As shown in Figure 7, many of the sites are located in areas with high concentrations of designated historic properties, which are scattered across Oakland with a high concentration in the downtown area.

Under CEQA, public agencies must consider the effects of their actions on both “historical resources” and “unique archaeological resources.” Pursuant to Public Resources Code section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” Section 21083.2 requires agencies to determine whether proposed projects would have effects on “unique archaeological resources.” The following are the various registers of historical resources including the national, state, and local levels. Historical resources listed or determined eligible for one of these registers is protected under CEQA (CEQA Guidelines, section 15064.5).

National Register of Historic Place and National Historic Landmarks. The National Register is the federal government’s list of properties warranting preservation. Approximately 38 Oakland properties are currently on the National Register and several hundred have been officially determined as eligible. Several thousand more may be eligible, either individually or as part of the National Register districts.

California State Historical Landmarks and Points of Historical Interest. In order to be eligible for a landmark designation, a property must be of statewide historical importance and be the first, last, only, or most significant example of a type in the region. Points of Historical Interest are properties of countywide and regional importance which are not eligible as State Historic Landmarks. There are 11 State Historical Landmarks in Oakland and one Point of Historical Interest.

California Register of Historical Resources. This is intended as a guide for identifying the State’s historical resources and to indicate what properties are to be protected. The Register presently includes properties officially determined eligible for the National Register of Historic Places or State Historical Landmarks Nos. 770 and higher.

Oakland Landmarks. Properties eligible as Oakland landmarks are defined under Section 2002(p) of the Zoning Regulations as those having “special character or special historical, cultural, educational, architectural, aesthetic, or environmental interest or value.” There are now over 110 landmarks in Oakland and at least several hundred additional properties appear eligible as landmarks.

City of Oakland Municipal Code: S-7 and S-20 Preservation Combining Zone. About 40 properties are located within five existing S-7 Zones. S-7 and S-20 zones are mainly located in southeast Oakland, within or adjacent to the Central Business District. Refer to the below discussion about the S-7 and S-20 zones under the Municipal Code for more details.

Archeological Resources. Prehistoric archeological resources typically include chert or obsidian flakes, projectile points, mortars and pestles, and dark friable soil containing shell and bone, dietary debris, heat-affected rock, and/or human burials. Native American prehistoric archeological resources

are generally situated near the San Francisco Bay and on terraces adjacent to intermittent or perennial creeks or springs; along ridges; and on broad or moderately wide mid-slope terraces.

Huge shellmounds left by the Ohlone peoples have been recovered near the mouth of the Temescal Creek in Emeryville and on the shores of Brooklyn Basin in what is now the Oakland Estuary. Buried artifacts and other archeological remains have also been found in various places in Oakland and further discoveries may be expected in the future.

At the time of Spanish settlement of the area, there were an estimated four or five Ohlone villages. Surface traces of these villages have long since disappeared, but all may exist as buried archeological sites. Three of these villages are believed to have been located in the vicinity of 51st Street and Telegraph Avenue, Trestle Glen, and Holy Names College. There are numerous housing opportunity sites located within a half-mile radius from these three potential Ohlone villages.

Paleontological Resources.³² Paleontological resources are the fossilized remains of the area's early plants and animals. The oldest fossils of land animals were deposited about 12.5 million years ago and are found in the lowermost rocks of the Orinda geologic formation. Horse teeth, mastodon tusks, and camel bones from this era have been discovered in the East Bay Hills. Even older remains, including fossilized beds of oysters, scallops, and clams from the Miocene epoch (10 to 30 million years ago), have been found in the hills above Oakland and Berkeley. These remains were deposited at a time when the East Bay Hills were still submerged by the sea. Fossilized plants from the Pliocene and Pleistocene times also occur throughout the Bay Area, including Oakland. Plant and animal fossils are occasionally uncovered during major excavation projects, including quarrying and highway tunnel construction. In fact, fossils are widespread and would be encountered in many places where broad, deep cuts into bedrock would occur.

2. Environmental Checklist

The proposed project would have a significant impact on the environment if “potentially significant” is checked under items Va-d, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

³² City of Oakland, Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation Element EIR*, October 31, 1997.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be "materially impaired." The significance of an historical resource is "materially impaired" when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that convey its historical significance and that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register of Historical Resources, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5)?	☐	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐	☐

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

3. Discussion

Comment to Question Va (Historical Resources)

The implementation of the *2007-2014 Housing Element* would not have direct, on-site physical impacts to existing historical resources. Out of the 14,629 housing units under the *2007-2014 Housing Element*, only 1,426 units have yet to be planned, approved, and constructed, and 12,075 have been approved or are in pre-approval. Some of the sites for which approvals have been issued could involve demolition of, or impacts to, historic resources. However, prior to issuance of approvals from the City of Oakland, each of these projects would have been subject to CEQA review, as well as to the Standard Conditions of Approval, described below and the goals and policies of the Historic Preservation Element of the City of Oakland's *General Plan*. Given these requirements, the potential impacts to historic resources resulting from projects on any of the approved sites would be mitigated on a site by site basis, as would the remaining 1,426 housing units, as described below.

While the opportunity sites would be located on vacant or underutilized parcels and would not include the demolition of historical resources, construction of these sites could indirectly impact surrounding historic properties. For example, vibration during construction activities could potentially damage nearby historic properties, or new development could be visually incompatible with the older, historical buildings.

If development was undertaken in a manner that was not sensitive to historic resources, then significant impacts to historical resources as defined by CEQA could result. However, because housing development under the *2007-2014 Housing Element* would be subject to various protective policies and conditions of approval, impacts would be less than significant. The policies and conditions that would apply to the proposed project are described below.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* goals and policies with regard to historical resources. These policies address preserving design elements of historic buildings, architectural integrity, and ensuring that new development in historic districts are visually interesting and compatible in character with the surroundings.

Historic Preservation Element

- *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.
- *Policy 2.1:* Preservation Incentives and Regulations for Designated Historic Properties. The City will use a combination of incentives and regulations to encourage preservation of significant older properties and areas which have been designated as Landmarks, Preservation Districts, or Heritage Properties. The regulations will be applied according to the importance of each property, with the more important properties have stronger regulations.
 - o *Action 2.4.1:* Landmark and Preservation District Design Guidelines: Develop and adopt design guidelines for Landmarks and Preservation Districts.
- *Policy 2.6:* Preservation Incentives. (b) Compatible new development on vacant noncontributing Preservation District parcels will be eligible for the following incentives: (iv) broader range of permitted or conditionally-permitted uses; (v) transferable development rights; (vi) priority for economic development and community development project assistance and eligibility for possible historic preservation grants for low-income housing; and (vii) eligibility for acquisition, rehabilitation, and other development assistance from a possible historic preservation revolving fund or possible Marks historical rehabilitation bond program.

Land Use and Transportation Element

- *Policy N9.8: Preserving History and Community.* Locations that create a sense of history and community within the City should be identified and preserved where feasible.

As aforementioned, several of the housing opportunity sites are located in the downtown area. The following policies of the *LUTE* would be applicable to residential infill housing occurring on opportunity sites within the Downtown Oakland:

- *Policy D1.1: Defining Characteristics of Downtown.* The characteristics that make downtown Oakland unique, including... historic areas... should be enhanced and used to strengthen the downtown as a local and regional asset.
- *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.

To the extent that any of the development occurring under the *2007-2014 Housing Element* would occur in Old Oakland, Jack London Square and/or in neighborhoods that feature historic architecture, or create a sense of history and/or community, the following *LUTE* policies would apply:

- *Policy D1.4: Planning for Old Oakland.* Old Oakland should be respected and promoted as a significant historic resource and character-defining element, with Washington Street as its core.

The inclusion of *LUTE* Policies D1.1, D2.1, D1.4, and N9.8 are indicative of the City's commitment to preserving and enhancing historic resources; therefore, these policies would govern future development under the proposed project.

In the unlikely event that historic properties adjacent to the opportunity sites could be damaged or altered as a result of construction, the following *General Plan* policies would apply:

- *Policy 2.4: Landmark and Preservation District Regulations.* (a) Demolitions and removals involving Landmarks or Preservation Districts will generally not be permitted unless certain findings are made; (b) Alterations or New Construction will normally be approved if they are found to meet the Secretary of Interior's Standards for the Treatment of Historic Properties; (c) Findings involving alterations of Landmarks or Preservation Districts will seek to balance preservation with other concerns; (d) Specific regulations are set forth in Tables 4-1 and 4-2 of the *Historic Preservation Element*.
- *Policy 3.1: Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions.* The City will make all reasonable efforts to minimize adverse effects on the character-defining elements of existing or Potential Designated Historic Properties which could result from private or public projects requiring discretionary City actions.
- *Policy 3.5: Historic Preservation and Discretionary Permit Approvals.* For alterations 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.
- *Policy 3.6: Historic Preservation and City-Sponsored or Assisted Projects.* To the extent consistent with other Oakland *General Plan* provisions, City-sponsored or assisted projects involving an existing or Potential Historic Property will: (a) avoid adverse effects on these

properties; (b) incorporate preservation efforts; (c) be considered to have no effect on the properties if they conform with the Secretary of Interior's Standards.

LUTE EIR.³³ Potential impacts to historic resources were analyzed as part of the *LUTE EIR* (page III.G-1 – III.G-17) and mitigation measures were identified. Those mitigation measures are incorporated by reference here. With the implementation of *General Plan* policies D1.4, D6.2, W10.7, N9.8, and N9.9 and appropriate mitigation measures from the *LUTE EIR* (Mitigation Measure G.3a, and G.3b), impacts to historic resources are less than significant and no new impacts are anticipated as a result of the project. Those mitigation measures are as follows:

Mitigation Measure G.3a: Amend the Zoning Regulations text to incorporate the new preservation regulations and incentives.

Mitigation Measure G.3b: Develop and adopt design guidelines for Landmarks and Preservation Districts.

Municipal Code. The housing opportunity sites are located throughout the City of Oakland. In general, the S-7 and S-20 historical zones are located in southeast Oakland, within or adjacent to the Central Business District. In the event that a housing site is located within an S-7 or S-20 zone, development under the *2007-2014 Housing Element* would be subject to the following titles of the Oakland Municipal Code:

- *Title 17: Planning*
 - o *Chapter 17.84: S-7 Preservation Combining Zone Regulations.* The provisions outlined in this chapter are for the S-7 preservation combining zone. The S-7 zone is intended to preserve and enhance the cultural, educational, aesthetic, environmental, and economic value of structures and areas of special importance due to historical association, basic architectural merit, the embodiment of a style or special type of construction, or other special character or value, and is typically appropriate to selected older locations in the City. This chapter summarizes the required design review process and criteria for construction, alteration, demolition, and removal of historic structures.
 - o *Chapter 17.100B: S-20 Historic Preservation District Combining Zone Regulations.* The provisions outlined in this chapter are for the S-20 historic preservation district combining zone. The S-20 zone is intended to preserve and enhance the cultural, educational, aesthetic, environmental, and economic value of structures and areas of special importance. The S-20 zone is similar to the S-7 preservation combining zone, but is designed for larger areas, often with a large number of residential properties that may not be individually eligible for landmark designation but which as a whole constitute a historic district. The S-20 zone provides generally more expeditious review procedures than those provided in the S-7 zone. These regulations shall apply in the S-20 zone, and are supplementary to the provisions of Section 17.102.030 for designated landmarks and to the other regulations applying in the zones with which the S-20 zone is combined.

³³ City of Oakland, Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation Element EIR*, October 31, 1997.

Standard Conditions of Approval. In the unlikely event that historic properties adjacent to the opportunity sites could be damaged or altered as a result of construction, the following *Standard Conditions of Approval* would apply:

SCA-56 Compliance with Policy 3.7 of the Historic Preservation Element (Property Relocation Rather than Demolition): The project applicant shall make a good faith effort to relocate a historic building to a site acceptable to the Planning and Zoning Division and the Oakland Cultural Heritage Survey. Good faith efforts include, at a minimum, the following:

- a) Advertising the availability of the building by: (1) posting of large visible signs (such as banners, at a minimum of 3 feet x 6 feet 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 Planning and Zoning Division;
- 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.

SCA-57 Vibrations Adjacent Historic Structures: The project applicant shall retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage a Historic Structure and design means and methods of construction that shall be utilized to not exceed the thresholds.

Compliance with the aforementioned *Historic Preservation Element* policies, *LUTE* policies, Municipal Code Title 17, and SCA-56 and 57, would reduce adverse changes in significant historical resources, as defined by the CEQA Guidelines, to a less-than-significant level.

Comments to Questions Vb-Vd (Archeological and Paleontological Resources and Human Remains)

As indicated in the Setting discussion, other cultural resources, such as paleontological and archeological resources, may be encountered during construction at the opportunity sites. Ground-disturbing activities (such as excavation) associated with the construction of the new housing units at opportunity site, which are widely distributed throughout the City, could potentially unearth undiscovered archaeological or paleontological resources, or human remains. If ground-disturbing activities during construction are not sensitive to those cultural resources, then physical impacts could result. Disruption of such resources could result in a significant impact under CEQA.

However, potential impacts to cultural resources have been addressed in the *General Plan*, the *LUTE EIR* and by the City's Standard Conditions of Approval. Compliance with *General Plan* objectives and policies, the *LUTE EIR* mitigation measure, the Standard Conditions of Approval, and additional mitigation measures would reduce any impacts on paleontological and archeological resources to a less-

than-significant level. The policies and conditions that would apply to the proposed project are described below.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* objectives and policies with regard to archeological resources:

- *Objective 4: Archeological Resources.* To develop databases identifying existing and potential archeological sites and adopt procedures for protecting significant archeological resources.
- *Policy 4.1: Archeological Resources.* To protect significant archeological resources, the City will take special measures for discretionary project involving ground disturbances located in archeologically sensitive area.

LUTE EIR. Potential impacts to archeological and paleontological resources were analyzed as part of the *LUTE EIR* (page III.G-1 – III.G-17). The *LUTE EIR* addressed the project's impacts to these cultural resources and mitigation measures are incorporated by reference here. With the implementation of *General Plan* policies and appropriate mitigation measures from the *LUTE EIR* (Mitigation Measure G.2), impacts to archeological and paleontological resources are less than significant and no new impacts would result. This mitigation measure is as follows:

Mitigation Measure G.2: Establish criteria and interdepartmental referral procedures for determining when discretionary City approval of ground-disturbing activities should be subject to special conditions to safeguard potential archeological resources.

Standard Conditions of Approval. The City has adopted the following *Standard Conditions of Approval* which would apply to any development project undertaken under the *2007-2014 Housing Element*. Compliance with these *Standard Conditions of Approval* would reduce potentially significant impacts to archeological and paleontological resources and human remains to a less than significant level:

SCA-52 Archaeological Resources:

- a) Pursuant to CEQA Guidelines section 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Oakland. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

- b) In considering any suggested measure proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the project applicant shall determine whether avoidance is necessary and feasible in light 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) shall be instituted. Work may proceed on other parts of the project site while measure for historical resources or unique archaeological resources is carried out.
- c) Should an archaeological artifact or feature be discovered on-site during project construction, all activities within a 50-foot radius of the find would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. If the deposit is determined to be significant, the project applicant and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate measure, subject to approval by the City of Oakland, which shall assure implementation of appropriate measure measures recommended by the archaeologist. Should archaeologically-significant materials be recovered, the qualified archaeologist shall recommend appropriate analysis and treatment, and shall prepare a report on the findings for submittal to the Northwest Information Center.

SCA-53 Human Remains: In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines 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 Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. 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.

SCA-54 Paleontological Resources: In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995,1996)). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.

Compliance with the aforementioned *Historic Preservation Element* policies, *LUTE EIR* Mitigation Measure G.2, and Standard Conditions of Approval 52, 53, and 54, would reduce significant changes to archeological resources, unique paleontological resources, geologic features, or human remains to a less-than-significant level.

4. Cumulative Impacts

The geographic area considered for the cultural and paleontological resources cumulative analysis is the City of Oakland. Construction activities associated with the *2007-2014 Housing Element* and past, present, pending, and reasonably foreseeable future projects could result in significant impacts to archaeological, historic, and paleontological resources, and human remains. However, similar to construction under the *2007-2014 Housing Element*, past, present, and future projects have or would be subject to the City's Standard Conditions of Approval designed to protect cultural and paleontological resources. The conditions of approval also include provisions to ensure the discovery of human remains is reported to the proper authorities. The *2007-2014 Housing Element* would not result in the demolition of significant historic architectural resources. Therefore, construction of housing units implemented by the *2007-2014 Housing Element*, together with the impact of past, present, current, pending, and reasonably foreseeable future development, would not contribute to a cumulative impact to cultural or paleontological resources.

5. Conclusion

Development at the opportunity sites identified in the *2007-2014 Housing Element* would largely occur as infill, in an urbanized and built-out City. Compliance with the goals, policies, and programs of the City's *General Plan* (Goal 2, Policy 2.1, and 2.6, Action 2.4.1, and Policies N9.8, D1.1, D2.1, D1.4, 2.4, 3.1, 3.5, 3.6, 4.1, and Objective 4); Municipal Code (Title 17), Standard Conditions of Approval 52, 53, 54, 56, and 57, and *LUTE EIR* Mitigation Measure G.2 would ensure that development under the *2007-2014 Housing Element* would comply with federal and State laws protecting cultural resources, resulting in a less-than-significant impact. In addition, should any sensitive resources be discovered during the construction of future development projects under the *2007-2014 Housing Element*, all building activity should cease until a resource mitigation plan and monitoring program is prepared by a qualified professional as described in Standard Conditions of Approval. As such, the proposed project would have a less-than-significant impact to cultural resources.

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VI. GEOLOGY AND SOILS

1. Setting

The City of Oakland is on the eastern shore of San Francisco Bay. The City occupies 56 square miles and is characterized by flatland topography in the west and the Oakland Hills to the east. The flatlands generally are at elevations of less than 100 feet above mean sea level (msl) with most of the urban area between 42 feet and 43 feet msl; the Oakland Hills reach an elevation of 1,760 feet msl at Grizzly Peak. The bedrock formations of the Oakland Hills are divided from the alluvial deposits of the flatlands by the Hayward Fault Zone, an active part of the San Andreas Fault System, which, being approximately 44 miles wide in the Bay Area, encompasses all the communities surrounding San Francisco Bay. Several rugged canyons cut through the Oakland Hills include Strawberry Canyon, Hamilton Gulch, Telegraph Canyon, and Claremont Canyon.

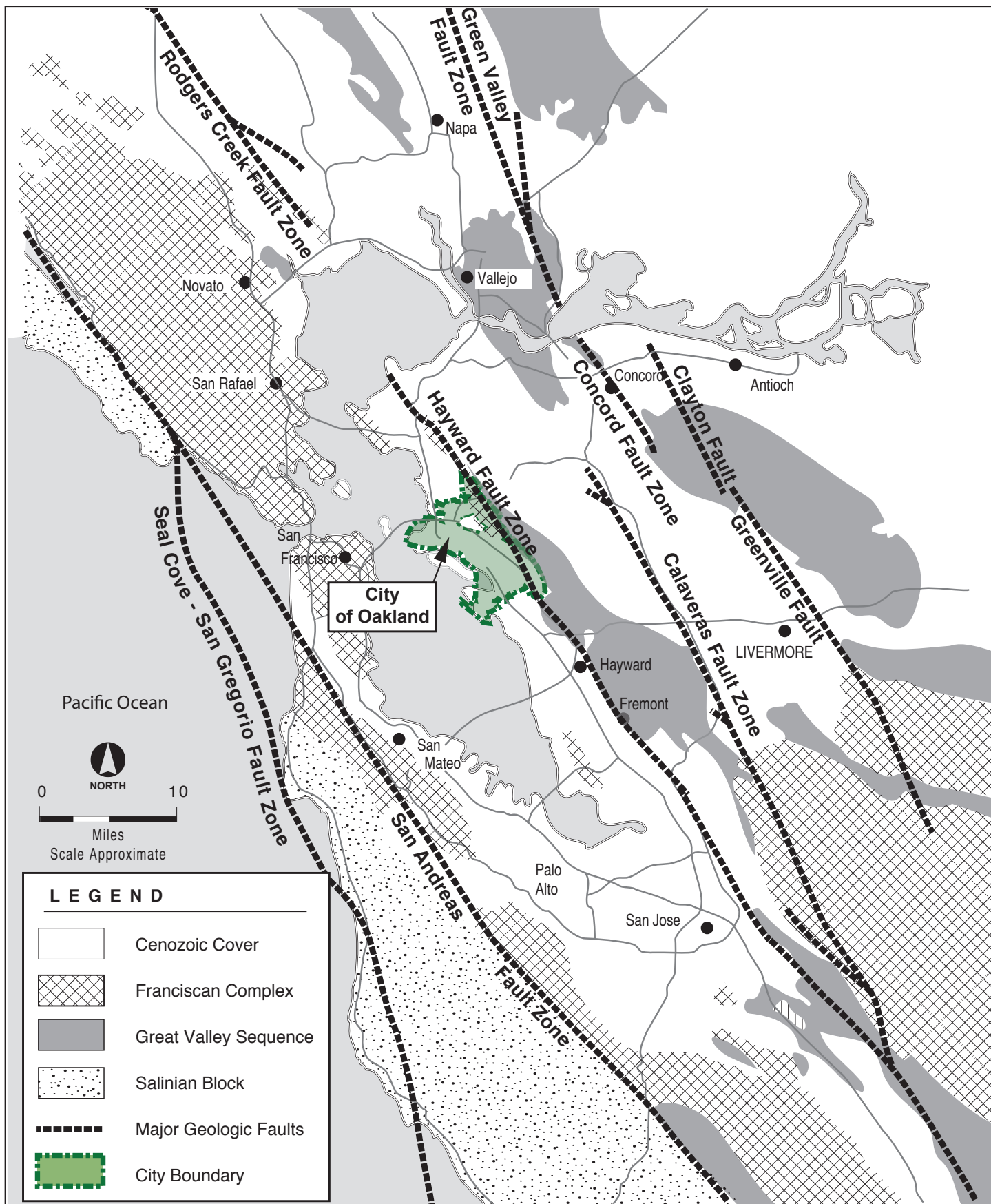
The City is in the Coast Ranges geomorphic province. The major geologic feature of the region is the seismically active San Andreas Fault System. The main trace of the San Andreas fault is about 16 miles southwest of the City, as shown in Figure 8, Regional Geologic Map. The main trace of the Hayward fault passes through the City at the base of the Oakland Hills. During Historic times (the past 200 years), these two faults have produced most of the moderate and large earthquakes in the Bay Area.

There are several other active and potentially active fault zones that affect the City. The San Gregorio, San Andreas, Hayward, Calaveras, and Greenville fault zones all include historically active segments.³⁴ Active segments of the San Gregorio fault are about 40 miles southwest of the City, as shown in Figure 8. The Calaveras fault and Greenville fault are 11 miles and 25 miles east of the City, respectively. The City is crossed by the Alquist-Priolo Earthquake Fault Zone surrounding the Hayward fault.³⁵

Slopes of 30 percent or more occur along the flanks of the Oakland Hills in the City, predominantly east and south of State Route 13 (SR13) and I-580, respectively. In some of these areas, the slope is as great as 75 percent. Slopes of 5 to 30 percent are common from just west of SR13 to the flatlands, which begin at approximately MacArthur Boulevard. The flatlands generally have slopes of less than 5 percent.

³⁴ Bortugno, E.J., R.D. McJunkin, and D.L. Wagner, *Map Showing Recent of Faulting, San Francisco-San Jose Quadrangle*, California Geological Survey, Regional Geologic Map Series, No. 5A, 1991, sheet 5, scale 1:250,000.

³⁵ Hart, E.W., and Bryant, W.A., *Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with index to Earthquake Fault Zones Maps*, California Geological Survey, Special Publication 42, revised 1997, Supplements 1 and 2, 1999, Supplement 3 released May 1, 2003, Online Version updated May 1, 2006.



Along the City's west and southwest borders, adjacent to the Oakland Estuary, much of the existing land surface has been created by filling (i.e., depositing fill materials in the shallow Bay margins). The Bay Bridge approach, the former military depots, and shipping channels are built on land that has been created by filling.

2. Environmental Checklist

The proposed project would have a significant impact on the environment if “potentially significant” is checked under items VIa-f, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Expose people or structures to substantial risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or Seismic Hazards Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to California Geological Survey Special Publications 42 and 117 and PRC §2690 et. Seq.)?	☐	☐	☒	☐	☐
ii) Strong seismic groundshaking?	☐	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse?	☐	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil, creating substantial risks to life, property, or creek/waterways?	☐	☐	☒	☐	☐
c) Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007, as it may be revised), creating substantial risks to life or property?	☐	☐	☒	☐	☐
d) Be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property?	☐	☐	☒	☐	☐
e) 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?	☐	☐	☒	☐	☐

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
f) 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?	☐	☐	☐	☐	☒

Notes:

- a. SCA = Standard Conditions of Approval.
- b. MM = Mitigation Measures

3. Discussion

Comment on Question VIa and VIc (Hazards)

The City of Oakland and the rest of the Bay Area are in one of the most active seismic regions in the United States. Each year, low and moderate magnitude earthquakes occurring in or near the Bay Area are felt by residents of the City. Since the mid-nineteenth century, there have been about 45 destructive earthquakes in California, of which about a dozen have affected the City. The April 1906 earthquake on the San Andreas fault, estimated at about Moment Magnitude (M_w) 7.9 ($M_{8.3}$ on the Richter scale), was the largest regional seismic event felt in the City. More recently, the M_w 6.9 ($M_{7.1}$) Loma Prieta earthquake of October 1989 on the Santa Cruz Mountains segment of the San Andreas fault caused severe damage throughout the Bay Area, including about \$1.5 billion of property damage throughout Alameda County (including the City of Oakland), with 42 deaths reported in the collapse of the Cypress Structure.³⁶

Allowing new human-occupancy uses in the Hayward fault's Alquist-Priolo Earthquake Fault Zone would pose risks to people and structures in the event of a large earthquake causing ground surface rupture or violent groundshaking. As shown in Figure 6-2, two housing opportunity sites are in close proximity to the Hayward Fault Zone. Compliance with the Alquist-Priolo Earthquake Fault Zoning Act (provided subsequently), the Oakland Building Code (provided subsequently), and the City's Standard Conditions of Approval (SCA) 35 and 59 (provided subsequently) would result in less-than-significant exposures of people and structures to the hazards of groundshaking from earthquakes and surface rupture on a known earthquake fault. These requirements would ensure that homes are built on seismically safe ground by mandating site-specific studies and requiring setbacks.

Subsidence and settling can occur in areas where fill has been placed. Settlement of fill has the potential to crack roads, pipes, and building foundations in the flat areas. In the hilly areas, settlement can occur where slopes have been filled to reduce the gradient. Variations in fill thickness and compaction rates

³⁶ McNutt, S.R., "Summary of Damage and Losses Caused by the Loma Prieta Earthquake," in: *The Loma Prieta (Santa Cruz Mountains), California, Earthquake of 17 October 1989*, S.R. McNutt and R.H. Sydnor, editors, California Geological Survey, Special Publication 104, 1990, pages 131 to 138.

can cause building foundations to crack on contoured hillsides. Fill has been placed along the City's south and west sides and in various other locations throughout the City during previous development. Compliance with the Oakland Building Code (provided subsequently), and the City's SCA-35, 58, and 68 (provided subsequently) would result in less-than-significant exposures of people and structures to the hazards of subsidence and settling.

Landsliding is the rapid downslope movement of soil, rock, and rock debris. Mudslides, the most familiar type of landslide in the City, are caused by the shallow movement of earth saturated by water. Landslides are natural occurrences, but can be exacerbated by improper excavation or construction. Development on susceptible slopes can trigger slide activity, thereby increasing the potential for loss of life and property. The risk of landsliding is highest on slopes steeper than 15 percent containing weak, unconsolidated, or shallow soil units; formations with a high clay content and water content; extensive grading; and vegetation removal, and on artificial slopes, especially where the soil is underlain by weathered or highly fractured bedrock. There is a higher probability of landslides on slopes along earthquake faults, such as the traces of the Hayward fault that pass through the City. A single factor, such as an earthquake, heavy rain, misdirected runoff, or a broken water pipe, can trigger a landslide on a susceptible hillside.

The City's Public Works Department maintains a series of detailed maps (called "grade sheets") that show the locations of reported land stability problems. Hundreds of problem areas are shown, ranging from very destructive slides to minor slides in residential yards and along streams. The slides generally have occurred within a mile-wide band along the Hayward fault, typically within hillside residential areas. The U.S. Geologic Survey (USGS) has mapped the locations of potential future landslides in the City, as well as the locations of areas potentially subject to liquefaction. In general, the hilly areas to the east of the Hayward fault have "high" slide hazards, and the hilly areas west of the fault have "moderate" slide hazards. Potentially liquefiable soils occur along the courses of existing and buried creeks and throughout the filled flatlands adjacent to the Bay. Because most of the identified housing opportunity sites are in the built-out, urban areas of the City, most of them would not be subject potential future landslides. Two sites east of Piedmont and four sites northwest of Knowland Park, identified in Figure 9, *Geologic Hazards*, are near potential landslide areas.

These opportunity sites also are near the Hayward fault and those east of Piedmont are on the western edge of the Alquist-Priolo Earthquake Fault Zone. Numerous opportunity sites throughout the flatlands are in areas potentially susceptible to liquefaction, as shown in Figure 9. Compliance with the Oakland Building Code (provided subsequently), and the City's SCA-35 and 60 (provided subsequently) would result in less-than-significant exposures of people and structures to the hazards of landsliding and liquefaction through the regulation of design and setting of future development within the City.

Expansive soils have the capacity for volume change with a loss or gain in moisture. If the soil's potential to shrink or swell potential is rated moderate to high, damage to buildings, roads, and other structures can occur. Chapter 16 of the Building Code ensures structures intended for human occupancy built on expansive soils are subject to less-than-significant settling or heaving effects by

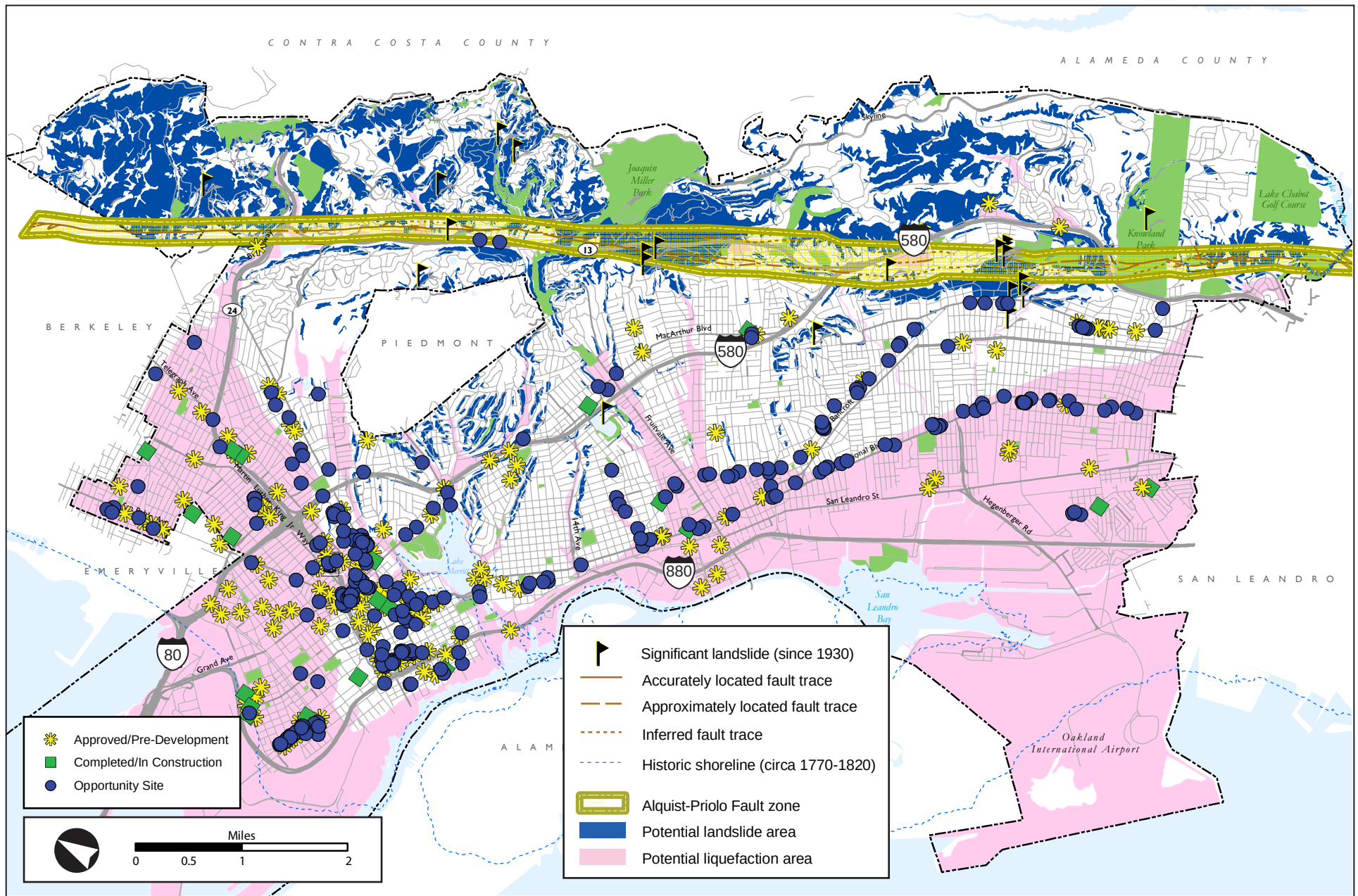


FIGURE 9
Geologic Hazards

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Source: City of Oakland, General Plan Safety Element, 2004.

requiring such development to meet specific minimum structural design standards. The identification and treatment of expansive soils are required to comply with the provisions of Chapter 18 of the Building Code, which specifies the requirements for foundation and soil investigations; excavation, grading, and fill; and the design of footings and foundation support. Geotechnical investigations generally recommend removal and recompaction or replacement of existing fills unsuitable for foundation support. When weak soils are replaced or re-engineered specifically for stability prior to use, the potential effects of expansion can be reduced to an acceptable level or eliminated. An acceptable degree of soil stability can be achieved for expansive or compressible soils by the incorporation of soil treatment programs (replacement, grouting, compaction, drainage control, etc.) in the excavation and construction plans to address site-specific soil conditions. Compliance with the Oakland Building Code (provided subsequently), and the City's SCA-35 and 58 (provided subsequently) would result in less-than-significant exposures of people and structures to the hazards of expansive soil through the regulation of design and setting of future development within the City.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* and policies with regard to geology and soil hazards:

Open Space, Conservation, and Recreation Element

- *Policy CO-1.1:* Design all construction activities to ensure that soil is well secured so that unnecessary erosion, siltation of streams, and sedimentation of water bodies does not occur.
- *Policy CO-2.1:* Encourage development practices which minimize the risk of landsliding.
- *Policy CO-2.2:* 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.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the Oakland Municipal Code with regard to geology and soil hazards:

Unreinforced Masonry Ordinance (Ordinance No. 11613). Requires the upgrading of unreinforced masonry buildings to promote public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on existing buildings of this construction.

Standard Conditions of Approval. Development under the *2007-2014 Housing Element* would be subject to the following Standard Conditions of Approval with regard to geology and soil hazards:

SCA-35 Hazards Best Management Practices. Prior to commencement of demolition, grading, or construction, The project applicant and construction contractor shall ensure that construction of Best Management Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

- Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction. Avoid overtopping construction equipment fuel gas tanks;

- During routine maintenance of construction equipment, properly contain and remove grease and oils;
- Properly dispose of discarded containers of fuels and other chemicals.
- Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.
- 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 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 notification of regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

SCA-58 Soils Report: Required as part of the submittal of a Tentative Tract or Tentative Parcel Map. A preliminary soils report for each construction site within the project area shall be required as part if this project and submitted for review and approval by the Building Services Division. The soils reports shall be based, at least in part, on information obtained from on-site testing. Specifically the minimum contents of the report should include:

- a) Logs of borings and/or profiles of test pits and trenches:
 - i) The minimum number of borings acceptable, when not used in combination with test pits or trenches, shall be two (2), when in the opinion of the Soils Engineer such borings shall be sufficient to establish a soils profile suitable for the design of all the footings, foundations, and retaining structures.
 - ii) The depth of each boring shall be sufficient to provide adequate design criteria for all proposed structures.
 - iii) All boring logs shall be included in the soils report.
- b) Test pits and trenches
 - i) Test pits and trenches shall be of sufficient length and depth to establish a suitable soils profile for the design of all proposed structures.
 - ii) Soils profiles of all test pits and trenches shall be included in the soils report.
- c) A plat shall be included which shows the relationship of all the borings, test pits, and trenches to the exterior boundary of the site. The plat shall also show locations of all proposed site improvements. All proposed improvements shall be labeled.
- d) Copies of all data generated by the field and/or laboratory testing to determine allowable soil bearing pressure, sheer strength, active and passive pressures, maximum allowable

- slopes where applicable and any other information which may be required for proper design of foundations, retaining walls, and other structures to be erected subsequent to or concurrent with work done under the grading permit.
- e) Soils Report. A written report shall be submitted which shall include, but is not limited to, the following:
 - i. Site description
 - ii. Local and site geology
 - iii. Review of previous field and laboratory investigations for the site ;
 - iv. Review of information on or in the vicinity of the site on file at the Information Counter, City of Oakland, Office of Planning Building;
 - v. Site stability shall be addressed with particular attention to existing conditions and proposed corrective attention to existing conditions and proposed corrective actions at locations where land stability problems exist;
 - vi. Conclusions and recommendations for foundations and retaining structures, resistance to lateral loading slopes, and specifications, for fills, and pavement design required;
 - vii. Conclusions and recommendations for temporary and permanent erosion control and drainage. If not provided in a separate report they shall be appended to the required soils report;
 - viii. All other items which a Soils Engineer deems necessary;
 - ix. The signature and registration number of the Civil Engineer preparing the report.
 - f) The Director of Planning and Building may reject a report that she/he believes is not sufficient. The Director of Planning and Building may refuse to accept a soils report if the certifications date of the responsible soils engineer on said document is more than three years old. In this instance, the Director may be required that the old soils report be recertified, that an addendum to the soils report be submitted, or that a new soils report be provided.

For any development projects that require an application for a Tentative Tract Map or Tentative Parcel Map and are wholly or partially within an Alquist-Priolo Earthquake Fault Zone, SCA-59 would apply; with the following exceptions; condominium conversions and single family wood or steel frame dwellings not exceeding two stories, when not part of a development of four or more dwellings.

SCA-59 Geotechnical Report: Required as part of the submittal of a Tentative Tract Map or Tentative Parcel Map:

- a) A site-specific, design level, Fault Zone geotechnical investigation for each construction site within the project area shall be required as part if this project and submitted for review and approval to the Building Services Division. Specifically:
 - i. Each investigation shall include an analysis of expected ground motions at the site from identified faults. The analyses shall be accordance with applicable City ordinances and polices, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.

- ii. The investigation shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).
 - iii. The investigation shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, shall be included in the final design, as approved by the City of Oakland.
 - iv. The geotechnical report shall include a map prepared by a land surveyor or civil engineer that shows all field work and location of the “No Build” zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge.
 - v. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the projects design phase, shall be incorporated in the project.
 - vi. Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.
 - vii. A peer review is required for the Geotechnical Report. Personnel reviewing the geologic report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.
- b) Tentative Tract or Parcel Map approvals shall require, but not be limited to, approval of the Geotechnical Report.

For any development projects that require an application for a Tentative Tract Map or Tentative Parcel Map and are located wholly or partially within the Seismic Hazards Zone, SCA-60 would apply; with the following exceptions; condominium conversions and single family wood or steel frame dwellings not exceeding two stories, when not part of a development of four or more dwellings.

SCA-60 Geotechnical Report: Required as part of the submittal of a tentative Tract Map or Tentative Parcel Map:

- a) A site-specific, design level, Landslide or Liquefaction geotechnical investigation for each construction site within the project area shall be required as part if this project and submitted for review and approval by the Building Services Division. Specifically:
 - i. Each investigation shall include an analysis of expected ground motions at the site from identified faults. The analyses shall be accordance with applicable City ordinances and polices, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.
 - ii. The investigation shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).

- iii. The investigation shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, shall be included in the final design, as approved by the City of Oakland.
 - iv. The geotechnical report shall include a map prepared by a land surveyor or civil engineer that shows all field work and location of the “No Build” zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge.
 - v. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the projects design phase, shall be incorporated in the project.
 - vi. Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.
 - vii. A peer review is required for the Geotechnical Report. Personnel reviewing the geologic report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.
- b) Tentative Tract or Parcel Map approvals shall require, but not be limited to, approval of the Geotechnical Report.

SCA-68 Best Management Practices for Soil and Groundwater Hazards: Ongoing throughout demolition, grading, and construction activities the project applicant shall implement all the City-required BMPs regarding potential soil and groundwater hazards.

- a) Soil generated by construction activities shall be stockpiled onsite 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 agencies laws, in particular, the Regional Water Quality Control Board (RWQCB) and /or the Alameda County Department of Environmental Health (ACDEH) and policies of the City of Oakland.
- b) Groundwater pumped from the subsurface shall be contained onsite 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 of the City of Oakland, the RWQCB and/or the ACDEH. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building (pursuant to the Standard Condition of Approval regarding Radon or vapor Intrusion from Soil and Groundwater Sources)
- c) Prior to issuance of any demolition, grading or building permit, the applicant shall submit for review and approval by the City of Oakland, written verification that the appropriate federal, state or county oversight authorities, including but not limited to RWQCB and/or the ACDEH, have granted all required clearances and confirmed that the applicable standards, regulations and conditions for all previous contamination at the site. The applicant also shall provide evidence from the City’s Fire Department, Office of Emergency Services, indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No.

12323, and compliance with the Standard Condition of Approval Phase I and/or Phase II Reports.

Other. Development under the *2007-2014 Housing Element* would be subject to the following State and local regulations with regard to geology and soils – hazards:

State – California Building Code and City of Oakland Building Code. The California Building Code (CBC) is another name for the body of regulations found in the California Code of Regulations (CCR), Title 24, Part 2. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Until January 1, 2008, the CBC was based on the then-current Uniform Building Code and contained Additions, Amendments, and Repeals specific to building conditions and structural requirements in the State of California. The 2007 CBC, effective January 1, 2008, is based on the current (2006) International Building Code, published by the International Conference of Building Officials, and contains prominent enhancement of the sections dealing with fire safety, equal access for disabled persons, and environmentally friendly construction. Cities and counties are required to enforce the regulations of the 2007 CBC beginning January 1, 2008. Each jurisdiction may adopt its own building code based on the 2007 CBC. Local codes are permitted to be more stringent than Title 24, but must, at a minimum, meet all state standards. The City of Oakland has adopted the 2007 CBC as the basis for the City Building Code, Title 15 of the Municipal Code (Ordinance No. 12843, adopted December 18, 2007). The City's enforcement of its Municipal Code would ensure that the design and construction of buildings in the City would be consistent with the CBC.

State – Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code, Division 2, Chapter 7.5, Sections 2621 et seq.). The Alquist- Priolo Earthquake Fault Zoning Act prohibits the construction of buildings for human occupancy across the traces of active faults and thereby mitigates the hazard of surface fault-line rupture. The Act assumes an area of 50 feet on either side of an active fault trace is underlain by the fault, unless proven otherwise through a fault location investigation. Construction anywhere in an Earthquake Fault Zone is permitted only following the completion of a fault location report prepared by a California-registered Professional Geologist (Section 2623 of the Act).

State – Seismic Hazards Mapping Act (Public Resources Code, Division 2, Chapter 7.8, Sections 2690 et seq.). The Seismic Hazards Mapping Act protects public safety from the effects of strong groundshaking, and earthquake induced liquefaction, landslides, or other ground failures. In accordance with the Act, the State Geologist is required to compile maps of seismic hazard zones throughout the State. Section 2697 of the Act requires that a geotechnical report be prepared prior to City approval of projects in a seismic hazard zone designated by the State Geologist. Section 2699 of the Act requires that the Safety Element prepared for each city *General Plan* takes into account the information provided in the seismic hazard zone maps. Seismic hazard zone maps have been prepared for Oakland delineating potential liquefaction and landslide hazard zones.

Local – City Building Services Division. In addition to compliance with building standards set forth by the City Building Code, the project sponsor for housing projects would be required to submit an engineering analysis accompanied by detailed engineering drawings to the Building Services Division prior to excavation, grading, or construction activities on the project site. This is consistent with standard City practices to ensure that all buildings are designed and built in conformance with the seismic requirements of the City Building Code. An engineering analysis report and drawings and relevant grading or construction activities on a project site would be required to address constraints and incorporate recommendations identified in geotechnical investigations. These required submittals ensure that the buildings are designed and constructed in conformance with the requirements of all applicable building code regulations, pursuant to standard City procedures.

Compliance with the aforementioned *OSCAR* policies, Municipal Code, Standard Conditions of Approval, and applicable federal, State, and local regulations would reduce geologic hazards to a less-than-significant level.

Comment on Question VIb (Erosion)

Hillside construction usually involves the extensive movement of earth to ensure that roads, utilities, and structures are stabilized. On steeper sites, grading may include major cutting and filling. Such grading can decrease slope stability and increase the potential for erosion by the removal of vegetation. Grading activities are subject to the provisions of the City's Grading Ordinance (Ordinance No. 10312) and Sedimentation and Erosion Control Ordinance (Ordinance No. 10446), the full text of both ordinances are located below. The ordinances require a permit for most earth movements of greater than 50 cubic yards of soil and preparation of a sedimentation and erosion control plan where appropriate, compliance with the Ordinances would result in less-than-significant exposures of people and structures to the hazards of erosion.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* policies with regard to geology and soils – erosion:

Open Space, Conservation, and Recreation Element

- *Policy CO-2.4:* Minimize hillside cuts and fills and the removal of desirable vegetation. Limit large scale grading to those areas where it is essential to development. Where hillside grading does occur, reshape the terrain in smooth, natural appearing contours rather than flat, terraced benches. Immediately replant and reseed graded areas to reduce soil loss.
- *Policy W3.1:* Waterfront objectives, policies, and actions regarding geology, land stability, erosion, soils, water quality, flood hazards, wetland plant and animal habitats, and air quality and pollutants, shall be consistent and in compliance with the Open Space, Conservation, and Recreation Element of the City's *General Plan*.
- *Policy N7.6:* Permit the development of subdivided parcels provided that site and building design minimize environmental impacts, building intensity and activity can be accommodated

by available and planned infrastructure, and site and building designs are compatible with neighborhood character.

Standard Conditions of Approval. Development under the *2007-2014 Housing Element* would be subject to the following SCA-with regard to geology and soils, erosion:

SCA-72 Vegetation Management Plan on Creekside Properties. The full text and description of SCA-72 is located in Section VII, Hazards. This SCA-requires that a vegetation management plan be submitted to the City for project sites that are creekside, within a wildfire hazard zone. SCA-72 includes suggested measure for erosion control.

For development occurring on a project site where a Category III or IV Creek Protection permit is required, SCA-83, 85 and 86 would apply.³⁷

SCA-83 Creek Protection Plan: Prior to and ongoing throughout demolition, grading, and/or construction activities, a project applicant is required to submit an approved creek protection plan:

- a) The approved creek protection plan shall be included in the project drawings submitted for a building permit (or other construction-related permit). The project applicant shall implement the creek protection plan to minimize potential impacts to the creek during and after construction of the project. The plan shall fully describe in plan and written form all erosion, sediment, stormwater, and construction management measures to be implemented on-site.
- b) If the plan includes a stormwater system, all stormwater outfalls shall include energy dissipation that slows the velocity of the water at the point of outflow to maximize infiltration and minimize erosion. The project shall not result in a substantial increase in stormwater runoff volume or velocity to the creek or storm drains.

SCA-85 Creek Monitoring: Prior to issuance of a demolition, grading, or building permit within vicinity of the creek, a project applicant is require to retained a qualified geotechnical engineer and/or environmental consultant paid for by the project applicant to make site visits during all grading activities and submit to the Building Services Division a letter certifying that the erosion and sedimentation control measures set forth in the Creek Protection Permit submittal material have been instituted during the grading activities.

SCA-86 Creek Landscaping Plan: Prior to issuance of a demolition, grading, or building permit within vicinity of the creek, a project applicant shall develop a final detailed landscaping and irrigation plan for review and approval by the Planning and Zoning Division prepared by a licensed landscape architect or other qualified person. Such a plan shall include a planting schedule, detailing plant types and locations, and a system for temporary irrigation of plantings.

- a) 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,

³⁷ City of Oakland Public Works Agency, Oakland Creeks Watershed Improvement Program, <http://www.oaklandpw.com/creeks>, June 2009.

- 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.
- b) All landscaping indicated on the approved landscape plan shall be installed prior to the issuance of a Final inspection of the building permit, unless bonded pursuant to the provisions of Section 17.124.50 of the Oakland *Planning Code*.
 - c) All landscaping areas shown on the approved plans shall be maintained in neat and safe conditions, and all plants shall be maintained in good growing condition and, whenever necessary replaced with new plant materials to ensure continued compliance with all applicable landscaping requirements. All paving or impervious surfaces shall occur only on approved areas.

For any new construction occurring within the 100 year floodplain as mapped in a Federal Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map, SCA-89 would apply.

SCA-89 Regulatory Permits and Authorizations: Prior to construction within the floodway or floodplain, the project applicant shall obtain all necessary regulatory permits and authorizations from the Alameda County Flood Control and Water Conservation District and shall comply with all conditions issued by that agency. Compliance with SCA-89 is required prior to issuance of a demolition, grading, or building permit.

Other. Development under the *2007-2014 Housing Element* would be subject to the following local regulations with regard to geology and soils, erosion:

Grading Ordinance (Ordinance No. 10312). This Ordinance requires grading permits for earth moving activities under specified conditions of volume of earth to be moved, slope characteristics, areas where "land disturbance" or stability problems have been reported. To obtain a grading permit, a soils report, a grading plan, and an erosion and sedimentation control plan must be submitted to the Department of Public Works and approved.

The Sedimentation and Erosion Control Ordinance (Ordinance No. 10446). This Ordinance requires any person who performs grading, clearing, and grubbing or other activities that disturb the existing soil to take appropriate preventative measures to control erosion; prevent sedimentation of eroded materials onto adjacent lands, public streets, or rights-of-way; and prevent carrying of eroded materials to any water course by any route.

Compliance with the above *OSCAR* policies, *LUTE* policies, Standard Conditions of Approval, and local regulations would reduce soil erosion or loss of topsoil to a less-than-significant level.

