Draft Environmental Impact Report

San Pablo Avenue Specific Plan

Prepared by: The City of El Cerrito
With Assistance from: MIG, Inc.

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1. INTRODUCTION

This Draft Program Environmental Impact Report (Draft EIR) has been prepared by the City of El Cerrito in accordance with the California Environmental Quality Act (CEQA)[1] and associated CEQA Guidelines[2] to describe the potential environmental consequences of the proposed San Pablo Avenue Specific Plan. This Draft EIR is intended to serve as an informational document for use by public agency decision makers and the public in their consideration of the proposed Specific Plan.

In order to avoid repetition and provide a manageable environmental document, this Draft EIR does not duplicate the detailed contents of the Specific Plan document. The reader is encouraged to review the entire Specific Plan or the sections that interest the reader for more detail. Pursuant to section 15150 (Incorporation By Reference) of the CEQA Guidelines, the San Pablo Avenue Specific Plan is incorporated into this Draft EIR by reference.

The entire draft San Pablo Avenue Specific Plan may be viewed during regular business hours at El Cerrito City Hall, 10890 San Pablo Avenue, El Cerrito, CA 94530. Business hours are: Monday and Wednesday, 8:00 AM to 4:00 PM; Tuesday and Thursday, 8:00 AM to 6:00 PM; and alternate Fridays, 8:00 AM to 4:00 PM.

The entire draft Specific Plan is posted on the City of El Cerrito website at:

www.el-cerrito.org/SPASP

1.1 EIR PURPOSE AND INTENDED USE

The Specific Plan area is located within both the City of El Cerrito and the City of Richmond. By mutual agreement of both jurisdictions, the City of El Cerrito is acting as the Lead Agency[3] for this EIR, which has been prepared pursuant to all relevant sections of the California Environmental Quality Act (CEQA). The EIR is intended to inform decision-makers, other responsible agencies, and the general public of the proposed San Pablo Avenue Specific Plan and its environmental consequences. The EIR has been prepared by the City of El Cerrito to identify, evaluate, and assist both the cities of El Cerrito and Richmond in mitigating the potential environmental consequences of the Specific Plan. The EIR is also intended to provide

[1]The California Environmental Quality Act (CEQA) is codified in section 21000, et seq., of the California Public Resources Code.

[2]The CEQA Guidelines are set forth in sections 15000 through 15387 of the California Code of Regulations, Title 14, Chapter 3.

[3]The CEQA Guidelines define the “Lead Agency” as the public agency that has the principal responsibility for carrying out or approving a project. Because the San Pablo Avenue Specific Plan area is within both El Cerrito and Richmond, each City will be responsible for carrying out or approving the individual Specific Plan-facilitated development projects within its own jurisdiction.

the CEQA-required environmental documentation for the adoption of the Specific Plan and the associated amendments to the El Cerrito General Plan and zoning code. The Richmond Livable Corridors Form-Based Code would amend the Richmond General Plan and zoning codes as appropriate.

The EIR is intended to serve as a public information and disclosure document identifying and analyzing those environmental impacts resulting from the Specific Plan that are expected to be significant, and describing mitigation measures and alternatives that could avoid or reduce significant adverse impacts and increase beneficial effects.[1] Such impacts and needed mitigations are discussed in this EIR to the level of detail necessary to allow reasoned decisions about the project and conditions of project approval. As a result of the information in this EIR, the City Councils of El Cerrito and Richmond may act to approve or deny the various project actions, and/or to establish requirements or conditions of approval considered necessary to mitigate identified project impacts on the environment.

As the Lead Agency, and as appropriate under CEQA, the City of El Cerrito also intends the EIR to serve as the CEQA-required environmental documentation for consideration of this project by other Responsible Agencies[2] and Trustee Agencies[3] (e.g., East Bay Municipal Utility District, Stege Sanitary District, California Department of Transportation) which may have limited discretionary authority over future site-specific development proposals facilitated by the Specific Plan. In addition, as a program EIR (see below), El Cerrito and Richmond may rely on this EIR in evaluating and acting on subsequent, parcel-specific development proposals in the Specific Plan area, to the extent that such future reliance on this EIR is permitted by CEQA and the CEQA Guidelines.

1.2 SAN PABLO AVENUE SPECIFIC PLAN

The Specific Plan represents a multi-year collaborative planning effort between the cities of El Cerrito and Richmond to identify a shared vision for the future of San Pablo Avenue, identify improvement needs, and adopt implementing regulations that can be applied consistently in the planning area. A major goal of the planning effort is to achieve a coordinated, cohesive environment and character in the plan area through (1) a Form-Based Code (FBC); (2) multi-modal transportation goals and policies, recommended streetscape design improvements, and design standards as part of the Complete Streets Plan portion of the Specific Plan; and (3) infrastructure improvements.

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[1]CEQA Guidelines section 15149(b).

[2]Under CEQA Guidelines, the term "Responsible Agency" includes all public agencies, other than the Lead Agency, which have discretionary approval authority over aspects of the project for which the Lead Agency has prepared an EIR.

[3]Under CEQA Guidelines, the term "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California. The only Trustee Agencies in California are the California Department of Fish and Wildlife (CDFW), State Lands Commission, California Department of Parks and Recreation, and (in limited circumstances) the University of California.