Comment on Question VI d, VI e, and VI f (Soil Suitability): In the City, there are three types of soil: 1) the bay muds along the shoreline and in the filled areas; 2) the alluvium and sand dune (Merritt Sand) deposits in the flatland and foothill areas; and 3) sandstones and shale fragments of the hill areas. Certain shoreline areas have coarsely textured sand as a result of activity by water, whereas igneous rock outcrops exist in some hill areas. Most of the soil types in the City are classified by the Soil Conservation Service as having "severe" limitations on development based on one or more of the

following characteristics: shrink/swell potential, wetness, strength, depth, slope, or flooding potential. Slope is the primary constraining factor for development in the hill areas. Shrink/swell (expansive soil) is the primary constraining factor in the flatland areas, with the highest potential for shrink/swell being in areas underlain by young bay mud and fine-grained basin and alluvial deposits, which are composed largely of clay. Potentially unsuitable features such as undocumented abandoned wells, filled pits or swamps, buried mounds, tank vaults, unmarked sewer lines, unknown fill soils, or landfills for which there are no approved closure and post-closure plans would be revealed by the soils and geotechnical investigations required by the City's Standard Conditions of Approval. Sewer mains are available in the City that would be used for wastewater disposal from new development. As a result, there would be no impact related to the capability of the City's soils to support septic tanks or alternative disposal systems. Compliance with the Oakland Building Code (provided subsequently), and the City's SCA-58, 68, and 69 (provided subsequently) would result in less-than-significant exposures of people and structures to the hazards of unsuitable soil conditions.

General Plan. Development under the *2007-2014 Housing Element* would be subject to *Policy CO-1.1, Policy CO-2.1 and Policy CO-2.2* of the *General Plan* with regard to geology and soils, soil suitability. *Policy CO-1.1, Policy CO-2.1 and Policy CO-2.2* are listed, in their entirety under geology and soils, hazards, above. These policies address the issue of soils that are unique, unstable and/or prone to landsliding and recommend suitable uses (such as low-intensity recreational uses, where possible) on less stable sites where preservation of unique geologic features is desirable.

Standard Conditions of Approval. Development under the *2007-2014 Housing Element* would be subject to SCA-58 through 60, and 68 through 69, with regard to geology and soils – soil suitability. SCA-58 through 60, and 68, are listed, in their entirety, under geology and soils – hazards, above. SCA-69 is listed in Section VII. Hazards and Hazardous Materials. SCA-58 through 60 require a soils report and a geotechnical investigation as part of the submittal of a Tentative Tract or Tentative Parcel Map (within the exception of single-family wood or steel framed dwellings not exceeding two stories unless part of a development with four or more dwelling units). The soils report and geotechnical investigation minimally must include subsurface investigation (soil borings, trenching, pits, as appropriate), a site-specific, design level, fault location, landslide, and liquefaction investigation for the construction site, earthwork, site preparation and foundation design recommendations, and conclusions and recommendations for erosion control. SCA-68 requires BMPs for handling excavated soil and groundwater on sites with historic commercial or industrial uses, to the extent that housing would be developed on any of these sites. SCA-69, applicable to sites with contaminated soils or groundwater would safeguard against radon or vapor intrusion thus mitigating for soil suitability issues with regard to contamination.

Other. Development under the *2007-2014 Housing Element* would be subject to the State's Building Code and City's Building Code and Building Services Division, described above.

Compliance with the above *General Plan* policies, Standard Conditions of Approval, and Building Codes would reduce the soil suitability impacts to less than significant.

4. Cumulative Impacts

Potential cumulative geology and seismic impacts do not extend far beyond a project's boundaries since such geological impacts are typically confined to discrete spatial locations and do not combine to create an extensive 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 development effects from the project could affect the geology of an off-site location. These circumstances are not applicable to the infill development anticipated under the *Housing Element*.

Present and future projects within the City's geographic area are subject to the aforementioned *General Plan*, Municipal Code, and federal, State, and local requirements, resulting in reduced geologic and seismic hazards. As present and future projects throughout the City replace aging infrastructure and older structures with new, more rigorously regulated projects, the potential for cumulative seismic risks is incrementally reduced over time.

In addition, the Standard Conditions of Approval discussed above, including appropriate grading requirements, and compliance with the Uniform Building Code as locally amended, would reduce the potential for cumulative geologic and seismic effects from the housing sites and their surrounding areas. Therefore, implementation of the *2007-2014 Housing Element*, together with the impact of past, present, existing, pending, and reasonably foreseeable future development, would not result in any significant cumulative geologic and seismic impacts.

5. Conclusion

Development at the opportunity sites identified in the *2007-2014 Housing Element* would largely occur as infill, in an urbanized and built-out City. Compliance with policies CO-1.1, CO-2.1, CO-2.2, CO-2.4, CO-5.3, W3.1, and N7.6 contained in the City's *General Plan*, *Open Space*, *Conservation*, and *Recreation* and *Land Use and Transportation* elements, applicable sections of the Municipal Code, and *Standard Conditions of Approval* 35, 58, 59, 60, 68, 72, 83, 85, 86, and 89 would ensure that development under the *2007-2014 Housing Element* would comply with federal, State, and local laws, and have less than significant impacts. In addition, *Standard Conditions of Approval* 77 and 82 from Section VIII, Hydrology and Water Quality, and SCA-69 in Section VII, Hazards, and Hazards Materials, address erosion issues. The *General Plan* policies listed above have been crafted to ensure that future development would comply with federal and State laws in regards to geology and soils, and the City's Municipal Code would ensure that future development is in compliance with the standards established by the State, as enforced by the City, thus resulting in less-than-significant impacts. In addition, future development under the *2007-2014 Housing Element* would be required to prove site suitability, with regard to geologic hazards, through a geological investigation. As such, the proposed project would have a less-than-significant impact related to seismic failures, geologic instability, erosion, and expansive soils. There would be no impact related to the City's soils capacity to support septic tanks.

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VII. HAZARDS AND HAZARDOUS MATERIALS

1. Setting

To provide a discussion of the potential for hazardous substances that exist in the City of Oakland and the potential impacts from the *2007-2014 Housing Element*, this section provides a general overview of the regulatory framework for hazards and hazardous materials and worker health and safety requirements as well as a discussion of potential hazards that exist within the City of Oakland. The information presented in this section is general information suitable for a programmatic review. Individual development projects would be subject to a site-specific review as later in this section.

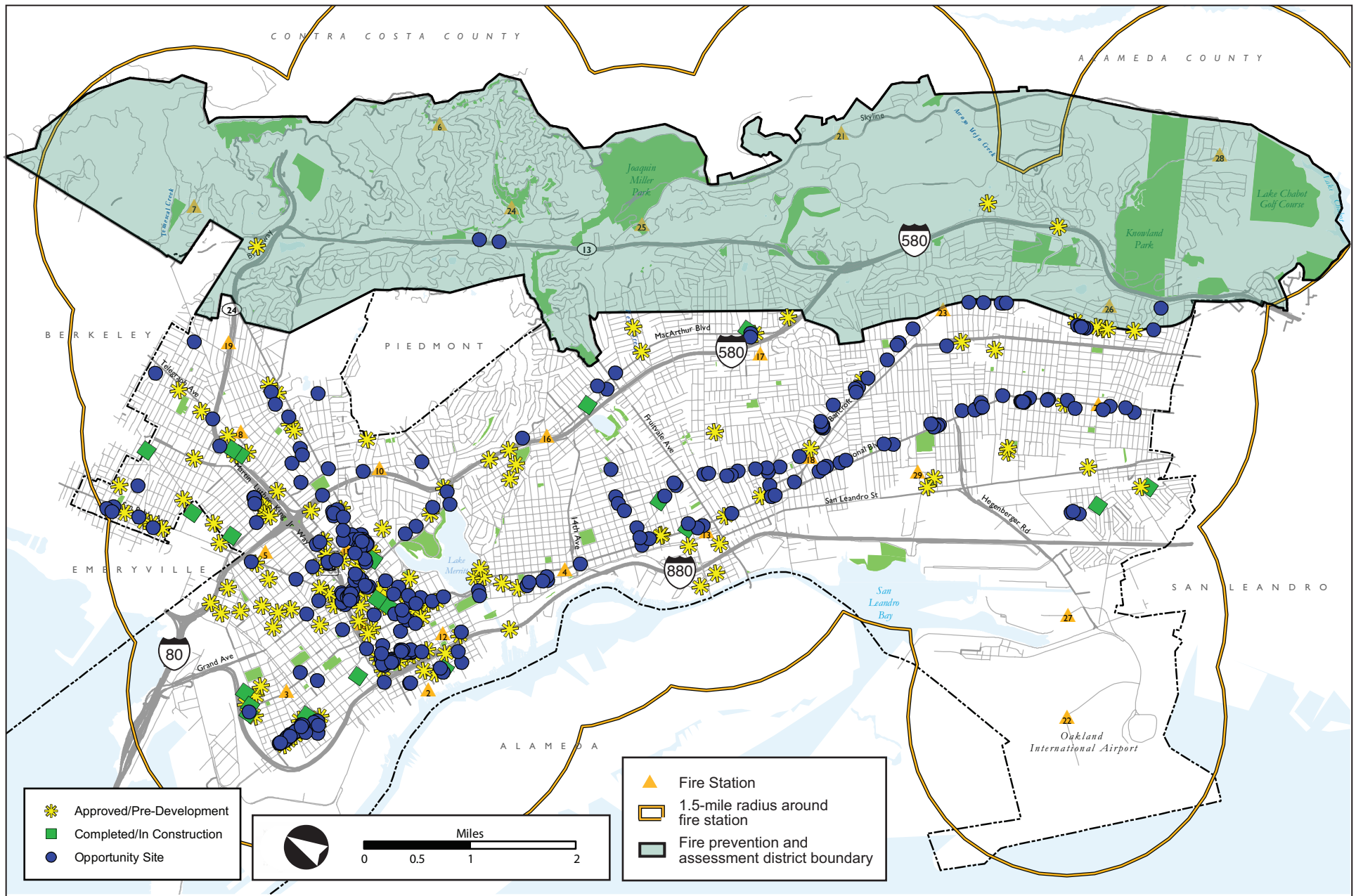
Physical Setting. This setting section describes the potential environmental, health, and safety hazards in the City of Oakland. Potential environmental health and safety hazards identified under CEQA include risks associated with wildland fires, proximity to public or private airports or airstrips, and/or exposure to hazardous materials. Hazardous materials exposure is another hazard that could occur, as a result of disturbing contaminated soil or groundwater or handling hazardous materials. Hazardous materials are those chemicals or substances that pose hazards to human health or safety, or to the environment, particularly if released. Hazardous wastes are a subset of hazardous materials that pose potential hazards to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Wildland Fire Hazards. The City of Oakland is urbanized and defined by a mixture of land uses including residential, commercial, industrial, and retail uses. However, as described in Section IV, Biological Resources, nearly 7,000 acres of wildlands remain within the City, in parks, on college campuses, in vacant lots, at the airport, and on private lands in the Oakland hills. These natural communities are broadly categorized as woodlands, brushlands, grasslands, and wetlands.³⁸ Wildland fires are still a concern, particularly where wildlands abut residential development and steep terrain slows emergency vehicle access, as shown in Figure 10, Fire Hazards.

Airport Hazards. The City of Oakland is home to the Metropolitan Oakland International Airport (MOIA), located on the west side of I-880, accessible by Hegenberger Road. The airport is bordered by San Francisco Bay to the west and the San Leandro Bay to the east. The flights paths used for take-off and landing at the airport are in the direction of the Bay and/or the commercial/industrial areas of Alameda to the northwest. Some portions of the City of Oakland are within the ALUC Height Referral Area,³⁹ which is a 20,000-foot radius buffer around the east side of the airport. The ALUC Safety Zone includes Bay Farm Island and the Alameda Municipal Golf Course, but does not include

³⁸ City of Oakland. *General Plan – Land Use and Transportation Element: Environmental Impact Report*. February 1998. Page III.H-1.

³⁹ Map VI, Metropolitan Oakland International Airport, ALUC Height Referral Area, page 38. Alameda County Airport Land Use Policy Plan. Airport Land Use Commission of Alameda County. Adopted July 16, 1986.



any area within the City of Oakland other than the northwest tip of the airport's runways.⁴⁰ A small area of Oakland is located within the Oakland North Airport Master Development Plan Area, the majority of which is west of I-880 and is occupied with commercial or industrial uses. A portion of the City of Oakland is located within the Comprehensive Airport Land Use Plan 60 CNEL (Community Noise Equivalent Level) contour for the Metropolitan Oakland International Airport.⁴¹ The implications of this designation with respect to noise are discussed further in Section VI., Noise. The City of Oakland is not in close proximity to a private air strip. Therefore, hazards related to airports are low to nil in the City.

Emergency Plans and Access. The City of Oakland has a local equivalent of the State and federal emergency management agencies called the Oakland Office of Emergency Services (OES), a division of the Oakland Fire Department (OFD). The Oakland (OES) is the certified unified program agency (CUPA) for the City, enforcing federal, State, and local legislation related to hazardous materials, and operates the City's Emergency Operations Center (EOC).⁴² The Oakland OES operates an emergency operations center (EOC) from which centralized emergency management would be performed during a disaster. The Standardized Emergency Management System (SEMS) is a framework for standardizing emergency-response procedures in California to facilitate the flow of information and resources among agencies in responding to multi-agency emergencies. The City has adopted the SEMS emergency plan along with five other emergency management plans. In 2002, the City of Oakland, Alameda, and San Leandro, and the University of California at Berkeley installed a network of outdoor warning sirens to alert the public in the case of an emergency.

The Oakland OES has also identified a network of evacuation routes and potential emergency shelters as identified in Figure 2.1 of the *General Plan – Public Safety Element*.⁴³ Emergency Evacuation Routes are typically along major thoroughfares including: San Leandro Street, International Boulevard, Foothill Road, Broadway, Webster, Telegraph Avenue, San Pablo Avenue, Grand Avenue, Seventh Street, and others. As shown in Figure 11, Public Safety, an overwhelming majority of the housing opportunity sites are located along these Emergency Evacuation Routes.

Presence of Hazardous Materials. Many current and historic uses of hazardous materials occur in the City of Oakland, as identified in Figure 7.2 of the *General Plan – Public Safety Element* and in Figure 12, Hazardous Materials, of this document.⁴⁴ Figure 12 shows the physical locations of hazardous materials such as: aboveground storage tanks (ASTs), underground storage tanks (USTs), emitters of Toxic Air Contaminants (TACs) (discussed further in Section III, Air Quality), CalARP facilities and CalSites, defined below.

⁴⁰ Map VII, Oakland North Airport ALUC Safety Zone (Bay farm Island), page 39. Alameda County Airport Land Use Policy Plan. Airport Land Use Commission of Alameda County. Adopted July 16, 1986.

⁴¹ San Mateo County Comprehensive Airport Land Use Plan, December 1996.

⁴² City of Oakland. *General Plan – Chapter 2 – Public Safety*. 2004.

⁴³ Figure 2.1, Public Safety. City of Oakland General Plan – Public Safety Element.

⁴⁴ Figure 5.1, Hazardous Materials. City of Oakland General Plan – Public Safety Element.

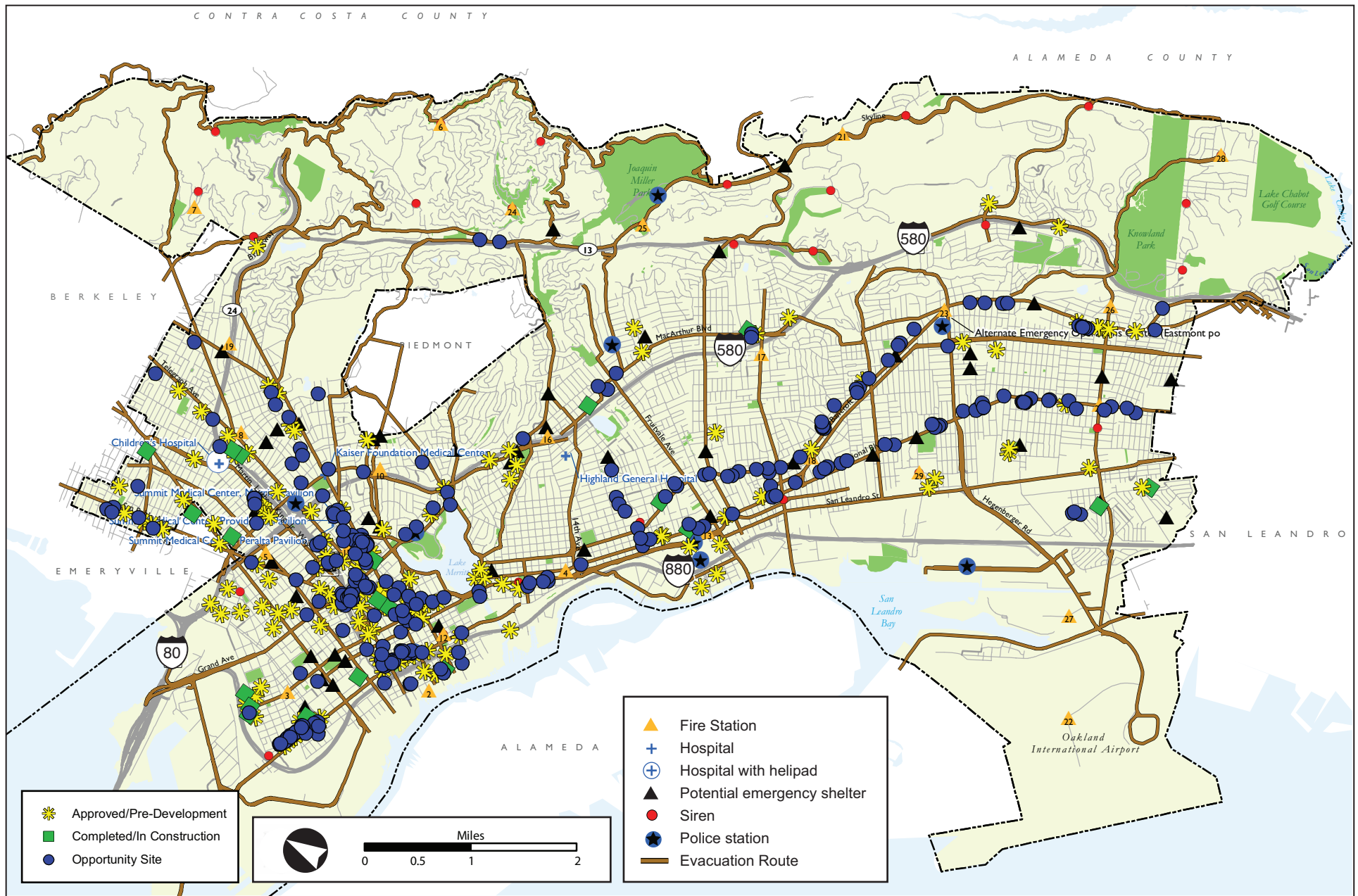


FIGURE 11
Public Safety

100006401

Source: City of Oakland, General Plan Safety Element, 2004.

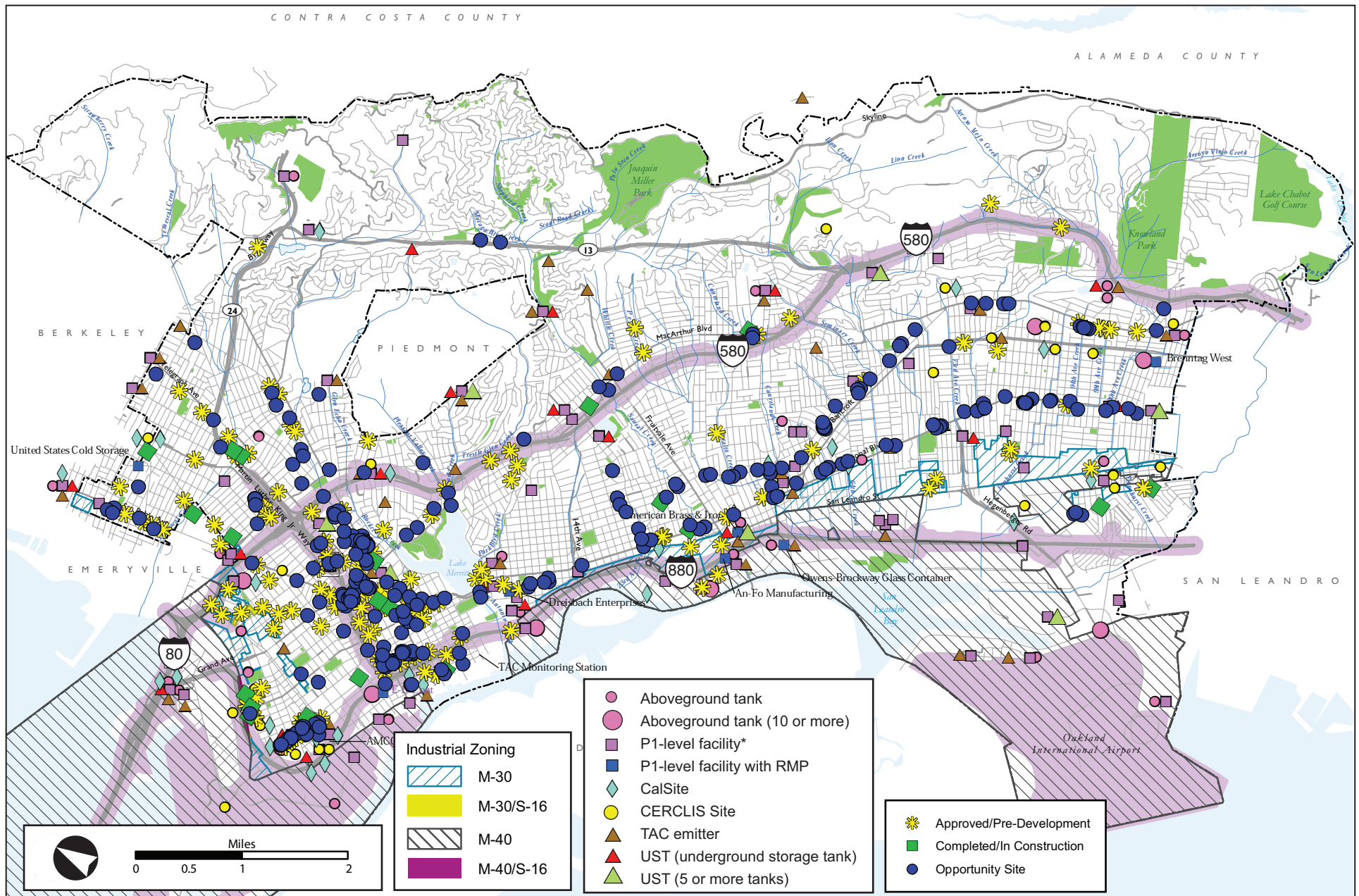


FIGURE 12
Hazardous Materials

100006401

Source: City of Oakland, *General Plan Safety Element*, 2004.
* Most P1-level facilities indicated on this map obtained closure by 2006.
For a current list of P1-facilities contact: The City of Oakland-
Fire Prevention Bureau-Hazardous Materials Management Program

CalARP facilities are sites identified by the California Accidental Release Prevention Program. Some of these facilities are classified as P1. P1 indicates a remedial action priority, which requires a remedial action plan. Typically, a P1 remedial action plan can include an Environmental Protection Agency (EPA) Risk Management Plan (RMP). Some of the CalARP P1 facilities identified in Figure 11 indicate that an RMP is already in place. Figure 11 is based on the hazards map compiled for the *Public Safety Element* in 2004. The majority of the P1 Sites indicated in Figure 11 were closed by 2006. For a current list of P1-level facilities contact the City of Oakland-Fire Prevention Bureau-Hazardous Materials Management Program.

CalSites are identified by the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) as part of the Historical Abandoned Site Survey Program, which identified certain potential hazardous waste sites. The identification of these sites were generally not made via sampling and site characterization; rather, they were made as a result of file searches and windshield surveys. Some of the sites may have had a site inspection with sampling. The survey information has been compiled into this database by the EPA DTSC in accordance with Section 25359.6 of the California Health and Safety Code. This database was previously known as The Abandoned Sites Program Information System ASPIS.

However, some of the sites on the CalSite list have been flagged for no further action by the EPA DTSC in accordance with Section 25359.6 of the California Health and Safety Code. As shown in Figure 12, identified hazardous materials sites are scattered throughout the City. Those identified in Figure 12 are only from the DTSC list and were current as of 2004. The 1998 *LUTE EIR* identified over 100 sites in the City of Oakland as being on the state's "Cortese List" of hazardous waste sites and devotes in excess of 50 pages discussing hazardous materials. The California State Regional Water Quality Control Board "Geo Tracker" database identifies underground hazardous substance storage tanks on 23 of the 224 opportunity sites listed in Table C-9 of the *2007-2014 Housing Element*. Of the 23, there are three sites with a status of "remediation" and 20 sites with a status of "site assessment."

Regulatory Setting. Hazardous materials and hazardous wastes, collectively called hazardous substances, are defined in Title 22 of the California Code of Regulations, Sections 66260 through 66261.10. As defined in Title 22 of the California Code of Regulations, hazardous substances are grouped into four general categories based on their properties. They can be classified as one or more of the following: toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage materials), or reactive (causes explosions or generates toxic gases). Federal regulations regarding the classification of hazardous wastes are contained in Title 40 Code of Regulations, Part 264. They are similar to the California Regulations; however the California regulations are usually more stringent.

The California Department of Toxic Substances Control (DTSC) defines the term "hazardous material" as a substance or combination of substances that, because of its quantity; concentration; or physical, chemical, or infectious characteristics, may (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored,

transported, disposed of, or otherwise managed. Hazardous wastes are a subset of hazardous materials that pose potential hazards to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. The Department of Toxic Substances Control maintains a database of known hazardous sites called the EnviroStor Database.⁴⁵

Government Code Section 65962.5, mandates that the California EPA develop and maintain an updated Hazardous Waste and Substances Site List (Cortese List). The requirements of Government Code Section 65962.5 are met by EPA with a number of separate lists provided by the appropriate regulatory agency, including the DTSC, the San Francisco Regional Water Quality Control Board (RWQCB), and the California Integrated Waste Management Board's (CIWMB). Lists include Federal Superfund; Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS); Resource Conservation and Recovery Act (RCRA); and Brownfields; and State and Local Cortese, SLIC and Leaking Underground Storage Tanks (LUST) and active Underground Storage Tanks (UST) site, et al. These lists are used as planning documents by State and local agencies, and developers. A Phase I Environmental Assessment, as prepared for a project site, includes a records search accessing the lists identified above.

Local regulations regarding hazardous materials including relevant sections of the Municipal Code are discussed subsequently.

2. Environmental Checklist

The proposed project would have a significant impact on the environment if 'potentially significant' is checked under items VIIa-h, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	☐

⁴⁵ DTSC website: <http://www.envirostor.dtsc.ca.gov>

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☒	☐	☐
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and would result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐	☒
f) Be located within the vicinity of a private airstrip, and would result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐	☐

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

3. Discussion

Comment to Question VIIa (Hazardous Materials Transport, Use, and Disposal)

Construction of the proposed 13,501 housing units in the City of Oakland would involve use of paints, solvents, oil and grease, and petroleum hydrocarbons that are typically used during construction. Following construction completion, hazardous materials exposure from the project site would be limited to slight amounts of household hazardous materials, including paints, solvents, cleaners, metals, fuels, oils, and pesticides associated with each housing unit. In most circumstances, the potential risks posed by hazardous materials use and storage are primarily local and, therefore, limited to the immediate vicinity of such use.

Many of the opportunity sites are already developed and construction of housing units would not substantially increase hazardous material use and disposal. Although hazardous materials would be used in the construction of housing units, once the construction is complete, the level of hazardous materials use and disposal associated with residential uses would not be significant. Therefore, the proposed housing units would not introduce a significant amount of new hazardous materials in any one localized area. Moreover, the transport, use and disposal of even household hazardous chemicals are

heavily regulated. Compliance with existing federal, State, and local laws and regulations that are administered and enforced by the City would reduce risks associated with the routine use, storage, and transportation of hazardous materials in connection with construction activities to acceptable levels. After construction, the proposed project would not emit hazardous materials and/or be expected to pose an unacceptable risk of accidental release of hazardous substances. Consequently, adherence to existing regulations, as described further below, would reduce potential impacts to less than significant levels.

General Plan. The addition of residential development could involve hazardous materials transport, use, and disposal during construction of the proposed housing. However, development under the *2007-2014 Housing Element* would be subject to the following *Safety Element* policy and actions from the City's *General Plan* with regard to hazardous materials:

Safety Element

- *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-1.2:* 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 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 clean-up of contaminated properties.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the following titles of the Oakland Municipal Code:

- *Title 8: Health and Safety*
 - *Chapter 8.12: Hazardous Materials.* This chapter explains how the City of Oakland assumes the authority and responsibility for the implementation of Chapter 6.95 of the California Health and Safety Code (Health and Safety Code Section 25500 et seq.), as to the handling of the hazardous materials in the City. Pursuant to Section 25502 of Chapter 6.95, the City shall have exclusive jurisdiction within its boundaries for the purposes of carrying out Chapter 6.95.

- *Title 17: Planning Code*
 - o *Chapter 17.100A: S-19 Health and Safety Protection Overlay Zone.* The intent of the Health and Safety Protection Overlay Zone is to promote the public health, safety and welfare by ensuring that activities which use hazardous material substances or store hazardous materials, hazardous wastes, or explosives locate in appropriate locations and develop in such a manner as not to be a serious threat to the environment, or to public health, particularly to residents living adjacent to industrial areas where these materials are commonly used, produced or found.

The construction and occupation of housing developed under the *2007-2014 Housing Element* would involve the transport, use, and/or disposal of hazardous materials, including relatively small quantities of hazardous materials for routine purposes, such as cleaners, disinfectants, and lawn care chemicals. These commercial products are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. Most of these materials are consumed through use, resulting in relatively little waste. Further, compliance with *General Plan* Policy HM-1 and Actions HM-1.2 – HM-1.6, along with Chapter 8.12 and 17.100A of the Municipal Code, would further reduce impacts associated with the handling of hazardous materials.

Therefore, impacts associated with hazardous materials transport, use, and disposal would be less-than-significant.

Comment to Question VIIIb (Release of Hazardous Materials)

Residential development under the *2007-2014 Housing Element* would not involve the routine handling of hazardous materials (other than the small quantities of household chemicals mentioned above) once the housing has been built; therefore, release of hazardous materials after demolition and construction is unlikely.

However, residential development would occur on sites throughout the City of Oakland, some of which might contain sediments and soils contaminated with hazardous materials, as shown on Figure 12. Improper handling of contaminated soil and/or groundwater could result in inadvertent release into the environment, which would have an adverse impact.

The sites selected as housing opportunity sites are vacant or underutilized parcels. Some of these sites are parking lots, used car lots, or some similar use and may contain minor improvements/structures such as parking kiosks, etc. Any development under the *2007-2014 Housing Element* which includes the demolition of existing buildings containing Hazardous Building Materials such as asbestos, lead-based paint and/or PCBs could expose construction workers to harmful contaminants. Construction on sites with naturally occurring asbestos would also pose a risk to the health and safety of construction workers if asbestos fibers were released.

Construction activities could involve the standard use of fuels and lubricants that are considered potentially hazardous materials. Individual development projects would be required to comply with all hazardous materials regulations, which are codified in Title 8 of the California Code of Regulations (CCR), and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety

Code to reduce the risk to human health and to the environment from the routine use of potentially hazardous substances. These regulations must be implemented by employers/businesses, as appropriate for any construction project, and are monitored by the State (e.g., Cal/OSHA in the workplace or DTSC for hazardous waste) and/or local jurisdictions (e.g., the Oakland Fire Services Agency and the Alameda County Health Care Services Agency, Environmental Health Department). Hazards to construction workers and the general public during demolition and construction shall be further mitigated by the preparation and implementation of site-specific health and safety plans, as recommended by the Occupational Health and Safety Administration, per SCA-67, below.

To the extent that any development under the *2007-2014 Housing Element* would involve the demolition of existing structures that could contain asbestos, SCA-41 would apply.

SCA-41 Asbestos Removal in Structures: Prior to issuance of a demolition permit; if asbestos-containing materials (ACM) are found to be present in building materials to be removed, demolition and disposal, the project applicant shall submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations, Title 8; Business and Professions Code; Division 3; California Health & Safety Code 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended.

To the extent that any development under the *2007-2014 Housing Element* would involve construction on soils that contain naturally-occurring asbestos, serpentine soils, and/or ultramafic rock, SCA-42 would apply.

SCA-42 Asbestos Removal in Soil: Prior to issuance of a demolition, grading, or building permit; to minimize the release of naturally occurring asbestos in the soil during construction, the project applicant shall require the construction contractor to demonstrate compliance with Bay Area Air Quality Management District's (BAAQMD) Asbestos Airborne Toxic Control Measures for Construction, Grading, Quarrying and Surface Mining Operations (implementing CCR section 93105) for activities that disturb the soil, such as grading, etc.

- A. Minimum Requirements where area to be disturbed with Construction Grading Operations is 1 acre or less

Administrative Requirements

- a) No notification is required to the BAAQMD office; unless
- b) Upon discovery of naturally occurring asbestos, serpentine, or ultramafic rock the project applicant must notify the BAAQMD's Air Pollution Control Officer (APCO) by the next business day.

Dust Control Requirements

- a) Vehicle speed shall be $\leq$ 15 mph

- b) Sufficient water shall be applied to the area prior to disturbance to prevent visible emissions from crossing project boundaries.
 - c) Areas to be graded or excavated shall be kept adequately wetted to prevent visible emissions from crossing project boundaries.
 - d) Storage piles kept shall be adequately wetted, treated with dust suppressant, or covered when the material is not being added or removed.
 - e) Equipment must be washed down before moving from the property onto the paved roadway.
 - f) Visible track-out on paved public road must be cleaned using wet sweeping or High Efficiency Particulate Air (HEPA) filter equipped vacuum device within 24 hours.
 - g) Implement the preceding dust control measures within 24 hours upon discovery of naturally occurring asbestos, serpentine, or ultramafic rock.
- B. Minimum Requirements where area to be disturbed with Construction Operations is More than 1 acre

Administrative (Prior to the start of work)

- a) Asbestos Dust Minimization Plan shall be submitted to BAAQMD and approved prior to engaging in the any construction or grading operation.
- b) The Asbestos Dust Minimization Plan provisions shall be implemented at the beginning and maintained throughout the duration of the construction or grading activity.

Dust Control Requirements

The Asbestos Dust Minimization Plan shall include one or more provisions to address the following topics:

- Control for traffic on on-site unpaved roads, parking lots, and staging areas shall include: limiting vehicle speed to less than 15 mph, and one or more of the following: watering every two hours of active operations or sufficiently often to keep area wetted; applying chemical dust suppressants to consistent with manufacturer's directions; maintaining gravel cover with a silt content less than 5% and asbestos content less than .25% as determined using the asbestos bulk test method; or any other measure as effective as those listed above.
- Control for earthmoving activities shall include one or more of the following: pre-wetting the ground to the depth of the anticipated cuts; suspending grading operations when wind speeds are high enough to result in dust emissions crossing the property line despite applicable of dust measures; application of water prior to any land clearing; or any other measure as effective.
- Storage piles shall be kept adequately wetted or covered with tarps when the material is not being added or removed.
- Storage piles must be stabilized when inactive for more than 7 days by implementing one or more of the following: adequately wetting the site, establishing and maintaining surface crusting material, chemical dust suppressant or stabilizer, covering with tarps

or vegetative cover, installation of wind barriers of 50% porosity around three sides of the pile areas, or any measure as effective.

- Equipment must be washed down before moving from the property onto paved roadway.

Track-out prevention and control measures shall include:

- i. Removal of visible track-out on paved public road at any location where vehicles exit the work site using wet sweeping or High Efficiency Particulate Air (HEPA) filter equipped vacuum device at least one time per day.
 - ii. Installation of one or more of the following track-out prevention devices: gravel pad, tire shaker, wheel wash system, not less than 50 feet of pavement extending from intersection with paved public road, or other measure as effective.
- Control for offsite-transport shall include the following: maintenance of trucks such that no spillage can occur from holes or openings in cargo compartments; loads are adequately wetted; and either covered with tarps or loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6" from the top and that at no point of the load extends above the top of the cargo compartment.
 - Post project stabilization of disturbed surfaces shall occur using one or more of the following: establishing vegetative cover; placement of at least 3" of non-asbestos-containing material, paving, or other measure deemed sufficient to prevent 10 mph winds from causing visible emissions.

Administrative (After completion of work)

- If required by the BAAQMD's APCO, the plan must include an air-monitoring component which shall specify the following: type of air sampling device; siting of the device; sampling of the device; sampling duration and frequency; and analytical method.
- The plan shall state the frequency with which the information will be reported to BAAQMD.
- The owner/operator shall keep maintain the following records for at least 7 years following completion of the project: results of any required air monitoring; documentation for any geologic evaluation conducted for the purposes of obtaining an exemption; and results of any bulk sampling conducted by the owner/operator to document applicability done or at the request of APCO. The housing opportunity sites identified in the *2007-2014 Housing Element* are largely vacant and/or underutilized. All of the housing opportunity sites are designated for residential development under the *General Plan*. However, it is possible that some of these sites were historically used for commercial and/or industrial purposes. Many current and historic uses of hazardous materials were identified in Figure 7.2 of the *General Plan – Public Safety Element*⁴⁶ including; aboveground storage tanks (ASTs), underground storage tanks (USTs), emitters of Toxic Air Contaminants (TACs), CalARP facilities and CalSites. However, the sites identified in Figure 7.2 are not comprehensive, and the

⁴⁶ Figure 5.1, Hazardous Materials. City of Oakland General Plan – Public Safety Element, 1997.

identification of current and historic uses of hazardous materials is only the first step. The extent of soil and/or groundwater contamination at these, or any of the housing opportunity sites, and/or the presence of hazardous building materials is largely unknown. Demolition of buildings containing hazardous building materials and/or grading, excavation, or construction on sites with soil or groundwater contamination could result in a release of hazardous materials into the environment resulting in a potentially significant impact.

SCA-61 through 66, and 69, provided subsequently in this section, require a Phase I and/or Phase II Environmental Site Assessment ESA(s) for development projects meeting certain criteria. A Phase I ESA prepared for a project site typically lists current and past operations, reviews environmental agency databases (including the State Cortese List), records and identifies site reconnaissance observations, and summarizes potential contamination issues. A Phase I ESA is typically prepared for a development site prior to submission of a development application to the City. If the Phase I ESA identifies known or potential contamination issues, a Phase II ESA is conducted. A Phase II ESA typically includes collecting soils and/or groundwater samples at the project site and transmitting the samples to a laboratory for analysis. A Phase II can also include inspecting existing structures to identify hazardous building components. A Phase II typically includes recommendations for remediation and/or safe handling of identified contaminants.

The City's of Oakland's SCA-61 through 66, and 69 tie the Phase I and Phase II requirements to the permit application process, as described below. SCA-67 requires a Health and Safety Plan to protect construction workers per the Phase I or II recommendations. SCA-68 promulgates Best Management Practices (BMPs) for handling contaminated soils and groundwater.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *Safety Element* policies and actions with regard to site contamination and proximity of housing to land uses that could be accidentally released into the environment:

- *Policy HM-3:* Seek to prevent industrial and transportation accidents involving hazardous materials, and enhance the City's capacity to respond to such incidents.
 - o *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.
 - o *Action HM-3.2:* Continue to support the prohibition of trucks on I-580 through Oakland.
 - o *Action HM-3.3:* Support State and federal legislative efforts that seek to increase the safety of transporting hazardous materials.
 - o *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.

Existing City policy and well-established regulations mitigate the impacts associated with soil contamination hazards. The following actions and policies of the *General Plan*, *OSCAR* and *LUTE Elements* would further reduce construction-related impacts:

- *Policy CO-1.2: Soil Contamination Hazards.* Minimize hazards associated with soil contamination through appropriate storage and disposal of toxic substances, monitoring of dredging activities, and cleanup 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.
 - *Action CO-1.2.1: Further Study of Soil Contamination.* Conduct further study of soil contamination and toxics during the update of the Oakland *General Plan* Safety Element.
 - *Action CO-1.2.2: Monitoring of Dredge Spoils Disposal.* Monitor the Galbraith Dredge Spoils Disposal Project to ensure that there are no negative impacts on soil, wetlands, and adjacent waters. Ensure community representation on any task force created to monitor future dredge spoils disposal projects, including the Galbraith Disposal Project.
- *Policy I/C4.2:* The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential land uses should be minimized through efficient and appropriate implementation and monitoring of environmental and developmental controls.
- *Policy N5.1:* Residential areas should be buffered from conflicting uses through the establishment of performance based regulations, the removal of nonconforming uses, and other tools.
- *Policy W1.2: Land Use Compatibility.* Land uses and impacts generated from such activities should be sensitive to one another, and appropriate buffering (e.g., landscaping, fencing, transitional uses, etc.) should minimize the incompatibility of uses.
- *Policy W6.2: Buffering of Heavy Industrial Uses.* Appropriate buffering measures for heavy industrial uses and transportation uses on adjacent residential neighborhoods should be developed.

In the unlikely event that historic industrial buildings are re-used for housing under the *2007-2014 Housing Element*:

- *Policy I/C2.2:* The reuse of abandoned buildings by non-traditional activities should be encouraged where the uses are consistent with, and will assist in the attainment of the objectives of the Plan.

Standard Conditions of Approval. SCA-61 through 68 would apply to: (a) all development projects that include the redevelopment or reuse of historically industrial or commercial buildings; (b) if the site has been identified in the City records for hazardous materials, such as the Permit Tracking System (PTS), or (c) if the site has been identified on the State Cortese List, which is discussed further under Comment to VIIId, later in this section. Presence on the State Cortese List precludes use of a Categorical Exemption under CEQA and would trigger the preparation of a project-level Initial Study which could lead to the preparation of either a Mitigated Negative Declaration or an Environmental Impact Report.

SCA-61 Site Review by the Fire Services Division: Prior to the issuance of demolition, grading or building permit the project applicant shall submit plans for site review and approval to the Fire Prevention Bureau Hazardous Materials Unit. Property owner may be required to obtain or perform a Phase II hazard assessment.

SCA-62 Phase I and/or Phase II Reports: Prior to issuance of demolition, grading, or building permits the project applicant shall submit to the Fire Prevention Bureau, Hazardous Materials Unit, a Phase I environmental site assessment report, and a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer.

SCA-63 Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment: Prior to issuance of any demolition, grading or building permit the project applicant shall submit a comprehensive assessment report to the Fire Prevention Bureau, Hazardous Materials Unit, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACM), lead-based paint, and any other building materials or stored materials classified as hazardous waste by State or federal law.

SCA-64 Environmental Site Assessment Reports Remediation: Prior to issuance of a demolition, grading, or building permit; if the environmental site assessment reports recommend remedial action, the project applicant shall:

- a) Consult with the appropriate local, State, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.
- b) Obtain and submit written evidence of approval for any remedial action if required by a local, State, or federal environmental regulatory agency.
- c) Submit a copy of all applicable documentation required by local, State, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II environmental site assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans.

SCA-65 Lead-based Paint Remediation: Prior to issuance of any demolition, grading or building permit; if lead-based paint is present, the project applicant shall submit specifications to the Fire Prevention Bureau, Hazardous Materials Unit signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: Cal/OSHA's Construction Lead Standard, 8 CCR1532.1 and DHS regulation 17 CCR Sections 35001 through 36100, as may be amended.

SCA-66 Other Materials Classified as Hazardous Waste: Prior to issuance of any demolition, grading or building permit; if other materials classified as hazardous waste by State or federal law are present, the project applicant shall submit written confirmation to Fire Prevention Bureau, Hazardous Materials Unit that all State and federal laws and regulations shall be followed when profiling, handling, treating, transporting and/or disposing of such materials.

SCA-67 Health and Safety Plan per Assessment: Prior to issuance of any demolition, grading or building permit; if the required lead-based paint/coatings, asbestos, or PCB assessment finds presence of such materials, the project applicant shall create and implement a health and safety plan to protect workers from risks associated with hazardous materials during demolition, renovation of affected structures, and transport and disposal.

SCA-68 Best Management Practices for Soil and Groundwater Hazards: Ongoing throughout demolition, grading, and construction activities; the project applicant shall implement all of the following Best Management Practices (BMPs) regarding potential soil and groundwater hazards.

- a) Soil generated by construction activities shall be stockpiled onsite 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 agencies laws, in particular, the Regional Water Quality Control Board (RWQCB) and/or the Alameda County Department of Environmental Health (ACDEH) and policies of the City of Oakland.
- b) Groundwater pumped from the subsurface shall be contained onsite 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 of the City of Oakland, the RWQCB and/or the ACDEH. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building (pursuant to the Standard Condition of Approval regarding Radon or Vapor Intrusion from Soil and Groundwater Sources
- c) Prior to issuance of any demolition, grading, or building permit, the applicant shall submit for review and approval by the City of Oakland, written verification that the appropriate federal, state or county oversight authorities, including but not limited to the RWQCB and/or the ACDEH, have granted all required clearances and confirmed that the all applicable standards, regulations and conditions for all previous contamination at the site. The applicant also shall provide evidence from the City's Fire Department, Office of Emergency Services, indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports.

To the extent that any development occurring under the *2007-2014 Housing Element* would include 1) habitable space below the ground and/or 2) the redevelopment or reuse of historically industrial or commercial buildings or 3) soil and/or groundwater hazards, SCA-69 would apply.

SCA-69 Radon or Vapor Intrusion from Soil or Groundwater Sources: The project applicant shall submit documentation to determine whether radon or vapor intrusion from the groundwater and soil is located on-site as part of the Phase I documents. The Phase I analysis shall be submitted to the Fire Prevention Bureau, Hazardous Materials Unit, for review and approval, along with a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer. Applicant shall implement the approved recommendations.

The construction phase of any residential development under the *2007-2014 Housing Element* could result in soil or groundwater contamination from hazardous materials used in the construction, therefore SCA-35 is incorporated. The full text of SCA-35 is described in Section VI, Geology and Soils.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the following title of the Oakland Municipal Code:

- *Title 8: Health and Safety*
 - o *Chapter 8.42: Certified Unified Program Agency (CUPA).* The City of Oakland, pursuant to the State of California Environmental Protection Agency's approval of the City's application to serve as the certified unified program agency ("CUPA") for the City, assumes authority and responsibility for the administration and enforcement of the unified hazardous waste and hazardous materials management regulatory program established by Chapter 6.11 of the California Health and Safety Code (section 25404, et seq.), to consolidate the administration and enforcement of six hazardous materials management programs and ensure the coordination and consistency of any regulations adopted pursuant to such program requirements.

Compliance with the City of Oakland SCA-41, 42, 61 through 66, and 68, and 69, and Policy HM-3, CO-1.2, I/C4.2, N5.1, W1.2, W6.2, I/C2.2, and CO-1.2; Actions HM-3.1 through HM-3.4 of the *General Plan*; and Chapter 8.42 of the Municipal Code would ensure that hazardous building materials and/or contaminated soils and/or groundwater would be properly identified, handled, removed, and/or remediated. Compliance with SCA-67 would protect the health and safety of construction workers on sites where hazardous materials have been identified. Compliance with SCA-35 would reduce the risk of construction-related soil and groundwater contamination. As a result, the risk of an upset or accident resulting in the release of hazardous materials during demolition or construction would be less than significant.

Comment to Question VIIc (Vicinity to Existing or Proposed School)

Development projects under the *2007-2014 Housing Element* could be undertaken within one-quarter mile of an existing or proposed school. In the event that construction on a site within one-quarter mile of an existing school would involve the removal or remediation of contaminated soils, groundwater or building materials, an impact could occur. Individual development projects would be required to comply with SCA-35, 41-42, and 61-69, as described above. In addition, compliance with SCA-67

would not only protect workers on the site, but would also mitigate impacts beyond the site, including potential impacts to sensitive receptors at nearby schools. Project-level CEQA review and compliance with SCA-35, 41, 42, and 61 through 69, along with *General Plan* Policy HM-1 and HM-3, and Actions HM-1.2 through HM-1.6, and HM-3.1 through HM-3.4, as listed above, would mitigate impacts to existing schools to a less-than-significant level. Since the occupation of residential housing does not involve handling of acutely hazardous substances or wastes, once construction is complete, the proximity of residential development(s) would have a less-than-significant impact to existing or proposed schools.

Comment to Question VIIId (Listed Hazardous Materials Sites)

As discussed under Question VIIb, above, SCA-61 through 66, and 69 require a Phase I and/or Phase II Environmental Site Assessment ESA(s) for development projects meeting certain criteria. A Phase I ESA is typically prepared for a development site prior to submission of a development application to the City since preparation is triggered by a title transfer. A Phase I ESA prepared for a project site typically lists current and past operations, reviews environmental agency databases (including the State Cortese List), records and identifies site reconnaissance observations, and summarizes potential contamination issues. The Cortese database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration.

If the Phase I ESA identifies known or potential contamination issues, including presence on the Cortese list, a Phase II ESA is conducted. A Phase II ESA typically includes collecting soils and/or groundwater samples at the project site and transmitting the samples to a laboratory for analysis. A Phase II typically includes recommendations for remediation and/or safe handling of identified contaminants.

The City's of Oakland's SCA(s) 61 through 66, and 69 tie the Phase I and Phase II requirements to the permit application process, as described above. SCA-67 requires a Health and Safety Plan to protect construction workers per the Phase I or II recommendations. SCA-68 promulgates Best Management Practices (BMPs) for handling contaminated soils and groundwater. Therefore, in the event that a development application for a project under the *2007-2014 Housing Element* does not already include a Phase I ESA, one will be required through the permit application process. The Phase I ESA will identify whether or not the site is on the State Cortese List. Presence on the State Cortese List precludes use of a Categorical Exemption under CEQA and would trigger the preparation of a project-level Initial Study which could lead to the preparation of either a Mitigated Negative Declaration or an Environmental Impact Report. Presence on the Cortese list does not preclude development on the site; it just requires adequate CEQA review to determine whether development of the site would result a significant hazard to the public or the environment.

SCA-61 through 66 would insure that presence on the Cortese list and associated impacts are identified on a project-by-project basis, therefore impacts would be less than significant.

Comments to Questions VIIe and VIIf (Airports)

A portion of the City of Oakland is located within the Comprehensive Airport Land Use Plan 60 CNEL (Community Noise Equivalent Level) contour for the Metropolitan Oakland International Airport.⁴⁷ The implications of this designation with respect to noise are discussed further in Section VI., Noise. None of the sites identified for housing in the *2007-2014 Housing Element* are located within the Oakland International Airport Master Plan area. There are no other implications with respect to safety and proximity to the Metropolitan Oakland International Airport. The City of Oakland is not in close proximity to a private air strip, therefore no impact would occur.

General Plan. Development under the *2007-2014 Housing Element* would be subject Policy I/C4.2 of the *General Plan*. As discussed above, Policy I/C4.2 requires new or existing industrial or commercial uses, including seaport and airport activities that could create nuisance impacts on surrounding residential land uses to be minimized.

Comments to Questions VIIg (Emergency Evacuation Plan)

The Oakland OES has also identified a network of evacuation routes and potential emergency shelters as identified in Figure 2.1 of the *General Plan – Public Safety Element*.⁴⁸ Emergency Evacuation Routes are typically along major thoroughfares including: San Leandro Street, International Boulevard, Foothill Road, Broadway, Webster, Telegraph Avenue, San Pablo Avenue, Grand Avenue, Seventh Street, and others. Many of the housing opportunity sites identified under the *2007-2014 Housing Element* are located along San Leandro Street, International Boulevard, Foothill Road, Broadway, Webster, Telegraph Avenue, San Pablo Avenue, Grand Avenue, and Seventh Street, the major thoroughfares identified as Emergency Evacuation Routes, as shown in Figure 11. If construction along these routes inhibited vehicular circulation, an impact could occur. However, road closures during construction are unlikely, and since construction equipment would be minimal and used for only short durations, construction would not change the existing traffic circulation network in the vicinity, and would therefore not affect any emergency response plan or evacuation plan. Therefore, impacts to emergency response plans or emergency evacuation plans would be less than significant.

Comments to Question VIIh (Wildland Fires)

Wildland fires in Oakland are still a concern, particularly where wildlands abut residential development and steep terrain slows emergency vehicle access, namely in the Oakland Hills, along Highway 13. In 2004, the City of Oakland delineated a Wildfire Prevention Assessment District, referred to as the “fire prevention and assessment district” on Figure 10. There is a higher concentration of emergency sirens

⁴⁷ San Mateo County Comprehensive Airport Land Use Plan, December 1996.

⁴⁸ Figure 2.1, Public Safety. City of Oakland General Plan – Public Safety Element.

in this area, as shown in Figure 11.⁴⁹ Based on Figure 10 only three of the identified housing opportunity sites are within the Wildfire Prevention Assessment District as are three sites on which housing is approved or in pre-development. In addition, five opportunity sites and five other sites either approved or in pre-development are located along the western border of the Wildfire Prevention Assessment District. SCA-70 is applicable to all projects within the district.

General Plan. The additional residential development could expose additional people to the risks of wildland fires. However, development under the *2007-2014 Housing Element* would be subject to the following *Safety Element* policy and actions of the City's *General Plan* with regard to wildland fires:

Safety Element

- *Policy FI-3:* Prioritize the reduction of the wildfire hazard, with an emphasis on prevention.
 - o *Action FI-3.1:* Implement and administer the 2004 wildfire-prevention assessment district for the Oakland Hills, and carry out the programs funded by the district, including fire-safety inspections of private properties, vegetation management practices, roving firefighter patrols on high fire-hazard days, and public education efforts.
 - o *Action FI-3.2:* Consistent with the City's pedestrian master plan, develop unused pedestrian rights-of-way in the Oakland Hills as walkways to serve as additional evacuation routes, and provide and maintain lighting facilities for new and existing walkways.
 - o *Action FI-3.3:* Continue to participate in multi-jurisdictional programs and task forces, such as the Hills Emergency Forum and Diablo FireSafe Council, that work to reduce the threat of wildfire.

Standard Conditions of Approval. The following Standard Conditions of Approval would apply:

SCA-70 Vegetation Management Plan: Prior to issuance of a demolition, grading, and/or construction and ongoing: a) the project applicant shall submit a vegetation management plan to the Planning and Zoning Division and Fire Services Division that includes if deemed appropriate, but not limited to the, following measures:

- a) The project applicant shall enter into a maintenance agreement with the City that ensures that landscaping will be maintained and adhere to measures listed below.
 - i. Removal of dead vegetation overhanging roof and chimney areas;
 - ii. Removal of leaves and needles from roofs;
 - iii. Planting and placement of fire-resistant plants around the house and phasing out flammable vegetation;
 - iv. Trimming back vegetation around windows;
 - v. Removal of flammable vegetation on hillside slopes greater than 20%;
 - vi. Pruning the lower branches of tall trees;
 - vii. Clearing out ground-level brush and debris;

⁴⁹ "Wildfire Prevention Assessment District," accessed at: <http://www.oaklandnet.com/wildfirePrevention/WildfirePreventionAssessmentDistrictMap.pdf>, accessed on May 31, 2009.

- viii. Stacking woodpiles away from structures.

In addition, SCA-71 applied to all phased projects either planned unit developments (PUDs) or projects with development agreements, regardless of whether or not they are in the Wildfire Prevention Assessment District, as delineated.

SCA-71 Fire Safety Phasing Plan: Prior to issuance of a demolition, grading, and/or construction and concurrent with any p-job submittal permit the project applicant shall submit a separate fire safety phasing plan to the Planning and Zoning Division and Fire Services Division for their review and approval. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. Fire Services Division may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase.

On sites within the Wildfire Assessment District, that are also identified as creekside properties, SCA-72 and 73 would apply.

*SCA-72 Vegetation Management Plan on Creekside Properties:*⁵⁰ Prior to issuance of a demolition, grading, and/or construction and Ongoing, a) The project applicant shall submit a vegetation management plan for review and approval by the Planning and Zoning Division, Fire Services Division, and Environmental Services Division of the Public Works Agency that includes, if deemed appropriate, the following measures:

- i. Identify and do not disturb a 20-foot creek buffer from the top of the creek bank. If the top of bank cannot be identified, leave a 50-foot buffer from the centerline of the creek or as wide a buffer as possible between the creek centerline and the proposed site development.
- ii. Identify and leave "islands" of vegetation in order to prevent erosion and landslides and protect nesting habitat.
- iii. Leave at least 6 inches of vegetation on the site.
- iv. Trim tree branches from the ground up (limbing up) and leave tree canopy intact.
- v. Leave stumps and roots from cut down trees to prevent erosion.
- vi. Plant fire-appropriate, drought-tolerant, preferably native vegetation.
- vii. Err on the side of caution. If you don't know if a plant, tree or area is sensitive, ask for a second opinion before you cut.
- viii. Provide erosion and sediment control protection if cutting vegetation on a steep slope.
- ix. Leave tall shrubbery at least 3-feet high.
- x. Fence off sensitive plant habitats and creek areas to protect from goat grazing.
- xi. Obtain a tree protection permit for a protected tree (includes all mature trees except eucalyptus and Monterey pine).
- xii. Contact the City Tree Department (615-5850) for dead trees.

⁵⁰ See also: <http://www.oaklandnet.com/wildfirePrevention/DosandDonts.pdf>.

- xiii. Do not clear-cut vegetation. This can lead to erosion and severe water quality problems and destroy important habitat.
- xiv. Do not remove vegetation within 20-feet of the top of 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 proposed site development.
- xv. Do not trim/prune branches that are larger than 4 inches in diameter.
- xvi. Do not remove tree canopy.
- xvii. Do not dump cut vegetation in a creek.
- xviii. Do not cut tall shrubbery to less than 3-feet high.
- xix. Do not cut of short vegetation (grasses, ground-cover) to less than 6-inches high.

SCA-73 Fire Safety: Prior to and ongoing throughout demolition, grading, and/or construction the project applicant and construction contractor will ensure that during project construction, all construction vehicles and equipment will be fitted with spark arrestors to minimize accidental ignition of dry construction debris and surrounding dry vegetation.

To the extent that they are applicable to sites that could be developed under the *2007-2014 Housing Element*, compliance with SCA-70 through 74, along with *General Plan* Policy FI-3 and Actions FI-3.1 through FI-3.3, would reduce impacts associated with wildland fires to a less-than-significant level.

4. Cumulative Impacts

The general geographic area considered for potential public health or hazards cumulative impacts consists of an area within a quarter-mile of the housing sites, and the area along transportation routes used during demolition and construction activities associated with projects within this radius. Hazards and hazardous materials impacts are generally site-specific and/or have limited mobility, and would not be expected to have cumulatively considerable effects beyond this distance.

Development and construction activities could increase the exposure of persons to hazardous materials, including contaminated soil, soil gas, groundwater, hazardous construction materials, and lead and asbestos. However, the use, storage, and disposal of hazardous materials has been increasingly regulated by local, State, and federal laws and regulations, as explained in more detail above. The historical trend within the regulatory community has been to strengthen the standards regarding the use, handling, and transport of hazardous materials, thereby minimizing the risk to public health, safety, and welfare. Many past projects have been, all present projects are, and all future projects, including development under the *2007-2014 Housing Element*, will be subject to these more rigorous controls for site remediation and development. The current and future handling of hazardous materials within the geographic area will be subject to these escalating regulations and the City's Standard Conditions of Approval, as outlined above, and as a result, the cumulative hazardous materials risks will not be significant. Additionally, compliance with the strict regulatory requirements associated with handling of hazardous materials would reduce the potential for any cumulatively considerable contribution from the housing sites to any potential cumulative impact. Therefore, implementation of the *2007-2014*

Housing Element, together with the impact of past, present, existing, current, pending and reasonably foreseeable future development, would not result in any significant cumulative public health or hazards impacts.

5. Conclusion

Development at the opportunity sites identified in the *2007-2014 Housing Element* would largely occur as infill, in an urbanized and built-out City. Impacts associated with hazardous materials transport, use and disposal would be less-than-significant and compliance with Chapters 8.12, 8.50.060 and 17.100A of the Municipal Code would further reduce impacts. Compliance with the City of Oakland Standard Conditions of Approval 41 and 42, 61 through 66, and 68, and 69, and Policy HM-1, HM-3, CO-1.2, I/C4.2, N5.1, W1.2, W6.2, and I/C2.2 of the *General Plan* as well as Chapter 8.42 of the Municipal Code would ensure that hazardous building materials and/or contaminated soils and/or groundwater would be properly identified, handled, removed, and/or remediated. Compliance with SCA-67 would protect the health and safety of construction workers on sites where hazardous materials have been identified. Compliance with SCA-67 would not only protect workers on the site, but would also mitigate impacts beyond the site, including potential impacts to sensitive receptors at nearby schools. Compliance with SCA-35 would reduce the risk of construction-related soil and groundwater contamination. As a result, the risk of an upset or accident resulting in the release of hazardous materials during demolition or construction would be less than significant. To the extent that they are applicable to sites that could be developed under the *2007-2014 Housing Element*, compliance with SCA-70 through 73, along with *General Plan* Policy FI-3 and Actions FI-3.1 through FI-3.3, would reduce impacts associated with wildland fires to a less-than-significant level.

VIII. HYDROLOGY AND WATER QUALITY

1. Setting

The City lies within the overall regional drainage of the San Francisco Bay (Bay) and within the San Francisco Basin Regional Water Quality Control Board (SFBRWQCB) jurisdictional boundaries. Average annual rainfall varies within the City, from about 16 inches near the Bay to 26 inches towards the hills. The City is located along the eastern margin of the Bay, with over 19 miles (mi) of shoreline. Major water features of the Bay along the City's shoreline include, from north to south, the Outer Harbor, Middle Harbor, Estuary or Inner Harbor, and San Leandro Bay.⁵¹ Topography ranges from over 1,760 feet above mean sea level (msl) in the Oakland Hills area to less than 10 feet above msl near the Bay. Most of the City's existing urban development is located on the coastal shelf near the Bay and Estuary, which varies in width from about two to four miles at an elevation of about 42 to 43 feet above msl.

The City of Oakland overlays the Santa Clara Valley Groundwater Basin, East Bay Plain Groundwater Subbasin (DWR No. 2-9.04). The East Bay Plain Subbasin is a northwest trending alluvial plain bounded on the north by San Pablo Bay, on the east by the contact with Franciscan Basement rock, on the south by the Niles Cone Groundwater Basin. The East Bay Plain Basin extends beneath San Francisco Bay to the west.⁵² Designated beneficial uses for the groundwater basins include Municipal and Domestic Supply, Industrial Process Supply, Industrial Service Supply, and Agriculture. Surface drainage within the City is controlled by a combination of natural creeks, modified creeks, and man-made stormwater drainage facilities that discharge to lakes or shoreline water bodies, and ultimately to the Central San Francisco Bay. About 14 major creeks and 30 tributaries run through the City, flowing west from the hills to the Bay. In their upper reaches, the creeks generally follow natural channels, while downstream in the flatlands, most creek channels have been routed through man-made channels lined with concrete or buried in culverts and pipes (undergrounded). In addition to the creeks, there are three major lakes (Lake Chabot, Lake Merritt, and Lake Temescal) in the City plus several East Bay Municipal Utility District (EBMUD) water supply distribution reservoirs.⁵³

All surface waters within the San Francisco Regional Water Quality Control Board (SFRWQCB) jurisdiction must meet water quality objectives outlined in the Basin Plan.⁵⁴ Designated beneficial uses, together with their water quality objectives, comprise the relevant water quality standards. Designated beneficial uses for City inland surface waters are listed in Table 2, Designated Beneficial Uses of Surface Waters Within the City of Oakland.

⁵¹ City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997.

⁵² California Department of Water Resources, *Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin*, in California's Groundwater Bulletin 118, February 27, 2004.

⁵³ City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997.

⁵⁴ San Francisco Bay Regional Water Quality Control Board (SFRWQCB), *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)* Adopted into Administrative Law January 18, 2007.

Table 2
Designated Beneficial Uses of Surface Waters Within the City of Oakland

	MUN	FRSH	COLD	EST	MIGR	SPAWN	WARM	WILD	REC1	REC2
Lake Merritt		X		X		X		X	X	X
Lower San Leandro Creek		X			P	P	P	X	P	P
Lake Chabot (Alameda)	X		X			X	X	X	X	X
Upper San Leandro Reservoir	X		X			X	X	X	L	P
San Leandro Creek		X	X		P	P	P	X	P	P
Lake Temescal			X			X	X	X	X	X

Source: SFRWQCB, 2007⁵⁵

Notes:

MUN = Municipal and Domestic Supply;
FRSH = Freshwater Replenishment
COLD = Cold Freshwater Habitat
EST = Estuarine Habitat
MIGR = Fish Migration

SPAWN = Fish Spawning
WARM = Warm Freshwater Habitat
WILD = Wildlife Habitat
REC1 = Water Contact Recreation
REC2 = Noncontact Water Recreation

X = existing beneficial use
P = potential beneficial use;
L = limited beneficial use

Because the majority of streams and creeks have been channelized or undergrounded, there are no specific designated beneficial uses for them and they are not considered water quality impaired because there are no defined water quality standards. However, because they discharge to the shoreline water bodies or lakes that have designated beneficial uses and applicable water quality objectives, even these undergrounded creeks and streams must be managed to protect the receiving-water water quality standards. Currently, the major source of contaminants to waters in the City is from nonpoint sources, which include *polluted* Ed stormwater runoff, dredging, marine vessel waste (including from vessel “liveboards” and illicit dumping), infiltration/inflow from sewage pipes, accidental spills or leaching of hazardous materials, and construction activities.⁵⁶

⁵⁵ San Francisco Bay Regional Water Quality Control Board (SFRWQCB), *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)* Adopted into Administrative Law January 18, 2007.

⁵⁶ City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997. Page III.I-3.

Total Maximum Daily Loads⁵⁷ (TMDLs) are in effect for some pollutants within the San Francisco Bay Basin including TMDLs for San Francisco Bay Mercury, Urban Creeks Pesticide Toxicity, and San Francisco Bay PCBs. Other TMDLs will be developed for the above listed impairments by the scheduled completion date on the 303(d) list.

The shoreline waters and Central Bay, to which the City ultimately drains to, are impaired by a number of pollutants as listed on the 2006 Clean Water Act (CWA) Section 303(d) List of Water Quality Limited Segments Requiring TMDLs.⁵⁸ Some of these pollutants include chlordane, dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxins, exotic species, furan compounds, mercury, polychlorinated biphenyls (PCBs), sediment toxicity, heavy metals, polyaromatic hydrocarbons (PAHs), and others that may be present in the water or sediment. Sources of pollutants include unknown sources, atmospheric deposition, point sources, natural sources, nonpoint sources, and others.

Lake Chabot and Lake Merritt are considered water quality impaired. Lake Chabot is impaired by chlordane, DDT, dieldrin, mercury, and polychlorinated biphenyls (PCBs) from unknown sources, but the City does not discharge substantially to Lake Chabot; Lake Chabot is physically up-gradient of the majority of the City. Lake Merritt is impaired by organic enrichment/low dissolved oxygen from unknown sources and by trash from urban runoff/storm sewers.⁵⁹ Large urbanized areas of the City drain to Lake Merritt.

2. Environmental Checklist

The proposed project would have a significant impact on the environment if ‘potentially significant’ is checked under items VIIIa-VIII m, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

⁵⁷ A Total Maximum Daily Load is a regulatory requirement, adopted into the Basin Plan. It is the amount of pollutants that can be discharged by various sources without cause or contributing to water quality impairment. Allocations of allowable pollutant load are defined for contributing sources, including background contributions.

⁵⁸ San Francisco Regional Water Quality Control Board, USEPA Approval Date: June 28, 2007.

⁵⁹ San Francisco Regional Water Quality Control Board, 2006 CWA Section 303(d) List of Water Quality Limited Segments Requiring TMDLs, USEPA Approval Date: June 28, 2007.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	☐
b) 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)?	☐	☐	☒	☐	☐
c) Result in substantial erosion or siltation on- or off-site that would affect the quality of receiving waters?	☐	☐	☒	☐	☐
d) Result in substantial flooding on- or off-site?	☐	☐	☒	☐	☐
e) Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems?	☐	☐	☒	☐	☐
f) Create or contribute substantial runoff which would be an additional source of pollUTED runoff?	☐	☐	☒	☐	☐
g) Otherwise substantially degrade water quality?	☐	☐	☒	☐	☐
h) 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?	☐	☐	☐	☒	☐
i) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒	☐
j) Expose people or structures to a substantial risk of loss, injury or death involving flooding?	☐	☐	☐	☒	☐
k) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	☐
l) 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?	☐	☐	☒	☐	☐
m) Fundamentally conflict with elements of the City of Oakland Creek Protection (OMC Chapter 13.16) ordinance intended to protect hydrologic resources. 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?	☐	☐	☒	☐	☐

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

3. Discussion

Comment on Question VIIIa, VIIIb, VIIIc, and VIIm (Water Quality)

Like all urban communities, the quality of water resources within the City has been and continues to be affected by the diverse range of urban uses, from industrial uses to recreation. Pollutant sources include both point and nonpoint sources. Point source pollutants are pollutants discharged at a discrete location, such as a pipe. These sources are primarily municipal and industrial discharges, and are regulated by federal and State laws under the National Pollutant Discharge Elimination System (NPDES) and Porter Cologne Water Quality Act to protect the quality of receiving waters. Non-point source pollutants are diffuse sources of pollutants that are discharged over a large area, such as sheet flow runoff from a large field, and are not regulated under the NPDES program. Although stormwater runoff is a diffuse source of pollutants, because it is conveyed within a storm drainage system and discharged at discrete locations, stormwater runoff is regulated as a point-source discharge.

The City of Oakland has an extensive natural drainage system consisting of creeks and tributaries which collect and convey stormwater from the hills out into the Bay. Some of the creeks near the Bay are tidally-influenced which likely results in a mixture of fresh and salt-water forming an estuarial habitat. These creeks may also support sensitive wetland species dependent on estuarial habitat (see Section IV. Biological Resources for a further discussion of sensitive species).

The proposed project would involve construction activities, generate stormwater runoff, and potentially increase sewage requiring treatment at the wastewater treatment facility. Therefore, the applicable NPDES permits, which also serve as Waste Discharge Requirements (WDRs), include the Municipal NPDES permit for stormwater discharges (Alameda Countywide NPDES Municipal Stormwater Permit Water Quality Order No. R2-2003-0021, NPDES No. CAS0029831); the Construction General Permit for construction activities with land disturbance of more than one acre (WDRs) for Discharges of Storm Water Associated with Construction Activity Water Quality Order No. 99-08-DWQ, NPDES No. CAS000002); and Individual NPDES permits/WDRs for discharges that do not fall under the above categories; and, discharges from the municipal wastewater treatment facilities (e.g., Waste Discharge Requirements for the East Bay Municipal Utility District, Special District No. 1 Wet Weather Facilities (WWFs) Alameda and Contra Costa Counties Water Quality Order No. R2-2009-0004, NPDES NO. CA0038440) and US HUD Oakland City of Housing Authority NPDES No. CA0038512). Because the proposed project would only involve residential land development or redevelopment, the proposed project does not include new or increased industrial or commercial uses within the City of Oakland. Therefore, the Industrial General Permit WDR would not be violated. The proposed project is also not expected to result in discharge of water supply water requiring compliance with the General Permit for such discharges or an individual WDR/NPDES permit, unless substantial groundwater dewatering is required. Applicable water quality standards are listed in the San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan).⁶⁰

⁶⁰ SFRWQCB, 2007.

Construction activities would disturb surfaces and expose underlying soil to wind and water erosion. Construction equipment could also track sediment onto roads and other impervious surfaces to be washed off into storm drains during rain events. Trash and construction materials and spills and leaks from construction equipment could also end up in the storm drain system. Work within or next to exposed creeks would directly affect creek water quality. Construction activities that would cumulatively disturb one or more acres of land surface would be subject to the requirements of the Construction General Permit, including development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would include construction stormwater quality best management practices (BMPs) designed to protect water resources from construction activity degradation.

Post-construction, the proposed project would have to comply with the requirements of the Municipal NPDES Permit and wastewater treatment facility (WWTF) Individual NPDES Permit. Additional population supported by the proposed project would increase waste loads to the WWTF. If additional loads would exceed the permitted flow rates, discharges would violate the WWTF WDR. The ability of the WWTF to handle additional loads within its existing and/or planned permit operation conditions is discussed in Section XVI. Utilities and Service Systems of this document.

Following construction activities, the proposed project would increase the land use density and is expected to create additional impervious surfaces. New development and new impervious surfaces would be expected to increase the amount of stormwater runoff and the amount of pollutants in stormwater runoff. Pollutants deposited on impervious surfaces are more likely to be transported in runoff than pollutants deposited on pervious surfaces; reduced contact with soil and vegetation does not allow for as much sorption (both adsorption and absorption), degradation of pollutants (biological, physical, and chemical), and infiltration. Pollutants that could be expected to increase with implementation of the proposed project would be gross debris (e.g., trash, landscape litter, bacteria), metals and hydrocarbons (building materials, increased traffic, machine wear), household hazardous waste, and nutrients and pesticides (landscape maintenance). Increased density of land use could also directly affect surface waters by recreational activities, illicit activities near or within surface waters, and removal of protective vegetation. However, the *General Plan* contains several policies designed to minimize potential impacts associated with the proposed project.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* policies with regard to hydrology and water quality (as previously described in Section IV. Biological Resources):

- *Policy CO-5.3:* 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 “liveaboards;” and (c) improve water quality in Lake Merritt to enhance the lake’s aesthetic, recreational and ecological functions.

- *Policy CO-6.4:* 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 the 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 CO-8.1:* Work with federal, state, and regional agencies on an on-going basis to determine mitigation measures for development which could potentially impact wetlands. Strongly discourage development with unmitigatable adverse impacts.
- *Policy W-3.1:* Waterfront objectives, policies, and actions regarding geology, land stability, erosion, soils, water quality, flood hazards, wetland plant and animal habitats, and air quality and pollutants, shall be consistent and in compliance with the Open Space, Conservation, and Recreation Element of the City's *General Plan*.

The Regional Board establishes and enforces the WDRs for point- and nonpoint- source of pollutants at levels necessary to meet Basin Plan numerical and narrative water quality objectives. These water quality objectives are considered necessary to protect the present and potential beneficial uses and to protect existing high quality waters of the state. In addition to proposed project policy features, City Municipal Code and Standard Conditions of Approval would ensure that WDRs are not violated and that the proposed project fundamentally complies with the Creek Protection Ordinance. Compliance with the applicable WDRs would ensure that water quality standards are not substantially violated and that substantial additional sources of pollutants are not generated, and potential impacts would be less than significant.

Municipal Code. The City of Oakland places great value on its creeks both as natural drainage and valuable habitat. As a result, the City has codified creek protection policies in the Municipal Code and included more than a dozen policies pertaining specifically to creek protection in its Standard Conditions of Approval, discussed below. Development under the *2007-2014 Housing Element* would be subject to the following sections of the Oakland Municipal Code with regard to hydrology and water quality and creek protection. These Ordinances and Codes would reduce the potential for activities that would encroach upon creeks and could affect their water quality and they would serve to help control erosion and sediment transport potential.

Chapter 13.16: City of Oakland Creek Protection, Storm Water Management, and Discharge Control. The storm water management and discharge control ordinance was adopted in 1997 to provide stronger provisions to manage and safeguard creeks. It includes permitting guidelines for construction near creeks within the City of Oakland. According to the ordinance, a creek is defined as a watercourse that is a naturally occurring swale or depression, or engineered channel, which carries fresh or estuarine water either seasonally or year round within City boundaries. Municipal Code Section 13.26.100 requires compliance with any applicable General Permit (including the Construction General Permit) and BMPs to reduce pollutants in stormwater runoff.

Grading Ordinance (Ordinance No. 10312). Requires grading permits for earth moving activities under specified conditions of volume of earth to be moved, slope characteristics, areas where "land

disturbance" or stability problems have been reported. To obtain a grading permit, a soils report, a grading plan, and an erosion and sedimentation control plan must be submitted to the Department of Public Works and approved.

The Sedimentation and Erosion Control Ordinance (Ordinance No. 10446). Requires any person who performs grading, clearing, and grubbing or other activities that disturb the existing soil to take appropriate preventative measures to control erosion; prevent sedimentation of eroded materials onto adjacent lands, public streets, or rights-of-way; and prevent carrying of eroded materials to any water course by any route.

Standard Conditions of Approval. Construction of residential development under the *2007-2014 Housing Element* would also be subject to SCA-23, 24, 34, 55, and 75 through 86, below, with regard to hydrology and water quality. In addition, the *2007-2014 Housing Element* would be subject to SCA-88 from Section IV, Biological Resources, which regulates creek dewatering and diversion.

The following Standard Conditions of Approval are specifically targeted at protecting creeks and other water bodies from activities and conditions that could negatively affect water quality and at ensuring that protective measures are complied with. These Standard Conditions of Approval, Municipal Code, and other regulations would ensure that violation of WDRs is not substantial, additional sources of pollutants are not substantial, and the Creek Protection Ordinance is fundamentally complied with:

SCA-23 Compliance Matrix: Prior to issuance of a demolition, grading, or building permit, the project applicant shall submit to the Planning and Zoning Division and the Building Services Division a Conditions/ Mitigation Measures compliance matrix that lists each condition of approval and/or mitigation measure, the City agency or division responsible for review, and how/when the project applicant has met or intends to meet the conditions and/or mitigations. The applicant will sign the Conditions of Approval attached to the approval letter and submit that with the compliance matrix for review and approval. The compliance matrix shall be organized per step in the plancheck/construction process unless another format is acceptable to the Planning and Zoning Division and the Building Services Division. The project applicant shall update the compliance matrix and provide it with each item submittal.

SCA-24 Construction Management Plan: Prior to issuance of a demolition, grading, or building permit, the project applicant shall submit to the Planning and Zoning Division and the Building Services Division for review and approval a construction management plan that identifies the conditions of approval and mitigation measures related to construction impacts of the project and explains how the project applicant will comply with these construction-related conditions of approval and mitigation measures.

SCA-34 Erosion and Sedimentation Control: Ongoing throughout demolition grading, and/or construction activities the project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. Plans demonstrating the Best Management Practices shall be

submitted for review and approval by the Planning and Zoning Division and the Building Services Division. 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.

SCA-55 Erosion and Sedimentation Control Plan:

- a) Prior to any grading activities the project applicant shall obtain a grading permit if required by the Oakland Grading Regulations pursuant to Section 15.04.660 of the Oakland Municipal Code. The grading permit application shall include an erosion and sedimentation control plan for review and approval by the Building Services Division. 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 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 Director of Development or designee. 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.
- b) Ongoing throughout grading and construction activities the project applicant shall implement the approved erosion and sedimentation plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Building Services Division.

SCA-75 Stormwater Pollution Prevention Plan (SWPPP): Prior to and ongoing throughout demolition, grading, and/or construction activities the project applicant must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the State Water Resources Control Board (SWRCB). The project applicant must file a notice of intent (NOI) with the SWRCB. The project applicant will be required to prepare a stormwater pollution prevention plan (SWPPP) and submit the plan for review and approval by the Building Services Division. At a minimum, the SWPPP shall include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; Best Management Practices (BMPs), and an inspection and monitoring program. Prior to the issuance of any construction-related permits, the project applicant shall submit to the Building Services Division a copy of the SWPPP and evidence of submittal of the NOI to the SWRCB. Implementation of the SWPPP shall start with the commencement of construction and continue through the completion of the project. After construction is completed, the project applicant shall submit a notice of termination to the SWRCB.

SCA-76 Drainage Plan for Projects on Slopes Greater than 20%: Prior to issuance of building permit (or other construction-related permit) the project drawings submitted for a building permit (or other construction-related permit) shall contain a drainage plan to be reviewed and approved by the Building Services Division. The drainage plan shall include measures to reduce the post-construction volume and velocity of stormwater runoff to the maximum extent practicable. Stormwater runoff shall not be augmented to adjacent properties or creeks. The drainage plan shall include and identify the following:

- i. All proposed impervious surface on the site;
- ii. Anticipated directional flows of on-site stormwater runoff;
- iii. Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces;
- iv. Source control measures to limit the potential for stormwater pollution; and
- v. Stormwater treatment measures to remove pollutants from stormwater runoff.

SCA-77 Erosion, Sedimentation, and Debris Control Measures: Prior to issuance of demolition, grading, or construction-related permit the project applicant shall submit an erosion and sedimentation control plan for review and approval by the Building Services Division. All work shall incorporate all applicable “Best Management Practices (BMPs) for the construction industry, and as outlined in the Alameda Countywide Clean Water Program pamphlets, including BMP’s for dust, erosion and sedimentation abatement per Chapter Section 15.04 of the Oakland Municipal Code. The measures shall include, but are not limited to, the following:

- a) 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 street, gutters, stormdrains.
- b) In accordance with an approved erosion control plan, the project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable 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.
- c) 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.
- d) Install filter materials acceptable to the Engineering Division 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.
- e) Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.

- f) Direct and locate tool and equipment cleaning so that wash water does not discharge into the street, gutters, or stormdrains.
- g) 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 storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.
- h) Gather all construction debris on a regular basis and place them in a dumpster or other container which is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.
- i) 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.
- j) 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 street, gutter, stormdrains.
- k) 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 Board (RWQB).
- l) All erosion and sedimentation control measures shall be monitored regularly by the project applicant. The City may require erosion and sedimentation control measures to be inspected by a qualified environmental consultant (paid for by the project applicant) during or after rain events. If measures are insufficient to control sedimentation and erosion then the project applicant shall develop and implement additional and more effective measures immediately.

SCA-78 Site Design Measures for Post-Construction Stormwater Management: Prior to issuance of building permit (or other construction-related permit) the project drawings submitted for a building permit (or other construction-related permit) shall contain a final site plan to be reviewed and approved by Planning and Zoning. The final site plan shall incorporate appropriate site design measures to manage stormwater runoff and minimize impacts to water quality after the construction of the project. These measures may include, but are not limited to, the following:

- i. Minimize impervious surfaces, especially directly connected impervious surfaces;
- ii. Utilize permeable paving in place of impervious paving where appropriate;
- iii. Cluster buildings;
- iv. Preserve quality open space; and
- v. Establish vegetated buffer areas.

The approved plan shall be implemented and the site design measures shown on the plan shall be permanently maintained.

SCA-79 Source Control Measures to Limit Stormwater Pollution: Prior to issuance of building permit (or other construction-related permit) the applicant shall implement and maintain all structural source control measures imposed by the Chief of Building Services to limit the generation, discharge, and runoff of stormwater pollution.

The applicant, or his or her successor, shall implement all operational Best Management Practices (BMPs) imposed by the Chief of Building Services to limit the generation, discharge, and runoff of stormwater pollution.

SCA-80 Post-Construction Stormwater Management Plan: Prior to issuance of building permit (or other construction-related permit) the applicant shall comply with the requirements of Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Alameda Countywide Clean Water Program. The applicant shall submit with the application for a building permit (or other construction-related permit) a completed Construction-Permit-Phase Stormwater Supplemental Form to the Building Services Division. The project drawings submitted for the building permit (or other construction-related permit) shall contain a stormwater management plan, for review and approval by the City, to manage stormwater runoff and to limit the discharge of pollutants in stormwater after construction of the project to the maximum extent practicable.

- a) The post-construction stormwater management plan shall include and identify the following:
 - i. All proposed impervious surface on the site;
 - ii. Anticipated directional flows of on-site stormwater runoff;
 - iii. Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces;
 - iv. Source control measures to limit the potential for stormwater pollution;
 - v. Stormwater treatment measures to remove pollutants from stormwater runoff; and
 - vi. Hydromodification management measures so that post-project stormwater runoff does not exceed the flow and duration of pre-project runoff, if required under the NPDES permit.
- b) The following additional information shall be submitted with the post-construction stormwater management plan:
 - i. Detailed hydraulic sizing calculations for each stormwater treatment measure proposed; and
 - ii. Pollutant removal information demonstrating that any proposed manufactured/mechanical (i.e. non-landscape-based) stormwater treatment measure, when not used in combination with a landscape-based treatment measure, is capable or removing the range of pollutants typically removed by landscape-based treatment measures and/or the range of pollutants expected to be generated by the project.

All proposed stormwater treatment measures shall incorporate appropriate planting materials for stormwater treatment (for landscape-based treatment measures) and shall be designed with

considerations for vector/mosquito control. Proposed planting materials for all proposed landscape-based stormwater treatment measures shall be included on the landscape and irrigation plan for the project. The applicant is not required to include on-site stormwater treatment measures in the post-construction stormwater management plan if he or she secures approval from Planning and Zoning of a proposal that demonstrates compliance with the requirements of the City's Alternative Compliance Program.

The applicant shall implement the approved stormwater management plan.

SCA-81 Maintenance Agreement for Stormwater Treatment Measures: Prior to final zoning inspection for projects incorporating stormwater treatment measures, the applicant shall enter into the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit, which provides, in part, for the following:

- a) The 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
- b) 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 agreement shall be recorded at the County Recorder's Office at the applicant's expense.

SCA-82 Erosion, Sedimentation, and Debris Control Measures: Prior to issuance of demolition, grading, or construction-related permit the project applicant shall submit an erosion and sedimentation control plan for review and approval by the Building Services Division. All work shall incorporate all applicable "Best Management Practices (BMPs) for the construction industry, and as outlined in the Alameda Countywide Clean Water Program pamphlets, including BMP's for dust, erosion and sedimentation abatement per Chapter Section 15.04 of the Oakland Municipal Code. The measures shall include, but are not limited to, the following:

- a) 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.
- b) In accordance with an approved erosion control plan, the project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable 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.

- c) 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.
- d) 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.
- e) Install filter materials (such as sandbags, filter fabric, etc.) acceptable to the Engineering Division 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.
- f) Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.
- g) Direct and locate tool and equipment cleaning so that wash water does not discharge into the creek.
- h) 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 storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.
- i) Gather all construction debris on a regular basis and place them in a dumpster or other container which is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.
- j) 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.
- k) 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, stormdrains.
- l) 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 Board (RWQB).
- m) 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 Planning and Zoning.
- n) All erosion and sedimentation control measures shall be monitored regularly by the project applicant. The City may require erosion and sedimentation control measures to be inspected by a qualified environmental consultant (paid for by the project applicant) during or after rain events. If measures are insufficient to control sedimentation and erosion then the project applicant shall develop and implement additional and more effective measures immediately.

SCA-83 Creek Protection Plan:

- a) Prior to issuance of demolition, grading, or construction-related permit the approved creek protection plan shall be included in the project drawings submitted for a building permit (or other construction-related permit). The project applicant shall implement the creek protection plan to minimize potential impacts to the creek during and after construction of the project. The plan shall fully describe in plan and written form all erosion, sediment, stormwater, and construction management measures to be implemented on-site.
- b) If the plan includes a stormwater system, all stormwater outfalls shall include energy dissipation that slows the velocity of the water at the point of outflow to maximize infiltration and minimize erosion. The project shall not result in a substantial increase in stormwater runoff volume or velocity to the creek or storm drains.

SCA-84 Regulatory Permits and Authorizations: Prior to issuance of a demolition, grading, or building permit within vicinity of the creek, the project applicant shall obtain all necessary regulatory permits and authorizations from the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), California Department of Fish and Game, and the City of Oakland, and shall comply with all conditions issued by applicable agencies. Required permit approvals and certifications may include, but not be limited to the following:

- a) U.S. Army Corps of Engineers (Corps): Section 404. Permit approval from the Corps shall be obtained for the placement of dredge or fill material in Waters of the U.S., if any, within the interior of the project site, pursuant to Section 404 of the federal Clean Water Act.
- b) Regional Water Quality Control Board (RWQCB): Section 401 Water Quality Certification. Certification that the project will not violate state water quality standards is required before the Corps can issue a 404 permit, above.
- c) California Department of Fish and Game (CDFG): Section 1602 Lake and Streambed Alteration Agreement. Work that will alter the bed or bank of a stream requires authorization from CDFG.

SCA-85 requires the retention of a geotechnical engineer or environmental consultant to monitor grading activities for adherence to erosion or sedimentation control measures. SCA-86 is a detailed landscaping and irrigation plan. Both SCA-85 and 86 are required prior to issuance of a demolition, grading or building permit for construction within the vicinity of a creek.

Other. Development under the *2007-2014 Housing Element* would also be subject to the following federal, State, and local regulations with regard to hydrology and water quality, and compliance with these regulations is ensured with implementation of the Standard Conditions of Approval:

Clean Water Act. Under Section 404 of the CWA (33 USC, Section 1344), the U.S. Army Corps of Engineers (Corps) regulates the disposal of dredged and fill materials into “waters of the United States.” Waters of the United States include intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, and wetlands adjacent to any water of the United States (CFR 33, Part 328). In areas subject to tidal influence, Section 404 jurisdiction extends to the high tide line. Certain

waters of the United States are considered “special aquatic sites” because they are generally recognized as having particular ecological value. Such sites include sanctuaries and refuges, mudflats, wetlands, vegetated shallows, coral reefs, and riffle and pool complexes. Special aquatic sites are defined by the U.S. Environmental Protection Agency and may be afforded additional consideration in the permit process for a project. Special aquatic sites include habitats such as wetlands, mudflats, and eelgrass beds. Currently, EPA’s CWA regulations at 40 CFR 122.3(a) exclude from regulation under the National Pollutant Discharge Elimination System (NPDES), “...any other discharge incidental to the normal operation of a vessel.” Therefore, ballast water discharges have not been and are currently not being regulated under the Clean Water Act.

Rivers and Harbors Act. The Corps also regulates navigable waters under Section 10 of the Rivers and Harbors Act. Navigable waters are defined as “...those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce” (33 CFR, Part 322.2). A permit from the Corps must be obtained for any work within jurisdictional waters of the United States.

Regional Water Quality Control Board 401 Certification (associated with Section 404 of the Clean Water Act). The Regional Water Quality Control Board (RWQCB) must conduct a separate review of all projects subject to Section 404 to determine whether they require a Section 401 Water Quality Certification or a waiver of discharge requirements. Section 401 refers to the section of the Clean Water Act that gives states authority to issue, waive, or deny certification that the proposed activity is in conformance with state water quality standards.

Alameda Countywide Clean Water Program (NPDES Permit). The Alameda Countywide Clean Water Program consists of 17 participating agencies, including the City, that are cooperatively complying with RWQCB requirements to prevent storm water pollution and to protect and restore creek and wetland habitat. Implemented since 1991, this program includes a storm water management plan through reduction of discharge of pollutants in stormwater and urban runoff, public information and participation, construction site controls, illicit discharge identification and elimination, monitoring and runoff control. 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 storm water pollutants from industrial areas and construction sites. In July 1996, the County developed its second five-year plan, which address the following major program areas: regulatory compliance, focused watershed management, public information/participation, municipal maintenance activities, new development and construction controls, illicit discharge controls, industrial and commercial discharge controls, monitoring and special studies, and local agency program areas with performance standards. The award-winning County program has served as a model for other programs in the Bay Area as well as in the nation.

Compliance with the above *General Plan* policies, Municipal Code regulations, Standard Conditions of Approvals, and federal, State, and local regulations would reduce impacts to water quality to a less-than-significant level.

Comment on Question VIIIb (Groundwater)

The East Bay Plain Groundwater Subbasin is an important groundwater basin underlying the City, extending from the City of Richmond to the City of Hayward and including the City of Oakland.⁶¹ The basin is identified for municipal, industrial, and agricultural water supply, although the EBMUD is the major water purveyor for the City and the groundwater basin is currently not being used for municipal water supply. However, groundwater is currently used by industry and undergoes water quality testing and monitoring. The depth to groundwater varies, but is generally more than ten feet below ground surface. The quality of the shallow groundwater has been affected by urban uses, including leakage from sewer pipes, underground storage tanks, and improper handling or storage of hazardous materials.⁶²

The proposed project would not implement any new groundwater wells and there would be no direct impacts. However, development of the proposed project could increase the amount of impervious surfaces and thereby, reduce the recharge potential. Additionally, contamination by construction pollutants or other pollutant spills on pervious surfaces could migrate to groundwater resources.

As mentioned above, the groundwater is not a substantial source of drinking water. Section XVI. Utilities and Service Systems addresses potential proposed project effects on water supplies. It is unlikely that the proposed project would create substantial amounts of new impervious surfaces that would reduce groundwater recharge and substantially lower the local groundwater table such that water supplies are affected; development and redevelopment would not occur in substantial groundwater recharge areas and proposed project policy would minimize potential effect on groundwater supplies. High salinity limits⁶³ use of groundwater for water supply and over half the groundwater recharge occurs artificially or through subsurface inflows.

The potential for contamination during construction would not be substantial. The development would require compliance with Standard Conditions of Approval that would serve to protect groundwater from the introduction of pollutants. Therefore, potential impacts on groundwater would be less than significant.

⁶¹ California Regional Water Quality Control Board, 1995. *Water Quality Control Plan, San Francisco Bay Basin (Region 2)*, June 21.

⁶² City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997 Page III.I-2.

⁶³ California Department of Water Resources, *Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin*, in California's Groundwater Bulletin 118, February 27, 2004.

General Plan. Development under the *2007-2014 Housing Element* would also be subject to the following *General Plan* policies with regard to hydrology and water quality, groundwater:

Open Space, Conservation and Recreation Element

- *Policy CO-5.1:* Encourage groundwater recharge by protecting large open space areas, maintaining setbacks along creeks and other recharge features, limiting impervious surfaces where appropriate, and retaining natural drainage patterns within newly developing areas.
- *Policy CO-5.2:* Support efforts to improve groundwater quality, including the use of non-toxic herbicides and fertilizers, the enforcement of anti-litter laws, the clean-up of sites contaminated by toxics, and on-going monitoring by the Alameda County Flood Control and Water Conservation District.

Existing requirements and *General Plan* policies would minimize the potential for groundwater contamination and substantial reductions in the groundwater table/groundwater supplies. Therefore, potential impacts on groundwater are less than significant.

Standard Conditions of Approval. The *2007-2014 Housing Element* would be subject to SCA-35, discussed in Section VI, Geology and Soils, and Section VII, Hazards and Hazardous Materials, and SCA-68 in Section VII, Hazards and Hazardous Materials. SCA-35 and 68 include BMPs for soil and groundwater hazards and hazards BMPs in regard to groundwater, as well as SCA-75 and 77, described above, requiring stormwater pollution prevention BMPs and materials/waste handling BMPs.

Compliance with the above *OSCAR Element* policies and Standard Conditions of approval would result in less-than-significant impacts to groundwater.

Comment on Question VIIIc and VIII (Drainage Pattern/Siltation):

Erosion or siltation can occur when rainwater comes in contact with graded soil that has not been stabilized or re-planted. Erosion and siltation are discussed in greater detail in Section VI, Geology and Soils, as related to soil instability and loss of topsoil. Erosion and siltation can also affect water quality if soil is contaminated with pesticides or other hazardous chemicals, as discussed further in Section VII, Hazards and Hazardous Materials. Contaminated soils can be carried via stormwater runoff onto adjacent properties and into natural drainage swales (such as creeks and sloughs) as well as into the municipal stormwater system. Stormwater laden with *polluted* soils can clog or slow flows through natural and man-made drainage systems. Where flows are slowed, the contaminated soils are re-deposited causing an increase in local pollutant concentrations. Recreational uses, such as boating, can also negatively impact water quality, particularly standing water bodies such as lakes.

The potential impacts to water quality with respect to runoff and erosion would be attributed primarily to grading activities associated with the construction of new housing and increased drainage or impervious surfaces that might occur with development and/or redevelopment. To the extent that the housing opportunity sites are affected by contaminated soils, potential impacts could be increased (see Section VII, Hazards and Hazardous Materials, for a further discussion of contaminated soils). The

potential for substantial additional sources of pollutants associated with contaminated sediment are addressed above.

Increases in small to medium storm flows can also have a substantial effect on stream bed and bank erosion and, ultimately, stream form and function when discharges are to a susceptible (e.g., non-lined or tidal) creek. Higher storm events have a large effect on stream bed and bank erosion, but during the large storm events, even pervious surfaces get saturated and essentially act as impervious surfaces. Therefore, effects of development are not as substantial during large storm events as they are during smaller ones.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* policies (found in the *OSCAR Element*) designed to protect soil degradation and minimize erosion and sediment transport:

Open Space, Conservation and Recreation Element

- *Policy CO-1.1:* Regulate new 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 activities to ensure that soil is well secured so that unnecessary erosion, siltation of streams, and sedimentation of water bodies does not occur.
- *Policy CO-2.4:* Minimize hillside cuts and fills and the removal of desirable vegetation. Limit large scale grading to those areas where it is essential to development. Where hillside grading does occur, reshape the terrain in smooth, natural appearing contours rather than flat, terraced benches. Immediately replant and reseed graded areas to reduce soil loss.
- *Policy CO-6.1:* 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-6.5:* Protect the surface waters of the San Francisco Estuary system, including San Francisco Bay, San Leandro Bay, and the Oakland Estuary. Discourage shoreline activities which negatively impact marine life in the water and marshland areas.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the sections of the Oakland Municipal Code with regard to creek protection, runoff controls, erosion controls, and sediment transport minimization identified above. In addition to those addressed above, the following Municipal Codes and Ordinances would apply to protect susceptible areas from erosion and sedimentation:

Chapter 15.04.660 California Building Code Chapter 18B, Section 1802B.7 Permit Application--Erosion and Sedimentation Control Plans. Erosion Control and Sedimentation Control Plans are required and must incorporate both interim and permanent control measures to minimize erosion, excessive stormwater runoff, and sedimentation.

Section 1810B General Requirements Applicable for All Grading Work Unless Modified by the City Engineer. This section ensures that all grading and erosion and sediment controls have been completed in accordance with approved plans and are in a stable condition:

1. Grading, erosion control and sedimentation control work shall be done in accordance with plans hereinbefore described.
2. No grading work shall be done during the wet season except for emergency stabilization of geotechnical instability.
3. Temporary erosion and sedimentation control facilities shall be completely in place prior to October 15th, and shall be diligently maintained to ensure effectiveness through April 15th.
4. The hours of grading operations shall be only between 7:00 a.m. to 9:00 p.m. weekdays, 8:30 a.m. to 6:00 p.m. Saturdays, and prohibited on Sundays and Holidays unless otherwise approved by the City Engineer. Exceptions will only be granted if it can be shown that there is a compelling public interest to grade during prohibited times.
5. No clearing and grubbing shall take place on any site for which a Grading Permit is required prior to the issuance of a valid Grading Permit.
6. Where required, a valid Tree Removal Permit must be obtained prior to the issuance of a Grading Permit. No tree removal shall take place until both Tree Removal Permit and a Grading Permit, if required, have been issued.
7. No grading shall be approved on properties adjacent to the site without the written permission of the adjacent property owner. Such written permission shall be notarized and acknowledged and presented to the City Engineer as a part of the items required with the application for a Grading Permit.
8. The rate of slope of the surface of permanent fills shall not be steeper than 2 to 1 and the rate of permanent cut slopes shall not be steeper than 1.5 to 1, unless otherwise recommended in the Soils Report and approved by the City Engineer.
9. Areas to receive fill shall be adequately prepared by stripping unsuitable material and by benching slopes. Where past sliding is known or suspected or where unstable material exists, all such unstable material shall be stripped, with slip surfaces destroyed by benching and subdrainage installed before the fill is placed.
10. Drainage facilities shall be provided to convey stormwater to a natural watercourse, swale or other drainage way, or to a public storm drainage system at locations and in a manner satisfactory to the City Engineer. Adequate temporary measures shall be taken to control stormwater during grading operations.
11. Erosion control shall include planting of all graded areas to be left exposed to the elements in accordance with the planned maintenance of such areas.

The Creek Protection, Stormwater Management and Discharge Control Ordinance (Ordinance No. 11590). Establishes comprehensive guidelines for the regulation of discharges to the City's storm drain system. The ordinance directs and guides control of surface water quality by identifying specific protective measures required by the City for development projects. The ordinance requires the implementation of best management practices for new developments and redevelopments. The Public Works Department must issue permits for storm drainage facilities that would be connected to existing city drainage facilities, and the ordinance identifies specific mechanisms for the

inspection and enforcement of the ordinance's provisions. In 1997, the ordinance was amended to include the requirement for a Creek Protection Permit for any construction or related activity on creekside property, and it includes enforcement provisions to provide more effective methods to deter and reduce the discharge of pollutants to the storm drain system, local creeks, lakes and the Bay. The Creek Protection Permit provides clear guidelines and best management practices to creekside residents for protecting the creek and habitat. Section 13.25.120 of the Municipal Code requires a Creek Protection Permit for any development or work within the boundaries of a creekside property or public ROW fronting a creekside property.

Chapter 13.16 Creek Protection, Storm Water Management and Discharge Control. Requires a hydrology report if the proposed construction activity falls into Category IV of a creek protection permit or if the proposed activity has the potential to:

- A. Discharge concentrated stormwater into or connect any stormwater pipe or stormwater channel to a creek;
- B. Modify the natural flow of water in a creek;
- C. Cause development within a creek floodway, riparian corridor, or within twenty (20) feet from the top of bank of a creek.
- D. Deposit in, plant non-native vegetation in, or remove any material from a creek including its banks, except as required for necessary maintenance of creeks; or
- E. Construct, alter, enlarge, connect to, change, or remove any structure in a creek. (Ord. 12024 § 1 (part), 1997)

The following are the applicable minimum elements that must be addressed in a hydrology report that is to be prepared by a licensed civil engineer with creek hydrology expertise and submitted for city review and approval prior to the issuance of a creek protection permit for development or work that is described in Section 13.16.160. (The Chief of Building Services may require additional reasonable information due to special circumstances) (Section 13.16.170 Hydrology report requirements):

- A. Property identification;
- B. Name of the property owner;
- C. California Department of Fish and Game approval, if appropriate;
- D. Alameda County Flood Control and Water Conservation District approval, if appropriate;
- E. Five year, ten year, twenty-five (25) year and one hundred (100) year flows and water surface levels;
- F. How future development in the area (unrelated to the proposed work) may impact flows;
- G. Creek bank stability, before and after the project;
- H. Impact of proposed work with regard to direction, as well as quantity of flow in the creek;
- I. Upstream and downstream conditions, before and after project construction;
- J. Location of major drainage facilities (e.g. trash racks, culverts, discharge points, etc.);

- M. Proposed improvements to the creek, including any vegetative or other natural screening enhancements utilized;
- N. Impacts of proposed project on existing vegetation or wildlife within the affected riparian corridor; and
- O. Special circumstances/additional information. (Ord. 12024 § 1 (part), 1997)

Standard Conditions of Approval. In addition to SCA-23, 34, 55, 75, 77, 78, 80, 82 through 86, and 88, described above, construction of residential development under the *2007-2014 Housing Element* would also be subject to SCA-43, 46, 47, and 72 from Section VII, Hazards and Hazardous Materials, which would minimize the potential for soil surface and creek bank destabilization that could negatively impact water quality.

Other. In addition to the regulations presented above, development under the *2007-2014 Housing Element* would also be subject to the following local regulation that would reduce the potential for altered runoff conditions that could cause or contribute to erosion and sediment transport in surface waters:

Alameda Countywide Clean Water Program/Municipal NPDES Permit. The Alameda Countywide Clean Water Program, mentioned above, also includes a Hydromodification Management Plan. The Hydromodification Management (HM) Standard requires that projects in which the combined amounts of impervious surfaces created and replaced totals one acre or more, shall not cause an increase in the erosion potential of the receiving stream over the pre-project (existing) condition. Increase in runoff flow and volume shall be managed so that post-project runoff shall 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 to beneficial uses due to increased erosive force. Such management shall be through implementation of the hydromodification requirements. Applicable projects are required to meet the HM Standard when such projects are located in HM control areas shown in Attachment A of Order No. R2-2007-0025. For exempt projects, site design/landscape characteristics which maximize infiltration (where appropriate), provide retention or detention, slow runoff, and minimize impervious land coverage must be incorporated to the maximum extent practicable.

These proposed project policies and existing regulations would reduce the potential for erosion and sediment transport and altered flow regime such that off-site stream bed or bank erosion would not be substantial. Existing regulations and Standard Conditions of Approval would prevent substantial erosion and sediment transport and impacts would be less than significant.

Comment on Question VIIIId and VIIE (Local Flooding/Stormwater System Capacity):

The natural drainage pattern of large portions of the City has been highly altered by channelization of creeks and by routing them through underground culverts. In some areas, the natural creeks remain and receive stormwater runoff from the developed areas. Increased impervious surfaces and changes in

drainage patterns could alter the peak flow rates and flow volumes draining to the existing storm drain system. Increases in flow rates, volume, or changes in the timing of peak flow rates could cause or contribute to exceedance of the existing storm drain system or planned storm drain system where effects of the proposed project were not accounted for. Where existing flow already exceeds the drainage system capacity, these discharges would still contribute to storm drain system capacity exceedance, even if flows from the development site are not substantially altered compared to existing conditions. Existing regulatory requirements and Standard Conditions of Approval, as noted below, would ensure that changes in drainage patterns would not substantially exceed the capacity of existing or planned storm drain systems and impacts would be less than significant.

Standard Conditions of Approval. Construction of residential development under the *2007-2014 Housing Element* would be subject to SCA-20, 21, and 91, below, with regard to the storm drain system, including street-routed flows, along with SCA-76 and 80, described above, to minimize stormwater runoff, and SCA-68 from Section VII, Hazards and Hazardous Materials. These Standard Conditions of Approval are specifically targeted at ensuring adequate drainage and inclusion of pervious surfaces to minimize drainage effects of development:

SCA-20 Improvements in the Public Right-of-Way (General): The following shall be approved prior to the issuance of a P-job or building permit:

- a) The project applicant shall submit Public Improvement Plans to Building Services Division for adjacent public rights-of-way (ROW) showing all proposed improvements and compliance with the conditions and/or mitigations and City requirements including but not limited to curbs, gutters, sewer laterals, storm drains, street trees, paving details, locations of transformers and other above ground utility structures, the design specifications and locations of facilities required by the East Bay Municipal Utility District (EBMUD), street lighting, on-street parking and accessibility improvements compliant with applicable standards and any other improvements or requirements for the project as provided for in this Approval. Encroachment permits shall be obtained as necessary for any applicable improvements- located within the public ROW.
- b) Review and confirmation of the street trees by the City's Tree Services Division is required as part of this condition and/or mitigations.
- c) The Planning and Zoning Division and the Public Works Agency will review and approve designs and specifications for the improvements. Improvements shall be completed prior to the issuance of the final building permit.
- d) The Fire Services Division will review and approve fire crew and apparatus access, water supply availability and distribution to current codes and standards.

SCA-21 Improvements in the Public Right-of Way (Specific): Final building and public improvement plans submitted to the Building Services Division shall be approved prior to the issuance of a grading or building permit and shall include the following components:

- a) Install additional standard City of Oakland streetlights.
- b) Remove and replace any existing driveway that will not be used for access to the property with new concrete sidewalk, curb and gutter.

- c) Reconstruct drainage facility to current City standard.
- d) Provide separation between sanitary sewer and water lines to comply with current City of Oakland and Alameda Health Department standards.
- e) Construct wheelchair ramps that comply with Americans with Disability Act requirements and current City Standards.
- f) Remove and replace deficient concrete sidewalk, curb and gutter within property frontage insert location.
- g) Provide adequate fire department access and water supply, including, but not limited to currently adopted fire codes and standards.
- h) Others as applicable.

SCA-91 Stormwater and Sewer: Prior to completing the final design for the project's sewer service confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.

Compliance with the above Standard Conditions of Approval would result in less-than-significant impacts to local flooding and stormwater system capacity.

Comment on Question VIIIh, VIIIi, VIIIj, and VIIIk (Flood Zones/Tsunami)

Flood hazard areas are depicted on Figure 13, Flood Hazards. The *2007-2014 Housing Element* includes housing sites that could be located in a 100-year floodplain near Lake Merritt area and along several creeks/tributaries. As discussed below, under the applicable municipal code/ordinances and

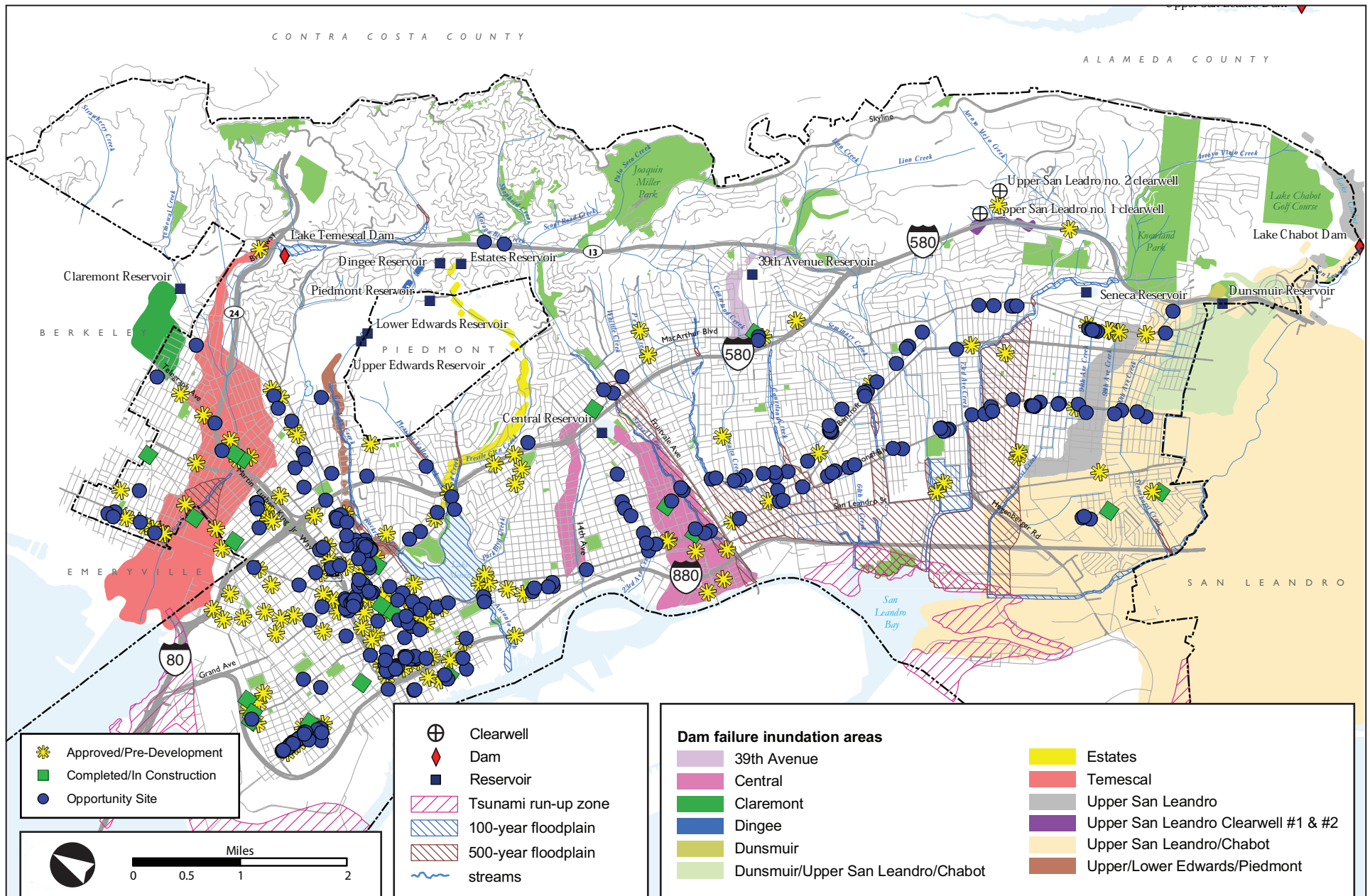


FIGURE 13
Flood Hazards

100006401

Source: City of Oakland, General Plan Safety Element, 2004.

Standard Conditions of Approval, future development, including that under the *2007-2014 Housing Element*, must provide sufficient mitigation to minimize potential risks in order to obtain a Grading Permit if it is within a Flood Hazard Area. In addition, project applicants would be required to retain the civil engineer of record to ensure that each project's development plans and design contain finished site grades and floor elevations that are elevated above the Base Flood Elevation (BFE). Furthermore, the majority of housing sites are not located in a flood hazard area. Therefore, potential impacts associated with flooding as a result of location within a 100-year floodplain would be less than significant.

Tsunamis are large sea waves generated by submarine earthquakes, or similar large-scale, short-duration phenomena, such as volcanic eruptions, that can cause considerable damage to low-lying coastal areas. Construction of residential development under the *2007-2014 Housing Element* would not be expected to occur in a tsunami run-up zone and impacts would be less than significant (Figure 13).

Seiches are waves, also caused by large-scale, short-duration phenomena, that result from the oscillation of confined bodies of water (such as reservoirs and lakes) that also may damage low-lying adjacent areas, although not as severely as a tsunami. Except for areas around Lake Merritt, no new development would be located near and down gradient of large standing bodies of water that could be subject to seiche and no substantial historical seiche effects have been identified. Furthermore, although the Bay is susceptible to seiche effects, these would not be as substantial as tsunami effects. The housing developments under the *2007-2014 Housing Element* would not be affected by tsunamis; therefore the proposed project would not be affected by a seiche in the Bay and potential seiche impacts would be less than significant.

Mudflow hazards typically occur where unstable hill slopes are located above gradient or where site soils are unstable and subject to liquefaction, and when substantial rainfall saturates soils causing failure. The majority of housing sites are not located near steep unstable hill slopes susceptible to mudslide. Potential effects of mudflows are addressed in Section VI. Geology and Soils, under the liquefaction and landslide impacts analysis.

However, residential structures would likely be located within inundation zones from failure of major dams, including areas inundated by failure of the Temescal Dam and Central Dam. The Temescal Dam is 116 feet tall, with 14.5 feet of freeboard, and impounds about 200 acre-feet of water.⁶⁴ The Central Dam is 44 feet tall with five feet of freeboard and impounds about 485 acre-feet of water.⁶⁵ Both dams are earthen dams under the jurisdiction of the State of California Division of Safety of Dams. Earthen dams are considered less susceptible to seismic failure because they can deform with earth movement. As part the normal maintenance program, all jurisdictional dams are generally inspected at least once per year. High hazard dams are typically inspected twice a year, and special

⁶⁴ California Division of Dam Safety. N.d. California Jurisdictional Dams. <http://www.water.ca.gov/damsafety/damlisting/index.cfm>. accessed June 2, 2009

⁶⁵ California Division of Dam Safety. N.d. California Jurisdictional Dams. <http://www.water.ca.gov/damsafety/damlisting/index.cfm>. accessed June 2, 2009

inspections may be made in response to follow-up work. The likelihood of a seismic failure of these major dams is small and regular inspection ensures that potential defects in dam integrity are quickly identified. Other dams potentially subject to failure are smaller and inundation areas are not substantial.

Municipal Code and Standard Conditions of Approval further reduce the potential effects of flooding. FEMA provides the Oakland Fire Department grant funds to support the CORE (Citizens of Oakland Respond to Emergencies) program. CORE was created to train the citizens of Oakland to be better prepared in emergency situations in their communities. When emergencies occur, CORE members provide critical support to first responders, provide immediate assistance to victims, and organize spontaneous volunteers at a disaster site. Therefore, potential impacts associated with dam failure inundation would be less than significant.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the sections of the Oakland Municipal Code emergency management:

Chapter 8.50.060 Emergency Plan. The Emergency Services Manager shall be responsible for the development, maintenance, testing and training associated with the Oakland NIMS/SEMS Emergency Plan to ensure and provide for the effective mobilization of all of the resources of Oakland according to Resolution No. 80021 C.M.S. dated July 18, 2006, and approved by City Council. Such NIMS/SEMS Emergency Plan shall be reviewed on an annual basis and revised as needed by the Emergency Services Manager. (Ord. 12841 § 1 (part), 2007)

Chapter 15.04.660 California Building Code Chapter 18B Grading, Excavations, and Fills. Section 1802B.13 requires that development within a Flood Hazard Area must provide sufficient mitigation to minimize potential risks in order to obtain a Grading Permit.

Standard Conditions of Approval. Development under the *2007-2014 Housing Element* would be subject to the following Standard Conditions of Approval with regard to hydrology and water quality – flooding/hazards:

SCA-89 Regulatory Permits and Authorizations: Prior to issuance of a demolition, grading, or building permit within the floodway or floodplain, the project applicant shall obtain all necessary regulatory permits and authorizations from the Alameda County Flood Control and Water Conservation District and shall comply with all conditions issued by that agency.

SCA-90 Structures within a Floodplain: Prior to issuance of a demolition, grading, or building permit:

- a) The project applicant shall retain the civil engineer of record to ensure that the project's development plans and design contain finished site grades and floor elevations that are elevated above the Base Flood Elevation (BFE) if established within a 100-year flood event.
- b) The project applicant shall submit final hydrological calculations that ensure that the structure will not interfere with the flow of water or increase flooding.

The housing developments under the *2007-2014 Housing Element* would not be affected by tsunamis; therefore the proposed project would not be affected by a seiche in the Bay and potential seiche impacts would be less than significant. In addition, compliance with the above Municipal Code and Standard Conditions of Approvals would further reduce the potential effects of flooding to less than significant.

4. Cumulative Impacts

The geographic area considered for the hydrology and water quality cumulative analysis consists of the area within the City of Oakland whose storm sewers discharge to the San Francisco Bay.

Stormwater runoff that currently enters the storm sewers within most of the City discharges to the San Francisco Bay. The stormwater contains urban-type pollutants from past, present, and existing projects in the sewered area, which have contributed to impairment of the quality of the San Francisco Bay. Applicable stormwater regulations have become progressively more rigorous since the adoption of the Federal Clean Water Act in 1977, with the derivative requirements imposed and enforced by the State Water Resources Control Board and Regional Water Boards through the NPDES permitting process. Stormwater runoff from past, present, and existing development is treated in accordance with NPDES requirements. These requirements have resulted in policies and regulations, incrementally strengthened by a series of amendments and adopted by Water Board Orders, mandating greater levels of protection to water quality for past, present, existing, and current projects. Recently approved, currently pending, and future projects, including the housing developed under the *2007-2014 Housing Element*, would continue to discharge stormwater during construction and operation of these projects. However, these future projects, which would replace existing land uses and would be subject to current and any subsequent NPDES permitting requirements. Therefore, no significant adverse cumulative impacts would occur.

5. Conclusion

Development at the opportunity sites identified in the *2007-2014 Housing Element* would largely occur as infill, in an urbanized and built-out City. Moreover, compliance with policies CO-1.1, CO-2.4, CO-5.1, CO-5.2, CO-5.3, CO-6.1, CO-6.4, CO-6.5, CO-8.1, and W-3.1, contained in the City's *General Plan, Open Space, Conservation, and Recreation* and *Land Use and Transportation* elements, Chapter 13.16 and Ordinances 10312, 10446, and 11590 of the Municipal Code, and *Standard Conditions of Approval* 20, 21, 23, 24, 34, 35, 43, 46, 47, 55, 68, 72, 75 through 86, and 88 through 91 would ensure that development under the *2007-2014 Housing Element* would not result in significant impacts as a result of runoff/erosion, groundwater depletion, and/or flooding/hazards. Thus, the proposed project would have a less-than-significant impact regarding hydrology and water quality.

IX. LAND USE

1. Setting

The City of Oakland encompasses approximately 56 square miles of land and is comprised of about 103,000 parcels. The City was incorporated in 1852, and its current city limits were established in 1909. For over 100 years, the City has been urbanizing, and today offers residents extensive housing and occupational opportunities, with a broad transportation system, neighborhoods with small commercial districts, regional attractions, areas with natural beauty, a central business district with private and public sector employees, and industrial areas. According to the 1998 *Land Use and Transportation Element (LUTE)* of Oakland's *General Plan*, the City is built-out and there is relatively little vacant land or space that does not require improvements to make it suitable for future development.

Land uses in the City of Oakland are distributed in a pattern which reflects natural features such as the waterfront and hills, transportation improvements, and the various stages of Oakland's development. Transportation and utility uses are concentrated at the harbor and airport. Industrial uses are generally located in West Oakland and in a broad corridor extending along the Southern Pacific Railroad from West Oakland to San Leandro. Commercial uses are located in activity "nodes" such as downtown and in "strips" along the City's arterial streets. Residential uses occupy most of the remainder of the City, with densities generally decreasing towards the hills. The highest residential densities are found Downtown and in the neighborhoods around Lake Merritt. A summary of land uses in six major, geographical Planning Areas within the City is provided below:

- **West Oakland/Harbor.** The West Oakland Planning Area is one of Oakland's oldest communities and contains a mix of residential and industrial uses. The Harbor Planning Area is entirely non-residential and consists mostly of maritime terminals, railyards, and former military bases on land filled during the 1930s. The two areas comprise 5,571 acres, or about 17 percent of the City. More than three-quarters of this acreage is presently in transportation or utility use. About seven percent is residential, and six percent is industrial.
- **Central/Chinatown.** The Central/Chinatown Planning Area includes Downtown Oakland, Chinatown, Pill Hill, the Jack London Waterfront, and the residential neighborhoods of Adams Point, Richmond Boulevard, and the Gold Coast. At 1,170 acres, it is one of the smallest planning areas in the City. However, it is Oakland's primary employment and civic center and its transportation hub. About 23 percent of the area is residential, nine percent is industrial, and nine percent consists of transportation or utility uses. Commercial uses, including more than 13 million square feet of office space, comprise 32 percent of the area.
- **San Antonio/Fruitvale/Lower Hills.** This Planning Area extends from the east side of Lake Merritt to High Street and includes the mostly single family residential neighborhoods east of Piedmont between Highways 580 and 13. The area covers 4,417 acres, or about 13 percent of the City's area. Although three quarters of the land area is residential, this is one of the most diverse parts of the City in its land use mix. Some 51 percent of the area consists of one-family homes and 25 percent consists of attached and multi-family housing. Most of the higher density housing is located in San Antonio and Fruitvale, often in a land use pattern in which single family homes and apartments are mixed on the same blocks. Concentrations of high

density housing are located on the eastern edge of Lake Merritt and along Foothill and Park Boulevards.

- **East Oakland.** This Planning Area encompasses Central East Oakland, Elmhurst, and the International Airport. Its 6,700 acres represent 20 percent of Oakland's land area. Residential uses comprise one third of the East Oakland area and about 80 percent of the residential acreage consists of single-family housing. Although portions of the area are exclusively single-family, large portions contain mixes of single and multi-family dwellings. East Oakland also includes more than 800 acres of industry, 500 acres of public and institutional uses, 300 acres of parkland, and 400 acres of commercial land use. The separation between industrial and residential uses is more distinct here than it is in West Oakland, although there are land use conflicts at some of the edge locations where the two uses meet.
- **North and South Hills.** This is the largest Planning Area in size, extending more than 12 miles from Berkeley to San Leandro and encompassing 30 percent of Oakland's land area. Nearly half of this area consists of parks, open space, and vacant land, while the remainder is mostly developed with single-family homes. The land use pattern reflects the area's steep terrain and its development during more recent times than the flatlands.
- **North Oakland.** At 1,588 acres, North Oakland comprises about five percent of Oakland's land area. Some 73 percent of this area is residential, including more than 700 acres of single-family residences. The area also contains 337 acres of duplexes, triplexes, and fourplexes, and 123 acres of multi-family housing. These varied housing types can be found on almost every block in North Oakland, creating a very diverse housing mix in a relatively small area. Seven percent of the Planning Area is in public or institutional use.

Development of various land uses within the City is governed by adopted regulations, plans, and policies, including the *General Plan*, *Planning Code*, and applicable specific or redevelopment plans. State law requires each city to adopt a general plan for the physical development of the city, and any land outside its boundaries which bears relation to its planning (California Government Code Section 65300). While the City's *General Plan* provides policies and objectives that guide development within the City, the City's *Planning Code* serves as an implementation tool for those policies and objectives. Specific plans and redevelopment also serve as implementation tools for the *General Plan* policies and objectives.

City of Oakland General Plan. The *General Plan* breaks the City into five separate focus areas for the purpose of land use planning: Industry and Commerce, Transportation, Downtown, Waterfront, and Neighborhoods. The overall planning goals for these focus areas are summarized below. A list of applicable policies and objectives for the focus areas is provided under the discussion of environmental impacts later in this section. Since the proposed housing sites under the *2007-2014 Housing Element* are located throughout the City and within these focus areas.

- **Industry and Commerce.** The economic hubs in the City of Oakland are located in the Seaport, Airport, Downtown, Waterfront, and Coliseum areas. The *General Plan* seeks to strengthen these "Showcase Districts" with plans that will increase economic strength, provide better access to the Pacific Rim, create urban satellite campuses for bioscience, and provide linkages to the City's universities and laboratories. Housing sites under the *2007-2014 Housing Element* would be located in these areas; however, they would not involve industry and commerce uses.

- **Transportation and Transit-Oriented Development.** Oakland provides a transportation system with many options including buses, BART, automobiles, shuttles, ferries, bicycling, and walking. The *General Plan* seeks to create “transit-oriented districts” around the major transportation hubs that would offer a wide range of local services, housing, and retail shops. Several housing sites, especially those in the downtown area, would be developed for the purposes of transit-oriented development.
- **Downtown.** The downtown area of Oakland currently contains buildings of architectural and historic distinction, a skyline with regional visibility, vital neighborhoods, transportation networks, and Lake Merritt Park. The *General Plan* includes policies to increase housing development, capitalize on the communications infrastructure, and increase office locations. In addition, the *General Plan* strategies provide opportunities for added high density residences, entertainment, commercial, retail, and educational uses in the downtown area. The *2007-2014 Housing Element* would develop housing in the downtown district.
- **Waterfront.** Oakland has a diverse waterfront supporting the fourth largest Port in the United States, the fastest growing airport in California, and a mixed-use waterfront area that ranges from intensive commercial mixed-uses to wetlands and shoreline parks. In addition, the closure of several large military bases near the seaport has provided the City with additional opportunities to plan for an integrated set of new land uses that could benefit the community. Some housing sites under the *2007-2014 Housing Element* would be located along the waterfront.
- **Neighborhoods.** Neighborhoods in the City include hill area districts, solid single-family tracts in the flatlands, “live-work” lots in industrial districts, and urban density living in the downtown area. The diversity in neighborhood types supports a range of lifestyles and incomes in over 60 neighborhoods. Some Oakland neighborhoods, however, are negatively impacted by industries that abut residences. The existing *General Plan* applies policies and classifications to ensure that the character of established neighborhoods will be maintained and enhanced, while new housing, new businesses, and new City services will be concentrated in neighborhood centers and along key corridors. The housing sites that would be developed in established neighborhoods would maintain the existing character as per the policies outlined in the *General Plan*, described in more detail below.

Planning Code. The City is in the process of updating its zoning regulations in order to make the City’s zoning consistent with the vision established by the City’s *LUTE* of the *General Plan*, in a process called the Citywide Zoning Update. Oakland has not comprehensively revised its zoning regulations since 1965 and therefore, the existing regulations are not entirely consistent with the *LUTE*, which was adopted in 1998. The City has completed the zoning regulation update for some areas, including the City’s industrial and open space areas, as well as areas at the edges of the City’s industrial areas, in which a mix of housing and businesses are allowed. However, three components of Citywide Zoning Update remain and still need to be updated by the City: residential zoning, commercial zoning, and institutional zoning.

The focus of the Update is on uses and development standards (e.g. height, setback, gross bulk/building envelope). Other standards that cover both residential and commercial/corridor zones (such as parking, landscaping, buffering, and design guidelines) will be addressed after the base residential and commercial zones are updated. Once completed, the Citywide Zoning Update will be consistent with the *2007-2014 Housing Element*.

Other City of Oakland Plans. The City of Oakland has adopted several land use plans throughout the City ranging from specific plans to redevelopment plans. The other City plans are not legal planning documents that regulate development. However, to the extent that there would be housing sites within these areas, development would consider the following plans: Acorn Redevelopment Plan; Broadway/MacArthur Redevelopment Plan; Central District Redevelopment Plan; Central City East Redevelopment Plan; Coliseum Redevelopment Plan; Oak Center Redevelopment Plan; Oak Knoll Redevelopment Plan; Stanford/Adeline Redevelopment Plan; West Oakland Redevelopment Plan, and the North Oakland Hills Area Specific Plan (NOHASP).

In addition, the City of Oakland is currently preparing three Specific Plans: Broadway/Valdez District Specific Plan, Lake Merritt BART Station Specific Plan, and Central Estuary Specific Plan. These specific plans have just been started, and are estimated to take 18-24 months to complete, and have not yet been approved by the City.

2. Environmental Checklist

The proposed project would have a significant impact on the environment if ‘potentially significant’ is checked under items IXa-d, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the proposed project:					
a) Physically divide an established community?	☐	☐	☐	☐	☒
b) Result in a fundamental conflict between adjacent or nearby land uses?	☐	☐	☒	☐	☐
c) Fundamentally conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and actually result in a physical change in the environment?	☐	☐	☒	☐	☐
d) Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐	☒

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

3. Discussion

Comments to Question IXa (Division of Communities). The housing sites under the *2007-2014 Housing Element* would consist of urban infill projects at individual parcels. As described above in the Setting, six Planning Areas exist in the City: West Oakland/Harbor, Central/Chinatown, San Antonio/Fruitvale/Lower Hills, East Oakland, North and South Hills, and North Oakland. All of these planning areas contain a mix of uses, including residential. No physical barriers would be added that would physically separate the Planning Areas the housing sites from their surroundings. In addition, existing land use connectivity and circulation routes within the areas of the housing sites would be maintained and no new roadways that could divide a community would be constructed as a result of the *2007-2014 Housing Element*. The *2007-2014 Housing Element* would ensure the continued maintenance and conservation of existing residential neighborhoods; therefore, project implementation would not physically divide an established community. No impact would occur.

Further, the proposed project would be subject to the following policies that regulate against division of communities and also promote development of communities and districts.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *LUTE* objectives and policies from the *General Plan* specifically focused on promotion and protection of established communities and districts.

Downtown Objectives and Policies

- *Policy D1.7: Planning for the Gold Coast:* The Gold Coast should be recognized and conserved as an established neighborhood providing urban density housing in a unique urban setting.
- *Objective D10:* Maximize housing opportunities in the downtown to create a better sense of community.
- *Policy D10.6: Creating Infill Housing.* Infill housing that respects surrounding development and the streetscape should be encouraged in the downtown and to strengthen or create distinct districts.

Waterfront Objectives and Policies

- *Policy W9.3: Defining Development Characteristics Along the Estuary.* Mixed use and residential developments should be sensitive to adjacent properties and designed to enhance the existing and unique characteristics of the waterfront and immediate surroundings. Individual properties should be designed to encourage and provide sufficient public access to the waterfront and designed to avoid the feeling of “gated” or private communities.

Goals for Oakland’s Neighborhoods

- *Objective N9:* Promote a strong sense of community within the City of Oakland, and support and enhance the district character of different areas of the City, while promoting linkages between them.

Compliance with the above listed *LUTE* policies and objectives would ensure that the *2007-2014 Housing Element* would not divide an established community, resulting in no impact.

Comments to Questions IXb (Land Use Conflicts): Citywide land use planning efforts, including the *General Plan*, Specific Plans, Redevelopment Plans, and zoning are aimed at planning growth that is cohesive and that minimizes land use conflicts. In general, fundamental land use conflicts occur when one land use significantly impedes the function of another existing nearby land use. Residential uses are considered sensitive receptors and environmental hazards from surrounding land uses must be considered. The function of a land use would be impacted if localized noise, air emissions, or hazardous materials exposure would disrupt its neighboring operations. For example, construction of housing next to a heavy industrial plant would result in health risk to the housing, impeding residents from living in this area. As explained in Section VII, Hazardous Materials, less-than-significant land use conflicts regarding these hazards would occur. However, the sensitive receptors at the new residential units planned under the *2007-2014 Housing Element* could be impacted by potentially significant air and noise exposure. This impact will be discussed in detail in the EIR.

The above notwithstanding, one method used to identify housing sites for the *2007-2014 Housing Element* was by mapping areas throughout the City that allow residential uses at 30 units or greater. These areas occur mostly along major corridors and in the downtown, which are areas planned for high-density and mixed-use development in the *General Plan*. Therefore, since the housing sites were identified based on the location of existing residential areas, the *2007-2014 Housing Element* would not conflict with existing uses and would be consistent with the actual land uses in the vicinity.

In addition, the *2007-2014 Housing Element* would comply with the following policies and regulations outlined in the *General Plan* and the *LUTE EIR* regarding conflicts with nearby or adjacent land uses.

General Plan. As stated above, the *General Plan*, and in particular the *LUTE*, was designed to limit the impacts of proposed projects on surrounding land uses. Development under the *2007-2014 Housing Element* would be subject to the following *LUTE* objectives and policies from the *General Plan* specifically focused on compatibility of land uses:

Industry and Commerce

- *Policy I/C4.1: Protecting Existing Activities.* Existing industrial, residential, and commercial activities and areas which are consistent with long term land use plans for the City should be protected from the intrusion of potentially incompatible land uses.

Downtown Objectives and Policies

- *Policy D1.5: Planning for the Gateway District.* New development and rehabilitation in the Gateway district should contribute to greater neighborhood cohesion and identity, emphasizing mixed housing type and urban density residential development.
- *Policy D10.2: Locating Housing.* Housing in the downtown should be encourage in identifiable districts, within walking distance of the 12th Street, 19th Street, City Center, and Lake Merritt BART stations to encourage transit use, and in other locations where compatible with surrounding uses.
- *Policy D10.7: Developing Live-Work Spaces.* Locational and performance criteria should be developed for live-work developments.

- *Policy D11.1: Promoting Mixed-Use Development.* Mixed-use development should be encouraged in the downtown for such purposes as to promote its diverse character, provide the needed goods and services, support local art and culture, and give incentive to reuse existing vacant or underutilized structures.
- *Policy D11.2: Locating Mixed-Use Development.* Mixed-use development should be allowed in commercial areas, where the residential component is compatible with the desired commercial function of the area.

Waterfront Objectives and Policies

- *Policy W1.3: Reducing Land Use Conflicts.* Land uses and impacts generated from Port or neighborhood activities should be buffered, protecting adjacent residential areas from the impacts of industrial uses. Appropriate siting of industrial activities, buffering, truck traffic management efforts, and other mitigations should be used to minimize the impact of incompatible uses.
- *Policy W9.2: Encouraging Mixed Land Uses Along the Estuary.* Mixed land uses should be encouraged in areas where the integration of housing with other compatible uses will add to the overall environmental, social, and economic vitality of the waterfront, and will create a safe environment.
- *Policy W9.7: Supporting Existing Residential Communities Along the Estuary.* The existing residential communities within and adjacent to the waterfront should be supported and enhanced.
- *Policy W12.5: Mitigating Land Use Conflicts.* Since this area is and may continue to be an area that has a variety of uses, incompatibilities should be mitigated.

Goals for Oakland's Neighborhoods

- *Policy N3.4: Constructing Housing on Orphan Lots.* Construction of housing units on “orphan lots” in residential areas should be allowed where the proposed unit meets other applicable standards.
- *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.
- *Policy N5.3: Supporting Live-Work Development.* The City should support and encourage residents desiring to live and work at the same location where neither the residential use nor the work occupation adversely affects nearby properties or the character of the surrounding area.
- *Policy N7.2: Defining Compatibility.* Compatibility factors should be balanced with the citywide need for additional housing.
- *Policy N7.5: Respecting the Existing Development Pattern.*
- *Objective N8: Direct urban density and mixed use housing development to locate near transit or commercial corridors, transit stations, the Downtown, waterfront, underutilized properties where residential uses do not presently exist but may be appropriate, areas where this type of development already exists and is compatible with desired neighborhood character, and other suitable locations.*

- *Policy N8.1: Developing Transit Villages:* “Transit Village” areas should consist of attached multi-story development on properties near or adjacent to BART stations or other well-used or high volume transit facilities, such as light rail, train, ferry stations, or multiple-bus transfer locations. While residential units should be encouraged as part of any transit village, other uses may be included where they will not negatively affect the residential living environment.
- *Policy N9.7: Creating Compatible but Diverse Development.* Diversity in Oakland’s built environment should be as valued as the diversity in population. Regulations and permit processes should be geared towards creating compatible and attractive development, rather than “cookie cutter” development.
- *Policy N11.6: Suggested Proactive Developer and Community Relations.* Prior to submitting required permit application(s), project sponsors of medium and large scale housing developments should be encouraged to meet with neighborhood groups and community members, hear their concerns regarding the proposed project, and take those concerns into consideration.

LUTE EIR.⁶⁶ Potential impacts to established communities and land use compatibilities were analyzed as part of the *LUTE EIR* (pages III.A-1 – III.A-32), and mitigation measures were identified. Those mitigation measures are incorporated by reference here. With the implementation of the *General Plan* policies listed above and appropriate mitigation measures from the *LUTE EIR* (Mitigation Measures LU-1a, LU-1b, and LU-1c, below), impacts to established communities and compatibility are less than significant and no new impacts would be anticipated as a result of the project. Those previously adopted mitigation measures are as follows:

Mitigation Measure LU-1a: Establish performance based standards which designate appropriate levels of noise, odors, light/glare, traffic volumes, or other such characteristics for industrial activities located near commercial or residential areas. (1998 *LUTE EIR - Mitigation Measure A.1a*)

Mitigation Measure LU-1b: Develop “performance” zoning regulations which permit industrial and commercial uses based upon their compatibility with other adjacent or nearby land uses. (1998 *LUTE EIR - Mitigation Measure A.1b*)

Mitigation Measure LU-1c: Develop strategies to mitigate conflicts associated with live/work and home occupation uses. (1998 *LUTE EIR - Mitigation Measure A.1c*)

Mitigation Measure LU-1d: Establish design requirements for large-scale commercial development that requires adequate buffers from residential uses. Use of open space, recreation space, or transit installations as buffers should be encouraged. (1998 *LUTE EIR - Mitigation Measure A.2a*)

Mitigation Measure LU-1e: Develop distinct definitions for home occupation, live/work and work/live operations; define appropriate locations for these activities and performance criteria for their establishment; and create permitting procedures and fees that facilitate the establishment of those activities which meet the performance criteria. (1998 *LUTE EIR - Mitigation Measure A.2b*)

⁶⁶ City of Oakland, Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation Element EIR*, October 31, 1997.

Mitigation Measure LU-1f: Develop an incentive program to encourage the relocation of non-conforming industrial/commercial businesses or residential uses to more appropriate locations in the City. (1998 LUTE EIR - Mitigation Measure A.2f)

Compliance with the *LUTE* policies and objectives and the *LUTE EIR* mitigation measures, listed above, would result in less-than-significant conflicts between existing adjacent or nearby land uses.

Comments to Question IXc (Policy Conflicts): As discussed further below, State law requires consistency between general plan elements, and between a general plan and zoning ordinance and other implementation mechanisms for general plans.

Conflicts with the General Plan

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, “[e]ffects analyzed under CEQA must be related to a physical change.” Section 15125(d) of the Guidelines states that environmental documents shall discuss any inconsistencies between Housing Elements and applicable *General Plans*.

Further, Appendix G of the CEQA Guidelines (Environmental Checklist Form) makes explicit the focus 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*” (emphasis added). 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 elsewhere in this document.

Regarding a project’s consistency with the *General Plan* in the context of CEQA, the 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)

In addition, State law requires that a *General Plan* and its constituent elements must “...comprise an integrated, internally consistent and compatible statement of policies for the adopting agency.”⁶⁷ The California Government Code requires that that a general plan be integrated and internally consistent,

⁶⁷ California Government Code, Section 65300.5.

both among the elements and within each element.⁶⁸ This implies that all elements have equal legal status and no one element is subordinate to any other element. Therefore, the *2007-2014 Housing Element* must be consistent with land use goals and policies set forth in all affected parts of other *General Plan* elements.

Policies in the other *General Plan* elements will advance the ability of the City to achieve the objectives contained in the updated *Housing Element*, and will implement specific housing policies and programs. Similarly, policies in the *Housing Element* will advance the implementation of policies and programs in the other *General Plan* elements. The City has therefore determined that the *2007-2014 Housing Element* is consistent with the *General Plan*, and included detailed analysis of other *General Plan* policies in Appendix F of the *Housing Element*.

Conflicts with Zoning

The Zoning Regulations are an important tool in controlling land development activities. Although the Regulations have been amended many times, there has not been a comprehensive update since August 1965. Past amendments have addressed changing laws, land use and zoning issues, changes in economic and community dynamics, and neighborhood concerns.

The Zoning Ordinance translates the *LUTE's* land use classifications and Policy Framework into a regulatory format. As a charter city, Oakland is exempt from the statutory requirements that zoning be consistent with the *General Plan*. However, the City is electing to have and maintain zoning consistency. The Land Use and Transportation Plan Diagram, in concert with the Policy Framework and other *General Plan* Elements, establishes the City's general intent regarding future zoning.

As described in the project description and briefly above, the City of Oakland is undertaking a comprehensive Zoning Update to make the City's zoning consistent with the vision of the *General Plan*. The Zoning Update is on-going and the *2007-2014 Housing Element* is a citywide program encompassing all of the Planning Areas, *General Plan* land use classifications, and zoning districts. Therefore, the land use discussion for the purposes of this document focuses on consistency with the policies of the *General Plan* since it is the *General Plan* that is guiding the Zoning Update. Moreover, development occurring under the *2007-2014 Housing Element* would also be subject to the City's *Guidelines for Determining Project Conformity With the General Plan and Zoning Regulations*, a guidance document adopted by the Oakland City Planning Commission in May of 1998 on a project-by-project basis, until such time as the Zoning Update process is completed. This guidance document was designed to "bridge the gap" between the City's *General Plan* and zoning; it is a "living document" which is periodically updated. Once completed, the Citywide Zoning Update will make the *Planning Code* consistent with the *General Plan* and the *2007-2014 Housing Element*.

⁶⁸ California Office of Planning and Research, *General Plan Guidelines*, 2003.

Conflicts with Other Plans

As explained above, there are several existing redevelopment plans and a specific plan that pertain to certain areas of the City. In addition, the City of Oakland is currently preparing three specific plans, as described in the project description. To the extent that the housing sites are located within these plan areas, the *2007-2014 Housing Element* would comply with these plans. State law also requires that these plans are consistent with the *General Plan*, and in turn, individual elements of the *General Plan*. Therefore, since the *2007-2014 Housing Element* is required to be consistent with these redevelopment and specific plans, no conflict would occur.

In addition, the *2007-2014 Housing Element* would comply with the following *General Plan* policies, Municipal Code, and Standard Conditions of Approval, as explained below.

General Plan. Development under the *2007-2014 Housing Element* would be subject to the following *General Plan* objectives and policies with regard to conflicting with applicable land use plan, policy, or regulation:

Land Use and Transportation Element

- *Policy N3.11: Enforcing Codes.* The City should aggressively enforce the requirements of the City's Housing Code and other applicable regulations on housing of all types.
- *Policy W6.9: Developing Housing Along the Estuary: Quality, Type, and Services.* Housing quality, type, and services should be developed in a manner that is consistent with the policies and requirements of: future detailed plans created for the Waterfront; the *Housing Element* of the *General Plan*; the City's Building Code; and/or other appropriate codes per regulations.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the following title of the Oakland Municipal Code:

- *Title 17: Planning.* Title 17 of the Municipal Code discusses the title and scope of the zoning regulations in the City. The purpose of these provisions is to specify the title purposes and applicability of the zoning regulations and to require conformity to the regulations. The general purposes of the zoning regulations are to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of the City and its residents.

In addition, Chapter 17.01.050 states that until the *Planning Code* is updated, land use designations, zoning controls, and subdivision controls specified by the *Planning Code* and Subdivision Regulations shall apply, except where such action would conflict with the *General Plan*. Where a conflict does arise, the *General Plan* policies and land use designation shall apply and take precedent.

Standard Conditions of Approval. The City has adopted the following SCA which would apply to any development project undertaken under the *2007-2014 Housing Element*. Compliance with these Standard Conditions of Approval would further reduce the less-than-significant impacts associated with compliance with applicable City plans and policies.

SCA-4 Conformance with other Requirements

- a) The project applicant shall comply with all other applicable federal, State, regional and/or local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the City's Public Works Agency. 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 Condition of Approval 3.

SCA-5 Conformance to Approved Plans; Modification of Conditions or Revocation

- a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of approval, unless an earlier date is specified elsewhere.
- b) The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved plans may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension or other corrective action.
- c) Violation of any term, conditions/mitigation measures or project description relating to the Approvals is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approvals or alter these conditions/mitigation measures if it is found that there is violation of any of the conditions/mitigation measures or the provisions of the *Planning Code* or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Conditions of Approval.

Therefore, compliance with the *General Plan*, Municipal Code, and Standard Conditions of Approval would result in less-than-significant impacts regarding conflicts with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project.

Comments to Questions IXd (Conflicts with Conservation Plans). Development under the *2007-2014 Housing Element* would occur primarily in already urbanized areas. As stated in the Section IV, Biological Resources, development of the housing sites identified in the *2007-2014 Housing Element* would not fundamentally conflict with any applicable habitat conservation plan (HCP) or natural community conservation plan (NCCP). The closest major HCP/NCCP is the East Contra Costa County HCP, which encompasses the County of Contra Costa, and the cities of Brentwood, Clayton, Oakley, and Pittsburg. As such, no impact would occur.

4. Cumulative Impacts

The geographic area considered for the land use cumulative analysis includes the City of Oakland. As analyzed above, the *2007-2014 Housing Element* would not result in a significant land use impact by potentially physically dividing an established community; conflicting with adjacent or nearby land uses; or conflicting with applicable land use plans, policies, or regulations adopted for the purpose of

avoiding or mitigating an environmental effect. In addition, the City is not located in or near an area guided by a habitat conservation plan or natural community conservation plan. The housing developed under the *2007-2014 Housing Element* would be consistent with the City's *General Plan* Land Use designations. Thus, the *2007-2014 Housing Element* would not combine with, or add to, any potential adverse land use impacts that may be associated with other cumulative development.

Cumulative development in the area consists of residential, commercial, transit, and other typical urban uses. Cumulative development, in combination with development under the *2007-2014 Housing Element*, has and would continue to result in the development and redevelopment of infill or vacant sites throughout the City. Nonetheless, development would be consistent with adopted plans and the overall vision for the City. As such, the *2007-2014 Housing Element* would not contribute to any significant adverse cumulative land use impacts when considered together with past, present, current, pending and reasonably foreseeable future development.

5. Conclusion

Development at the opportunity sites identified in the *2007-2014 Housing Element* would largely occur as infill, in an urbanized and built-out City. Compliance with the goals, policies, and programs of the City's *General Plan* (Policies I/C4.1, D1.5, D1.7, D10.1, D10.2, D10.6, D11.1, D11.2, W1.3, W6.9, W9.2, W9.7, W12.5, N3.4, N3.11, N4.4, N5.2, N5.3, N7.2, N7.5, N8.1, N9.7, N11.6, and Objectives D10, N8, and N9); Municipal Code (Title 17); Standard Conditions of Approval 4 and 5; and Mitigation Measures LU-1a, LU-1b, LU-1c, LU-1d, LU-1e, and LU-1f would ensure that development under the *2007-2014 Housing Element* would not conflict with adjacent land uses, divide an existing community, or conflict with applicable land use policies. As such, the proposed project would have a less-than-significant impact with regard to land use.

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X. MINERAL RESOURCES

1. Setting

Within the City of Oakland, there is one mining site that is identified by the Surface Mining and Reclamation Act (SMARA) as a Regionally Significant Resource. The Leona Quarry, Sector P, located between Claremont Canyon and the San Leandro border, contains rhyolite deposits and has been partially developed into Monte Vista Villages, a townhome development. However, none of the housing opportunity sites identified in the *2007-2014 Housing Element* are near the Leona Quarry. Nor are any of the housing opportunity sites designated as a Regionally Significant Construction Aggregate Resources by the State Mining and Geology Board.⁶⁹

2. Environmental Checklist

The proposed project would have a significant impact on the environment if ‘potentially significant’ is checked under items Xa-b, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐	☒

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

3. Discussion

Comments to Questions Xa and b: There are no known mineral resources at any of the opportunity sites. The CGS Mineral Resource Zones and Resource Sectors Alameda County map classifies most of the opportunity sites as located in an MRZ-1 zone, which constitutes an area “where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.” In addition, a few opportunity sites are located in an MRZ-4 zone, which is classified as an area “where available information is inadequate for assignments to any

⁶⁹ City of Oakland. *General Plan Open Space, Conservation, and Recreation Element*. 1996. .

other MRZ zone.” According to the CGS maps, the nearest mineral deposit classified area is Sector P, which is approximately 0.75 miles north of the closest opportunity site.⁷⁰

4. Cumulative Impacts

The geographic area considered for the mineral resources cumulative analysis is the City of Oakland. Construction activities associated with the *2007-2014 Housing Element* and past, present, current, existing, pending, and reasonably foreseeable future projects within the City would not result in significant impacts to agricultural resources. As stated above, no significant mineral resources exist within the vicinity of the housing units that would be constructed under the *2007-2014 Housing Element*. Therefore, no cumulative impacts would result.

5. Conclusion

Development occurring under the *2007-2014 Housing Element* would have no impact on known mineral resources or significant mineral resources.

⁷⁰ California Geological Survey, *Special Report 146 – Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area, Part II: Classification of Aggregate Resource Areas South San Francisco Bay Production-Consumption Region*, Plates 2.1, 2.19, 2.20, and 2.60. 1983.

XI. NOISE

1. Environmental Checklist

The proposed project would have a significant impact on noise if ‘potentially significant’ is checked under items XIa-k, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Exposure of persons to or generate noise levels in excess of standards established in the Oakland general plan or applicable standards of other agencies (e.g., OSHA)?	☒	☐	☐	☐	☐
b) Violate the City of Oakland Noise Ordinance (Oakland <i>Planning Code</i> Section 17.120.050) regarding operational noise?	☒	☐	☐	☐	☐
c) Violate the City of Oakland Noise Ordinance (Oakland <i>Planning Code</i> Section 17.120.050) regarding construction noise, except if an acoustical analysis is preformed?	☒	☐	☐	☐	☐
d) Violates the City of Oakland Noise Ordinance (Oakland <i>Municipal Code</i> Section 8.18.020) regarding nuisance of persistent construction-related noise?	☒	☐	☐	☐	☐
e) Create a vibration not associated with motor vehicles, trains, and temporary construction or demolition work, which is perceptible without instruments by the average person at or beyond any lot line containing vibration-causing activities, except vibration causing activities located within the (a) M-40 zone or (b) M-30 zone more than 400 feet from any legally occupied residential property (Oakland <i>Planning Code</i> Section 17.120.060)?	☒	☐	☐	☐	☐
f) Expose person to or generate rail-related groundbourne vibration in excess of standards established by the Federal Transit Administration?	☒	☐	☐	☐	☐
g) Generate interior Ldn or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24):	☒	☐	☐	☐	☐
h) Result in a 5dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐	☐

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
i) Conflicts with state land use compatibility guidelines for all specified land uses for determination of acceptability of noise after incorporation of all applicable Standard Conditions of Approval?	☒	☐	☐	☐	☐
j) Be located within an airport land use plan and would expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐	☐
k) Be located within the vicinity of a private airstrip, and would expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐	☐

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

2. Discussion

Comment on Question XI a-k: The existing noise environment within the vicinity of the 2007-2014 *Housing Element* opportunity sites will be described based upon 24-hour sample noise measurements and short-term noise measurements. Relative noise ordinances and policies shall be discussed as well as likely noise levels to be generated by construction and operation. The noise increases will be analyzed with respect to their potential to affect sensitive land uses or conflict with the ordinances and policies. Issues a) through k) will be analyzed in the EIR.

XII. POPULATION AND HOUSING

1. Setting

Population. According to the California Department of Finance, the City of Oakland had a population of 420,183 residents in 2008 and was the eighth largest city in California.⁷¹ Although the City has not grown as rapidly as Alameda County or State of California, the growth experienced during the last three decades represents a significant turnaround for the City. For the first time since the 1940s, Oakland experienced significant and sustained population growth, increasing from about 339,000 in 1980 to over 420,000 in 2008. The increase is particularly significant in light of the fact that Oakland was almost completely developed by 1980. Before 1980, Oakland had experienced three decades of population decline due to changes in the local economy, migration to suburban communities, and other factors.⁷² In 1998, the *LUTE* projected that the population of Oakland would increase to 413,170 by 2015;⁷³ however, the City had already exceeded this projected population figure by about 1.7 percent as of 2008.

City policies and investments have contributed to the recent population growth by encouraging development downtown and along transportation corridors and by stimulating investment in housing. New residents have also moved to Oakland because housing costs are lower than in other centrally located Bay Area communities. Most of Oakland's population growth, however, has come from immigration not necessarily related to development trends in the central city and major corridors. Population growth and the resulting occupancy changes in Oakland over the past decade have also been affected by a low estimated percentage of vacant housing units (at approximately four percent in 2008) and an estimated increase in new housing construction (about 6,500 new units between 2000 to 2008).

Every two years the Association of Bay Area Governments (ABAG) makes long-term forecasts of population, households, and employment within the Bay Area, which is designed to be a realistic assessment of growth in the region. The ABAG population projections differ slightly from the estimates by the California Department of Finance (DOF). Since ABAG projects population, households, and employment over a long-term horizon, the future population numbers from the *ABAG Projections 2007* will be used in this document. In addition, the *2007-2014 Housing Element* uses ABAG statistics to determine the amount of housing needed in the City.

⁷¹ State of California, Department of Finance, *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2008 and 2009*. Sacramento, California, May 2009.

⁷² City of Oakland, *Housing Element 2007-2014*, 2009.

⁷³ City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, Section III.C: Population, Housing, and Employment. October 31, 1997.

Table 3 was applied to the development of the *2007-2014 Housing Element*. The table compares past Census Bureau statistics for 1990 and 2000, current DOF statistics for 2008, and project ABAG population growth in both the City of Oakland and Alameda County. According to the projections, the City of Oakland is expected to reach a population of more than 440,000 by 2020. For Oakland, ABAG projected a six percent population growth rate between 2000 and 2010 and a four percent increase between 2010 and 2020. Checking the progress of that projection, as of 2008, the percentage growth rate since 2000 is five percent. The ABAG population growth projections for Alameda County are nine percent between 2000 and 2010 and five percent between 2010 and 2020. Checking the progress of that projection, as of 2008, the percentage growth rate since 2000 is six percent. As such, the ABAG numbers are the basis for the population projections as outlined in the *2007-2014 Housing Element*.

Table 3						
City of Oakland and Alameda County Population						
	Population					
	1990^a	2000^a	2008^b	2010^c	2015^c	2020^c
Oakland	372,242	399,484	420,183	425,300	445,700	464,700
Alameda County	1,279,182	1,443,741	1,543,000	1,571,400	1,635,700	1,700,700

Source: *City of Oakland Housing Element Update 2007-2014*, Table 3-55, page 3-84.

Notes:

- a. U.S. Census Bureau, 1990 and 2000.
- b. 2008 data from Demographics Research Unit of California Department of Finance Table E-5.
- c. Association of Bay Area Governments, Projections 2007. Based on the Oakland 'subregional study area.'

Households. In 2008, the City was home to 164,053 households, which represents an increase since 1990. In addition, approximately 7,257 Oakland residents lived in group quarters such as college dormitories, nursing homes, correctional facilities, and other shelter facilities not constituting individual dwelling units.⁷⁴ Table 4, below, compares the statistics for the City of Oakland and Alameda County households over a 30 year period. As shown in the table, household growth in Oakland is projected to be slightly less than population growth due to an increase in the average household size. Checking the progress of that projection, as of 2008, the percentage growth for households has exceeded ABAG's projections with an eight percent increase. DOF 2008 projections for persons per household is 16 percent, on track with ABAG projections.

⁷⁴ City of Oakland, *Housing Element 2007-2014*, 2009.

Table 4
City of Oakland and Alameda County Households

	1990 ^a	2000 ^a	2008 ^b	2010 ^c	2015 ^c	2020 ^c
Households						
Oakland	144,521	150,790	164,053	159,610	168,910	177,440
Alameda County	479,518	523,366	570,619	564,880	589,780	614,790
Persons per Household						
Oakland	2.52	2.20	2.63	2.62	2.59	2.57
Alameda County	2.59	2.70	2.47	2.73	2.72	2.71

Source: *City of Oakland Housing Element Update 2007-2014*, Table 3-55, page 3-84.

Notes:

- a. U.S. Census Bureau, 1990 and 2000.
- b. 2008 data from Demographics Research Unit of California Department of Finance Table E-5.
- c. Association of Bay Area Governments, Projections 2007. Based on the Oakland 'subregional study area.'

Regional Housing Need Allocation. Under State law, new housing need is determined, at a minimum, through a Regional Housing Needs Allocation (RHNA) process.⁷⁵ In the RHNA process, the State Housing and Community Development Department (HCD) determines the amount of housing needed for all income groups in each region, based on existing housing need and expected population growth. In April 2007, the State HCD determined that, at a minimum, the nine-county Bay Area needed to provide 214,500 units between 2007 and 2014 to satisfy regional demand.

Each city's share of regional housing demand is based on a plan prepared by ABAG called the Regional Housing Needs Determination, which was adopted in May 2008. The City of Oakland (along with all other cities and counties in the State) must plan to accommodate its share of the housing need of persons at all income levels. Under the ABAG plan, the City must accommodate 14,629 new housing units between January 2007 and June 2014 to meet its "fair share" of the State's housing need. The allocation is equivalent to an annual need of 1,951 housing units for the seven-and-a-half-year planning period (2007-2014). The City's responsibility under State law in accommodating its regional housing allocation is to identify adequate sites that will be made available through appropriate zoning and development standards and with services and facilities, including sewage collection and treatment, domestic water supply, and septic tanks and wells to encourage the development of a variety of types of housing for all income levels.⁷⁶

⁷⁵ California Government Code, Section 65584.

⁷⁶ City of Oakland, *Housing Element 2007-2014*, 2009, pg. 1-1.

Jobs/Housing Balance. According to the U.S. Census, 174,740 people living in Oakland were employed in 2000, representing 56 percent of the working age population (the population 16 years of age and older) and 92 percent of the civilian labor force (those 16 years of age and older working or looking for work). However, job opportunities have declined recently and unemployment among Oakland residents has remained the same high percentage as reported in the last *Housing Element*. Despite the setback in the City's employment outlook, ABAG projects significant job growth over the 20-year period from 2000 to 2020. According to ABAG, employment in Oakland should increase by 26 percent, or about 1.2 percent per year. By comparison, employment growth throughout Alameda County is anticipated to be 35 percent over the same 20-year period, or about 1.5 percent per year.⁷⁷

Census data indicate that about 39 percent of the employed residents of Oakland held jobs in Oakland in 2000. Another 16 percent worked in nearby cities of the Inner East Bay, indicating that the majority (55 percent) of Oakland's employed residents work close to home, in Oakland and adjacent cities. About 36 percent of the jobs in Oakland in 2000 were held by people who also lived in the city. Another 15 percent of jobs were held by residents of nearby cities in the Inner East Bay, indicating that over half (51 percent) of Oakland's jobs are held by residents of Oakland and its adjacent cities.

The jobs to employed residents ratio is a means of measuring the relationship between jobs and housing units within a community. The overall relationship between jobs and employed residents in an area identifies the extent to which a community enjoys a balanced mix of land uses thereby offering job opportunities to local residents and housing opportunities for workers employed in local jobs. As shown in Table 5, according to ABAG Projections 2007, the City is anticipated to have a job to employed residents ratio of 1.18 in 2010, decreasing to 1.11 in 2020.

Another means of measuring the relationship between jobs and housing units within a community is the jobs to housing ratio. Data and projections for Oakland indicate that Oakland has a good balance of jobs and housing and that the ratio will remain stable over time. According to ABAG Projections 2007, the City will have approximately 218,350 jobs and 159,610 housing units by 2010. The resulting jobs to housing ratio would be approximately 1.37 jobs per housing unit, or 1.37 times as many jobs as there are households within the City. As shown in Table 5, the jobs to housing ratio is anticipated to remain stable at 1.37 through 2020.

These ratios mean that the City has a larger population in the daytime, when most employees commute into the City for work, than at nighttime. However, these ratios do not take into account whether: the skills of local workers coincide with local job requirements; the salaries paid to the workers enable them to live in the community where they work; or if personal and life choices are the reasons for why they do not live where they work.

⁷⁷ City of Oakland, *Housing Element 2007-2014*, 2009, pg. 3-88.

Table 5
City of Oakland Jobs to Employed Residents and Jobs to Housing Ratios

	2005	2010	2015	2020
Jobs to Employed Residents				
Jobs	202,570	218,350	231,250	243,100
Employed Residents	175,180	184,930	202,150	219,910
Jobs to Employed Residents Ratio	1.16	1.18	1.14	1.11
Jobs to Housing Ratio				
Jobs	202,570	218,350	231,250	243,100
Housing	154,580	159,610	168,910	177,440
Jobs to Housing Ratio	1.31	1.37	1.37	1.37

Source: ABAG, *Projections 2007*, City of Oakland Subregional Study Area

2. Environmental Checklist

The proposed project would have a significant impact on the environment if “potentially significant” is checked under items XIIa-c, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Induce substantial population growth in a manner not contemplated in the General Plan either directly (for example by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed?	☐	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element?	☐	☐	☐	☒	☐

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element?	☐	☐	☐	☒	☐

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

3. Discussion

Comments on Question XII a (Population Growth):

The *2007-2014 Housing Element* is an amendment to the City's *General Plan*, required every seven years to reassess housing needs, based on current population trends and projections of future population growth. The goal of the *2007-2014 Housing Element* is to accommodate projected population growth and resulting housing needs, based on the RHNA, described under the Setting. As stated previously, based on ABAG projections and the resulting RHNA, 14,629 housing units would be required to accommodate population growth in the City through 2014. The *2007-2014 Housing Element* would be consistent with the RHNA. In developing the proposed project, the City has not only demonstrated its capability to adequately meet Oakland's housing allocation set forth under the RHNA, but also to surpass the formulated requirement.⁷⁸ The *2007-2014 Housing Element* includes a total of: 1,128 units already constructed, or under construction; 5,005 units with planning approvals; and 7,070 units in stages of pre-development. In addition, a remaining 1,426 units would be accommodated through 2014. As an update to the General Plan, the proposed project in and of itself would comprise growth per the General Plan and would not exceed growth projected in the General Plan.

There are two ways to measure the jobs/housing balance. The jobs to housing ratio and the jobs to employed residents ratio. As stated in the Setting section, the jobs to housing ratio is currently 1.37 jobs per housing unit, and the jobs to housing ratio is anticipated to remain 1.37 jobs per housing unit through 2020. According to ABAG Projections 2007, the City is anticipated to have a job to employed residents ratio of 1.18 in 2010, decreasing to 1.11 in 2020. Given that by one ratio no change would occur with buildout of the *Housing Element*, and the other shows only an incremental decrease, no impact to the jobs/housing balance would occur.

⁷⁸ City of Oakland, *City of Oakland Housing Element 2007-2014*, 2009, pg. 1-2.

Based on the City's significance criteria, growth under the proposed project would result in a significant impact if it would require additional infrastructure that was not previously considered or analyzed. For the purposes of this analysis, "infrastructure" is comprised of (1) roads and (2) utility systems, including water, sewer, stormwater, solid waste, and electrical distribution, processing, or storage systems. In general, development under the *2007-2014 Housing Element* would occur as in-fill on sites that are currently served with existing infrastructure; therefore extension of infrastructure to an under-served area is not anticipated. However, this analysis also addresses the potential for the proposed project to result in unplanned expansions of existing infrastructure within current service areas.

Roads. Impacts to roadways will be discussed in the EIR. Although growth under the *Housing Element* would result in a decrease in the level of service on the existing roadways, roadway expansions are not recommended. As a result, the *Housing Element* would not trigger the need for roadway expansions that were not previously contemplated. Thus, no growth inducing impact related to roadway expansion would occur.

Utilities. As discussed in Section XVI, Utilities, the City of Oakland's sanitary sewer collection and conveyance infrastructure is aging. Deteriorated pipes are subject to infiltration of stormwater, resulting in high flow levels and overflow of untreated wastewater during wet weather events. However, the City of Oakland has a 25-year inflow and infiltration collection maintenance and rehabilitation program that will help eliminate overflow by upgrading the existing system. In addition, SCA-91 requires the project applicant for individual development projects to be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the individual project. As a result, growth under the *Housing Element* would likely result in the need for upgraded sewer and stormwater conveyance infrastructure. Since growth under the *Housing Element* would be mostly infill, improvements to utilities infrastructure would not result in extension of utilities to previously unserved areas. As a result, infrastructure improvements resulting from the *2007-2014 Housing Element* would not be considered growth inducing.

Comments on Questions XII b and c (Displacement):

As noted above, the *2007-2014 Housing Element* includes 1,128 housing units which are already-constructed or under construction; 5,005 units with planning approvals; and 7,070 units in stages of pre-development. In addition, a remaining 1,426 units would be accommodated through 2014. To determine the opportunity sites for the 1,426 remaining housing units, a citywide search of 2008 Alameda County property tax records was conducted, and assessor data was inventoried for parcels coded as "vacant," "parking lots," or other uses signifying that the property was underutilized. The inventory included sites with minimal structural improvements such as used car lots and open storage areas. Field surveys were also conducted to verify that the parcel was either vacant or underdeveloped. Therefore, the 1,426 remaining housing units at the opportunity sites would not displace existing residences.

However, the 12,075 units already approved with entitlements and the units which are in pre-development could displace existing residences *if* they are required to demolish existing housing units in order to accommodate new and expanded residential buildings. While a search was not made through all the applications which were either entitled or in pre-development to determine the possibility of displacement, any displacement that resulted from these projects would be subject to redevelopment relocation assistance, as required by the California Relocation Assistance Law. In the event that relocation is required due to code enforcement activities, condo conversions, or redevelopment, the City has established policies in the Municipal Code and Redevelopment Plans, as explained in more detail below, to mitigate potential displacement. See the discussions below. As such, development under the *2007-2014 Housing Element* would necessarily comply with programs designed to assist displaced residents. Given this requirement, any potential displacement of residents or housing would be mitigated to less than significant impacts

Redevelopment Relocation Assistance Plan. The Redevelopment Agency is required by State and federal Laws to establish a Relocation Assistance Plan in the event that private property is purchased under eminent domain for redevelopment activities. The statutes under each law are essentially the same, and require a relocation assistance program for residents if property is purchased by the City. The City establishes redevelopment plans separately for each project area. In each of these plans, the requirements under California Relocation Assistance Law (Government Code Section 7260 et seq.) are cited. The Redevelopment Agency provides both counseling and financial assistance pursuant to the requirements under California Redevelopment Law.

Municipal Code. Development under the *2007-2014 Housing Element* would be subject to the following titles and chapters of the Oakland Municipal Code with regards to the displacement of existing residents:

- *Title 15 Buildings and Construction*
 - *Chapter 15.60.080 - Relocation payments and assistance by city.* The City shall use reasonable efforts, subject to budget staffing constraints, to assist tenant households displaced by its code enforcement activities by providing information, referrals, and other relocation advisory assistance aimed at facilitating the household's move. In addition, the city, in the sole discretion of the Housing Official and subject to funding availability, may make from city funds any of the payments required of a property owner.
- *Title 16 Condominium Conversions*
 - *Chapter 16.36.050 - Tenant rights and the preliminary tenant assistance program and Chapter 16.36.080 Final tenant assistance program.* A subdivider is required to prepare a preliminary tenant assistance Program (PTAP) that addresses efforts to minimize tenant displacement, and to provide tenant relocation assistance. The final tenant assistance program (FTAP) is developed in conformity with any conditions of approval relating to the tenant assistance program.

Compliance with the above Municipal Code regulations and the Redevelopment Relocation Assistance Plan would reduce the already improbable displacement impacts to a less-than-significant level.

4. Cumulative Impacts

The *2007-2014 Housing Element* would have no cumulative impact on population and housing or the jobs/housing balance within the City. The *2007-2014 Housing Element* is expected to account for all housing developments within the City through 2014, since it includes the number of housing units projected to be required by natural population increases. Therefore, since there would not be additional population-driven market demand for further housing units, no additional housing projects would be considered during this period. Although the *2007-2014 Housing Element* would increase the population in Oakland, this increase would be consistent with the RHNA for the City. As such, no cumulative impacts would occur.

5. Conclusion

The *2007-2014 Housing Element* would have no significant impact on the City's population or housing, or jobs/housing balance, either directly or indirectly, nor would it result in the displacement of people that could result in the need to provide relocation housing. However, in the unlikely event that the *2007-2014 Housing Element* would displace existing residents, the proposed project would comply with Municipal Code Titles 15 and 16, along with the California Redevelopment Relocation Assistance Plan. As such, the *2007-2014 Housing Element* would result in less-than-significant population and housing impacts.

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XIII. PUBLIC SERVICES

1. Setting

The City provides its residents with municipal public services including fire and police protection, schools, libraries, and parks.

Fire Facilities and Emergency Medical Services. The Oakland Fire Department (OFD) provides a wide range of services and programs designed to prevent, prepare for, and respond to any and all emergencies that face the City. The OFD responded to over 56,000 emergency calls in 2007, of which 80 percent were medically related.⁷⁹ 1,325 structural fires, just over 2 percent of the total call volume, were reported in 2007.

The 500 uniformed personnel of the OFD are distributed across 25 fire stations, including a station at the Oakland Airport.⁸⁰ As first responders, all firefighters are certified as Emergency Medical Technicians. Staffing ratios equate to 1.19 sworn staff per 1,000 residents. These employees are assigned to six divisions: Operations, Fire Prevention, Support Services, Administration, Education and Training, and Emergency Services. The Operations Division is responsible for emergency response and fire suppression.

According to Action FI-1.2 of the City's *Safety Element*, the City's fire and emergency service standard is to respond to fires and other emergencies within seven minutes of notification 90 percent of the time. The Department is currently exceeding this standard approximately 90 percent of the time.⁸¹ While the OFD is currently meeting its response time standards, the Department reports that there is not an excess of facility capacity.

Current response time varies between hill and flatland neighborhoods. In the hills, the varied topography, lower densities, and narrow streets result in the longer response times. Typically, the Fire Department responds with two engines, one truck, and one chief for a residential structural fire; however, the actual number of personnel sent to a fire correlates with the intensity of the specific fire.⁸²

As the population in the City has increased, the OFD has experienced a corresponding increase in emergency response calls, including EMS, fires, and rescues. At this time, facilities are adequate to meet demand for service.⁸³

⁷⁹ Oakland Fire Department, "2007 Operational Statistics," accessed at: <http://www.oaklandnet.com/fire/operations/statistics.asp>, accessed on July 16, 2009.

⁸⁰ Oakland Fire Department, "Operations," accessed at: <http://www.oaklandnet.com/fire/operations/>, accessed on July 16, 2009.

⁸¹ James Edwards, Deputy Chief, Fire Prevention /Communications, Oakland Fire Department. Email communication July 30, 2009 with Vernazza Wolfe Associates, Inc.

⁸² City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997.

⁸³ James Edwards, Deputy Chief, Fire Prevention /Communications, Oakland Fire Department. Email communication July 30, 2009 with Vernazza Wolfe Associates, Inc.

Police Facilities. The Oakland Police Department (OPD) provides law enforcement and crime prevention services. On average, Oakland's crime rate is somewhat higher than the rate in other mid-sized American cities. In 2008, there were 29,394 total Part 1 (violent) offenses reported in the City of Oakland, including 116 murders, 3,323 robberies, and 4,129 felony assaults. This marked a 0.07 percent decrease from 2007.⁸⁴

The OPD currently has 803 sworn officers assigned to six service areas and 57 police beats.⁸⁵ There are currently 1.9 sworn officers per 1,000 residents,⁸⁶ which is lower than corresponding State and national average rates of 2.0 and 2.8 sworn staff per 1,000 residents, respectively. The OPD does not set a standard ratio of sworn police officers to residents. However, due to budget constraints, future layoffs of policing staff may be required.⁸⁷

The primary performance standard utilized by the OPD is "dispatch time," that is, the time that elapses between when a call is received at the communications center and when an officer is dispatched. This measure identifies how rapidly the Department's internal communications procedures and staff availability result in an officer being sent on a call. Calls for service are defined and dispatched based on their urgency. Urgency is assigned based on Priority Codes 1 through 4.⁸⁸ Priority Code 1 calls are the most serious, since they pertain to imminent potential for injury to persons or the need to prevent a crime of violence. In 2008, the Department received 31,755 Code 1 calls. Priority Code 2 calls represent the greatest volume of calls and consist of offenses such as disputes with violence potential and stolen vehicles. In 2008, the Department received 181,244 Code 2 calls. Priority Code 3 calls represent "cold reports." These are non-emergency calls which do not indicate danger to life or property. Finally Priority Code 4 calls are non-emergency assignments which are to receive alternative processing, such as mail, phone or fax reports. Priority Code 3 and 4 calls take lower precedence. In 2008, there were 59,573 and 11,978 calls for service that were categorized as Priority Code 3 and Priority Code 4, respectively.⁸⁹

The OPD works with the City Council to establish performance measures (goals) for response times to calls. The performance measures are updated every two years, according to the budget cycle. The current goals, adopted for the 2009-2011 budget, are to dispatch 75 percent of Priority 1 Code calls in less than one minute and the other 25 percent in one to five minutes so that 100 percent of Priority 1

⁸⁴ Oakland Police Department, "Summary of Part 1 Crime Offenses, 1969 – 2008," accessed at: <http://gismaps.oaklandnet.com/crimewatch/pdf/HistoricalData.htm>, accessed on July 16, 2009.

⁸⁵ City of Oakland, Oakland Police Department, *Oakland Information Technology – Crimewatch*. Retrieved on 2009-06-22. <http://gismaps.oaklandnet.com/crimewatch/>

⁸⁶ Jeffrey Thomason, Public Information Officer, Oakland Police Department. Email communication June 19, 2009 with Vernazza Wolfe Associates, Inc.

⁸⁷ Jeffrey Thomason, Public Information Officer, Oakland Police Department. Phone communication June 17, 2009 with Vernazza Wolfe Associates, Inc.

⁸⁸ City of Oakland Police Department, *Communications Division Policy & Procedures, Priority Codes, Revised July 5, 2006*. Provided by Michael F. Johnson, Lieutenant, Commander of Communications Division, to Vernazza Wolfe Associates, Inc., July 30, 2009.

⁸⁹ Michael F. Johnson, Lieutenant, Commander Communications Division, Oakland Police Department. Phone communication July 30, 2009 with Vernazza Wolfe Associates, Inc.

Code calls are dispatched within five minutes. At present, the OPD is not reaching these goals. Currently, 28 to 37 percent of Priority Code 1 calls are dispatched within one minute, and within five minutes, 68 to 70 percent of Priority Code 1 calls are dispatched.⁹⁰ There are no set goals for Priority 2, 3, or 4 calls, and performance is not tracked.⁹¹ Since performance standards are not currently being met, additional demands on the OPD would exacerbate this deficiency.

Oakland Schools. The Oakland Unified School District (OUSD) operates the public school system in the City of Oakland. OUSD administers 68 elementary schools, 19 middle schools, and 27 high schools. Of these, approximately 32 are public charter schools.⁹² School enrollment has declined during the 2000s due to out-migration of families from Oakland and growth of private schools and non-OUSD charter schools. Total enrollment in OUSD schools was approximately 54,863 students in the 2000-2001 school year, declining to 46,538 students in the 2008-2009 school year.⁹³ Attendance at non-OUSD schools comprised 15 percent of Oakland's public school enrollment as of June 2007.⁹⁴

According to the OUSD's *Long Range Facilities Master Plan*, most of the schools operated by the OUSD have generally excellent or good classroom capacities, indicating that the schools will be able to accept new students for at least five more years.⁹⁵ However, many schools require modernization improvements and ADA upgrades.

Library Services. The Oakland Public Library (OPL) serves the population of Oakland, Piedmont, and Emeryville. The library network currently includes 15 branches, a Main Library, a Second Start Adult Literacy Program, the Bookmobile, the Tool Lending Library, and the African-American Museum and Library. Many branch libraries in the City are antiquated, small in size, and cannot accommodate the services provided in modern libraries.

In 2006, the OPL completed a Master Facilities Plan in response to the community's need for improved services and to plan for facilities to support projected population growth. The Plan states that existing facilities are extended beyond their service capacity and identified under-served areas of the City without adequate access to library facilities, including the neighborhoods of Laurel/Redwood Heights, Oak Knoll, and San Antonio.⁹⁶ The Plan measured OPL service levels in 2000 and set guidelines to

⁹⁰ Michael F. Johnson, Lieutenant, Commander Communications Division, Oakland Police Department. Phone communication July 30, 2009 with Vernazza Wolfe Associates, Inc.

⁹¹ Michael F. Johnson, Lieutenant, Commander Communications Division, Oakland Police Department. Phone communication August 6, 2009 with Vernazza Wolfe Associates, Inc.

⁹² Oakland Unified School District, "Schools Listing," accessed at <http://webportal.ousd.k12.ca.us/Schools.aspx> on June 30, 2009.

⁹³ California Department of Education, "DataQuest," accessed at: <http://dq.cde.ca.gov/dataquest/>, accessed on July 28, 2009.

⁹⁴ Lapkoff & Gobalet Demographic research, Inc., *Demographic update for Oakland Unified School District* (June 2007), page 1

⁹⁵ Oakland Unified School District, 2008. *Long Range Facilities Master Plan*. Accessed July 20, 2009 at: <http://webportal.ousd.k12.ca.us/docs/OUUSD%20Facilities%20Master%20Plan.ppt> on June 30, 2009

⁹⁶ *Oakland Public Library Master Facilities Plan: 2006 Draft Report*. City of Oakland, Oakland Public Library. June 2006.

meet the projected demand for OPL services in 2020, including the number of books in collections, seating for storytelling, community and group work rooms, computers and library space. To meet Oakland residents' needs, the Library needs to increase its total square footage system wide from approximately 170,700 square feet, or 0.42 square foot per person, to approximately 350,000 square foot, or 0.80 square foot per person. In response, the OUSD has provided land to the City of Oakland at the northeast corner of 81st Avenue and Ruidsdale Street in East Oakland to build a new community library. In addition to the 81st Avenue Branch, the summary of recommended development strategies identifies nine libraries in need of building expansion and calls for the construction of five new libraries, including the 81st Avenue Branch.

To fund this Plan, the City of Oakland placed a \$150 million bond measure (Measure N) on the ballot in 2006. Measure N did not pass; therefore, the majority of the improvements recommended in the Plan remain unfunded. However, the City was able to fund the construction of the new 81st Avenue Branch library (located in the Coliseum Redevelopment Area) that was identified in the Plan.⁹⁷ The OPL's ability to address existing deficiencies is limited by budgetary constraints.⁹⁸

Parks. The City of Oakland Office of Parks & Recreation (OPR) is responsible for 2,500 acres of open space, including 100 parks and public grounds, and 25 recreation, community, and interpretive centers. In addition, the City of Oakland offers 59 outdoor tennis courts, three golf courses, 53 athletic fields, and five public pools. According to the City's *Open Space, Conservation, and Recreation (OSCAR) Element*, which was adopted in 1996, Oakland's total park acreage standard is 10 acres per 1,000 residents.⁹⁹ This standard has been in place since the 1976 *OSCAR Element*. The City of Oakland has approximately 6.1 acres of parkland per 1,000 residents,^{100,101} which is below the City's standard of 10 acres per 1,000 residents. As such, there is currently a deficit of parklands based on the City standard. See Section XIV, Recreation, for more details.

2. Environmental Checklist

The proposed project would have a significant impact on the environment if "potentially significant" is checked under items XIIIa (i – v), below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

⁹⁷ Jerry Garazon, Oakland Public Library. Phone communication on July 8, 2009 with Vernazza Wolfe Associates, Inc.

⁹⁸ Jerry Garazon, Oakland Public Library. Phone communication on July 8, 2009 with Vernazza Wolfe Associates, Inc.

⁹⁹ City of Oakland, *Open Space, Conservation, and Recreation Element*, June 1996, page 4-9.

¹⁰⁰ Association of Bay Area Governments, *Projections 2007: Forecasts for the San Francisco Bay Area to the Year 2035*, December 2006.

¹⁰¹ Based on a 2005 City of Oakland population of 410,600 persons and 2,500 acres of open space.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:					
i) Fire protection?	☐	☐	☒	☐	☐
ii) Police protection?	☐	☐	☒	☐	☐
iii) Schools? ^c	☐	☐	☐	☒	☐
iv) Libraries	☐	☐	☐	☒	☐
v) Parks	☐	☐	☐	☒	☐

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

c. Although impacts to schools are exempt from CEQA review and mitigation (see SB 50), the impacts are still analyzed below.

3. Discussion

Comment to Question XIIIa (i) (Fire protection): The proposed project does not in and of itself include construction of new or expanded fire facilities, which could result in adverse physical impacts. However, the potential for the proposed project to trigger the need for such construction, in order to maintain City service standards, is addressed below.

Any major housing and population increases in the City of Oakland resulting from implementation of the *2007-2014 Housing Element* would need to be evaluated by the OFD. At this time, the OFD is adequately staffed for existing conditions. Future adjustments in the OFD's facilities and level of staffing would be determined as new housing is constructed in specific areas of the City. In some areas, new housing units and associated population growth could be accommodated by modifying existing stations to accommodate more staff. In other areas, new facilities, such as new fire stations could be required.¹⁰²

The 35,103 additional residents who would occupy the 13,501 housing units planned under the *2007-2014 Housing Element*, which have not yet been constructed would increase the number of service calls to the OFD. At this time, it is difficult for the OFD to estimate the number of increased staff that will

¹⁰² James Edwards, Deputy Chief, Fire Prevention /Communications, Oakland Fire Department. Email communication July 30, 2009 with Vernazza Wolfe Associates, Inc.

be needed to respond to this increase in service calls. Typically, the factors that determine the number of additional staff and/or facilities required include; density of new housing units, location with regard to flatlands or hills, proximity to existing fire stations, and the presence of physical barriers to these locations. Currently, OFD response time is generally acceptable in the City, including the Hiller Highlands (North Hills) area which is now served by the North Hills Fire Station, and the OFD has not identified specific requirements for new facilities.¹⁰³ However, all future development would occur pursuant to *General Plan* policies, Municipal Code regulations, mitigation measures adopted for the *LUTE EIR* and the Standard Conditions of Approval that would reduce the potential impact on services to less-than-significant levels. Moreover, separate CEQA review would be implemented, as needed, for new construction as required by State law, and additional mitigation measures would be implemented to reduce impacts. As such, impacts from the proposed project would be less than significant.

The City does not currently charge impact fees to pay for infrastructure, such as fire stations, and/or additional personnel. However, the City is studying the potential for assessing such fees. Therefore, it is possible that needed improvements or construction of new facilities for the OFD may be facilitated through impact fees or other agreements with developers, in the future.¹⁰⁴

The "Oakland Community Services" study¹⁰⁵ indicated that future development should be planned to be accessible for emergency services: an evaluation of topography, road widths, building materials, water availability, and vegetation should be completed before any development approvals are granted. To the extent that future reductions in the department budget could occur, resources needed to respond adequately to emergencies could be limited. These reductions would not inhibit growth or redevelopment in any particular part of the City, but the City overall may experience a decline in fire response service.¹⁰⁶

According to the Oakland Building Code (Chapter 15.04 of the Municipal Code) and the Fire Code (Chapter 15.12 of the Municipal Code), new buildings would be required to incorporate sprinkler systems and other features designed to prevent future fires. In addition, the increased economic base could increase tax revenue and create greater financial resources for fire services in the future. Conversely, the increased amount of traffic projected by *2007-2014 Housing Element* (see Section XV, Transportation) could have the indirect effect of slowing down emergency vehicles and increasing response times.

¹⁰³ James Edwards, Deputy Chief, Fire Prevention /Communications, Oakland Fire Department. Email communication July 30, 2009 with Vernazza Wolfe Associates, Inc.

¹⁰⁴ James Edwards, Deputy Chief, Fire Prevention /Communications, Oakland Fire Department. Email communication July 10, 2009 with Vernazza Wolfe Associates, Inc.

¹⁰⁵ The "Oakland Community Services" study was prepared as a resource document for the *Land Use and Transportation Element*. It was provided as Technical Report #5.

¹⁰⁶ City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*. "Public Services." October 31, 1997. The "Oakland Community Services"

The City's *Safety Element* Policy FI-1, Action FI-1, and Action FI-2 call for maintaining adequate fire and emergency service within Oakland, and the construction of 13,501 housing units as allowed under the proposed project could trigger the need for new or expanded facilities to meet the City's standard. Other *General Plan* policies, Municipal Code regulations, previously-imposed mitigation measures in the *LUTE*, and SCA's listed below would help reduce the demand on fire or emergency service, but would not offset the need for new facilities. Construction of new or expanded facilities could result in adverse physical impacts; however, future fire or emergency facilities would be subject to separate CEQA review and would also be subject to various City regulations that are listed throughout this document. Compliance with these requirements would minimize physical environmental impacts from construction of new or expanded facilities, and impacts would be less than significant.

General Plan. The addition of residential development could increase the demand for fire services, which could potentially result in the need for new fire facilities. However, the *General Plan* policies set forth below are intended to address potential impacts on fire services resulting from an increased level of population. Impacts are to be mitigated primarily by expanding fire protection services commensurate with growth, and assessing the need for such services as individual projects are proposed. As such, development under the *2007-2014 Housing Element* would be subject to the following *Safety Element* and *LUTE* policies from the City's *General Plan* with regard to fire services:

Public Safety Element

- *Policy FI-1:* Maintain and enhance the City's capacity for emergency response, fire prevention, and fire fighting.
- *Action FI-1.1:* Periodically assess the need for new or relocated fire stations and other facilities, changes in staffing levels, and additional or updated supplies, equipment, technologies and in-service training classes.
- *Action FI-1.2:* Strive to meet a goal of responding to fires and other emergencies within seven minutes of notification 90 percent of the time.
- *Policy FI-2:* Continue, enhance, or implement programs that seek to reduce the risk of structural fires.
- *Action FI-2.2:* Continue to enforce provisions under the local housing code requiring the use of fire-resistant construction and the provision of smoke detectors and fire-extinguishing systems.
- *Action FI-2.3:* Continue to review development proposals to ensure that they incorporate required and appropriate fire-mitigation measures, including adequate provisions of occupant evacuation and access by fire-fighting personnel and equipment.

Land Use and Transportation Element

- *Policy N2.2:* Provision of services by civic and institutional uses should be distributed and coordinated to meet the needs of City residents.
- *Policy N12.1:* 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.

LUTE EIR. Mitigation measures in the *LUTE EIR* require the City of Oakland to: consider the availability of existing fire services; develop target ratios of firefighters to the population; analyze distribution services; and solicit comments from the OFD regarding the impact that a development could have on the department. The previously imposed mitigation measures that apply to the *2007-2014 Housing Element* are listed below.

Mitigation Measure D.5-1a: In reviewing major land use or policy decisions, consider the availability of police and fire protection services, park and recreation services, schools, and library services in the affected areas, as well as the impact of the project on current service levels.

Mitigation Measure D.5-1e: Solicit comments from the Oakland Police and Fire Departments on major new development proposals to ensure that law enforcement and fire protection impacts are appropriately addressed and mitigated.

Municipal Code. The housing sites under the *2007-2014 Housing Element* would be required to comply with all regulations of the 2007 California Fire Code, which establishes requirements pertaining to fire protection systems, including the provision of state-mandated smoke alarms, fire extinguishers, appropriate building access, and emergency response notification systems. In addition, development under the *2007-2014 Housing Element* would be subject to the following title of the Oakland Municipal Code:

- *Chapter 15.12: Oakland Fire Code.* This chapter of the Municipal Code outlines the provisions of the Oakland Fire Code. Included are the City's amendments to the 2007 California Fire Code.

Standard Conditions of Approval. The following Standard Conditions of Approval are applicable to the *2007-2014 Housing Element*; SCA-4, 61, 71 and 73.

As stated in Section IX, Land Use, SCA-4 requires building plans for development projects to be submitted to the Fire Services Division for review and approval. SCA-61 and 71 (Section VII, Hazards) also require Fire Services Division Approval to ensure that the site design and fire safety features of the project adequately address fire hazards. SCA-73 (Section VII, Hazards) requires spark arrestors on construction equipment to further reduce the risk of construction-period fires.

Comment to Question XIIIa (ii) (Police Protection): The proposed project does not in and of itself include construction of new or expanded police facilities, which could result in adverse physical impacts. However, the potential for the proposed project to trigger the need for such construction, in order to meet and maintain City service standards, is addressed below.

The number of police officers that would be needed to accommodate potential population growth under the *2007-2014 Housing Element* would depend on the type and location of housing constructed.¹⁰⁷ Other factors to consider when assessing potential impacts on staffing levels include how effectively new developments incorporate best practices in the program called "Crime Prevention Through

¹⁰⁷ David Kozicki, Deputy Chief of Police. Phone and email communication, July 10, 2009 with Vernazza Wolfe Associates, Inc.

Environmental Design” or CPTED. These practices promote collaborative design of urban environments, incorporating the input of law enforcement officers, architects, city planners, landscape and interior designers and resident volunteers. Implementation of such practices can create a climate of safety in a community.¹⁰⁸

At present, the OPD is not meeting the performance goals established by the City Council. If the City were to expand staff to meet increased service needs associated with projected population growth under the *2007-2014 Housing Element*, it is possible that this increase in staff will result in the need to expand facilities at the Downtown Oakland location. At present, there is excess capacity at the Eastmont Precinct to accommodate additional staff. However, space at the second OPD Station (Downtown Oakland) is more limited and expanded facilities could be required.¹⁰⁹

With build-out of the *2007-2014 Housing Element*, the policing needs in some geographic areas would increase more substantially than in others. Reconfiguration of police beats might be needed as the number of persons working Downtown and along the waterfront grows. Increased population along the transit corridors, around the transit stations, and along the Estuary shoreline would probably increase the number of calls in these areas. The overall number of emergency calls may increase as population and employment increases. If additional staffing and equipment needs would require the construction of new stations and/or facilities, the construction of such facilities could have adverse physical impacts.

The *LUTE*’s Policy N2.2 and Mitigation Measure D.5-1a from the *LUTE EIR* call for maintaining adequate police service within Oakland, and the construction of 13,501 housing units as allowed under the proposed project could trigger the need for new or expanded facilities to meet the City’s dispatch standard. However, criminal activity could potentially be reduced as increased residential densities were introduced in areas that are presently economically depressed or devoid of public activity. The development of higher density housing along transit corridors would introduce more informal street surveillance and pedestrian activity, and reduce the number of underutilized and vacant lots, which are often difficult to police. The design of new buildings to create “defensible space” could reduce the potential for vandalism, vagrancy, and other forms of criminal activity within new development. The increased economic base could increase tax revenue and create greater financial resources for police services in the future. Nonetheless, these benefits would not offset the need for new facilities. Construction of new or expanded facilities could result in adverse physical impacts; however, future police facilities would be subject to separate CEQA review and would also be subject to various City regulations that are listed throughout this document. These requirements would minimize physical environmental impacts from construction of new or expanded facilities. Adverse physical impacts for construction of new or expanded police facilities would be mitigated to less than significant. As such, impacts of the proposed project would be less than significant. The below paragraphs summarize *LUTE* and *LUTE EIR* policies and requirement that call for maintaining police service as growth occurs.

¹⁰⁸ CPTED’s goals are defined at the CPTED Watch website accessed at <http://www.cpted-watch.com> on July 10, 2009.

¹⁰⁹ Michael F. Johnson, Lieutenant, Commander Communications Division, Oakland Police Department. Phone communication July 30, 2009 with Vernazza Wolfe Associates, Inc.

General Plan. The addition of residential development could increase the demand for police services, which could potentially result in the need for new police facilities. However, *General Plan* Policy N2.2 (as outlined above) from the *LUTE* require coordination of civic service with the needs of residents. These *LUTE* policies primarily mitigate impacts by expanding law enforcement services commensurate with growth, and assessing the need for additional police services as individual projects are proposed.

LUTE EIR. Mitigation measures in the *LUTE EIR* require the City of Oakland to: consider the availability of police services; develop target ratios of police officers to the population; increase police foot patrol and cruisers; analyze distribution services; and solicit comments from the OPD regarding the impact that a development could have on the department. The previously imposed Mitigation Measures D.5-1a and D.5-1e of the *LUTE EIR*, as outlined in more detail under “Fire Services,” above, would apply to the *2007-2014 Housing Element*.

Comment to Question XIIIa (iii) (Schools): Classroom overcrowding constitutes a significant impact on the environment if the overcrowding would result in construction of new or expanded school facilities, the construction of which would result in adverse physical changes to the environment. Minor changes in annual operating budgets and cash flows (fiscal impacts) are not considered to be environmental impacts and are therefore not discussed in this section.

The proposed project does not in and of itself include construction of new or expanded school facilities, which could result in adverse physical impacts. However, the potential for the proposed project to trigger the need for such construction, in order to maintain service standards, is addressed below.

A student generation rate, or average number of students living in each dwelling unit, has been applied to the projected number of housing units. This student generation rate is based on the OUSD’s Developer Impact Fee Justification Study and is equal to 0.364 students per household.¹¹⁰ Based on the additional 13,501 housing units proposed under the *2007-2014 Housing Element*, the increase in student population would be 4,914 students across all grade levels (13,501 multiplied by 0.364). These figures are conservative, as they do not consider diversions to private school, or the fact that much of the planned new housing would consist of live-work units, lofts, and apartments in the waterfront and downtown areas that might not be attractive to families with children. Additionally, *LUTE* Policy N.12.2 (see below) calls for providing adequate school capacity to Oakland residents.

As stated in above, OUSD student enrollment has dropped by approximately 8,325 students since the 2000-2001 school year due to out-migration of families from Oakland and the growth of private schools and non-OUSD charter schools. In addition, since 2000, OUSD has opened 40 new schools throughout the City of Oakland.¹¹¹ As such, the conservative anticipated increase of 4,914 students generated under the *2007-2014 Housing Element* would not exceed past school district capacity, since 4,914 new

¹¹⁰ City of Oakland Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation EIR*, October 31, 1997.

¹¹¹ Oakland Unified School District, “Annual Report 2007,” accessed July 28, 2009 at: <http://webportal.ousd.k12.ca.us/docs/13668.pdf>

students does not even equal the 8,325 student decline over the last nine years. Therefore, since OUSD enrollment has declined and new schools have opened since 2000, the *2007-2014 Housing Element* would result in a less-than-significant impact to schools and would not trigger the need for new school construction.

Comment to Question XIIIa (iv) (Libraries): The proposed project would not in and of itself include construction of new or expanded library facilities, which could result in adverse physical impacts. However, the potential for the proposed project to trigger the need for such construction, in order to maintain City service standards, is addressed below.

Additional residential development could indirectly impact Oakland libraries by increasing the number of library patrons. The population growth anticipated under the *2007-2014 Housing Element* (35,103 residents) would cause an increase in the demand for library services.

OPL's Master Facilities Plan includes a needs assessment and long-range strategy to address the community's growing needs for library services. This Plan takes into account the long-term population growth anticipated for the City, which does not exceed the population level anticipated under the *2007-2014 Housing Element*. Only one of the library system improvements is under construction (construction of the 81st Avenue Branch). The remaining improvements have been delayed, since there is no funding available at present. However the increased population from the *2007-2014 Housing Element* would not require additional expansion of library facilities beyond what is proposed in the Master Facilities Plan. Consequently, the *2007-2014 Housing Element* would not require new facilities.¹¹² Impacts would be less than significant.

Comment to Question XIIIa (v) (Parks): The proposed project does not in and of itself include construction of new or expanded park facilities. However, there is an existing deficit of parkland in Oakland, and construction of 13,501 housing units as allowed under the proposed project would trigger the need for new or expanded parks to meet the City's standard of 10 acres per 1,000 residents. While policies REC-3.1, REC-6.2, REC-10.4, OS-4.1, and OS-4.2 of the City's *General Plan OSCAR Element* and Municipal Code Titles 16 and 17 would help reduce demand on parks, there would still be a need for new parkland based on the City's standard of 10 acres per 1,000 residents. *General Plan* Policies REC-10.2, Parkland Dedication and Impact Fee, and Action REC-10.2.1, Adoption of Quimby Act Fee, call for contribution of land or funding for park-related improvements due to growth. Park expansions could occur due to the need triggered by the proposed project and potential corresponding fees that would contribute to park development.

Construction of parks could result in adverse environmental impacts. For example, if grading would occur in constructing parkland, increased erosion could occur that could in turn degrade surface waters. If trees would be removed to accommodate fields or trails, adverse impacts on nesting birds or visual resources could occur. However, development of parklands would not typically involve intensified construction activities or building mass that would result in substantial visual degradation, traffic

¹¹² Jerry Garazon, Oakland Public Library. Phone communication on July 8, 2009 with Vernazza Wolfe Associates, Inc.

generation, and noise or air emissions. Due to the nature of recreational use, development of parks would not be expected to occur near uses or sites that could expose persons to hazards. Development of parks would not result in substantial demand on utilities or public services or populations growth. Moreover, the type of impacts associated with parkland development are generally mitigated through existing State or County requirements and would also be subject to various City regulations that are listed throughout this document. These requirements would minimize physical environmental impacts from construction of new or expanded facilities. Physical impacts from development of future park facilities, resulting from the need triggered by the *2007-2014 Housing Element*, would be less than significant. As such, impacts of the *2007-2014 Housing Element* would be less than significant.

4. Cumulative Impacts

The geographic area considered for the public services cumulative analysis includes the entire City of Oakland since the majority of the services provided are provided throughout the City. The increased population and density resulting from the *2007-2014 Housing Element*, in conjunction with population and density of past, present, existing, pending and reasonably foreseeable future development in the City, would result in a cumulative increase in the demand for public service facilities. This cumulative increase could result in the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives. However, all future development would occur pursuant to *General Plan* policies, Municipal Code regulations, mitigation measures adopted for the *LUTE EIR* and the Standard Conditions of Approval that would reduce the potential impact on services to less-than-significant levels.

Schools. As discussed above, the *2007-2014 Housing Element* would have a less-than-significant impact on the OUSD and would not trigger the need to construct new education facilities. However, development under the *2007-2014 Housing Element* could result, with other foreseeable development within the City, in a potentially significant cumulative impact. In the event that a cumulative impact would occur, the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50 [SB 50]) would apply. SB 50 restricts the ability of local agencies, such as the City of Oakland, to impose additional mitigation measures or deny land use approvals on the basis that public school facilities are inadequate. According to the State Office of Public School Construction, SB 50 establishes the base amount of allowable developer fees which can be charged on new development. In 2009, this base amount is \$1.93 per square foot of residential construction. The local school district can decide to levy additional fees on new development.¹¹³ According to Oakland's Building Services Department, the OUSD fee is \$2.24 per square foot in 2009, and OUSD is considering an increase to this fee.¹¹⁴ These fees are intended mitigate residential project impacts. Payment of these required fees is the State mandated mitigation measure for impacts to affected public schools under CEQA. Given this fee requirement, cumulative school-related impacts would be less than cumulatively considerable.

¹¹³ Jeremy McCarroll, State Office of Public School Construction. Phone communication on July 6, 2009 with Vernazza Wolfe Associates, Inc.

¹¹⁴ Guillermo Loyola, City of Oakland Building Services. Telephone Communication on July 7, 2009 with Vernazza Wolfe Associates, Inc.

General Plan. In addition to SB 50, cumulative development would be subject to the following *LUTE* policies from the City's *General Plan* with regard to school services:

- *Policy N.12.2:* Adequate public school capacity should be available to meet the needs of Oakland's growing community. The City and the Oakland Unified School District (OUSD) should work together to establish a continuing procedure for coordinating residential and commercial development and exploring the imposition of mutually agreed upon reasonable and feasible strategies to provide for adequate school capacity. The City and OUSD should jointly consider where feasible and appropriate, funding mechanisms such as assessment districts, Redevelopment Agency funding (AB 1290), 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.

As a result, implementation of the *2007-2014 Housing Element*, together with the impact of past, present, current, pending, and reasonably foreseeable future development, would not result in significant cumulative public service impacts as described above.

5. Conclusion

The proposed project would not result in construction of library facilities or the need for such facilities. The proposed project may result in the need for new or expanded fire, police, school, and park facilities. The construction of new or expanded fire, police, school or park facilities could result in adverse environmental impacts. However, all future development would occur pursuant to *General Plan* policies, Municipal Code regulations, mitigation measures adopted for the *LUTE EIR*, and the Standard Conditions of Approval that would reduce the potential impact on services to less-than-significant levels. Moreover, separate CEQA review would be implemented, as needed, for new construction as required by State law, and additional mitigation measures would be imposed to reduce impacts. As such, impacts from the proposed project would be less than significant.

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XIV. RECREATION

1. Setting

The City of Oakland Office of Parks & Recreation (OPR) is responsible for 2,500 acres of open space, including 100 parks and public grounds, and 25 recreation, community, and interpretive centers. In addition, the City of Oakland offers 59 outdoor tennis courts, three golf courses, 53 athletic fields, and five public pools.¹¹⁵

More than half of the City's park acreage consists of "Resource Conservation Areas," which are passive open space that is undeveloped. Most of this land consists of steeply sloping hillsides with limited potential for recreation. Only approximately one-quarter of the park acreage in the City consists of traditional region-serving, community, neighborhood, and mini-parks. These parks are distributed throughout the City on approximately 1,200 acres of land.¹¹⁶

Oakland's per capita park standards are based on National Recreation and Park Association (NRPA) guidelines, with modifications made to reflect the fact that Oakland is a mature, relatively dense city with a limited supply of vacant land. According to the City's *OSCAR Element*, which was adopted in 1996, Oakland's total park acreage standard is 10 acres per 1,000 residents.¹¹⁷ This standard has been in place since the 1976 *OSCAR Element*. The City of Oakland has approximately 6.1 acres of parkland per 1,000 residents,^{118,119} which is below the City's standard of 10 acres per 1,000 residents.

Additionally, according to the 1996 *OSCAR Element*, many of Oakland's parks and recreation programs were hard hit by cutbacks in funding for programs, maintenance, and capital improvements. In addition, social problems like drug and crime activities have negatively impacted many parks and have prevented their use by residents of surrounding areas. In some areas, changing recreational preferences and neighborhood demographics have made park facilities obsolete, while aging facilities in other areas have made rehabilitation or replacement necessary. West Oakland and the North Hills tend to be better served than other areas, but even these neighborhoods are deficient in active recreational facilities. The greatest deficiencies are in Fruitvale and Central East Oakland.¹²⁰

¹¹⁵ City of Oakland Parks and Recreation, "Inside Oakland," accessed at http://www.oaklandnet.com/parks/inside_oakland/, accessed on May 11, 2009.

¹¹⁶ City of Oakland, Office of Parks and Recreation, "Parks Listing," accessed at: <http://www.oaklandnet.com/parks/parks/parkslisting.asp?pgSet=all>, accessed on June 1, 2009.

¹¹⁷ City of Oakland, *Open Space, Conservation, and Recreation Element*, June 1996, page 4-9.

¹¹⁸ Association of Bay Area Governments, *Projections 2007: Forecasts for the San Francisco Bay Area to the Year 2035*, December 2006.

¹¹⁹ Based on a 2005 City of Oakland population of 410,600 persons and 2,500 acres of open space.

¹²⁰ City of Oakland, *Open Space, Conservation, and Recreation Element*, June 1996, page 4-10.

2. Environmental Checklist

The proposed project would have a significant impact on the environment if ‘potentially significant’ is checked under items XIVa-b, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☐	☒

Notes:

- a. SCA = Standard Conditions of Approval.
- b. MM = Mitigation Measures

3. Discussion

Comments on Questions XIVa (Existing Parks and Recreational Facilities)

The goal of the *2007-2014 Housing Element* is to show how the City could accommodate the 14,629 housing units that the Regional Housing Needs Allocation has assigned to Oakland. Out of these total units, 1,128 units have already been constructed, 5,005 units have planning approvals, 7,070 units are planned, and 1,426 additional units need to be accommodated through 2014. Construction of these remaining 13,501 units would increase the City’s population, and, in turn, would increase the demand for parks and recreation.

As explained above, the City currently has a parkland deficiency and the addition of dwelling units could further exacerbate the existing parks-to-residents ratio. Based on ABAG projections of 2.62 persons per household in the City of Oakland in 2010, the *2007-2014 Housing Element* could increase the population of the City by up to 35,975 residents.¹²¹ Therefore, the *2007-2014 Housing Element* could worsen existing conditions to approximately 5.6 residents per 1,000 acres of parkland, which would be significantly below the City’s standard of 10 residents per 1,000 acres. This would result in a potentially significant impact to regional and neighborhood parks.

However, compliance with the open space requirements under the Municipal Code, as described in more detail below, would reduce some of the impacts on parks by creating onsite open space. In

¹²¹ Association of Bay Area Governments, “Projections 2007: Forecasts for the San Francisco Bay Area to the Year 2035,” December 2006.

addition, Policy REC-10.2 mandates that all residential developments contribute to a park impact fee, which would fund acquisition of land and improvements for neighborhood and district parks. However, the City has not adopted a Parks Impact Fee on Residential development. The development of dwelling units under the *2007-2014 Housing Element* would be subject to the goals, policies, and programs of the City's *General Plan* and the Municipal Code (which includes the City's Planning and Building Codes), as outlined below. Compliance with applicable plans and policies would result in a less-than-significant impact regarding the use of existing neighborhood and regional parks that would lead to a substantial physical deterioration.

General Plan. The addition of residential development could indirectly impact existing recreational facilities by increasing the local population and potentially the level of use of such facilities. However, development under the *2007-2014 Housing Element* would be subject to the following *General Plan* policies and actions with regard to recreation:

- *Policy REC-3.1: Level of Service Standards.* Use the level of service standards in Table 15 [of the *OSCAR Element*] as a means of determining where unmet needs exist and prioritizing future capital investments.
- *Policy REC-6.2: Public-Private Partnerships.* Encourage “public-private partnerships” as a means of providing new recreational facilities on privately-owned sites. Promote joint use partnerships with local churches, private recreational service providers, and local non-profits.
- *Policy REC-10.2: Parkland Dedication and Impact Fee.* 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, including individual new dwelling units. Calculate the dedication or fee requirement based on a standard of four acres of local-serving parkland per 1,000 residents.
- *Action REC-10.2.1: Adoption of Quimby Act Fee.* Adopt an ordinance authorizing a Quimby Act parkland dedication and in-lieu/impact fee requirement.
- *Policy REC-10.4: Private Sector Provisions of Public Services.* Promote and support partnerships with the non-profit and private sectors in the development and operation of facilities which serve a public recreational need.
- *Policy OS-4.1: Provision of Usable Open Space.* Continue to require new multi-family development to provide usable outdoor open space for its residents.
- *Policy OS-4.2: Protection of Residential Yards.* Recognize the value of residential yards as a component of the City's open space system and discourage excessive coverage of such areas by buildings or impervious surfaces.

Municipal Code. Under the *Planning Code* (Title 17 of the Municipal Code), every zone within the City requires that new residential developments provide a minimum amount of open space within the proposed project area for the residents. Each zone has its own requirements; however, a minimum amount of between 75 to 150 sf of group open space per regular dwelling unit is required for all residential projects. According to Section 17.126.020, each square foot of private usable open space is considered equivalent to two square feet of required group usable open space and may be substituted, subject to minimum requirements for group space as prescribed in the applicable individual zone

regulations. The dwelling units constructed under the *2007-2014 Housing Element* would comply with the minimum open space requirement under the *Planning Code*.

In addition to these open space regulations under individual zones, the development of housing opportunity sites would be subject to the following titles of the Oakland Municipal Code:

- *Title 16: Subdivisions*
 - o *Chapter 16.20.040: Open Spaces Other Than Streets.* This chapter mandates that consideration shall be given to the allocation of suitable areas for schools, parks, and playgrounds to be dedicated for public use, or reserved for the common use of all property owners within the proposed subdivision by covenant in the deeds. In addition, consideration shall be given to the allocation of suitable areas for open space, parks, and playgrounds to be dedicated for the common use of all property owners within the proposed subdivision by covenant in the deeds.
 - o *Chapter 16.20.050: Tentative Map – reservation of land for public use.* This chapter explains that the Advisory Agency may require that areas of real property within the subdivision be reserved for schools, parks, recreational facilities, fire stations, libraries or other public uses.
- *Title 17: Planning*
 - o *Chapter 17.11: OS Open Space Regulations.* The provisions of this chapter outline the OS open space zone regulations. The OS zone is intended to create, preserve, and enhance land for permanent open space to meet the active and passive recreational needs of Oakland residents and to promote park uses which are compatible with surrounding land uses and the city's natural environment. The chapter summarizes permitted activities, permitted facilities, sign limitations, maximum building heights, minimum yards, maximum impervious surfaces, buffering, and other zoning provisions.
 - o *Chapter 17.126: Usable Open Space Standards.* The provisions of this chapter outlines the standards for required usable open space. The purpose of these provisions is to prescribe standards for the development and maintenance of open areas which serve the need for leisure, recreation, and space. These standards apply to all usable open space required by other provisions of the zoning regulations, except within the S-17 downtown residential open space combining zone.

Compliance with the above *OSCAR Element* policies and the Municipal Code regulations would result in a less-than-significant impact related to the use of existing neighborhood and regional parks or other recreational facilities.

Comments on Questions XIVb (New Parks and Recreational Facilities)

Development under the *2007-2014 Housing Element* would not include the construction or expansion of additional recreational facilities that would adversely impact the environment. The *2007-2014 Housing Element* would not add new public open spaces, but would include private open spaces for residents, which are considered as part of the opportunity sites. As mandated by the *Planning Code*, Title 17, the housing opportunity sites would include private onsite group open spaces, which could include common areas such as courtyards, landscaped areas, play areas, and/or recreation rooms. However, these common spaces are assumed to be a component of the opportunity sites and impacts of construction at

these sites are discussed on a programmatic level throughout the document. As such, compliance with the *General Plan* policies and Municipal Code would ensure that the development of recreational facilities at the opportunity sites would have no impact on the environment.

4. Cumulative Impacts

As stated in the *OSCAR Element* and noted above, the City is falling short of meeting its goal of providing 10 acres per 1,000 residents. The *2007-2014 Housing Element*, in conjunction with other past, present, current, planned, pending and foreseeable development under the cumulative scenario, would contribute to the need for new or expanded park and recreational facilities citywide necessary to achieve the goals set forth in the *OSCAR Element*. However, the fact that this goal is not met would not necessarily result in a physical environmental impact. Moreover, it is not expected that there will be a substantial or accelerated physical deterioration of existing park and open space facilities due to the construction of housing units under the *2007-2014 Housing Element*, as explained above. All future development would occur pursuant to *General Plan* policies, Municipal Code regulations, mitigation measures adopted for the *LUTE EIR* and the Standard Conditions of Approval that would reduce the potential impact on recreation services and facilities to less-than-significant levels. Therefore, no significant cumulative impacts are expected.

5. Conclusion

The addition of residential development could increase the use of existing neighborhood and regional parks, as well as other recreational facilities, resulting in a potentially significant impact. However, compliance with policies REC-3.1, REC-6.2, REC-10.2, REC-10.4, OS-4.1, OS-4.2, and Action REC-10.2.1 contained in the City's *OSCAR Element* and Municipal Code Titles 16 and 17 would ensure that future development under the *Housing Element* would comply with federal and State laws in regard to recreational facilities. Compliance with the goals and policies of the *General Plan* and the Municipal Code, the mitigation measures adopted for the *LUTE EIR* and the City's Standard Conditions of Approval would ensure that future development under the *2007-2014 Housing Element* would provide adequate onsite open space areas for residents, while minimizing the environmental impacts thereof. As such, the proposed project would have a less-than-significant impact on recreation.

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XV. TRANSPORTATION/TRAFFIC

1. Environmental Checklist

The proposed project would have a significant impact on transportation and traffic if ‘potentially significant’ is checked below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
Cause an increase in traffic which is substantial in relation to the traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections), or change the condition of an existing street (i.e.) street closures, changing direction of travel) in a manner that would substantially impact access or traffic load capacity of the street system?	☒	☐	☐	☐	☐

Notes:

- a. SCA = Standard Conditions of Approval.
- b. MM = Mitigation Measures

2. Discussion

Comment on Topic XV. Transportation/Traffic: The *2007-2014 Housing Element* would increase vehicular traffic in the vicinity of the opportunity sites, which is substantial in relation to the traffic load and capacity of the street system. Therefore, the EIR will analyze traffic and transportation impacts.

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XVI. UTILITIES AND SERVICE SYSTEMS

1. Setting

Wastewater. The East Bay Municipal Utility District's (EBMUD) Main Wastewater Treatment Plant (MWWTP) serves approximately 650,000 people in Alameda and Contra Costa Counties.¹²² The plant is located in West Oakland near the San Francisco Bay Bridge. Primary wastewater treatment involves the removal of floating materials, oils and greases, sand and silt, and heavier organic solids, while secondary treatment further removes suspended organic and chemical impurities.

The average annual flow of treated wastewater from the service area is currently 80 million gallons per day (mgd). The EBMUD MWWTP has an average dry weather flow design capacity of 120 mgd. During peak wet weather events, the MWWTP has a primary treatment capacity of up to 320 mgd and a secondary treatment capacity of 168 mgd. However, the EBMUD MWWTP can provide capacity for a short-term hydraulic peak of 415 mgd through operation of an on-site wet weather storage basin.¹²³

Maximum flow can exceed capacity during storms. However, EBMUD additionally operates storage basins that provide plant capacity for a short-term hydraulic peak of 415 mgd as well as two wet weather treatment facilities (WWF) in Oakland (the San Antonio Creek WWF and the Oakport WWF). EBMUD's wet weather facilities handle excess sewage during storms when flows exceed the capacity of the district's main wastewater treatment plant due to infiltration of stormwater into sanitary sewage pipes. EBMUD also operates a water recycling facility at the MWWTP that treats wastewater for non-potable uses such as golf courses, agricultural uses, and industrial uses (see Water Supply subsection, above).

In Oakland, wastewater that flows into the MWWTP through the City's sanitary sewer system, which is comprised of over 1,000 miles of interconnecting sewer pipes built mostly before the 1960s. Portions of the collection system are about 100 years old. These pipes function together with interceptors (large collection pipes that deliver wastewater to treatment points), pump stations, and other infrastructure to transport wastewater from homes and businesses to the MWWTP. Typical trunk lines serving residential areas are eight inches in diameter. These lines generally provide adequate capacity for wastewater collection, as long as residents do not use them to dispose of fat and grease. However, due to the age of the system, sedimentation can also reduce the flow capacity, and affect EBMUD's interceptors. EBMUD and the City of Oakland collaboratively maintain the transport system.¹²⁴

¹²² East Bay Municipal Utility District, "Wastewater," accessed on July 30, 2009 at: <http://www.ebmud.com/wastewater/>.

¹²³ Vince De Lange, P.E., Senior Civil Engineer, Supervisor of Wastewater Planning, EBMUD, email correspondence on August 12, 2009 with Vernazza Wolfe Associates, Inc.

¹²⁴ Loren Little, Senior Supervisor, City of Oakland Public Works Agency. Telephone conversation on July 9, 2009 with Vernazza Wolfe Associates, Inc.

The MWWTP and interceptor system have adequate dry weather capacity to treat the wastewater flows from future development. EBMUD's projections for future flows at the wastewater plant are based on assumptions about the amount of development that will take place within the service area. In areas considered to be fully developed, including most of Oakland, a 20 percent increase in sanitary flow was assumed, taking possible higher densities into consideration. Much higher levels of growth were assumed Downtown and in any other areas where redevelopment was encouraged by City policy. EBMUD spent \$325 million between 1988 and 1998 to construct a wet weather collection and treatment system that was designed to prevent raw sewage from entering San Francisco Bay when heavy rainfall overwhelms the collection and treatment system. The wet weather system, including new large diameter pipelines and three wet weather treatment facilities, was designed to collect wastewater from the seven communities in the EBMUD wastewater service area. EBMUD has been issued an NPDES permit that prohibits discharge from the three existing wet weather facilities.¹²⁵ There are no current plans to expand wastewater treatment capacity.¹²⁶

However, when there are major storms, there can be infiltration of stormwater into the aging sanitary sewer system from misconnections, cracks, and other imperfections in system pipes, joints and manholes. This infiltration can lead to a 10-fold increase in the volume of wastewater that reaches EBMUD's sewer interceptor pipes and wastewater treatment plant. During wet weather, flows have occasionally exceeded the capacity of the treatment infrastructure, resulting in wastewater discharges into the San Francisco Bay. EBMUD reached a settlement in January 2009 with the Environmental Protection Agency (EPA) and the State Water Resources Control Board to address inadequately treated sewage discharges into the San Francisco Bay during heavy storms. This settlement requires EBMUD to repair leaking private sewer pipes, improve maintenance, and deploy flow meters to identify areas with high wet weather sewage flows and needed repairs. The EPA expects a final solution, which will include EBMUD and the contributing cities, to be developed in the next several years based on the data gathered and the work initiated under the order.¹²⁷

Another issue with respect to sanitary sewer collection in Oakland has been inflow and infiltration of storm water into the EBMUD and Oakland sewer lines, resulting in high flow levels and overflow of untreated wastewater during wet weather events. Most of the storm water enters sewer systems by infiltration (storm water that passes through the soil and into deteriorated sewer pipes). Inflow originates from storm water inlets and manholes that connect to the sanitary sewer system rather than the storm water system. In 1986, with EBMUD as the lead agency, the Wet Weather Program was initiated to improve treatment capacity for wet weather flows and reduce the amount of inflow and infiltration throughout the EBMUD collection system. The cities of Alameda, Albany, Berkeley,

¹²⁵ Vince De Lange, P.E., Senior Civil Engineer, Supervisor of Wastewater Planning, EBMUD, email correspondence on August 12, 2009 with Vernazza Wolfe Associates, Inc.

¹²⁶ David Rehnstrom, EBMUD, email correspondence on July 7, 2009 with Vernazza Wolfe Associates, Inc.

¹²⁷ Environmental Protection Agency (January 15, 2009). U.S. EPA, state reach settlement with EBMUD to protect San Francisco Bay from inadequately treated wastewater discharges / New discharge permit, order require action to control wet weather discharges. Press release. Retrieved on June 23, 2009. <http://yosemite.epa.gov/opa/admpress.nsf/6427a6b7538955c585257359003f0230/954c764abb0c8c828525753f0081f877!OpenDocument&Start=1.3&Count=5&Expand=1.5>

Emeryville, Kensington, Oakland, Piedmont, and portions of El Cerrito and Richmond participate in EBMUD's Wet Weather Program. The program has resulted in four new wet weather treatment facilities, two storage basins, 7.5 miles of new interceptors, and expansion of the main wastewater treatment plant. These new facilities accommodate an increase in peak wet weather treatment capacity from 290 mgd to 775 mgd. The City of Oakland's long-range sewer improvements are anticipated to reduce peak regional flows from 1.1 billion gallons per day to 775 mgd. The City of Oakland has a 25-year inflow and infiltration collection maintenance and rehabilitation program that will help eliminate overflow by reducing inflow and infiltration of storm water to upgrade the existing system. The City's collection system is comprised of local collection mains and a network of trunk systems. The City's system capacity improvements have targeted the trunk network only and assume that the remainder of the system – the local mains – has sufficient capacity.

Stormwater. The Alameda County Flood Control and Water Conservation District (ACFCWCD) provides flood control services to the City of Oakland. The ACFCWCD's flood control infrastructure includes hundreds of miles of pipelines, channels, creeks, erosion control measures and pump stations. The City of Oakland is within Zone 12, which also includes the City of Emeryville. Zone 12 is the largest of the ACFCWCD's zones and has approximately 50 miles of closed conduits, approximately 10 miles of earthen and concrete channels, and existing natural waterways. Stormwater flows through these facilities to the San Francisco Bay.¹²⁸

The City of Oakland is responsible for building and maintaining the local storm drains that feed into the ACFCWCD's flood control system. Oakland maintains a storm drain system built between 1920 and 1950 consisting of 370 miles of pipes, 40 miles of creeks, five pump stations as well as other facilities including flood control dams, erosion control devices and tide gates.¹²⁹ New developments in the City of Oakland are required to mitigate peak flows through use of detention basins. If there is concern about possible contaminants in the water, bioswales or other filtration features may also be required.¹³⁰

Solid Waste. The City of Oakland sent approximately 327,951 tons of solid waste to landfills in 2008. This figure is down from the roughly 392,000 tons per year disposed of in 2005-2007, and represents the largest one-year decrease since at least 1995. This reduction in solid waste diversion is attributed to the economic slowdown. Thirty-two percent, or roughly 106,069 tons of the total landfilled annual waste in 2008 was generated by the residential sector, which includes 1-4 unit single-family dwellings, and 5-plus unit multi-family dwellings.¹³¹ It is estimated that in 2008, the City's single-family

¹²⁸ Alameda County Flood Control and Water Conservation District, 2005. *Report to the Community, Fiscal Year 2005*.

¹²⁹ Public Work Agency: Facts About Oakland's Infrastructure. City of Oakland. February 2009. Accessed June 23, 2009 at: www.oaklandpw.com/Asset722.aspx

¹³⁰ Moses Tsang, ACFCWCD, Supervising Civil Engineer. Telephone interview with Vernazza Wolfe Associates, Inc. on July 9, 2009.

¹³¹ Alameda County Waste Management Authority, 2008 Alameda County Waste Characterization Study. R.W. Beck, Inc. June 2009. Accessed June 18, 2009. http://stopwaste.org/docs/r1310_2008_alameda_wcs_rpt_final_6-4-09.pdf

dwellings recycled 54 percent of their waste stream, and the City's multi-family dwellings recycled 13 percent of their waste stream.¹³²

Waste Management of Alameda County (WMAC) provides solid waste collection and disposal services to Oakland homes and businesses through an exclusive franchise agreement with the City. This agreement includes collection and processing of residential yard trimmings and recyclables, the latter for only one-half of the City. California Waste Solutions, Inc., a privately owned recycling and waste management company, provides residential recycling collection and processing services to the other half of Oakland. Commercial recycling and organics collection and processing services are provided by independent service providers on the open market. WMAC hauls Oakland's solid waste to the Davis Street Transfer Station (DSTS), a Waste Management facility in San Leandro. WMAC also delivers source-separated residential recyclables and yard trimmings to DSTS, where they are processed and transported to end markets. DSTS operates a Construction & Demolition Material Recovery Facility (MRF) that handles Oakland solid waste, which is typically collected from construction sites or other "dry" accounts. The DSTS, which has a maximum allowable capacity of 5,600 tons of waste per day, received an average of 3,028 tons per day in 2003.¹³³ Based on the 2003 volume, the Davis Street Transfer Station can accommodate an increased volume of compostable or recyclable material.

Solid waste delivered to DSTS, and residuals from recycling and MRF operations at DSTS, are transferred to the Altamont Landfill in Livermore for disposal. The Altamont Landfill comprises 480 acres of permitted landfill area, has a maximum disposal rate of 11,150 tons per day, and has an average input of 7,505 tons per day.¹³⁴ In 2008, the City of Oakland contributed 767 tons per day, roughly ten percent of the average daily input.¹³⁵ Based on current disposal rates, there is sufficient capacity to meet the City's solid waste disposal needs through 2050.¹³⁶

The City of Oakland is subject to several waste reduction targets. Assembly Bill 939, adopted by the State of California in 1989, requires that 50 percent of a local jurisdiction's total waste stream be diverted from landfills. The Alameda County Waste Reduction and Recycling Act of 1990 (Measure D) established a countywide goal to annually divert a volume of waste equivalent to 75 percent of the waste generated in 2000 by 2010, and the City of Oakland adopted the 75 percent diversion goal by resolution in 2002. The Measure D diversion target can be met through reduction of the total waste stream as well as through diversions of waste produced. In 2006, the Oakland City Council adopted a Zero Waste Goal striving for diversion of all solid waste generated in the City. Progress toward the Zero Waste Goal will be measured by the tons of annual waste placed in landfills, with key milestones at five-year intervals between 2006 and 2020. To date, Oakland has successfully achieved the State's 50 percent waste reduction goal through voluntary participation in residential and commercial recycling

¹³² City of Oakland, Public Works Agency, Solid Waste Division.

¹³³ Alameda County Waste Management Authority, 2003. *Alameda County Integrated Waste Management Plan*. Accessed June 23, 2009. <http://stopwaste.org/docs/coiwwmp-2003.pdf>

¹³⁴ Ibid.

¹³⁵ Ibid.

¹³⁶ Ibid.

collection programs. Oakland's residential and non-residential disposal rate has decreased approximately 22 percent since 2000, helping the City move closer to the Measure D targets.¹³⁷ The volume of construction debris produced by new development projects is partially mitigated by a construction and demolition recycling program that keeps 75,000 to 200,000 tons out of the landfill every year, depending on the volume of new construction, demolition and remodeling projects.¹³⁸

Water Supply. EBMUD is a publicly owned utility that provides potable water for the City of Oakland. It delivers water to approximately 1.3 million people in a 325-square-mile area that includes parts of Alameda and Contra Costa Counties.¹³⁹

The EBMUD water supply system collects water from the Mokelumne River, located on the western slope of the Sierra Nevada, and then transports, treats, and distributes water to customers in Alameda and Contra Costa counties. The supply system consists of a network of reservoirs, aqueducts, treatment plants, pumping stations, and distribution facilities. The reservoirs are collectively known as the "terminal reservoirs", comprised of the Briones, Chabot, Lafayette, San Pablo, and Upper San Leandro reservoirs. Briones, San Pablo, and Upper San Leandro supply water to EBMUD customers throughout the year, whereas, the Chabot and Lafayette reservoirs serve as emergency supply sources. The EBMUD water system serves 1.3 million people in 20 incorporated cities and 15 unincorporated communities. On an average annual basis, 90 percent of the water used by EBMUD comes from the Mokelumne River watershed. EBMUD has water rights and facilities to divert up to a daily maximum of 325 million gallons, which equates to approximately 364,000 acre-feet annually (AFA) from the Mokelumne River. The normal year water supply for 2005 was 222 mgd and is expected to increase to 232 mgd by the year 2030, according to the Urban Water Management Plan of EBMUD.¹⁴⁰

Water Treatment. EBMUD operates six water treatment plants with a combined capacity of 430 million gallons per day (mgd). The water treatment plants are Upper San Leandro in Oakland, San Pablo in Kensington, Sobrante in El Sobrante, and plants located in and named for Orinda, Lafayette, and Walnut Creek. The water treatment plant in Orinda has the largest water output of the six plants, with a capacity of 200 mgd, and serves most of the cities of Alameda, Albany, Berkeley, El Cerrito, Emeryville, Moraga, other parts of Oakland, Orinda, Piedmont, Richmond, and San Leandro. Orinda processes 119 mgd of untreated water, which accounts for approximately 63 percent of its total capacity.¹⁴¹

¹³⁷ 2008 Alameda County Waste Characterization Study. R.W. Beck, Inc. June 2009. Accessed June 18, 2009. http://stopwaste.org/docs/r1310_2008_alameda_wcs_rpt_final_6-4-09.pdf

¹³⁸ Construction and Demolition Recycling. City of Oakland Public Works Agency. Accessed June 26, 2009. <http://www.oaklandpw.com/Page39.aspx>

¹³⁹ All About EBMUD Brochure. East Bay Municipal Utility District, Public Affairs Office. 2007. Accessed June 25, 2009. http://www.ebmud.com/about_ebmud/publications/all_about_ebmud/default.htm

¹⁴⁰ East Bay Municipal Utilities District, 2005 *Urban Water Management Plan*

¹⁴¹ East Bay Municipal Utility District, 2005. *Daily Water Supply Report*. Accessed July 1, 2009. https://portal.ebmud.com/ccs/crr/WSE_DailyReport_Menu.asp

Water Storage. Water storage is required to meet water demand for periods when peak hour demand exceeds maximum daily supply rates. These high demand periods usually occur for four to six hours during hot summer days and for potentially longer periods during large fire events. EBMUD's terminal reservoirs are located throughout the local water distribution system. EBMUD has 175 smaller water storage reservoirs throughout its service area. Water storage reservoirs allow treated water supply to be delivered at a relatively constant rate over a 24-hour period, accommodate hourly fluctuations in demand, and provide the required fire flows and emergency reserves in normal years. In order to meet projected storage requirements through buildout of the EBMUD service areas, additional water storage reservoirs will be needed. The exact sizes of these reservoirs and the timing of their construction are dependent upon the water usage patterns of future development and buildout projections (see Water Demands and Water Supply Planning and Reliability, below).

Water Distribution System. The water distribution system is composed of a system of pipes sized to deliver water at sufficient volumes and pressures. Generally, water distribution mains range from 4 inches to 12 inches in diameter and convey water for municipal, industrial, and fire services. Transmission mains are 18 inches and larger and are used to transport large volumes of water from the treatment plants throughout the distribution system. New development is required to provide an average water pressure of no less than 40 pounds per square inch (psi) and no more than 125 psi water service meter. Peak-hour pressure periods must be at least 30 psi, and during fire suppression periods, pressure must be at least 20 psi.

Recycled Water Supply. EBMUD is also expanding its recycled water programs, with the assistance of local municipalities. In 2008 EBMUD recycled 12 mgd of wastewater.¹⁴² Use of recycled water is limited to non-potable uses, such as golf courses, agricultural uses, and industrial uses. EBMUD encourages the use of recycled water through recycled water rate discounts and low-interest loans to retrofit buildings to accommodate recycled water. The City of Oakland adopted a dual plumbing ordinance in 2002, which requires new developments to install a dual plumbing system to accommodate future recycled water use. It is estimated that recycled water will account for up to 9.3 mgd in 2030.¹⁴³

Water Demands. In 2000, EBMUD completed the Update of Water Demand Projections (2000 Demand Study), which calculates future potable water demands up to the year 2030. The 2000 Demand Study provided a methodology to prepare more accurate demand projections. Future water demands were calculated using existing and future demands for various land use categories and future changes in land use as stated in the respective general plans of communities within the service area.¹⁴⁴ The 2000 Demand Study reflects the future land uses designated by adopted general and specific plans. By applying land use information, based on residential and non-residential land use categories, EBMUD forecasts that service area demands would be about 267 mgd by 2030.¹⁴⁵ With

¹⁴² East Bay Municipal Utility District, 2008. *Annual Report 2008*. http://www.ebmud.com/about_ebmud/publications/annual_reports/EBMUD%2008%20Annual%20Report.pdf

¹⁴³ WSMP 2040 Agenda for Board of Directors Workshop #6, February 13, 2008, page 20

¹⁴⁴ East Bay Municipal Utilities District, *2005 Urban Water Management Plan*, pg 4.

¹⁴⁵ Assuming demand reductions through conservation and recycled water use. East Bay Municipal Utilities District, WSMP 2040 Agenda for Board of Directors Workshop #6, February 13, 2008, page 20

implementation of conservation techniques and recycled water use, water demand could be reduced to approximately 232 mgd, as shown in Table 6. Therefore, EBMUD would be able to meet normal year water supply projections through 2030.¹⁴⁶

Table 6
East Bay Municipal Utility District Water Demands (mgd)

	2010	2015	2020	2025	2030
Gross System Demands	246	261	275	286	299
Baseline Conservation	22.5	22.5	22.5	22.5	22.5
Baseline Recycled Water	9.3	9.3	9.3	9.3	9.3
System Demands (adjusted)	214	229	243	254	267

Source: WSMP 2040 Agenda for EBMUD BOD Workshop #6, February 13, 2008, page 20.

Water Supply Planning and Reliability. There are many factors that affect the reliability of water supplies. The most important factors are the occurrences of hydrologic changes, mainly droughts, and the vulnerability of the Delta aqueducts. Other factors that could affect the availability of water supply include contamination, high turbidity, power outages, fires, and/or civil disturbances.

In October 1993, EBMUD adopted a long-term Water Supply Management Program (WSMP) that serves as a water supply planning guide through year 2020. EBMUD updated its Urban Water Management Plan in 2005 (Adopted November 22, 2005). EBMUD is currently preparing its WSMP 2040 for release in late 2009 or early 2010. The WSMP 2040 is a complex planning document that EBMUD will use to assess supplies and analyze demands over a thirty-year planning horizon. Since inception of the WSMP 2040, EBMUD has surveyed the jurisdictions in its service area to properly evaluate future demands, and is investigating various supply reliability sources. Throughout this planning process, public relations materials were distributed and EBMUD has conducted numerous public workshops in various jurisdictions. Upon completion of the WSMP, EBMUD can then compare its future supply and demand using current demand data and supply information. As part of the process, EBMUD also prepared a Programmatic EIR for the WSMP 2040. The Programmatic EIR evaluated the impacts associated with implementation of the WSMP 2040; individual projects identified in the WSMP could be subject to project-specific environmental review.

These documents identify that, during severe droughts, EBMUD would be unable to meet water demands with Mokelumne River supplies, without imposing extreme rationing measures. EBMUD's planning objective is to not impose greater than 25 percent rationing on customers during a critical drought; however, under the current situation EBMUD would experience a supply shortfall. The WSMP recommended two principal options for EBMUD's supplemental water supply: 1) additional surface or underground storage with conjunctive use and acquiring new surface water supplies, and 2)

¹⁴⁶ Normal year, as forecasted from April through the end of September, total system storage would be 500.000 AF or greater and East Bay Municipal Utilities District would not institute any Demand Management strategies

add surface water supply by either enlarging the existing Pardee Reservoir and/or by using EBMUD's American River contract entitlement.^{147,148} According to EBMUD's 2005 UWMP, as much as 131 mgd of additional supply would be needed during the next 25 years. EBMUD's current projects are geared towards relieving future water demand shortfalls and meeting projected demand. The 2005 UWMP discusses current projects that EBMUD is currently engaged in to relieve future water demand shortfalls. Three main projects are either currently under construction, or in the planning, testing, or feasibility phases.¹⁴⁹ These projects include:

- The Freeport Regional Water Project (FRWP) would divert water from the Sacramento River and construct a regional water treatment plant in Sacramento County in order to guarantee water for East Bay customers in dry years. EBMUD contract amount in single dry years is 112,000 AF and 165,000 AF over a three-year drought condition.^{150,151} EBMUD contract amount is 100 mgd during drought years.¹⁵² It is anticipated that EBMUD would start receiving Sacramento River water by the end of 2009.¹⁵³
- The Bayside Groundwater Project, which is a supplemental water supply project that would store water in a deep underground aquifer during wet years and extract some of that supply during times of drought. Phase 1 of the Bayside Groundwater Project, which will begin final testing in September 2009, would store an annual average of 1 mgd of water within a deep aquifer that extends beneath the City of San Lorenzo. After successfully operating Phase 1 for a period of time, EBMUD will consider a larger Phase 2 Bayside project that would have a capacity of between 2 and 10 mgd, allowing for even greater drought protection.¹⁵⁴
- The proposed Bay Area Regional Desalination Project, which is a joint venture between the Contra Costa Water District, the East Bay Municipal Utility District, the San Francisco Public Utilities Commission, and the Santa Clara Valley Water District. The regional desalination project would: provide an additional source of water during emergencies; provide a supplemental water supply source during extended droughts; allow other major water facilities to be taken out of service for maintenance or repairs; and increase supply reliability by providing water supply from a regional facility. The Bay Area Regional Desalination Project would have an ultimate total capacity of up to 71 mgd.¹⁵⁵

¹⁴⁷ Underground storage employs a "conjunctive use" program that involves using surface water when surplus surface water is available in wet years and then extracting "stored" or "banked" water in drier years to supplement reduced surface water supplies.

¹⁴⁸ East Bay Municipal Utilities District, *2000 Urban Water Management Plan*, pg. 2-14.

¹⁴⁹ East Bay Municipal Utilities District, *2005 Urban Water Management Plan*, pg 2-13.

¹⁵⁰ Freeport Regional Water Authority website <http://www.freeportproject.org/index.php> accessed March 11, 2008.

¹⁵¹ EBMUD, "Freeport Regional Water Project", http://www.ebmud.com/water_&_environment/water_supply/current_projects/freeport/default.htm, accessed August 25, 2008.

¹⁵² EBMUD, "Freeport Regional Water Project", http://www.ebmud.com/water_&_environment/water_supply/current_projects/freeport/default.htm#Major_Project_Elements, accessed July 30, 2009.

¹⁵³ Freeport Regional Water Authority website <http://www.freeportproject.org/nodes/project> accessed October 24, 2008.

¹⁵⁴ EBMUD, "Bayside Groundwater Project", http://www.ebmud.com/water_&_environment/water_supply/current_projects/bayside_groundwater/default.htm, accessed July 30, 2009.

¹⁵⁵ EBMUD, "Desalination Project", http://www.ebmud.com/water_&_environment/water_supply/current_projects/desalination_project/default.htm, accessed July 30, 2009.

In terms of reliability, these projects along with increasing conservation efforts would serve to bolster EBMUD's supply portfolio now and over a long-term planning horizon. In fact, as shown in Table 7, EBMUD is highly dependent upon the FRWP to overcome the 2010 and 2015 dry year deficits.

Supply and Demand Comparisons. In normal years, EBMUD currently supplies its customers with an annual average of about 222 mgd of water. In order to meet its customers' current and future water needs, EBMUD has to balance water supply and demand. At present, EBMUD's current supply is insufficient to meet customer needs in multiple year droughts despite water conservation measures and recycling programs. During the recent 1987 to 1992 drought, customers were subject to water use restrictions (rationing) each year. The 2005 UWMP states that without additional supplies, water use restrictions would occur more frequently in the future.¹⁵⁶ However, EBMUD anticipates that dry year water supply deficiencies would occur after 2009 when FRWP supplies are delivered to EBMUD. As stated above, EBMUD's two other supply reliability projects would further bolster local supplies.

EBMUD is currently preparing its WSMP 2040 for release in late 2009 or early 2010. The WSMP 2040 is a complex water supply planning document that EBMUD will use to assess supplies and analyze demands. Since inception of the WSMP 2040, EBMUD has surveyed the jurisdictions in its service area and conducted numerous public workshops to properly evaluate future demands and seek public support in its request to supply reliability. Upon completion of the WSMP EBMUD can then compare its future supply and demand situations using current demand data and supply information.

Table 7 represents the supply and demand conditions that EBMUD could expect under all hydrologic conditions. A single dry year (or Year 1 of "multiple dry years") is determined as a year that EBMUD would implement the Drought Management Program with the goal of achieving between 0 to 15 percent reductions in customer demand. With new supplies from the FRWP supply, rationing is reduced to five percent. In 2010, full use of FRWP supplies along with conservation would limit rationing to 25 percent and all customer demands would be met.

¹⁵⁶ EBMUD, 2000 Urban Water Management Plan, pg 4-25

Table 7
EBMUD Water Supply and Demand^a in Normal, Dry, and Multiple Dry Years

Supply and Demand	Year				
	2010	2015	2020	2025	2030
Normal Year ^b Supply	>225	>229	>243	>254	>267
Demand	214	229	243	254	267
<i>Difference</i>	0	0	0	0	0
Supply: Single Dry Year or Multiple Dry Year - 1	214	217	230	241	253
Demand with 5% Reduction ^{c, d}	214	217	230	241	253
Difference	0	0	0	0	0
Supply: Multiple Dry Year - 2	168	172	182	191	200
Demand with 25% Reduction ^{c, d}	168	172	182	191	200
<i>Difference</i>	0	0	0	0	0
Supply: Multiple Dry Year - 3	168	172	182	191	200
Demand with 25% Reduction ^d	168	172	182	191	200
<i>Difference</i>	0	0	0	0	0

Source: East Bay Municipal Utilities District, 2005 Urban Water Management Plan, Table 4-2 page 4-6. Updated by PBS&J to reflect FRWP supplies of up to 100 mgd in drought years beginning in late 2009. Since the FRWP is well under way this analysis assumes FRWP supplies will be available in all drought years from 2010 through 2030.

Notes:

- Supplemental supplies based on EBMUDSIM model results. Amount of water based upon EBMUD's Demand Management Program, provisions of the 1998 Settlement Agreement and the off setting of additional water supply system losses created by a supplemental supply. The actual need will be dependent on antecedent conditions and the severity of the actual drought. Any supplemental supply stored during the initial years of the drought is later released, diminishing the supplemental supply needs.
- Normal year, as forecasted from April through the end of September, total system storage would be 500,000 AF or greater.
- Year 2005 through completion of FRWP, EBMUD water supply system cannot adequately supply 95% of demand and may impose rationing up to 15% during the first year of a drought, supplemental supplies would be needed. Per mitigations in FRWP EIR rationing goal is 5% for single dry year or first dry year of a multiple dry year condition.
- Projected Supply data includes dry-year deliveries via Freeport regional Water Project beginning in 2010. EBMUD's deficiency goal is 25 percent.

Between 2010 and 2015, FRWP water supplies, along with aggressive conservation, would hold rationing near EBMUD's goal of 25 percent. After 2015, rationing would increase to EBMUD's 25 percent goal and FRWP supplies would be needed to limit customer deficiencies to 25 percent. In the third year of a multiple dry year, EBMUD can also achieve its 25 percent rationing goal and meeting system-wide demands with supplemental water supplies from FRWP.

Energy. Title 24, Part 6, of the California Code of Regulations (Energy Efficiency Standards for Residential and Nonresidential Buildings) was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The State of California updates the Title 24 standards

periodically to allow for the incorporation of new energy efficiency technologies and methods. These standards provide detailed minimum energy efficiency requirements for new construction. The standards apply to new construction of both residential and nonresidential buildings, and 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.

In 2005, the City adopted a green building ordinance (codified as Chapter 15.35 of the *Municipal Code*) requiring all new municipal buildings to achieve a minimum LEED™ Silver rating under the LEED Rating System and be certified by the U.S. Green Building Council. The City also established the Green Building Resource Center which provides leadership to both the private and public sectors in the arena of energy efficiency and “green” building practices. Co-sponsored training programs with the Pacific Energy Center and Build It Green train citizens in energy efficient building design and construction.

Electricity. The Pacific Gas and Electric Company (PG&E) supplies electricity to approximately 5.1 million electric customers throughout northern and central California, including customers in the City of Oakland. As of 2007, PG&E’s electric power was supplied by natural gas power plants (accounting for 47 percent of its power), non-emitting nuclear generation (23 percent of the total power), large hydroelectric facilities (13 percent), renewable sources, such as wind, geothermal, biomass, and small hydro power (12 percent), and coal (four percent).¹⁵⁷

The City operates three 55 megawatt (MW) fossil fuel plants that supplement PG&E’s electricity generation.¹⁵⁸ Electricity is transported via a grid of high-voltage transmission lines to seven main substations in Oakland, with a combined capacity of 792 MW. These substations contain transformers that “step down” or reduce electricity to lower voltages for distribution.¹⁵⁹ Local electricity capacity is a function of the capacity of the transmission network to convey power to the City, the capacity of substations to step down electricity to consumer voltages, and the capability of the local distribution network to deliver power to customers.

Natural Gas. PG&E also provides natural gas to a 70,000-square-mile service area in northern and central California.¹⁶⁰ This service area includes the City of Oakland. PG&E serves approximately 4.2 million people in the larger service area. A coordinated network of underground natural gas reservoirs, long distance transmission pipelines, and local distribution pipelines deliver natural gas from across the western United States to customers in the company’s service area.

¹⁵⁷ PG&E, 2007. Delivering Clean Energy. Accessed June 22, 2009 at: http://www.pge.com/about_us/environment/features/clean_energy.html

¹⁵⁸ Ibid.

¹⁵⁹ City of Oakland, Community and Economic Development Agency, *Oakland General Plan Land Use and Transportation Element EIR*, October 31, 1997.

¹⁶⁰ PG&E, 2007. Company Profile. Accessed June 20, 2009 at: http://www.pge.com/about_us/company_profile/about_pge/

2. Environmental Checklist

The proposed project would have a significant impact on the environment if “potentially significant” is checked under items XVI (a – h), below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the project:					
a) Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board?	☐	☐	☒	☐	☐
b) Require or result in construction of new stormwater drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	☐	☐	☒	☐	☐
c) Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects?	☐	☐	☒	☐	☐
d) 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?	☐	☐	☒	☐	☐
e) 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?	☐	☐	☐	☒	☐
f) Violate applicable federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒	☐
g) Violate applicable federal, state and local statutes and regulations relating to energy standards?	☐	☐	☐	☐	☒
h) 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?	☐	☐	☐	☒	☐

Notes:

- SCA = Standard Conditions of Approval.
- MM = Mitigation Measures

3. Discussion

Comments to Question XVIa and Question XVIc (Wastewater Capacity and Standards)

Based on typical wastewater generation figures, approximately 80 percent of the water used by residential units developed under the *2007-2014 Housing Element* would enter the wastewater system. As described under Comment to Question XVIc, total water demand associated with the *2007-2014 Housing Element* would be approximately 3.51 mgd. Thus, wastewater volumes generated by the project would be approximately 2.8 mgd.¹⁶¹ Conservatively assuming that an additional 3.51 mgd of wastewater would flow into the MWWTP, this additional flow would be within the MWWTP remaining capacity of 240 mgd for primary treatment and 88 mgd for secondary treatment. Also, the conservative flow of 3.51 mgd would be within the 20 percent increase in flow that is anticipated by EBMUD for future wastewater treatment.

EBMUD's Main Wastewater Treatment Plant (MWWTP) and interceptor system are anticipated to have adequate dry weather capacity to treat the proposed wastewater flows as a result of the *2007-2014 Housing Element*, provided that the wastewater meets the requirements of the current EBMUD Wastewater Control Ordinance. However, wet weather flows are a concern. EBMUD has historically operated three Wet Weather Facilities (WWFs) to provide treatment for high wet weather flows that exceed the treatment capacity of the MWWTP. On January 14, 2009, due to EPA's and the State Water Resources Control Board's re-interpretation of applicable law, the RWQCB issued an order prohibiting further discharges from EBMUD's WWFs. Additionally, on July 22, 2009 a Stipulated Order for Preliminary Relief issued by EPA, the SWRCB, and RWQCB became effective. This order requires EBMUD to begin work that will identify problem I/I areas, begin to reduce I/I through private sewer lateral improvements, and lay the groundwork for future efforts to eliminate discharges from the WWFs.¹⁶²

Currently, there is insufficient information to forecast how these changes will impact allowable wet weather flows in the individual collection system subbasins contributing to the EBMUD wastewater system. As required by the Stipulated Order, EBMUD is conducting extensive flow monitoring and hydraulic modeling to determine the level of flow reductions that will be needed in order to comply with the new zero-discharge requirement at the WWFs. It is reasonable to assume that a new regional wet weather flow allocation process may occur in the East Bay, but the schedule for implementation of any new flow allocations has not yet been determined.¹⁶³

In the interim, EBMUD has requested that the City require project applicants to incorporate the following measures into development projects: (1) replace or rehabilitate any existing sanitary sewer collection systems to reduce inflow and infiltration (I/I), and (2) ensure any new wastewater collection

¹⁶¹ Water Demand under the 2007-2014 Housing Element = 3.51 mgd, 80 percent of which will enter the wastewater stream. $3.51 \times 0.80 = 2.8$ mgd.

¹⁶² Vince De Lange, P.E., Senior Civil Engineer, Supervisor of Wastewater Planning, EBMUD, email correspondence with on August 12, 2009 with Vernazza Wolfe Associates, Inc.

¹⁶³ Ibid.

systems for the project are constructed to prevent infiltration and inflow (I/I) to the maximum extent feasible.¹⁶⁴ These measures are incorporated as SCA-91, below.

Given the above points, and the incorporation of SCA-91, the additional wastewater generated by the proposed project is not expected to exceed current wastewater treatment capacity at the MWWTP. Future improvements that have been planned regardless of the *2007-2014 Housing Element* would further increase wastewater treatment capacity and ensure that RWQCB requirements are met. Further, the SCA-below requires that development projects under the *2007-2014 Housing Element* would pay fees that would enable the City to minimize increases in infiltration/inflow to offset sanitary sewer increases from the development. Impacts from the proposed project would thus be less than significant.

Standard Conditions of Approval. The following Standard Conditions of Approval are applicable to the *2007-2014 Housing Element*:

SCA-91 Stormwater and Sewer. Prior to completing the final design for the project's sewer service: Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.

Comment to Question XVIb (Stormwater Capacity)

As discussed in Section VIII. Hydrology and Water Quality, construction activities would disturb surfaces and expose underlying soil to wind and water erosion. Construction equipment could also track sediment onto roads and other impervious surfaces to be washed off into storm drains during rain events. Trash and construction materials and spills and leaks from construction equipment could also end up in the storm drain system. These impacts could impair storm drain capacity if they would occur on a fairly large scale. Construction activities that would cumulatively disturb one or more acres of land surface would be subject to the requirements of the Construction General Permit, including development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would include construction stormwater quality best management practices (BMPs) designed to prevent sediment and debris from affecting the City or ACFCWCD stormwater systems.

¹⁶⁴ Ibid.

Post construction, the *2007-2014 Housing Element* is not expected to increase stormwater flow into the City and ACFCWCD systems such that there would be a need for expansion or construction of new stormwater facilities. The reason is that most of the housing sites are within an urbanized area that is largely covered by impermeable surfaces already and that is served by the City and ACFCWCD systems already. Development of new housing in the urban infill sites is not expected to substantially increase impermeable area, and so stormwater flow into the City and ACFCWCD systems should not substantially increase to the extent that new or expanded drainage system infrastructure would be needed.

Additionally, new developments are subject to strict design protocols for stormwater runoff. Comparisons of runoff prior to development are compared with post development runoff to ensure that the development has not resulted in increased flow levels. The City refers each development to ACFCWCD, which reviews the project and imposes mitigation measures if the project exceeds previous stormwater flow.¹⁶⁵ Project plans are reviewed by the Oakland Public Works Agency to make sure that the site design provides for adequate site drainage to moderate water flows to the City's storm drain system located in the public right-of-way.¹⁶⁶ Thus, development of the housing units allowed under the *2007-2014 Housing Element* would not be expected to result in increased stormwater flow such that expansion or construction of new stormwater systems would be needed. Impacts would be less than significant.

Additionally, it should be noted that various *General Plan* policies and Standard Conditions of Approval are in place to ensure increased flows or flow of sediment or debris into the City and ACFCWCD system would be minimized. See below.

General Plan. The *General Plan* policies set forth below are intended to address impacts on stormwater drainage facilities resulting from increased population:

Open Space, Conservation and Recreation Element

- *Policy CO-1.1:* 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:* Maintain, enforce, and periodically review development controls affecting soil removal, including the Grading Ordinance and the Sedimentation and Erosion Control Ordinance.
- *Action CO-6.1.2:* Strengthen the Watercourse Protection Ordinance by adding development guidelines for properties abutting creeks and drainage courses, and provisions for conservation easements. These guidelines and provisions should ensure that natural drainage patterns are maintained as much as possible when new development occurs.

¹⁶⁵ Arthur Valderama, ACFCWCD Development Review. Telephone conversation on July 8, 2009 with Vernazza Wolfe Associates, Inc.

¹⁶⁶ Dave Lonestar, Supervisor II, City of Oakland Public Works Agency. Telephone conversation on July 13, 2009 with Vernazza Wolfe Associates, Inc.

- *Action CO-5.3.2:* Improve maintenance of storm drain inlets, channels, pipes, and catch basins to ensure their proper operation and to reduce the amount of debris and sediment flowing to creeks. Operate a regular OPW debris removal program to ensure that storm flows can be accommodated and that erosion resulting from clogged storm drains is minimized. As funding permits, replace antiquated drains with adequate capacity to convey stormwater runoff during the rainy season.

Standard Conditions of Approval. Standard Conditions of Approval pertaining to stormwater quality and quantity are listed in Section VIII, Hydrology and Water Quality. Standard Conditions of Approval applicable to minimization of runoff volumes include SCA-78 and SCA-80.

Comment to Question XVIc (Water Supplies)

As stated previously, EBMUD is currently preparing its WSMP 2040 for release in late 2009 or early 2010. The WSMP 2040 is a water supply planning document that EBMUD will use to assess supplies and analyze demands. Since inception of the WSMP 2040, EBMUD has surveyed the jurisdictions in its service area and conducted numerous public workshops to properly evaluate future demands and seek public support in its request to supply reliability. Upon completion of the WSMP EBMUD can then compare its future supply and demand situations using current demand data and supply information. EBMUD's demand surveys conducted throughout its service area during preparation of its WSMP 2040 accounted for the demands associated with implementation of multiple projects of differing densities at a variety of locations throughout the City of Oakland. Over the course of 20 years it is estimated that approximately 13,000 new units would be constructed and based on Table 1 of the Population and Housing section the majority of new construction would occur in the next 10 years; therefore, it is reasonable to assume that buildout of the *2007-2014 Housing Element* was accounted for in EBMUD's WSMP 2040.¹⁶⁷¹⁶⁸

Table 8 shows the anticipated demands from the cities of Oakland, Berkeley and Alameda as determined in EBMUD's WSMP 2040 demand surveys. Of the aggregated demands shown in Table 8, total water consumption associated with buildout would be approximately 2.51 mgd. This assumes that each residential unit built under the *2007-2014 Housing Element* would consume approximately 186 gallons per day (gpd), or 70 gallons per capita per day based on 2.6 persons per household. It should be noted that residential demand could be as low as 110 gpd per unit with installation of high efficiency water fixtures. This total represents approximately 4.1 percent of the estimated 2020 demands and 3.4 percent of the 2030 demands in those jurisdictions. Similarly, demands associated with buildout of *2007-2014 Housing Element* represent 1.0 percent of EBMUD's 2020 demands (243 mgd) and 0.9 percent of service area demands in 2030.

¹⁶⁷ East Bay Municipal Utility District, Appendix A WSMP 2040 City of Oakland Planning Department Meeting Notes, August 2, 2007.

¹⁶⁸ Jae Park, East Bay Municipal Services District, personal communication August 7, 2009 with PBS&J.

Table 8
Projected Demands from cities of Oakland, Alameda, Berkeley (Central) (mgd)

Year	2010	2015	2020	2025	2030	2040
Demand Totals	50.7	55.7	61.4	67.1	74.3	75.7

Source: WSMP 2040 Agenda for EBMUD BOD Workshop #6, February 13, 2008, page 24. PBS&J estimated demands from plotted points and trend line on the Final Water Demand Graph.

Current supply and demand projections shown in Table 7 conclude that EBMUD has adequate supplies in all years including single and multiple dry year scenarios. This conclusion assumes that demand reductions of up to 25 percent will be achieved and EBMUD can rely on supplemental dry year supplies from FRWP beginning as early as late 2009 or by spring 2010. As state above, the incremental increase in demand of 2.51 mgd associated with the *2007-2014 Housing Element* is assumed to be accounted for in EBMUD's WSMP 2040 study and these demands would not cause EBMUD to seek additional water rights. Further, compliance with the *General Plan* policies and Action 7.4.2. from the *2007-2014 Housing Element* along with LEED or green building provisions implemented per housing project could further reduce the demand contributions associated with the *2007-2014 Housing Element*. Thus, potable water impacts associated with buildout of the *2007-2014 Housing Element* would be less than significant.

General Plan. The *OSCAR Element* policies set forth below are intended to address future water demand:

Open Space, Conservation and Recreation Element

- *Policy CO-4.1:* Emphasize water conservation and recycling strategies in efforts to meet future demand.
- *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-4.4:* Encourage regional development patterns which make environmentally sound use of water resources.

2007-2014 Housing Element. The following actions and policies apply to water consumption and would be adhered to with the implementation of the *2007-2014 Housing Element*:

- *Action 7.4.2 Water Consumption.* Encourage, where feasible, best practices in the installation of water-efficient technologies, greywater systems and the use of water collected on-site. In affordable housing developments, this will reduce utility bills, freeing up more resources to pay rent or a mortgage.

The potential water demands from the *2007-2014 Housing Element*, are estimated at 2.51 mgd after buildout. As shown in Table 6, water demands in Oakland, Alameda and Berkeley are expected to

increase over the next 20 years and the demands from *2007-2014 Housing Element* would contribute to these increases.

Because EBMUD has planned for improvements to the water treatment system to improve system reliability and accommodate projected growth in its regional service area, the *2007-2014 Housing Element* would not prompt a need to expand treatment facilities in order to meet its demands. The improvements are being planned for regional needs and would occur regardless of whether or not the *2007-2014 Housing Element* would be adopted. As stated above, EBMUD's Orinda water treatment plant (WTP) currently has a maximum combined treatment capacity of 400 mgd, if operated continuously. EBMUD can reliably deliver 200 mgd, which is well in excess of the demands from these three jurisdictions including buildout of the *2007-2014 Housing Element*, now and over the next 20 years.

In order to ensure proper distribution, EBMUD also manages the regional conveyance system used to transport potable water supplies to each jurisdiction and customers in its service area. In addition, EBMUD manages and maintains all the WTPs; any improvements or expansions are the responsibility of EBMUD and would not adversely affect the City of Oakland or *2007-2014 Housing Element*.

Therefore, as a result of the proposed project, no new or expanded water treatment facilities or storage would be required. Consequently, this impact is considered less than significant.

Comments to Question XVIe and Question XVI f (Landfills and Solid Waste)

Buildout of the *2007-2014 Housing Element* would result in 13,501 new housing units distributed throughout the City with a projected population of 35,103 persons. The average annual volume of solid waste produced by a household of Oakland residents in multi-family units was 1,962 pounds in 2008.¹⁶⁹ If disposal and diversion rates remained constant, the increase in solid waste volume associated with new housing units would be 13,244 tons annually.¹⁷⁰ This represents less than one percent of the annual capacity of the Altamont Landfill. Thus, the increase in population associated with the *2007-2014 Housing Element* would not exceed the capacity of a permitted landfill.

Additionally, the City is currently meeting or projected to meet local and State solid waste reduction targets. Because proposed development under the *2007-2014 Housing Element* would represent only a small percent of the waste generated citywide, and because new development would be required to comply with the *General Plan* and Municipal Code policies listed below, it is expected that new development would not cause the City to fall out of compliance with existing solid waste requirements and would not violate applicable federal, state or local solid waste statutes and regulations. Impacts would be less than significant.

Also, compliance with the regulatory measures listed below would further ensure that potential solid waste impacts would be less than significant.

¹⁶⁹ City of Oakland, Public Works Agency, Solid Waste Division

¹⁷⁰ 1,962 pounds/residential unit (.981 tons)x 13,501 units = 26,488,962 pounds = 13,244 tons

LUTE EIR. Previously imposed mitigation measures from the City's *LUTE EIR* that apply to the *2007-2014 Housing Element* are listed below:

Mitigation Measure D.4-1a: Continue to implement programs that reduce the amount of solid waste generated in the City by encouraging recycling, composting, and other activities consistent with the City's Source Reduction and Recycling Element.

Mitigation Measure D.4-1b: Support solid waste collection, recycling, and disposal rates that are sufficient to cover the cost of adequate, efficient service delivery.

Mitigation Measure D.4-1c: Establish guidelines and incentives for the recycling of construction and demolition debris and the use of recycled concrete and other recycled products in the construction of new buildings, roads, and infrastructure.

2007-2014 Housing Element. The following actions and policies apply to solid waste reduction and would be adhered to with the implementation of the *2007-2014 Housing Element*:

- *Action 7.4.3 Waste Reduction.* Encourage, where feasible, multifamily developments to comply with the City's Zero Waste Plan.
- *Action 7.4.5 Recycled Content of Building Materials.* Encourage, where feasible, the use of building materials with high recycled content.
- *Action 7.4.6 Re-Use of Building Materials.* Encourage, where feasible, the re-use of building materials to reduce construction waste. Also encourage the reuse and rehabilitation of the City's historic building stock, using the *General Plan*'s goal D6.2 as a guide.

Municipal Code. The following Municipal Code regulations apply to the solid waste generation associated with the *2007-2014 Housing Element*:

- *Chapter 15.34* requiring a Recycling and Waste Reduction Plan for construction and demolition activities. Developers are required to submit a construction Waste Reduction and Recycling Plan (WRRP) that covers the construction phase. The City's Public Works and Community and Economic Development Agencies share review and approval of these plans.
- *Chapter 17.118* requiring new multifamily residential buildings of over 5 units to provide adequate, accessible, and convenient locations for the collection and storage of recyclable materials within containers and enclosures which are compatible with surrounding land uses and structures. This conforms with Chapter 18 of Division 30 of the CA Public Resources Code (commencing with Section 42900), known as the California Solid Waste Reuse and Recycling Access Act of 1991.

Standard Conditions of Approval. The following Standard Conditions of Approval are applicable to development under the *2007-2014 Housing Element*:

SCA-36 Waste Reduction and Recycling. The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval.

Prior to issuance of demolition, grading, or building permit: Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction,

renovations/alterations/modifications with construction values of \$50,000 or more (except R-3), and all demolition (including soft demo). The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at www.oaklandpw.com/Page39.aspx or at the building permit counter. After approval of the plan, the project applicant shall implement the plan.

Ongoing: The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Planning Division of the Community and Economic Development Agency for review and approval. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site.

Comment to Question XVIg and Question XVIh (Energy)

New residential development is subject to Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings. Thus, the 13,501 units planned under the *2007-2014 Housing Element* would not violate state or local statutes or regulations relating to energy standards.

There are adequate energy supplies to provide for the increase in energy requirements associated with the 13,501 units planned under the *2007-2014 Housing Element*, and PG&E can serve the proposed growth in housing units.¹⁷¹ If necessary, PG&E would reinforce or expand its electric distribution facilities as needed. The location of any expanded or reinforced facilities would be in a franchise area, i.e., any area that is not private property.¹⁷² In the event that additional distribution stations would need to be constructed due to the *2007-2014 Housing Element*, these facilities are anticipated to occur in the City, in the vicinity of housing sites. Construction could result in environmental impacts such as loss of trees or erosion impacts. Nonetheless, the City of Oakland has jurisdiction over the PG&E easements; therefore, all *General Plan* policies, Municipal Code regulations, and Standard Conditions of Approval would apply to the construction of new energy facilities within the City. These requirements are expected to reduce potential impacts from construction of electric distribution facilities to less than significant. .

In addition, the *2007-2014 Housing Element* would comply with actions with regard to energy use in order to further reduce energy impacts. The below actions would help reduce energy reliance on PG&E.

¹⁷¹ Carl Horikoshi, Land Services, PG&E. Telephone Conversation on July 8, 2009 with Vernazza Wolfe Associates, Inc.

¹⁷² Carla Latigue, PG&E Senior New Business Representative. E-mail communication July 20, 2009 with Vernazza Wolfe Associates, Inc.

2007-2014 Housing Element. The following actions, as implemented under the *2007-2014 Housing Element*, would apply to energy use:

- *Action 7.2.1: Energy and Climate Action Plan.* Consider opportunities and develop a prioritized comprehensive plan to minimize consumption of energy through conservation and efficiency and to increase use of energy from renewable energy technologies.
- *Action 7.2.2: Alternative Energy Production.* Continue to review plans for residential construction, taking into account building orientation, street layout, lot design, landscaping, and street tree configuration, with the intent of maximizing solar access and cooling opportunities. Provide information and tools such as a solar energy generation calculator to assist the public in capitalizing on opportunities to generate renewable energy.
- *Action 7.2.3: Technical Assistance.* Continue to educate people about the advantages of energy conservation and provide technical assistance to help new construction or remodeling projects achieve superior levels of energy efficiency.

4. Cumulative Impacts

The geographic area considered for the utilities cumulative analysis includes the City of Oakland and other communities within the area of applicable service providers (e.g., EBMUD, ACFCWCD). The increased population and density resulting from the *2007-2014 Housing Element*, in conjunction with population and density of past, present, existing, pending and reasonably foreseeable future development in the City, would result in a cumulative increase in the demand for utilities. This cumulative increase is unlikely to cause the need for new or physically altered facilities or infrastructure in order to maintain acceptable service standards or performance objectives. Infrastructure planned by EBMUD would occur in response to regional needs and regardless of the *2007-2014 Housing Element*. Other infrastructure construction beyond Oakland, would be subject to its own environmental review and applicable regulations for biology, water quality, air quality, etc; these requirements would minimize environmental impacts. Nonetheless, cumulative development would trigger infrastructure expansion that could result in environmental impacts.

However, development under the *2007-2014 Housing Element* would occur pursuant to *General Plan* policies, Municipal Code regulations, mitigation measures adopted for the *LUTE EIR* and the Standard Conditions of Approval that would reduce the potential impact on services to less-than-significant levels. As a result, the contribution of the *2007-2014 Housing Element* to potential cumulative impacts would be less than cumulatively considerable.

5. Conclusion

Development resulting from the *2007-2014 Housing Element* would be infill development in built-up areas or redevelopment of existing sites. Compliance with *General Plan* Policies I/C1.9, T5.1, D4.1, and N7.2 found in the *LUTE Element*, *LUTE EIR* Mitigation Measure D.2-2 and Standard Condition of Approval 91 would ensure that impacts to wastewater treatment standards are less than significant. Impacts related to stormwater drainage capacity would be less than significant, and compliance with

General Plan Policy CO-1.1, and Actions CO-1.1.1, CO-6.1.2, and CO-5.3.2 in the *OSCAR Element*, Policy T5.3 from the *LUTE Element*, and SCA-78 and 80 would further reduce impacts.

Compliance with Policies CO-4.1, CO-4.2, CO-4.3, and CO-4.4 from the *OSCAR Element*, and Action 7.4.2. from the *2007-2014 Housing Element*, along with green building or LEED certification objectives could reduce impacts on potable water demands to less than significant. In terms of supply infrastructure and conveyance facilities, EBMUD manages the regional conveyance system used to transport potable water supplies to each jurisdiction and customers in its service area. EBMUD also manages and maintains all the WTPs; any improvements or expansions are ultimately the responsibility of EBMUD; therefore, impacts to facilities as a result of implementation of the *2007-2014 Housing Element* are less than significant. As stated previously, EBMUD demand surveys conducted during preparation of its WSMP 2040 accounted for demands associated with buildout of the *2007-2014 Housing Element* along with demands throughout its service area. Moreover, EBMUD has adequate supplies from its diversions on the Mokelumne River coupled with supplies from the FRWP to serve demands under all hydrologic conditions; therefore, cumulative impacts to water supplies are less than significant.

Impacts related to solid waste would be less than significant, and compliance with *LUTE EIR* Mitigation Measures D.4-1a, D.4-1b, and D.4-1c, and Actions 7.4.3, 7.4.5, and 7.4.6 from the *2007-2014 Housing Element*, as well as Chapter 15.34 of the Municipal Code and SCA-36 would further reduce impacts. There are adequate supplies of gas, and electricity for residential growth planned under the *2007-2014 Housing Element*. Furthermore, energy conservation measures under Title 24 and the City's Green Building Guidelines would minimize future energy demand. Impacts related to energy would be less than significant with compliance with various *General Plan*, Municipal Code requirements, and Standard Conditions of Approval that reduce impacts. Also, compliance with Actions 7.2.1, 7.2.2, and 7.2.3 of the *2007-2014 Housing Element* would further reduce impacts.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

1. Environmental Checklist and Discussion

The proposed project would have a significant impact on the environment if 'potentially significant' is checked under items XVIIa-c, below, and there is no mitigation measure or *Standard Condition of Approval* (SCA) identified that would reduce impacts to a less-than-significant level.

	Potentially Significant	Potentially Significant Unless New Mitigation is Incorporated	Less than Significant with SCA ^a and/or Previously Imposed MM ^b	Less than Significant Impact	No Impact
Would the Project:					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐	☐

Notes:

a. SCA = Standard Conditions of Approval.

b. MM = Mitigation Measures

2. Discussion

Comment on XVIIa. As discussed in Section IV, Biological Resources, the *2007-2014 Housing Element* would not result in significant effects on the habitat, population, or community of fish, wildlife, or plant species. Development at the opportunity sites identified in the *2007-2014 Housing Element* would largely occur as infill, in an urbanized and built-out City. Compliance with policies CO-2.4, CO-5.3, CO-6.1, CO-6.4, CO-6.5, CO-7.1, CO-7.3, CO-7.4, CO-8.1, CO-9.1, CO-11.1, CO-11.2, W-3.1, and W-3.2 contained in the City's *General Plan*, *OSCAR* and *LUTE* elements, Chapters 13.16 and 12.36 of the Municipal Code, and SCA-43 through 47, 72, 75 through 86, 87, and

88 would ensure that development under the *2007-2014 Housing Element* would comply with federal, State, and local laws, and would result in a less-than-significant impact regarding biological resources.

As discussed in Section V, Cultural Resources, compliance with the goals, policies, and programs of the City's *General Plan* (Goal 2, Policy 2.1, and 2.6, Action 2.4.1, and Policies N9.8, D1.1, D2.1, D1.4, 2.4, 3.1, 3.5, 3.6, 4.1, and Objective 4); Municipal Code (Title 17), Standard Conditions of Approval 52, 53, 54, 56, and 57, and *LUTE EIR* Mitigation Measure G.2 would ensure that development under the *2007-2014 Housing Element* would comply with federal and State laws protecting cultural resources, resulting in a less-than-significant impact. In addition, should any sensitive resources be discovered during the construction of future development projects under the *2007-2014 Housing Element*, all building activity should cease until a resource mitigation plan and monitoring program is prepared by a qualified professional as described in Standard Conditions of Approval. This would result in a less-than-significant impact to cultural resources.

Comment on XVIIb. The effects of the *2007-2014 Housing Element*, when combined with the effects of past, present, current, pending and reasonably foreseeable future projects in the area, would not result in cumulatively considerable impacts for the topics found to be less-than-significant in this Initial Study. However, potential cumulative impacts for the following topics could occur: air quality, climate change, noise, and transportation/traffic.

The analysis in this Initial Study considers past, present, current and existing projects as they are included in the existing environmental setting. Reasonably foreseeable projects have been largely considered in the *LUTE EIR*. Given the highly developed nature of the City and the lack of large amounts of undeveloped land in the vicinity of the opportunity sites, reasonably foreseeable projects are anticipated to be redevelopment of existing development. Such development would be consistent with land uses and density/intensity designated for the respective areas by the *LUTE* and previously considered at a cumulative level.

As with the *2007-2014 Housing Element*, all pending and reasonably foreseeable future projects would be required to be consistent with the Oakland *General Plan*; would be required to comply with all federal, State, and local code requirements and regulations, such as the Oakland Municipal Code and Building Codes, would be required to meet the mitigation measures of the *LUTE EIR*, and the Standard Conditions of Approval (referenced in Appendix A of this document), and would be required to adhere to all other applicable policies and processes for project review and approval, such as Design Review, to ensure that no significant adverse effects would result. Given that all current and future projects would be required to take into account the surrounding uses and resources and mitigate any potential impacts to a less-than-significant level, it is reasonable to assume that the effects of past, present, current, pending and reasonably foreseeable future projects together would not result in cumulatively considerable impacts.

With the exception of air quality, climate change, noise, and transportation/traffic, which will be analyzed in the EIR, as the discussion in this Initial Study shows, the *2007-2014 Housing Element* would not have impacts that are individually limited but cumulatively considerable. However, because the topics of air quality, climate change, noise, and transportation/traffic require further analysis beyond this Initial Study, the *2007-2014 Housing Element* has the potential for significant impacts.

Comment on XVIIc. As discussed in this IS, the *2007-2014 Housing Element* has the potential to have direct or indirect impacts with regard to air quality, climate change, noise, and transportation/traffic. These issues will be studied, analyzed, and discussed in detail in the EIR.

3. Conclusion

All other impacts, except for air quality, climate change, noise, and transportation/traffic, as addressed in this document, would be less than significant, with the incorporation of the City of Oakland's *General Plan*, *LUTE EIR* mitigation measures, Municipal Code, and Standard Conditions of Approval, as cited throughout this Initial Study.

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Appendix A

Standard Conditions of Approval
as of 9-17-08

**City of Oakland
Planning and Zoning Division**

**CONDITIONS OF APPROVAL &
UNIFORMLY APPLIED DEVELOPMENT
STANDARDS IMPOSED AS STANDARD
CONDITIONS OF APPROVAL**

A list of Condition of Approval Templates for projects
approved under the Oakland Planning Code.

For Staff Use Only

This document is available electronically at
L:\CEQA Documents\StandardCOA9/17/08.finalDraft.doc

REVISED 09/05/07
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TABLE OF CONTENTS

Introduction	5
Practical Use	6

Part 1: General Conditions of Approval for all Projects

Approved Use	7
Effective Date, Expiration, Extensions and Extinguishment	7
Scope of This Approval; Major and Minor Changes	7
Conformance with Other Requirements	7
Conformance to Approved Plans; Modification of Conditions and Revocation.....	8
Signed Copy of the Conditions/Mitigation Measures	8
Indemnification.....	8
Compliance with the Conditions of Approval.....	9
Severability	9
Job Site Plans.....	9
Special Inspector/Inspections, Independent Technical Review, etc.....	9
Required Landscape Plan for New Residential Construction & Certain Additions, etc	9
Landscape Requirements for Street Frontages (Residential)	10
Assurance of Landscaping Completion.....	10
Landscape Maintenance	10
Landscape Requirements for Downslope Lots.....	11
Landscape Requirements for Street Frontages (Commercial and Manufacturing)	11
Landscape Maintenance	11

Part 2: Additional General Conditions of Approval for Major Project Cases

Underground Utilities	12
-----------------------------	----

Improvements in the Public Right-of-Way (General)	12
Improvements in the Public Right-of-Way (Specific).....	12
Payment for Public Improvements	13
Compliance Matrix	13
Construction Management Plan	13
Parking and Transportation Demand Management.....	13

Part 3: Uniformly Applied Development Standards (Imposed as Standard Conditions of Approval)

Dust Control	15
Construction Emissions	16
Days/Hours of Operation.....	16
Noise Control.....	17
Noise Complaint Procedures	17
Interior Noise.....	18
Operational Noise-General.....	18
Construction Traffic and Parking.....	18
Erosion and Sedimentation Control.....	19
Hazards Best Management Practices.....	19
Waste Reduction and Recycling.....	20
Standard Conditions of Approval / Mitigation Measures and Existing Program (SCAMMRP)	21
Vibration.....	21
Pile Driving and Other Extreme Noise Generators	22
Lighting Plan	22
Asbestos Removal in Structures	23
Asbestos Removal in Soil.....	23
Tree Removal Permit on Creekside Properties	25
Tree Removal During Breeding Season	25
Tree Removal Permit.....	25
Tree Replacement Plantings	25
Tree Protection During Construction	26
Whipsnake Habitat, Biological Monitor.....	27
Whipsnake Habitat, Placement of Debris.....	27

Whipsnake Habitat, Barrier Fence	28
Whipsnake Habitat, Downsloping Lots.....	28
Archeological Resources	28
Human Remains	29
Paleontological Resources.....	29
Erosion and Sedimentation Control Plan	29
Compliance with Policy 3.7 of the Historic Preservation Element	30
Vibrations Adjacent to Historic Structures.....	30
Soils Report	31
Geotechnical Report (Alquist Priolo).....	32
Geotechnical Report (Sesimic Hazards Zone)	33
Site Review by the Fire Services Division	34
Phase I and/or Phase II Reports.....	34
Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment.....	34
Environmental Site Assessment Reports Remediation	34
Lead-Based Paint Remediation	34
Other Materials Classified as Hazardous Waste	35
Health and Safety Plan per Assessment	35
Best Management Practices for Soil and Groundwater Hazards.....	35
Radon or Vapor Intrusion from Soil or Groundwater Sources.....	36
Vegetation Management Plan.....	36
Fire Safety Phasing Plan.....	36
Vegetation Management Plan on Creekside Properties	37
Fire Safety	37
Hazardous Materials Business Plan.....	37
Stormwater Pollution Prevention Plan	38
Drainage Plan for Projects on slopes Greater than 20%.....	38
Erosion, Sedimentation and Debris Control Measures.....	39
Site Design Measures for Post-Construction Stormwater Management	40
Source Control Measures to Limit Stormwater Pollution	40
Post-Construction Stormwater Management Plan.....	41
Maintenance Agreement for Stormwater Treatment Measures.....	42
Erosion, Sedimentation, and Debris Control Measures.....	42
Creek Protection Plan	44

Regulatory Permits and Authorizations (Creeks).....	44
Creek Monitoring	44
Creek Landscaping Plan	44
Creek Dewatering and Aquatic Life.....	45
Creek Dewatering and Diversion	45
Regulatory Permits and Authorizations (Flood Hazard Boundary)	46
Structures within Floodplain	46
Stormwater and Sewer.....	46
Traffic Fairshare for Projects Located in Southeast Oakland	47
Oakland Area Geologic Hazards Abatement District (GHAD)	47
Indoor Air Quality	48
Air Pollution Buffering for Private Open Space	49

Part 4: Conditions of Approval Based on Topic (Forthcoming; See Standard Conditions Template October 01, 2003 for possible suggestions for project specific Conditions of Approval)

INTRODUCTION

In general, projects of the same type should have the same Conditions of Approval. Variations in conditions of approval should only occur if two projects have different characteristics such as their zoning, General Plan land use category, size, location, development context, or other special considerations. This document provides a template to achieve this consistency.

This document has been divided into three parts:

- 1) General Conditions of Approval for **all** Projects;
- 2) General Conditions for **Major** Permits; and
- 3) Uniformly Applied Development Standards, imposed as Standard Conditions of Approval, as indicated below.

The Conditions listed in **Part 1** are General Conditions which we attach to each and every planning approval regardless of project type, location, size, context, or other considerations.

The Conditions listed in **Part 2** are applied to projects that require an initial decision by the Planning Commission, which are appealable to the City Council, and therefore require the imposition of special conditions of approval.

Part 3 of this document includes the City's Uniformly Applied Development Standards. These Development Standards are incorporated into projects as Standard Conditions of Approval regardless of a project's environmental determination, pursuant, in part, to CEQA Guidelines section 15183. As applicable, the Standard Conditions of Approval are adopted as requirements of an individual project when it is approved by the City and are designed to, and will, substantially mitigate environmental effects. In reviewing project applications, the City determines which of the Standard Conditions of Approval are applied, based upon the zoning district, community plan, and the type(s) of permit(s)/approvals(s) required for the project. Depending on the specific characteristics of the project type and/or project site, the City will determine which Standard Conditions of Approval apply to each project; for example, Standard Conditions of Approval related to creek protection permits will only be applied projects on creekside properties.

The Standard Conditions of Approval incorporate development policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection, Stormwater Water Management and Discharge Control Ordinance, Oakland Tree Protection Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, California Building Code, and Uniform Fire Code, among others¹), which have been found to substantially mitigate environmental effects. In EIRs the Development Standards should be included in the discussion concerning the regulatory setting of each environmental topic. Where there are peculiar circumstances associated with a project or project site that will result in significant environmental impacts despite implementation of the Standard Conditions of Approval the City will determine whether there are feasible mitigation measures to reduce the impact to less than significant levels in the course of appropriate CEQA review (mitigated negative declarations or EIRs).

¹ These Standard Conditions of Approval do not include each and every mitigation measure from every General Plan, Redevelopment Plan, or other plan EIR. Mitigation measures not included here have already been implemented or adopted as City policy.

Practical Use

This document has been designed to be incorporated into the Planning and Zoning Division's templates and staff reports. To effectively use this document please copy the entire document into each approval letter and report. Copying this into your report should keep all the formatting the same. The other option would be to use the document as a separate Attachment from your letter or report. Do not use a previous approval letter or staff report as a template. This negates the use of this document.

For an Administrative Case, delete the Introduction/ Guide. Then start with Part 1 and delete the grey heading and underline. Fill in the other grey boxes with the appropriate dates, etc. To edit grey boxes double-click with mouse and edit the default text box. Delete all of Part 2 and delete Part 3's heading and purpose once you have familiarized yourself with the contents. Delete the underline. Go through each grey heading and decide whether it is applicable to the project. All grey boxes within the condition should be filled-out. If a heading does not apply to the project delete the entire section until the next heading. Repeat until you reach the end of the document. Delete the Planning Commission approval lines. You might need to also delete spaces between conditions or add spaces to make sure that all of the condition is on one page. To turn-off grey boxes, go to View/toolbars and check forms. On the forms toolbar, click the "a" surrounded by the hatching. This should turn off all the grey shading.

For a Major Permits, delete the Introduction Guide. Follow the directions for Part 1 of the Administrative Cases above. Delete heading for Part 2 and continue filling in the grey boxes. To edit grey boxes double-click with mouse and edit the default text box. Also delete the underline. Once you reach Part 3, delete the heading and the purpose once you have familiarized yourself with the contents. Delete underline. Go through each grey heading and decide whether it is applicable to the project. All grey boxes within the condition should be filled-out. If a heading does not apply to the project delete the entire section until the next heading. The conditions should renumber themselves. Do not change any of the wording in the condition except for the grey boxes. You might need to also delete spaces between conditions or add spaces to make sure that all of the condition is on one page. To turn-off grey boxes, go to View/toolbars and check forms. On the forms toolbar, click the "a" surrounded by the hatching. This should turn off all the grey shading.

[Part 1: General Conditions of Approval for all Projects]

1. Approved Use

Ongoing

a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, **letter and/or staff report**, and the plans dated **insert date of final approved plans** and submitted on **insert "received" date of final approved plans**, and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans, will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall required prior written approval from the Director of City Planning or designee.

b) This action by the **Director of City Planning or City Planning Commission** ("this Approval") includes the approvals set forth below. This Approval includes: **List permit, code section, memo and/or date if applicable per the language in the public notice.**

I.Example: Approval of a Planned Unit Development ("PUD") for the Kenilworth Residential PUD, under Oakland Municipal Code Section 17.140

2. Effective Date, Expiration, Extensions and Extinguishment

Ongoing

Unless a different termination date is prescribed, this Approval shall expire **select one calendar year for code compliance cases / two years for all other cases** from the approval date, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired.

3. Scope of This Approval; Major and Minor Changes

Ongoing

The project is approved pursuant to the **select document. Examples include Planning Code, Subdivision Regulations, Creek Protection Ordinance etc** only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

4. Conformance with other Requirements

Prior to issuance of a demolition, grading, P-job, or other construction related permit

a) The project applicant shall comply with all other applicable federal, state, regional and/or local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the City's Public Works Agency. 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 Condition of Approval 3.

- b) The applicant shall submit approved building plans for project-specific needs related to fire protection to the Fire Services Division for review and approval, including, but not limited to automatic extinguishing systems, water supply improvements and hydrants, fire department access, and vegetation management for preventing fires and soil erosion.

5. Conformance to Approved Plans; Modification of Conditions or Revocation

Ongoing

- a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of approval, unless an earlier date is specified elsewhere.
- b) The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved plans may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension or other corrective action.
- c) Violation of any term, **Conditions/ Mitigation Measures** or project description relating to the Approvals is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approvals or alter these **Conditions/ Mitigation Measures** if it is found that there is violation of any of the **Conditions/ Mitigation Measures** or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Conditions of Approval.

6. Signed Copy of the Conditions/ Mitigation Measures

With submittal of a demolition, grading, and building permit

A copy of the approval letter and **Conditions/ Mitigation Measures** shall be signed by the property owner, notarized, and submitted with each set of permit plans to the appropriate City agency for this project.

7. Indemnification

Ongoing

- a) To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (hereafter collectively called City) from any liability, damages, claim, judgment, loss (direct or indirect) action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to participate in the defense of said Action and the applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.

- b) Within ten (10) calendar days of the filing of any Action as specified in subsection A above, the applicant shall execute a Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Letter of Agreement shall survive termination, extinguishment or invalidation of the approval. Failure to timely execute the Letter Agreement does not relieve the applicant of any of the obligations contained in this condition or other requirements or conditions of approval that may be imposed by the City.

8. Compliance with Conditions of Approval

Ongoing

The project applicant shall be responsible for compliance with the recommendations in any submitted and approved technical report and all the Conditions of Approval **and all applicable adopted mitigation measures** set forth below at its sole cost and expense, and subject to review and approval of the City of Oakland.

9. Severability

Ongoing

Approval of the project would not have been granted but for the applicability and validity of each and every one of the specified conditions **and/or mitigations**, and if one or more of such conditions **and/or mitigations** is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid conditions **and/or mitigations** consistent with achieving the same purpose and intent of such Approval.

10. Job Site Plans

Ongoing throughout demolition, grading, and/or construction

At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval **and/or mitigations**, shall be available for review at the job site at all times.

11. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Management

Prior to issuance of a demolition, grading, and/or construction permit

The project applicant may be required to pay for on-call third-party special inspector(s)/inspections as needed during the times of extensive or specialized plancheck review or construction. The project applicant may also be required to cover the full costs of independent technical review and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval. The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

General Landscape Conditions of Approval for all new residential construction or residential additions of over 500 sq. ft.

12. Required Landscape Plan for New Construction and Certain Additions to Residential Facilities

Prior to issuance of a building permit

Submittal and approval of a landscape plan for the entire site is required for the establishment of a new residential unit (excluding secondary units of five hundred (500) square feet or less), and for additions to Residential Facilities of over five hundred (500) square feet. The landscape plan and the plant materials

installed pursuant to the approved plan shall conform with all provisions of Chapter 17.124 of the Oakland Planning Code, including the following:

- a) Landscape plan shall include a detailed planting schedule showing the proposed location, sizes, quantities, and specific common botanical names of plant species.
- b) Landscape plans for projects involving grading, rear walls on downslope lots requiring conformity with the screening requirements in Section 17.124.040, or vegetation management prescriptions in the S-11 zone, shall show proposed landscape treatments for all graded areas, rear wall treatments, and vegetation management prescriptions.
- c) Landscape plan shall incorporate pest-resistant and drought-tolerant landscaping practices. Within the portions of Oakland northeast of the line formed by State Highway 13 and continued southerly by Interstate 580, south of its intersection with State Highway 13, all plant materials on submitted landscape plans shall be fire-resistant. The City Planning and Zoning Division shall maintain lists of plant materials and landscaping practices considered pest-resistant, fire-resistant, and drought-tolerant.
- d) All landscape plans shall show proposed methods of irrigation. The methods shall ensure adequate irrigation of all plant materials for at least one growing season.

13. Landscape Requirements for Street Frontages.

Prior to issuance of a final inspection of the building permit

- a) All areas between a primary Residential Facility and abutting street lines shall be fully landscaped, plus any unpaved areas of abutting rights-of-way of improved streets or alleys, provided, however, on streets without sidewalks, an unplanted strip of land five (5) feet in width shall be provided within the right-of-way along the edge of the pavement or face of curb, whichever is applicable. Existing plant materials may be incorporated into the proposed landscaping if approved by the Director of City Planning.
- b) In addition to the general landscaping requirements set forth in Chapter 17.124, a minimum of one (1) fifteen-gallon tree, or substantially equivalent landscaping consistent with city policy and as approved by the Director of City Planning, shall be provided for every twenty-five (25) feet of street frontage. On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet, the trees to be provided shall include street trees to the satisfaction of the Director of Parks and Recreation.

14. Assurance of Landscaping Completion.

Prior to issuance of a final inspection of the building permit

The trees, shrubs and landscape materials required by the conditions of approval attached to this project shall be planted before the certificate of occupancy will be issued; **or a bond, cash, deposit, or letter of credit, acceptable to the City**, shall be provided for the planting of the required landscaping. The amount of such **or a bond, cash, deposit, or letter of credit** shall equal the greater of two thousand five hundred dollars (\$2,500.00) or the estimated cost of the required landscaping, based on a licensed contractor's bid.

15. Landscape Maintenance.

Ongoing

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. All required fences, walls and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

General Landscape Conditions of Approval for all new residential construction and residential additions over 500 sq. ft. on Downslope Lots.

16. Landscape Requirements for Downslope Lots.

Prior to issuance of a final inspection of the building permit

On downslope lots where the height of the rear elevation of the primary Residential Facility exceeds twenty-eight (28) feet, landscaping that meets the following requirements shall be planted to screen the rear face of the building:

- a) A minimum of one (1) fifteen-gallon tree or five (5) five-gallon shrubs, or substantially equivalent landscaping as approved by the Director of City Planning, shall be provided for each fifteen (15) feet of lot width, measured at the rear face of the residence.
- b) The landscape screening shall be elected and maintained such that it is sufficient in size within five (5) years of planting to screen, at a minimum, the lower ten (10) feet of the structure.

General Landscape Conditions of Approval for all new commercial and manufacturing construction.

17. Landscape Requirements for Street Frontages.

Prior to issuance of a final inspection of the building permit

On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet and does not interfere with access requirements, a minimum of one (1) twenty-four (24) inch box tree shall be provided for every twenty-five (25) feet of street frontage, unless a smaller size is recommended by the City arborist. The trees to be provided shall include species acceptable to the Tree Services Division.

18. Landscape Maintenance.

Ongoing

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. All required irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

Part 2: Additional General Conditions of Approval for Major Permits (Initial Decision is by the Planning Commission and can be appealed to City Council)

19. Underground Utilities

Prior to issuance of a building permit

The project applicant shall submit plans for review and approval by the Building Services Division and the Public Works Agency, and other relevant agencies as appropriate, that show all new electric and telephone facilities; fire alarm conduits; street light wiring; and other wiring, conduits, and similar facilities placed underground. The new facilities shall be placed underground along the project applicant's street frontage and from the project applicant's structures to the point of service. The plans shall show all electric, telephone, water service, fire water service, cable, and fire alarm facilities installed in accordance with standard specifications of the serving utilities.

20. Improvements in the Public Right-of-Way (General)

Approved prior to the issuance of a P-job or building permit

- a) The project applicant shall submit Public Improvement Plans to Building Services Division for adjacent public rights-of-way (ROW) showing all proposed improvements and compliance with the conditions **and/or mitigations** and City requirements including but not limited to curbs, gutters, sewer laterals, storm drains, street trees, paving details, locations of transformers and other above ground utility structures, the design specifications and locations of facilities required by the East Bay Municipal Utility District (EBMUD), street lighting, on-street parking and accessibility improvements compliant with applicable standards and any other improvements or requirements for the project as provided for in this Approval. Encroachment permits shall be obtained as necessary for any applicable improvements- located within the public ROW.
- b) Review and confirmation of the street trees by the City's Tree Services Division is required as part of this condition **and/or mitigations**.
- c) The Planning and Zoning Division and the Public Works Agency will review and approve designs and specifications for the improvements. Improvements shall be completed prior to the issuance of the final building permit.
- d) The Fire Services Division will review and approve fire crew and apparatus access, water supply availability and distribution to current codes and standards.

21. Improvements in the Public Right-of Way (Specific)

Approved prior to the issuance of a grading or building permit

Final building and public improvement plans submitted to the Building Services Division shall include the following components: **Examples include:**

- a) Install additional standard City of Oakland streetlights **insert location**.
- b) Remove and replace any existing driveway that will not be used for access to the property with new concrete sidewalk, curb and gutter.
- c) Reconstruct drainage facility to current City standard **insert location**.
- d) Provide separation between sanitary sewer and water lines to comply with current City of Oakland and Alameda Health Department standards.

- e) Construct wheelchair ramps that comply with Americans with Disability Act requirements and current City Standards at **insert location**.
- f) Remove and replace deficient concrete sidewalk, curb and gutter within property frontage **insert location**.
- g) Provide adequate fire department access and water supply, including, but not limited to currently adopted fire codes and standards. **Insert as applicable**.
- h) **Insert as applicable**.

22. Payment for Public Improvements

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

The project applicant shall pay for and install public improvements made necessary by the project including damage caused by construction activity.

23. Compliance Matrix

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

The project applicant shall submit to the Planning and Zoning Division and the Building Services Division a **Conditions/ Mitigation Measures** compliance matrix that lists each condition of approval **and/or mitigation measure**, the City agency or division responsible for review, and how/when the project applicant has met or intends to meet the conditions **and/or mitigations**. The applicant will sign the Conditions of Approval attached to the approval letter and submit that with the compliance matrix for review and approval. The compliance matrix shall be organized per step in the plancheck/construction process unless another format is acceptable to the Planning and Zoning Division and the Building Services Division. The project applicant shall update the compliance matrix and provide it with each item submittal.

24. Construction Management Plan

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

The project applicant shall submit to the Planning and Zoning Division and the Building Services Division for review and approval a construction management plan that identifies the conditions of approval **and mitigation measures** related to construction impacts of the project and explains how the project applicant will comply with these construction-related conditions of approval **and mitigation measures**.

These Development Standards apply to ALL projects involving 50 or more new residential units or 50,000 sq. ft. or more of new non residential space.

25. Parking and Transportation Demand Management

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

The applicant shall submit for review and approval by the Planning and Zoning Division a Transportation Demand Management (TDM) plan containing strategies to reduce on-site parking demand and single occupancy vehicle travel. The applicant shall implement the approved TDM plan. The TDM shall include strategies to increase bicycle, pedestrian, transit, and carpools/vanpool use. All four modes of travel shall be considered. Strategies to consider include the following:

- a) Inclusion of additional bicycle parking, shower, and locker facilities that exceed the requirement
- b) Construction of bike lanes per the Bicycle Master Plan; Priority Bikeway Projects
- c) Signage and striping onsite to encourage bike safety
- d) 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 crossing at arterials
- e) Installation of amenities such as lighting, street trees, trash receptacles per the Pedestrian Master Plan

and any applicable streetscape plan.

- f) Direct transit sales or subsidized transit passes
- g) Guaranteed ride home program
- h) Pre-tax commuter benefits (checks)
- i) On-site car-sharing program (such as City Car Share, Zip Car, etc.)
- j) On-site carpooling program
- k) Distribution of information concerning alternative transportation options
- l) Parking spaces sold/leased separately
- m) Parking management strategies; including attendant/valet parking and shared parking spaces

Part 3: Uniformly Applied Development Standards (Imposed as Standard Conditions of Approval)

These Development Standards apply to ALL construction projects

26. Dust Control

Prior to issuance of a demolition, grading or building permit

During construction, the project applicant shall require the construction contractor to implement the following measures required as part of Bay Area Air Quality Management District's (BAAQMD) basic and enhanced dust control procedures required for construction sites. These include: **Insert as applicable.**

BASIC (Applies to ALL construction sites)

- a) Water all 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 possible.
- 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) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- d) Sweep daily (with water sweepers using reclaimed water if possible) all paved access roads, parking areas and staging areas at construction sites.
- e) Sweep streets (with water sweepers using reclaimed water if possible) at the end of each day if visible soil material is carried onto adjacent paved roads.
- f) Limit the amount of the disturbed area at any one time, where feasible.
- g) Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.
- h) Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- i) Replant vegetation in disturbed areas as quickly as feasible.
- j) Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- k) Limit traffic speeds on unpaved roads to 15 miles per hour.
- l) Clean off the tires or tracks of all trucks and equipment leaving any unpaved construction areas.

ENHANCED (ALL "Basic" Controls listed above plus the following if the construction site is greater than 4 acres)

- m) All "Basic" controls listed above, plus:
- n) Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- o) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
- p) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods

when work may not be in progress. The name and telephone number of such persons shall be provided to the BAAQMD prior to the start of construction as well as posted on-site over the duration of construction.

- q) Install appropriate wind breaks at the construction site to minimize wind blown dust.

27. Construction Emissions

Prior to issuance of a demolition, grading or building permit

To minimize construction equipment emissions during construction, the project applicant shall require the construction contractor to:

- a) Demonstrate compliance with Bay Area Air Quality Management District (BAAQMD) Regulation 2, Rule 1 (General Requirements) for all portable construction equipment subject to that rule. BAAQMD Regulation 2, Rule 1 provides the issuance of authorities to construct and permits to operate certain types of portable equipment used for construction purposes (e.g., gasoline or diesel-powered engines used in conjunction with power generation, pumps, compressors, and cranes) unless such equipment complies with all applicable requirements of the "CAPCOA" Portable Equipment Registration Rule" or with all applicable requirements of the Statewide Portable Equipment Registration Program. This exemption is provided in BAAQMD Rule 2-1-105.
- b) Perform low- NOx tune-ups on all diesel-powered construction equipment greater than 50 horsepower (no more than 30 days prior to the start of use of that equipment). Periodic tune-ups (every 90 days) shall be performed for such equipment used continuously during the construction period.

28. Days/Hours of Construction Operation

Ongoing throughout demolition, grading, and/or construction

The project applicant shall require construction contractors to limit standard construction activities as follows:

- a) Construction activities are limited to between 7:00 AM and 7:00 PM Monday through Friday, except that pile driving 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. Monday through Friday.
- b) Any construction activity proposed to occur outside of the standard hours of 7:00 am to 7:00 pm Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.
- c) Construction activity shall not occur on Saturdays, with the following possible exceptions:
 - i. Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.
 - ii. After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.
- d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.

- e) No construction activity shall take place on Sundays or Federal holidays.
- f) 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.
- g) Applicant shall use temporary power poles instead of generators where feasible.

29. Noise Control

Ongoing throughout demolition, grading, and/or construction

To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to the Planning and Zoning Division and the Building Services Division review and approval, which includes the following measures:

- 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) Stationary noise sources shall be located as far from adjacent receptors 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.
- d) 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.

30. Noise Complaint Procedures

Ongoing throughout demolition, grading, and/or construction

Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- a) A procedure and phone numbers for notifying the Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours);
- b) A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);
- c) The designation of an on-site construction complaint and enforcement manager for the project;
- d) Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and

- e) A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

31. Interior Noise

Prior to issuance of a building permit and Certificate of Occupancy

If necessary to comply with the interior noise requirements of the City of Oakland's General Plan Noise Element and achieve an acceptable interior noise level, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls), and/or other appropriate features/measures, shall be incorporated into project building design, based upon recommendations of a qualified acoustical engineer and submitted to the Building Services Division for review and approval prior to issuance of building permit. Final recommendations for sound-rated assemblies, and/or other appropriate features/measures, will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phases. Written confirmation by the acoustical consultant, HVAC or HERS specialist, shall be submitted for City review and approval, prior to Certificate of Occupancy (or equivalent) that:

- (a) Quality control was exercised during construction to ensure all air-gaps and penetrations of the building shell are controlled and sealed; and
- (b) Demonstrates compliance with interior noise standards based upon performance testing of a sample unit.
- (c) Inclusion of a Statement of Disclosure Notice in the CC&R's on the lease or title to all new tenants or owners of the units acknowledging the noise generating activity **and the single event noise occurrences**. Potential features/measures to reduce interior noise could include, but are not limited to, the following:
 - a) Installation of an alternative form of ventilation in all units identified in the acoustical analysis as not being able to meet the interior noise requirements due to adjacency to a noise generating activity, filtration of ambient make-up air in each unit and analysis of ventilation noise if ventilation is included in the recommendations by the acoustical analysis.
 - b) Prohibition of Z-duct construction.

32. Operational Noise-General ***Ongoing.***

Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 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 Planning and Zoning Division and Building Services.

33. Construction Traffic and Parking

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

The project applicant and construction contractor shall meet with appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan shall include at least the following items and requirements:

- a) A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.
- b) Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.
- c) Location of construction staging areas for materials, equipment, and vehicles at an approved location.
- d) A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. Planning and Zoning shall be informed who the Manager is prior to the issuance of the first permit issued by Building Services.
- e) Provision for accommodation of pedestrian flow.

Major Project Cases:

- f) Provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on-street spaces **or insert name of street.**
- g) Any damage to the street caused by heavy equipment, or as a result of this construction, shall be repaired, at the applicant's 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 issuance of a final inspection of the building permit. All damage that is a threat to public health or safety shall be repaired immediately. The street shall be restored to its condition prior to the new construction as established by the City Building Inspector and/or photo documentation, at the applicant's expense, before the issuance of a Certificate of Occupancy.
- h) Any heavy equipment brought to the construction site shall be transported by truck, where feasible.
- i) No materials or equipment shall be stored on the traveled roadway at any time.
- j) Prior to construction, a portable toilet facility and a debris box shall be installed on the site, and properly maintained through project completion.
- k) All equipment shall be equipped with mufflers.
- l) Prior to the end of each work day during construction, the contractor or contractors shall pick up and properly dispose of all litter resulting from or related to the project, whether located on the property, within the public rights-of-way, or properties of adjacent or nearby neighbors.

34. Erosion and Sedimentation Control [When no grading permit is required.]

Ongoing throughout demolition grading, and/or construction activities

The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. Plans demonstrating the Best Management Practices shall be submitted for review and approval by the Planning and Zoning Division and the Building Services Division. 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.

35. Hazards Best Management Practices

Prior to commencement of demolition, grading, or construction

The project applicant and construction contractor shall ensure that construction of Best Management Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

- a) Follow manufacture's recommendations on 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) Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.
- 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 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 notification of 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.

36. Waste Reduction and Recycling

The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency.

Prior to issuance of demolition, grading, or building permit

Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3), and all demolition (including soft demo). The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at www.oaklandpw.com/Page39.aspx or in the Green Building Resource Center. After approval of the plan, the project applicant shall implement the plan.

Ongoing

The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Environmental Services Division of the Public Works Agency for review and approval. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site.

This Development Standard applies to ALL projects that require a Mitigation Monitoring Program.

37. Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP)

Ongoing

All mitigation measures identified in the **insert the name of the EIR/MND** are included in the Standard Condition of Approval and Mitigation Monitoring Program (SCAMMRP) which is included in these conditions of approval and are incorporated herein by reference, as Attachment **attachment letter** as conditions of approval of the project. The Standard Conditions of Approval identified in the **insert the name of the EIR/MND** are also included in the SCAMMRP, and are therefore, not repeated in these conditions of approval. To the extent that there is any inconsistency between the SCAMMRP and these conditions, the more restrictive conditions shall govern. The project sponsor (also referred to as the Developer or Applicant) shall be responsible for compliance with the recommendation in any submitted and approved technical reports, all applicable mitigation measures adopted and with all conditions of approval set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. The SCAMMRP identifies the time frame and responsible party for implementation and monitoring for each mitigation measure. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Planning and Zoning Division. Adoption of the SCAMMRP will constitute fulfillment of the CEQA monitoring and/or reporting requirement set forth in Section 21081.6 of CEQA. Prior to the issuance of a demolition, grading, and/or construction permit, the project sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

These Development Standards apply to ALL residential projects that are located adjacent to an active rail line.

38. Vibration

Prior to issuance of a building permit

A qualified acoustical consultant shall be retained by the project applicant during the design phase of the project to comment on structural design as it relates to reducing groundborne vibration at the project site. If required in order to reduce groundborne vibration to acceptable levels **(insert FTA vibration standards applicable to the project. This information is located in the CEQA Thresholds, page 13, Table 3)**, the project applicant shall incorporate special building methods to reduce groundborne vibration being transmitted into project structures. The City shall review and approve the recommendations of the acoustical consultant and the plans implementing such recommendations. Applicant shall implement the approved plans. Potential methods include 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 ground-borne vibration to the residences above.
- b) Trenching, which involves excavating soil between the railway/freeway 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).

These Development Standards apply to ALL projects that involve pile driving or other extreme noise generation greater than 90 dba.

39. Pile Driving and Other Extreme Noise Generators

Ongoing throughout demolition, grading, and/or construction

To further reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90dBA, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the Planning and Zoning Division and the Building Services Division to ensure that maximum feasible noise attenuation will be achieved. This plan shall be based on the final design of the project. A third-party peer review, paid for by the project applicant, may be required to assist the City in evaluating the feasibility and effectiveness of the noise reduction plan submitted by the project applicant. The criterion for approving the plan shall be a determination that maximum feasible noise attenuation will be achieved. A special inspection deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official, and the deposit shall be submitted by the project applicant concurrent with submittal of the noise reduction plan. The noise reduction plan shall include, but not be limited to, an evaluation of implementing the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:

- a) Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;
- b) 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;
- c) Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;
- d) 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
- e) Monitor the effectiveness of noise attenuation measures by taking noise measurements.

These Development Standards apply to ALL construction projects that will have new exterior lighting.

40. Lighting Plan

Prior to the issuance of an electrical or building permit

The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning and Zoning Division and the Electrical Services Division of the Public Works Agency for review and approval. All lighting shall be architecturally integrated into the site.

These Development Standards apply to projects with Asbestos in Structures.

41. Asbestos Removal in Structures

Prior to issuance of a demolition permit

If asbestos-containing materials (ACM) are found to be present in building materials to be removed, demolition and disposal, the project applicant shall submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations, Title 8; Business and Professions Code; Division 3; California Health & Safety Code 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended.

These Development Standards apply to ALL construction projects that are located on naturally occurring asbestos, serpentine soils and/or ultramafic rock (generally above Highway 13 between Shepard Canyon Rd. and Keller Ave.; See map on the L Drive)

42. Asbestos Removal in Soil

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

To minimize the release of naturally occurring asbestos in the soil during construction, the project applicant shall require the construction contractor to demonstrate compliance with Bay Area Air Quality Management District's (BAAQMD) Asbestos Airborne Toxic Control Measures for Construction, Grading, Quarrying and Surface Mining Operations (implementing CCR section 93105) for activities that disturb the soil, such as grading, etc. **Include the appropriate condition/requirements depending on site area below.**

A. Minimum Requirements where area to be disturbed with Construction Grading Operations is 1 acre or less

Administrative Requirements

- a) No notification is required to the BAAQMD office; unless
- b) Upon discovery of naturally occurring asbestos, serpentine, or ultramafic rock the project applicant must notify the BAAQMD's Air Pollution Control Officer (APCO) by the next business day.

Dust Control Requirements

- a) Vehicle speed shall be ≤ 15 mph
- b) Sufficient water shall be applied to the area prior to disturbance to prevent visible emissions from crossing project boundaries.
- c) Areas to be graded or excavated shall be kept adequately wetted to prevent visible emissions from crossing project boundaries.
- d) Storage piles kept shall be adequately wetted, treated with dust suppressant, or covered when the material is not being added or removed.
- e) Equipment must be washed down before moving from the property onto the paved roadway.
- f) Visible track-out on paved public road must be cleaned using wet sweeping or High Efficiency Particulate Air (HEPA) filter equipped vacuum device within 24 hours.
- g) Implement the preceding dust control measures within 24 hours upon discovery of naturally occurring asbestos, serpentine, or ultramafic rock.

B. Minimum Requirements where area to be disturbed with Construction Operations is More than 1 acre

Administrative (Prior to the start of work)

- a) Asbestos Dust Minimization Plan shall be submitted to BAAQMD and approved prior to engaging in the any construction or grading operation.
- b) The Asbestos Dust Minimization Plan provisions shall be implemented at the beginning and maintained throughout the duration of the construction or grading activity.

Dust Control Requirements

The Asbestos Dust Minimization Plan shall include one or more provisions to address the following topics:

- a) Control for traffic on on-site unpaved roads, parking lots, and staging areas shall include: limiting vehicle speed to less than 15 mph, and one or more of the following: watering every two hours of active operations or sufficiently often to keep area wetted; applying chemical dust suppressants to consistent with manufacturer's directions; maintaining gravel cover with a silt content less than 5% and asbestos content less than .25% as determined using the asbestos bulk test method; or any other measure as effective as those listed above.
- b) Control for earthmoving activities shall include one or more of the following: pre-wetting the ground to the depth of the anticipated cuts; suspending grading operations when wind speeds are high enough to result in dust emissions crossing the property line despite applicable of dust measures; application of water prior to any land clearing; or any other measure as effective.
- c) Storage piles shall be kept adequately wetted or covered with tarps when the material is not being added or removed.
- d) Storage piles must be stabilized when inactive for more than 7 days by implementing one or more of the following: adequately wetting the site, establishing and maintaining surface crusting material, chemical dust suppressant or stabilizer, covering with tarps or vegetative cover, installation of wind barriers of 50% porosity around three sides of the pile areas, or any measure as effective.
- e) Equipment must be washed down before moving from the property onto paved roadway.
Track-out prevention and control measures shall include:
 - i. Removal of visible track-out on paved public road at any location where vehicles exit the work site using wet sweeping or High Efficiency Particulate Air (HEPA) filter equipped vacuum device at least one time per day.
 - ii. Installation of one or more of the following track-out prevention devices: gravel pad, tire shaker, wheel wash system, not less than 50 feet of pavement extending from intersection with paved public road, or other measure as effective.
- f) Control for offsite-transport shall include the following: maintenance of trucks such that no spillage can occur from holes or openings in cargo compartments; loads are adequately wetted; and either covered with tarps or loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6" from the top and that at no point of the load extends above the top of the cargo compartment.
- g) Post project stabilization of disturbed surfaces shall occur using one or more of the following: establishing vegetative cover; placement of at least 3" of non-asbestos-containing material, paving, or other measure deemed sufficient to prevent 10 mph winds from causing visible emissions.

Administrative (After completion of work)

- a) If required by the BAAQMD's APCO, the plan must include an air-monitoring component which shall specify the following: type of air sampling device; siting of the device; sampling of the device; sampling duration and frequency; and analytical method.

- b) The plan shall state the frequency with which the information will be reported to BAAQMD.
- c) The owner/operator shall keep maintain the following records for at least 7 years following completion of the project: results of any required air monitoring; documentation for any geologic evaluation conducted for the purposes of obtaining an exemption; and results of any bulk sampling conducted by the owner/operator to document applicability done or at the request of APCO.

These Development Standards apply to ALL projects that require a removal of any unprotected tree.

43. Tree Removal Permit on Creekside Properties

Prior to issuance of a final inspection of the building permit

Prior to removal of any tree located on the project site which is identified as a creekside property, the project applicant must secure the applicable creek protection permit, and abide by the conditions of that permit.

44. Tree Removal During Breeding Season

Prior to issuance of a tree removal permit

To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of raptors shall not occur during the breeding season of March 15 and August 15. If tree removal must occur during the breeding season, all sites 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 start of work from March 15 through May 31, and within 30 days prior to the start of work from June 1 through August 15. The pre-removal surveys shall be submitted to the Planning and Zoning Division and the Tree Services Division of the Public Works Agency. If the survey indicates the potential presences 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 CDFG, 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.

These Development Standards apply to ALL projects that involve a Tree Protection/Removal Permit for removal of a protected tree.

45. Tree Removal Permit

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

Prior to removal of any protected trees, per the Protected Tree Ordinance, located on the project site or in the public right-of-way adjacent to the project, the project applicant must secure a tree removal permit from the Tree Division of the Public Works Agency, and abide by the conditions of that permit.

46. Tree Replacement Plantings

Prior to issuance of a final inspection of the building permit

Replacement plantings shall be required for erosion control, groundwater replenishment, visual screening and wildlife habitat, and in order to prevent excessive loss of shade, in accordance with the following criteria:

- a) 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.
- b) Replacement tree species shall consist of *Sequoia sempervirens* (Coast Redwood), *Quercus agrifolia* (Coast Live Oak), *Arbutus menziesii* (Madrone), *Aesculus californica* (California Buckeye) or *Umbellularia californica* (California Bay Laurel) or other tree species acceptable to the Tree Services Division.
- c) Replacement trees shall be at least of twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.
- d) Minimum planting areas must be available on site as follows:
 - i. For *Sequoia sempervirens*, three hundred fifteen square feet per tree;
 - ii. For all other species listed in #2 above, seven hundred (700) square feet per tree.
- e) In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee as determined by the master fee schedule of the city may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.
- f) Plantings shall be installed prior to the issuance of a final inspection of the building permit, subject to seasonal constraints, and shall be maintained by the project applicant until established. The Tree Reviewer of the Tree Division of the Public Works Agency may require a landscape plan showing the replacement planting and the method of irrigation. Any replacement planting which fails to become established within one year of planting shall be replanted at the project applicant's expense.

These Development Standards apply to ALL projects that involve a Tree Protection/Removal Permit because a protected tree is located within 10' of construction.

47. Tree Protection During Construction

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

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:

- a) 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 City Tree Reviewer. 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.
- b) 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 City Tree Reviewer 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.
- c) 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 Tree Reviewer 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 tree reviewer. 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.

- d) 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.
- e) 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 Agency of such damage. 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.
- f) 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.

These Development Standards apply to ALL projects that are located within the Alameda Whipsnake Habitat as mapped by the California Department of Fish and Game (CDFG) and confirmed as habitat by the biological report. Generally located in the northwestern portion of the City limits. This area (in Oakland) is bounded by the Alameda/Contra Costa border to the north, Oakland/Berkeley border to the west, Snake Road to the east, and above Tunnel Road/Highway 13. (NOTE: PRESENCE OF HABITAT PRECLUDES USE OF THE IN-FILL EXEMPTION (SECTION 15332) AS THE SITE MUST HAVE “NO VALUE AS HABITAT”).**

48. Whipsnake Habitat, Biological Monitor

Prior to issuance of a demolition, grading, or building permit and ongoing throughout demolition, grading, and/or construction

If the project is located within confirmed Alameda Whipsnake Habitat area, the project applicant shall hire an on-site biological monitor who is qualified to identify Alameda Whipsnakes. The on-site biological monitor shall instruct the project superintendent and the construction crews (primarily the clearing, demolition and foundation crews) of the potential presence, status and identification of Alameda Whipsnakes. The biological monitor shall also provide information to the Planning and Zoning Division on the steps to take if a whipsnake is seen on the project site, including who to contact, to ensure that whipsnakes are not harmed or killed, as regulation by the federal Endangered Species Act.

49. Whipsnake Habitat, Placement of Debris

Prior to issuance of a demolition, grading, or building permit and throughout construction

If the project is located within confirmed Alameda Whipsnake Habitat area, the project applicant shall ensure that the placement of construction debris is limited to the area immediate adjacent to the foundation of the proposed buildings or and to the area between the foundation and the street. Install flexible construction fencing at the limit of work line (approximately ten feet beyond the foundation of the proposed building other than in the direction of the street). Such construction fencing shall limit the placement of construction materials and construction debris to inside the fencing.

50. Whipsnake Habitat, Barrier Fence***Prior to issuance of a demolition, grading, or building permit and throughout construction***

If the project is located within confirmed Alameda Whipsnake Habitat area, the project applicant shall install a solid fence along the real limit of construction line, and for a distance of **insert distance** perpendicular to the real line, to prevent whipsnakes from entering the work site. The snake barrier shall be constructed as follows and shall remain in place throughout the entire construction period:

- a) Plywood sheets at least three feet in height;
- b) Buried four foot, six inches into the ground
- c) Soil back-filled against the plywood fence to create a solid barrier at the ground;
- d) Plywood sheets maintained in an upright position with wooden or masonry stakes;
- e) Ends of each plywood sheet overlapped to ensure a continuous barrier.

51. Whipsnake Habitat, Downsloping Lots***Prior to issuance of a demolition, grading, or building permit and throughout construction***

If the project is located within confirmed Alameda Whipsnake Habitat area, the project applicant shall install erosion control devices, such as hay bales, at the downhill limit of construction line to prevent rocks and soil from moving downhill.

These Development Standards apply to ALL projects that involve a Grading Permit.

52. Archaeological Resources***Ongoing throughout demolition, grading, and/or construction***

- a) Pursuant to CEQA Guidelines section 15064.5 (f), “provisions for historical or unique archaeological resources accidentally discovered during construction” should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Oakland. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.
- b) In considering any suggested measure proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the project applicant shall determine whether avoidance is necessary and feasible in light 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) shall be instituted. Work may proceed on other parts of the project site while measure for historical resources or unique archaeological resources is carried out.
- c) Should an archaeological artifact or feature be discovered on-site during project construction, all activities within a 50-foot radius of the find would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. If the deposit is determined to be significant, the project applicant and the qualified archaeologist shall meet to determine the appropriate

avoidance measures or other appropriate measure, subject to approval by the City of Oakland, which shall assure implementation of appropriate measure measures recommended by the archaeologist. Should archaeologically-significant materials be recovered, the qualified archaeologist shall recommend appropriate analysis and treatment, and shall prepare a report on the findings for submittal to the Northwest Information Center.

53. Human Remains

Ongoing throughout demolition, grading, and/or construction

In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines 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 Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. 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.

54. Paleontological Resources

Ongoing throughout demolition, grading, and/or construction

In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995,1996)). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.

These Development Standards apply to ALL projects that require a Grading Permit, except for projects that involve contruction on slopes that exceed 20%. (See other Erosion and Sedimentation Control Plan.

55. Erosion and Sedimentation Control Plan

Prior to any grading activities

- a) The project applicant shall obtain a grading permit if required by the Oakland Grading Regulations pursuant to Section 15.04.660 of the Oakland Municipal Code. The grading permit application shall include an erosion and sedimentation control plan for review and approval by the Building Services Division. 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 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 Director of Development or designee. 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.

Ongoing throughout grading and construction activities

- b) The project applicant shall implement the approved erosion and sedimentation plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Building Services Division.

These Development Standards apply to ALL projects that propose demolition of a potentially designated historic structure (PDHP) OR a CEQA Historic Resource .

56. Compliance with Policy 3.7 of the Historic Preservation Element (Property Relocation Rather than Demolition)

Prior to issuance of a demolition permit

The project applicant shall make a good faith effort to relocate the building located at **insert project location** to a site acceptable to the Planning and Zoning Division and the Oakland Cultural Heritage Survey. Good faith efforts include, at a minimum, 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 Planning and Zoning Division;
- 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.

These Development Standards apply to ALL projects that involve construction that is adjacent to a CEQA Historic Resource or a potentially designated historic property (PDHP).

57. Vibrations Adjacent Historic Structures

Prior to issuance of a demolition, grading or building permit

The project applicant shall retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage the **insert historic building name** (Historic Structure) and design means and methods of construction that shall be utilized to not exceed the thresholds.

These Development Standards apply to ALL projects that require a Tentative Tract Map or Tentative Parcel Map (not part of this approval) except condominium conversions.

58. Soils Report

Required as part of the submittal of a Tentative Tract or Tentative Parcel Map.

A preliminary soils report for each construction site within the project area shall be required as part if this project and submitted for review and approval by the Building Services Division. The soils reports shall be based, at least in part, on information obtained from on-site testing. Specifically the minimum contents of the report should include:

A. Logs of borings and/or profiles of test pits and trenches:

- a) The minimum number of borings acceptable, when not used in combination with test pits or trenches, shall be two (2), when in the opinion of the Soils Engineer such borings shall be sufficient to establish a soils profile suitable for the design of all the footings, foundations, and retaining structures.
- b) The depth of each boring shall be sufficient to provide adequate design criteria for all proposed structures.
- c) All boring logs shall be included in the soils report.

B. Test pits and trenches

- a) Test pits and trenches shall be of sufficient length and depth to establish a suitable soils profile for the design of all proposed structures.
- b) Soils profiles of all test pits and trenches shall be included in the soils report.

C. A plat shall be included which shows the relationship of all the borings, test pits, and trenches to the exterior boundary of the site. The plat shall also show the location of all proposed site improvements. All proposed improvements shall be labeled.

D. Copies of all data generated by the field and/or laboratory testing to determine allowable soil bearing pressures, shear strength, active and passive pressures, maximum allowable slopes where applicable and any other information which may be required for the proper design of foundations, retaining walls, and other structures to be erected subsequent to or concurrent with work done under the grading permit.

E. Soils Report. A written report shall be submitted which shall include, but is not limited to, the following:

- a) Site description;
- b) Local and site geology;
- c) Review of previous field and laboratory investigations for the site;
- d) Review of information on or in the vicinity of the site on file at the Information Counter, City of Oakland, Office of Planning and Building;
- e) Site stability shall be addressed with particular attention to existing conditions and proposed corrective attention to existing conditions and proposed corrective actions at locations where land stability problems exist;
- f) Conclusions and recommendations for foundations and retaining structures, resistance to lateral loading, slopes, and specifications, for fills, and pavement design as required;
- g) Conclusions and recommendations for temporary and permanent erosion control and drainage. If not provided in a separate report they shall be appended to the required soils report;
- h) All other items which a Soils Engineer deems necessary;
- i) The signature and registration number of the Civil Engineer preparing the report.

- F. The Director of Planning and Building may reject a report that she/he believes is not sufficient. The Director of Planning and Building may refuse to accept a soils report if the certification date of the responsible soils engineer on said document is more than three years old. In this instance, the Director may require that the old soils report be recertified, that an addendum to the soils report be submitted, or that a new soils report be provided.

These Development Standards apply to ALL projects that require an application for a Tentative Tract Map or Tentative Parcel Map (not part of this approval) AND are located partially or wholly within the Alquist-Priolo Special Studies Zone. Exceptions include condominium conversions, and single family wood or steel frame dwellings not exceeding two stories, when not part of a development of 4 or more dwellings. See Arcview for Hayfault Fault and Alquist-Priolo Special Studies Zone layers.

59. Geotechnical Report

Required as part of the submittal of a tentative Tract Map or tentative Parcel Map

- a) A site-specific, design level, Fault Zone geotechnical investigation for each construction site within the project area shall be required as part of this project and submitted for review and approval to the Building Services Division. Specifically:
 - i. Each investigation shall include an analysis of expected ground motions at the site from identified faults. The analyses shall be in accordance with applicable City ordinances and policies, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.
 - ii. The investigations shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).
 - iii. The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, shall be included in the final design, as approved by the City of Oakland.
 - iv. The geotechnical report shall include a map prepared by a land surveyor or civil engineer that shows all field work and location of the "No Build" zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge.
 - v. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the project's design phase, shall be incorporated in the project.
 - vi. Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.
 - vii. A peer review is required for the Geotechnical Report. Personnel reviewing the geologic report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.
- b) Tentative Tract or Parcel Map approvals shall require, but not be limited to, approval of the Geotechnical Report.

These Development Standards apply to ALL projects that require an application for a Tentative Tract Map or Tentative Parcel Map (not part of this approval) AND are located partially or wholly within the Seismic Hazards Zone. Exceptions include condominium conversions and single family wood or steel frame dwellings not exceeding two stories, when not part of a development of 4 or more dwellings. See Arcview for Seismic Hazards Zone layer.

60. Geotechnical Report

Required as part of the submittal of a tentative Tract Map or tentative Parcel Map

- a) A site-specific, design level, Landslide or Liquefaction geotechnical investigation for each construction site within the project area shall be required as part of this project and submitted for review and approval by the Building Services Division. Specifically:
 - i. Each investigation shall include an analysis of expected ground motions at the site from identified faults. The analyses shall be in accordance with applicable City ordinances and policies, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.
 - ii. The investigations shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).
 - iii. The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, shall be included in the final design, as approved by the City of Oakland.
 - iv. The geotechnical report shall include a map prepared by a land surveyor or civil engineer that shows all field work and location of the “No Build” zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge.
 - v. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the project's design phase, shall be incorporated in the project.
 - vi. Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.
 - vii. A peer review is required for the Geotechnical Report. Personnel reviewing the geologic report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.
- b) Tentative Tract or Parcel Map approvals shall require, but not be limited to, approval of the Geotechnical Report.

These Development Standards apply (a) to ALL projects that include the redevelopment or reuse of historically industrial or commercial buildings; (b) if the site has been identified in City records for hazardous materials, such as the Permit Tracking System (PTS), OR (c) if the site has been identified on the State Cortese List [NOTE: PRESENCE ON CORTESE LIST PRECLUDES USE OF A CATEGORICAL EXEMPTION].

61. Site Review by the Fire Services Division***Prior to the issuance of demolition, grading or building permit***

The project applicant shall submit plans for site review and approval to the Fire Prevention Bureau Hazardous Materials Unit. Property owner may be required to obtain or perform a Phase II hazard assessment.

62. Phase I and/or Phase II Reports***Prior to issuance of a demolition, grading, or building permit***

Prior to issuance of demolition, grading, or building permits the project applicant shall submit to the Fire Prevention Bureau, Hazardous Materials Unit, a Phase I environmental site assessment report, and a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer.

63. Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment***Prior to issuance of any demolition, grading or building permit***

The project applicant shall submit a comprehensive assessment report to the Fire Prevention Bureau, Hazardous Materials Unit, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACM), lead-based paint, and any other building materials or stored materials classified as hazardous waste by State or federal law.

64. Environmental Site Assessment Reports Remediation***Prior to issuance of a demolition, grading, or building permit***

If the environmental site assessment reports recommend remedial action, the project applicant shall:

- a) Consult with the appropriate local, State, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.
- b) Obtain and submit written evidence of approval for any remedial action if required by a local, State, or federal environmental regulatory agency.
- c) Submit a copy of all applicable documentation required by local, State, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II environmental site assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans.

65. Lead-based Paint Remediation***Prior to issuance of any demolition, grading or building permit***

If lead-based paint is present, the project applicant shall submit specifications to the Fire Prevention Bureau, Hazardous Materials Unit signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: Cal/OSHA's Construction Lead Standard, 8 CCR1532.1 and DHS regulation 17 CCR Sections 35001 through 36100, as may be amended.

66. Other Materials Classified as Hazardous Waste***Prior to issuance of any demolition, grading or building permit***

If other materials classified as hazardous waste by State or federal law are present, the project applicant shall submit written confirmation to Fire Prevention Bureau, Hazardous Materials Unit that all State and federal laws and regulations shall be followed when profiling, handling, treating, transporting and/or disposing of such materials.

67. Health and Safety Plan per Assessment***Prior to issuance of any demolition, grading or building permit***

If the required lead-based paint/coatings, asbestos, or PCB assessment finds presence of such materials, the project applicant shall create and implement a health and safety plan to protect workers from risks associated with hazardous materials during demolition, renovation of affected structures, and transport and disposal.

68. Best Management Practices for Soil and Groundwater Hazards***Ongoing throughout demolition, grading, and construction activities***

The project applicant shall implement all of the following Best Management Practices (BMPs) regarding potential soil and groundwater hazards.

- a) Soil generated by construction activities shall be stockpiled onsite 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 agencies laws, in particular, the Regional Water Quality Control Board (RWQCB) and/or the Alameda County Department of Environmental Health (ACDEH) and policies of the City of Oakland.
- b) Groundwater pumped from the subsurface shall be contained onsite 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 of the City of Oakland, the RWQCB and/or the ACDEH. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building (pursuant to the Standard Condition of Approval regarding Radon or Vapor Intrusion from Soil and Groundwater Sources
- c) Prior to issuance of any demolition, grading, or building permit, the applicant shall submit for review and approval by the City of Oakland, written verification that the appropriate federal, state or county oversight authorities, including but not limited to the RWQCB and/or the ACDEH, have granted all required clearances and confirmed that the all applicable standards, regulations and conditions for all previous contamination at the site. The applicant also shall provide evidence from the City's Fire Department, Office of Emergency Services, indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports.

These Development Standards apply to ALL construction projects that include 1) habitable space below the ground AND/OR 2) the redevelopment or reuse of historically industrial or commercial buildings OR 3) Soil and/or Groundwater Hazards.

69. Radon or Vapor Intrusion from Soil or Groundwater Sources***Ongoing***

The project applicant shall submit documentation to determine whether radon or vapor intrusion from the groundwater and soil is located on-site as part of the Phase I documents. The Phase I analysis shall be submitted to the Fire Prevention Bureau, Hazardous Materials Unit, for review and approval, along with a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer. Applicant shall implement the approved recommendations.

These Development Standards apply to ALL projects that are located within the 2004 Wildfire Assessment District per map located on the L Drive.

70. Vegetation Management Plan

<http://www.oaklandnet.com/wildfirePrevention/WildfirePreventionAssessmentDistrictMap.pdf>

Prior to issuance of a demolition, grading, and/or construction and Ongoing

- a) The project applicant shall submit a vegetation management plan to the Planning and Zoning Division and Fire Services Division that includes if deemed appropriate, but not limited to the, following measures:
 - i. Removal of dead vegetation overhanging roof and chimney areas;
 - ii. Removal of leaves and needles from roofs;
 - iii. Planting and placement of fire-resistant plants around the house and phasing out flammable vegetation;
 - iv. Trimming back vegetation around windows;
 - v. Removal of flammable vegetation on hillside slopes greater than 20%;
 - vi. Pruning the lower branches of tall trees;
 - vii. Clearing out ground-level brush and debris;
 - viii. Stacking woodpiles away from structures.
- b) The project applicant shall enter into a maintenance agreement with the City that ensures that landscaping will be maintained and adhere to measures listed above.

These Development Standards apply to ALL phased projects (PUD's or projects with Development Agreements).

71. Fire Safety Phasing Plan***Prior to issuance of a demolition, grading, and/or construction and concurrent with any p-job submittal permit***

The project applicant shall submit a separate fire safety phasing plan to the Planning and Zoning Division and Fire Services Division for their review and approval. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. Fire Services Division may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase.

These Development Standards apply to ALL projects that are located within the 2004 Wildfire Assessment District per map located on the L Drive AND are located on project sites identified as creekside properties.

72. Vegetation Management Plan on Creekside Properties**<http://www.oaklandnet.com/wildfirePrevention/DosandDonts.pdf>*****Prior to issuance of a demolition, grading, and/or construction and Ongoing***

- a) The project applicant shall submit a vegetation management plan for review and approval by the Planning and Zoning Division, Fire Services Division, and Environmental Services Division of the Public Works Agency that includes, if deemed appropriate, the following measures:
 - i. Identify and do not disturb a 20-foot creek buffer from the top of the creek bank. If the top of bank cannot be identified, leave a 50-foot buffer from the centerline of the creek or as wide a buffer as possible between the creek centerline and the proposed site development.
 - ii. Identify and leave "islands" of vegetation in order to prevent erosion and landslides and protect nesting habitat.
 - iii. Leave at least 6 inches of vegetation on the site.
 - iv. Trim tree branches from the ground up (limbing up) and leave tree canopy intact.
 - v. Leave stumps and roots from cut down trees to prevent erosion.
 - vi. Plant fire-appropriate, drought-tolerant, preferably native vegetation.
 - vii. Err on the side of caution. If you don't know if a plant, tree or area is sensitive, ask for a second opinion before you cut.
 - viii. Provide erosion and sediment control protection if cutting vegetation on a steep slope.
 - IX. Leave tall shrubbery at least 3-feet high.
 - X. Fence off sensitive plant habitats and creek areas to protect from goat grazing.
 - XI. Obtain a tree protection permit for a protected tree (includes all mature trees except eucalyptus and Monterey pine).
 - XII. Contact the City Tree Department (615-5850) for dead trees.
 - XIII. Do not clear-cut vegetation. This can lead to erosion and severe water quality problems and destroy important habitat.
 - XIV. Do not remove vegetation within 20-feet of the top of 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 proposed site development.
 - XV. Do not trim/prune branches that are larger than 4 inches in diameter.
 - XVI. Do not remove tree canopy.
 - XVII. Do not dump cut vegetation in a creek.
 - XVIII. Do not cut tall shrubbery to less than 3-feet high.
 - XIX. Do not cut off short vegetation (grasses, ground-cover) to less than 6-inches high.

73. Fire Safety***Prior to and ongoing throughout demolition, grading, and/or construction***

The project applicant and construction contractor will ensure that during project construction, all construction vehicles and equipment will be fitted with spark arrestors to minimize accidental ignition of dry construction debris and surrounding dry vegetation.

These Development Standards apply to ALL projects that involve the handling, storage, or transportation of hazardous materials on-site.

74. Hazardous Materials Business Plan***Prior to issuance of a business license***

The project applicant shall submit a Hazardous Materials Business Plan for review and approval by Fire Prevention Bureau, Hazardous Materials Unit. Once approved this plan shall be kept on file with the City

and will be updated as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle the materials and provides information to the Fire Services Division should emergency response be required. 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.

These Development Standards apply to ALL projects that disturb one (1) acre or more of surface area.

75. Stormwater Pollution Prevention Plan (SWPPP)

Prior to and ongoing throughout demolition, grading, and/or construction activities

The project applicant must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the State Water Resources Control Board (SWRCB). The project applicant must file a notice of intent (NOI) with the SWRCB. The project applicant will be required to prepare a stormwater pollution prevention plan (SWPPP) and submit the plan for review and approval by the Building Services Division. At a minimum, the SWPPP shall include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; Best Management Practices (BMPs), and an inspection and monitoring program. Prior to the issuance of any construction-related permits, the project applicant shall submit to the Building Services Division a copy of the SWPPP and evidence of submittal of the NOI to the SWRCB. Implementation of the SWPPP shall start with the commencement of construction and continue through the completion of the project. After construction is completed, the project applicant shall submit a notice of termination to the SWRCB.

These Development Standards apply to ALL projects that involve construction on slopes greater than 20%.

76. Drainage Plan for Projects on Slopes Greater than 20%

Prior to issuance of building permit (or other construction-related permit)

The project drawings submitted for a building permit (or other construction-related permit) shall contain a drainage plan to be reviewed and approved by the Building Services Division. The drainage plan shall include measures to reduce the post-construction volume and velocity of stormwater runoff to the maximum extent practicable. Stormwater runoff shall not be augmented to adjacent properties or creeks. The drainage plan shall include and identify the following:

- i. All proposed impervious surface on the site;
- ii. Anticipated directional flows of on-site stormwater runoff;
- iii. Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces;
- iv. Source control measures to limit the potential for stormwater pollution; and
- v. Stormwater treatment measures to remove pollutants from stormwater runoff.

77. **Erosion, Sedimentation, and Debris Control Measures**

Prior to issuance of demolition, grading, or construction-related permit

The project applicant shall submit an erosion and sedimentation control plan for review and approval by the Building Services Division. All work shall incorporate all applicable “Best Management Practices (BMPs) for the construction industry, and as outlined in the Alameda Countywide Clean Water Program pamphlets, including BMP’s for dust, erosion and sedimentation abatement per Chapter Section 15.04 of the Oakland Municipal Code. The measures shall include, but are not limited to, the following:

BASIC (Applies to ALL construction sites)

- a) 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 street, gutters, stormdrains.
- b) In accordance with an approved erosion control plan, the project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable 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.
- c) 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.
- d) Install filter materials acceptable to the Engineering Division 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.
- e) Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.
- f) Direct and locate tool and equipment cleaning so that wash water does not discharge into the street, gutters, or stormdrains.
- g) 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 storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.
- h) Gather all construction debris on a regular basis and place them in a dumpster or other container which is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.
- i) 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.
- j) 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 street, gutter, stormdrains.

- k) 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 Board (RWQB).
- l) All erosion and sedimentation control measures shall be monitored regularly by the project applicant. The City may require erosion and sedimentation control measures to be inspected by a qualified environmental consultant (paid for by the project applicant) during or after rain events. If measures are insufficient to control sedimentation and erosion then the project applicant shall develop and implement additional and more effective measures immediately

These Development Standards apply to ALL projects that create or replace LESS than 10,000 square feet of impervious service or involve construction of one single family home. Exceptions to this standard include the following:

- a) Sidewalks, bicycle lanes, trails, bridge accessories, guardrails, and landscape features associated with the street.
- b) Routine maintenance and repair of existing impervious surfaces, including roof and pavement resurfacing and road pavement structural section rehabilitation work within the existing pavement footprint; and
- c) Reconstruction work within an existing public street right-of-way where both sides of the right-of-way are already developed.

78. Site Design Measures for Post-Construction Stormwater Management

Prior to issuance of building permit (or other construction-related permit)

The project drawings submitted for a building permit (or other construction-related permit) shall contain a final site plan to be reviewed and approved by Planning and Zoning. The final site plan shall incorporate appropriate site design measures to manage stormwater runoff and minimize impacts to water quality after the construction of the project. These measures may include, but are not limited to, the following:

- i. Minimize impervious surfaces, especially directly connected impervious surfaces;
- ii. Utilize permeable paving in place of impervious paving where appropriate;
- iii. Cluster buildings;
- iv. Preserve quality open space; and
- v. Establish vegetated buffer areas.

Ongoing

The approved plan shall be implemented and the site design measures shown on the plan shall be permanently maintained.

79. Source Control Measures to Limit Stormwater Pollution

Prior to issuance of building permit (or other construction-related permit)

The applicant shall implement and maintain all structural source control measures imposed by the Chief of Building Services to limit the generation, discharge, and runoff of stormwater pollution.

Ongoing

The applicant, or his or her successor, shall implement all operational Best Management Practices (BMPs) imposed by the Chief of Building Services to limit the generation, discharge, and runoff of stormwater pollution.

These Development Standards apply to ALL projects 1) where the application for a zoning permit was deemed complete on or after February 15, 2005 that create or replace 1 acre or MORE of impervious surface or 2) that the application for a zoning permit was deemed complete on or after August 15, 2006 that create or replace 10,000 square feet or more of impervious surface. Exception include the following:

- a) Sidewalks, bicycle lanes, trails, bridge accessories, guardrails, and landscape features associated with the street.**
- b) Routine maintenance and repair of existing impervious surfaces, including roof and pavement resurfacing and road pavement structural section rehabilitation work within the existing pavement footprint; and**
- c) Reconstruction work within an existing public street right-of-way where both sides of the right-of-way are already developed.**

80. Post-Construction Stormwater Management Plan

Prior to issuance of building permit (or other construction-related permit)

The applicant shall comply with the requirements of Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Alameda Countywide Clean Water Program. The applicant shall submit with the application for a building permit (or other construction-related permit) a completed Construction-Permit-Phase Stormwater Supplemental Form to the Building Services Division. The project drawings submitted for the building permit (or other construction-related permit) shall contain a stormwater management plan, for review and approval by the City, to manage stormwater run-off and to limit the discharge of pollutants in stormwater after construction of the project to the maximum extent practicable.

- a) The post-construction stormwater management plan shall include and identify the following:
 - i. All proposed impervious surface on the site;
 - ii. Anticipated directional flows of on-site stormwater runoff; and
 - iii. Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces; and
 - iv. Source control measures to limit the potential for stormwater pollution;
 - v. Stormwater treatment measures to remove pollutants from stormwater runoff; and
 - vi. Hydromodification management measures so that post-project stormwater runoff does not exceed the flow and duration of pre-project runoff, if required under the NPDES permit.
- b) The following additional information shall be submitted with the post-construction stormwater management plan:
 - i. Detailed hydraulic sizing calculations for each stormwater treatment measure proposed; and
 - ii. Pollutant removal information demonstrating that any proposed manufactured/mechanical (i.e. non-landscape-based) stormwater treatment measure, when not used in combination with a landscape-based treatment measure, is capable of removing the range of pollutants typically removed by landscape-based treatment measures and/or the range of pollutants expected to be generated by the project.

All proposed stormwater treatment measures shall incorporate appropriate planting materials for stormwater treatment (for landscape-based treatment measures) and shall be designed with considerations for vector/mosquito control. Proposed planting materials for all proposed landscape-based stormwater treatment measures shall be included on the landscape and irrigation plan for the project. The applicant is not required to include on-site stormwater treatment measures in the post-construction stormwater

management plan if he or she secures approval from Planning and Zoning of a proposal that demonstrates compliance with the requirements of the City's Alternative Compliance Program.

Prior to final permit inspection

The applicant shall implement the approved stormwater management plan.

81. Maintenance Agreement for Stormwater Treatment Measures

Prior to final zoning inspection

For projects incorporating stormwater treatment measures, the applicant shall enter into the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit, which provides, in part, for the following:

- i. The 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 agreement shall be recorded at the County Recorder's Office at the applicant's expense.

These Development Standards apply to ALL projects that involve a Creek Protection Permit.

82. Erosion, Sedimentation, and Debris Control Measures

Prior to issuance of demolition, grading, or construction-related permit

The project applicant shall submit an erosion and sedimentation control plan for review and approval by the Building Services Division. All work shall incorporate all applicable "Best Management Practices (BMPs) for the construction industry, and as outlined in the Alameda Countywide Clean Water Program pamphlets, including BMP's for dust, erosion and sedimentation abatement per Chapter Section 15.04 of the Oakland Municipal Code. The measures shall include, but are not limited to, the following:

BASIC (Applies to ALL construction sites)

- a) 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.
- b) In accordance with an approved erosion control plan, the project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable 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.
- c) 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.

- d) 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.
- e) Install filter materials (such as sandbags, filter fabric, etc.) acceptable to the Engineering Division 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.
- f) Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.
- g) Direct and locate tool and equipment cleaning so that wash water does not discharge into the creek.
- h) 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 storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.
- i) Gather all construction debris on a regular basis and place them in a dumpster or other container which is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.
- j) 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.
- k) 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, stormdrains.
- l) 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 Board (RWQB).
- m) 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 Planning and Zoning.
- n) All erosion and sedimentation control measures shall be monitored regularly by the project applicant. The City may require erosion and sedimentation control measures to be inspected by a qualified environmental consultant (paid for by the project applicant) during or after rain events. If measures are insufficient to control sedimentation and erosion then the project applicant shall develop and implement additional and more effective measures immediately.

These Development Standards apply to ALL projects that involve a Category III and IV Creek Protection permit).

83. Creek Protection Plan

<http://www.oaklandpw.com/creeks>

Prior to and ongoing throughout demolition, grading, and/or construction activities

- a) The approved creek protection plan shall be included in the project drawings submitted for a building permit (or other construction-related permit). The project applicant shall implement the creek protection plan to minimize potential impacts to the creek during and after construction of the project. The plan shall fully describe in plan and written form all erosion, sediment, stormwater, and construction management measures to be implemented on-site.
- b) If the plan includes a stormwater system, all stormwater outfalls shall include energy dissipation that slows the velocity of the water at the point of outflow to maximize infiltration and minimize erosion. The project shall not result in a substantial increase in stormwater runoff volume or velocity to the creek or storm drains.

84. Regulatory Permits and Authorizations

Prior to issuance of a demolition, grading, or building permit within vicinity of the creek

Prior to construction within the vicinity of the creek, the project applicant shall obtain all necessary regulatory permits and authorizations from the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), California Department of Fish and Game, and the City of Oakland, and shall comply with all conditions issued by applicable agencies. Required permit approvals and certifications may include, but not be limited to the following:

- a) U.S. Army Corps of Engineers (Corps): Section 404. Permit approval from the Corps shall be obtained for the placement of dredge or fill material in Waters of the U.S., if any, within the interior of the project site, pursuant to Section 404 of the federal Clean Water Act.
- b) Regional Water Quality Control Board (RWQCB): Section 401 Water Quality Certification. Certification that the project will not violate state water quality standards is required before the Corps can issue a 404 permit, above.
- c) California Department of Fish and Game (CDFG): Section 1602 Lake and Streambed Alteration Agreement. Work that will alter the bed or bank of a stream requires authorization from CDFG.

85. Creek Monitoring

Prior to issuance of a demolition, grading, or building permit within vicinity of the creek

A qualified geotechnical engineer and/or environmental consultant shall be retained and paid for by the project applicant to make site visits during all grading activities; and as a follow-up, submit to the Building Services Division a letter certifying that the erosion and sedimentation control measures set forth in the Creek Protection Permit submittal material have been instituted during the grading activities.

86. Creek Landscaping Plan

Prior to issuance of a demolition, grading, or building permit within vicinity of the creek

The project applicant shall develop a final detailed landscaping and irrigation plan for review and approval by the Planning and Zoning Division prepared by a licensed landscape architect or other qualified person. Such a plan shall include a planting schedule, detailing plant types and locations, and a system for temporary irrigation of plantings.

- a) 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.
- b) All landscaping indicated on the approved landscape plan shall be installed prior to the issuance of a Final inspection of the building permit, unless bonded pursuant to the provisions of Section 17.124.50 of the Oakland Planning Code.
- c) All landscaping areas shown on the approved plans shall be maintained in neat and safe conditions, and all plants shall be maintained in good growing condition and, whenever necessary replaced with new plant materials to ensure continued compliance with all applicable landscaping requirements. All paving or impervious surfaces shall occur only on approved areas.

These Development Standards apply to ALL projects that involve a Creek Protection Permit AND dewatering or diversion of water.

87. Creek Dewatering and Aquatic Life

Prior to the start of and ongoing throughout any in-water construction activity

- a) 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 aquatic life (native fish, native amphibians, and western pond turtles) below the dam or other artificial obstruction.
- b) The project applicant shall hire a biologist, and obtain all necessary State and federal permits (e.g. CDFG Scientific Collecting Permit), to relocate all native fish/native amphibians/pond turtles within the work site, prior to dewatering. The applicant shall first obtain a project-specific authorization from the CDFG and/or the USFWS, as applicable to relocate these animals. Captured native fish/native amphibians/pond turtles shall be moved to the nearest appropriate site on the stream channel downstream. The biologist/contractor 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 CDFG and/or the USFWS, as applicable.

88. Creek Dewatering and Diversion

Prior to the start of any in-water construction activities

If installing any dewatering or diversion device(s), the project applicant shall develop and implement a detailed dewatering and diversion plan for review and approval by the Building Services Division. All proposed dewatering and diversion practices shall be consistent with the requirements of the Streambed Alteration Agreement issued by the California Department of Fish and Game.

- a) Ensure that construction and operation of the devices meet the standards in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Control Board (RWQCB).
- b) Construct coffer dams and/or water diversion system of a non-erodible material which will cause little or no siltation. Maintain coffer dams and the water diversion system in place and functional throughout

the construction period. If the coffer dams or water diversion system fail, repair immediately based on the recommendations of a qualified environmental consultant. Remove devices only after construction is complete and the site stabilized.

- c) Pass pumped water through a sediment settling device before returning the water to the stream channel. Provide velocity dissipation measures at the outfall to prevent erosion.

These Development Standards apply to ALL projects that involve new construction within the 100 year flood plain as mapped on a Federal Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map. See Arcview for the 100 and 500 year flood layer.

89. Regulatory Permits and Authorizations

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

Prior to construction within the floodway or floodplain, the project applicant shall obtain all necessary regulatory permits and authorizations from the Alameda County Flood Control and Water Conservation District and shall comply with all conditions issued by that agency.

90. Structures within a Floodplain

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

- a) The project applicant shall retain the civil engineer of record to ensure that the project's development plans and design contain finished site grades and floor elevations that are elevated above the Base Flood Elevation (BFE) if established within a 100-year flood event.
- b) The project applicant shall submit final hydrological calculations that ensure that the structure will not interfere with the flow of water or increase flooding.

These Development Standards apply to ALL projects that involve a new connection to the City's stormwater and sewer system.

91. Stormwater and Sewer

Prior to completing the final design for the project's sewer service

Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.

These Development Standards apply to ALL projects (new, infill, change of use, and remodeling) that are located within the Southeast Oakland Hills TIP/TIF area per the map located on the L Drive. The area generally extends along both sides of the I-580

freeway corridor between the Seminary Avenue and the 98th Avenue interchanges. Exceptions to this standard include the following:

- a) Affordable housing units.
- b) Residential remodeling where there is no change in use or the number of units.
- c) Reconstruction of a razed structure if proof of destruction is submitted that shows the destruction of the house prior to the Ordinance.

92. Traffic Fairshare for Projects Located in Southeast Oakland

Prior to the issuance of a certificate of occupancy

Project applicants shall submit fair share traffic payments to the City in accordance with Chapter 10.70 of the Oakland Municipal Code for funding capital improvement projects to accommodate future traffic demand in the area.

These Development Standards apply to ALL projects that involve any new construction (residential, commercial, or industrial); AND

includes a geologic hazard, as defined in California Public Resource Section 26507, as an actual or threatened landslide, land subsidence, soil erosion, earthquake, fault movement, or any other natural or unnatural movement of land or earth; AND

technical, environmental peer review, or other applicable report pertaining to the actual or threatened geologic hazard specify the need to require a GHAD OR a greater than normal degree of construction attention, monitoring of the site, or maintenance of project improvements.

93. Oakland Area Geologic Hazards Abatement District (GHAD)

Prior to the approval of the final map

Prior to approval of the final map, the project shall complete annexation into the Oakland Area GHAD and provide evidence that all assessments, reserves and other requirements necessary to fund the GHAD with respect to the annexed properties have been established and authorized. The applicant shall prepare a Plan of Control, as defined in Public Resource Code Section 26509 which shall specify all anticipated operations and maintenance responsibilities of the GHAD for the annexed properties.

- a) The applicant shall provide an initial funding on the annexed properties in the amount to be determined by the City Engineer in accordance with the Plan of Control and the Engineer's Report for the annexed properties which shall be no later than the recordation of the final map for the project.
- b) The Engineer's Report shall identify the projected costs and a budget for GHAD operations and reserve accumulation for the annexed properties.
- c) The Engineer's Report shall include costs for the services of the project manager, attorney and treasurer/clerk for the GHAD.

The applicant shall request the GHAD to defend, hold harmless, and indemnify the Indemnified Parties (as that is defined in Condition #7 and their insurers against any and all liability, damages, claims, demands, judgments, losses, ("Indemnified GHAD claims") or other forms of legal or equitable relief related to the operation (including, without limitation, maintenance of GHAD owned property) of a the annexed properties and in the case of the City Council members, actions taken by said members while acting as the GHAD Board of Directors. This indemnity shall include, without limitation, payment of litigation expenses associated with any action herein. The Indemnified Parties shall have the right to select counsel to represent the Indemnified

Parties, at the GHAD's expense, in defense of any action specified in this condition of approval **insert condition of approval number**. The Indemnified Parties shall take all reasonable steps to promptly notify the GHAD of any claim, demand, or legal actions that may create a claim for indemnification under these conditions of approval. Within 90 days of the annexation to the GHAD, the applicant shall request the GHAD to enter into an Indemnification Agreement in a form acceptable to the City Attorney to establish in more specific detail the terms and conditions of the GHAD's indemnification obligations set forth herein. Any failure of any party to timely execute such Indemnification Agreement shall not be construed to limit any right or obligation otherwise specified in these Conditions of Approval.

These Development Standards apply to ALL new residential uses and sensitive land uses such as schools, daycare centers, playgrounds, and medical facilities located closer than the recommended buffer to any stationary sources of air pollution listed below, based on the California Air Resources Board's June 2005 Air Quality and Land Use Handbook: A Community Health Perspective and subsequent amendments to the California Code of Regulations.

- a) Within 500' of a freeway or urban roads with 100,000 vehicles/day or within 500' of a rail line (except BART) with over 30 trains per day.
- b) Within 1000' from a distribution center that accomodates more than 100 trucks per day, more than 40 trucks with operating refrigeration units (TRU) per day, or where the TRU unit operations exceed 300 hours per week.
- c) Within 1000' of a major service and maintenance rail or truck yard.
- d) Immediately downwind from ports.
- e) Immediately downwind from petroleum refineries.
- f) Within 300' of a chrome plater.
- g) Within 300' of a dry cleaning operation using Perchloroethylene (Perc Dry Cleaners) with one (1) machine; 500' separation for an operation with two (2) machines. (Perc dry cleaning operations with 3 or more machines should contact the air district for the required separation.)
- h) Within 300' of a large gas station facility with a throughput of 3.6 million gallons per year or greater.

NOTE: One source for stationary sources of air pollution includes www.arb.ca.gov/ch/chapis1/chapis1.htm

94. Indoor Air Quality

In order to comply with the California Air Resources Board Air Quality and Land Use Handbook (June 2005) and achieve an acceptable interior air quality level for sensitive receptors, appropriate measures, shall be incorporated into project building design. The appropriate measures shall include 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 the California Air Resources Board and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to stationary air quality pollutants prior to issuance of a demolition, grading, or building permit. The HRA shall be submitted to the Planning and Zoning Division for review and approval. The applicant shall

implement the approved HRA recommendations, if any. If the HRA concludes that the air quality risks from nearby sources are at or below acceptable levels, then additional measures are not required.

- b) The applicant shall implement the following features that have been found to reduce the air quality risk to sensitive receptors and shall be included in the project construction plans. These shall be submitted to the Planning and Zoning Division and the Building Services Division for review and approval prior to the issuance of a demolition, grading, or building permit and ongoing.
- a) Do not locate sensitive receptors near distribution center's entry and exit points.
 - b) Do not locate sensitive receptors in the same building as a perchloroethylene dry cleaning facility.
 - c) Maintain a 50' buffer from a typical gas dispensing facility (under 3.6 million gallons of gas per year).
 - d) Install, operate and maintain in good working order a central heating and ventilation (HV) system or other air take system in the building, or in each individual residential unit, that meets the efficiency standard of the MERV 13. The HV system shall include the following features: Installation of a high efficiency filter and/or carbon filter to filter particulates and other chemical matter from entering the building. Either HEPA filters or ASHRAE 85% supply filters shall be used.
 - e) Retain a qualified HV consultant or HERS rater during the design phase of the project to locate the HV system based on exposure modeling from the mobile and/or stationary pollutant sources.
 - f) Maintain positive pressure within the building.
 - g) Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air.
 - h) Achieve a performance standard of at least 4 air exchanges per hour of recirculation
 - i) Achieve a performance standard of .25 air exchanges per hour of in unfiltered infiltration if the building is not positively pressurized.
 - j) Project applicant shall maintain, repair and/or replace HV system or prepare an Operation and Maintenance Manual for the HV system and the filter. The manual shall include the operating instructions and maintenance and replacement schedule. This manual shall be included in the CC&R's for residential projects and distributed to the building maintenance staff. In addition, the applicant shall prepare a separate Homeowners Manual. The manual shall contain the operating instructions and maintenance and replacement schedule for the HV system and the filters. It shall also include a disclosure to the buyers of the air quality analysis findings.

95. Air Pollution Buffering for Private Open Space

Prior to approval of Final Development Plan for each stage

To the maximum extent practicable, private (individual and common) exterior open space, including playgrounds, patios, and decks, shall either be shielded from the stationary source of air pollution by buildings or otherwise buffered to further reduce air pollution for project occupants.

APPROVED BY:

City Planning Commission: _____ (date) _____ (vote)

City Council: _____ (date) _____ (vote)

Applicant and/or Contractor Statement

I have read and accept responsibility for the Conditions of Approval, as approved by Planning Commission action on **Date** . I agree to abide by and conform to these conditions, as well as to all provisions of the

Oakland Zoning Code and Municipal Code pertaining to the project.

Signature of Owner/Applicant: _____(date)
Signature of Contractor _____(date)