As used in this EIR, the terms "San Pablo Avenue Specific Plan," "Specific Plan," "Plan" (when specifically distinguished from another plan), and "project" are intended to be synonymous and refer to all aspects of the current San Pablo Avenue Specific Plan proposal, including all of the approval actions described above.

1.2.1 Form-Based Code

The Specific Plan Form-Based Code is intended to guide the physical environment and character of the streets, buildings, and open spaces in the Plan area. The Form-Based Code supports the community vision to create a vibrant, walkable, sustainable, and transit-oriented corridor that respects surrounding neighborhoods.

The Form-Based Code is organized by Transect Zones within a framework of Downtown, Midtown, and Uptown areas (see Chapter 3, Project Description, of this EIR). In the El Cerrito portion of the Plan area, the two primary Transect Zone Types are (1) Transit-Oriented Higher-Intensity Mixed Use (TOHIMU) for areas generally within a ½-mile walk of a BART station, and (2) Transit-Oriented Mid-Intensity Mixed Use (TOMIMU) for the remainder of the Plan area. The Transect Zones regulate the building heights, parking requirements, and land uses for new development in the El Cerrito portion of the Plan area.

For the Richmond parcels in the Plan area, the San Pablo Avenue Specific Plan defers to the Richmond Livable Corridors Form-Based Code. Likewise, land use types will be determined by the City of Richmond General Plan designations.

1.2.2 Complete Streets Plan

The Complete Streets Plan provides direction for the redesign and development of the street right-of-way (ROW) in the plan area, such as travel lanes, intersections, bike lanes, cycletracks, crosswalks, and medians. The plan also provides guidance for the pedestrian realm of the ROW, including the following sidewalk zones (from closest to the street inward):

- Amenity Zone--can contain landscaping, seating, lighting, and other urban furniture
- Pedestrian Zone--a clear pathway allowing pedestrian movement and full accessibility
- Activity Zone--provides space for activities such as outdoor dining for commercial uses and buffer zones at residential uses

The Complete Streets Plan aims to create a road and streetscape environment that balances the needs of all users and encourages mode-shift to increase the percentage of pedestrians, cyclists, and transit users. The Complete Streets performance measures were developed to understand impacts on all modes, as opposed to traditional traffic evaluation tools that simply measure delay to auto drivers; this new evaluation tool is referred to as “multi-modal level of service” (MMLOS).

The Complete Streets Plan includes multi-modal transportation goals and policies, recommended streetscape design improvements, and design standards to support the overarching framework of the Specific Plan.

1.2.3 Infrastructure Systems

The Specific Plan (especially the Infrastructure Systems chapter) includes infrastructure goals and policies, and recommends feasible improvements to infrastructure systems to support the Plan objectives. The systems evaluated in the Plan include water, wastewater, storm drainage, and dry utilities (e.g., gas, electric, cable).

1.3 PROGRAM EIR APPROACH AND ASSUMPTIONS

This EIR has been prepared as a program EIR. A program EIR is a type of EIR authorized by section 15168 (Program EIR) of the CEQA Guidelines for use in documenting the environmental impacts of community general plans, redevelopment plans, specific plans, precise plans, and other planning "programs." As explained in the CEQA Guidelines, a program EIR is useful in evaluating the potential environmental impacts of a project that involves a series of interrelated actions that can reasonably be characterized as a single project. The approach taken in preparing this EIR under the program EIR authority has been to describe the anticipated Plan area-wide and community-wide impacts of the San Pablo Avenue Plan. The EIR describes the cumulative, aggregate effects of the Specific Plan-proposed Regulating Plan, design standards, Complete Streets Plan, and associated development capacity assumptions on Plan area-wide and community-wide environmental conditions. Such impacts are described at a level of detail consistent with the level of detail provided in the proposed Specific Plan.

Pursuant to CEQA, this program EIR evaluates the Specific Plan-related impacts and mitigation needs that can be identified at this time. The more detailed impacts of future individual, site-specific development and infrastructure projects that may be undertaken in accordance with the Specific Plan, but which are not proposed at this time and therefore are not yet described in sufficient detail, are not considered in this program EIR; rather, the CEQA-required environmental review of such subsequent individual actions would be undertaken at a later time, if and when such proposals come before the respective jurisdictional City in the form of a site-specific development application or improvement project. At that time, when the details of the individual action are sufficiently defined, the action would be subject to its own, project-specific environmental determination by the City, in compliance with CEQA requirements.

1.3.1 Impact Assessment Assumptions

The purpose of this program EIR is to evaluate the likely environmental consequences of development under the Specific Plan by the year 2040, and to identify mitigation measures and alternatives that could avoid or reduce potentially significant adverse environmental impacts and increase beneficial effects.[1] The Plan area development capacity assumptions used for the impact analyses in this program EIR are first based on projections provided by the Association of Bay Area Governments (ABAG) for the Plan area, then on entitled and planned projects in the City of El Cerrito and the City of Richmond, and projections for the construction of projects consistent with the Form-Based Code development standards. For the purpose of this EIR, ABAG Plan Bay Area growth projections were applied to the new development standards, including on-site parking, site layout and height parameters, to assume a realistic growth projection for the Specific Plan area. These design standards were developed to be consistent with the goals of Plan Bay Area: climate protection, adequate housing, healthy and safe

[1] CEQA Guidelines section 15149(b).

communities, open space and agricultural preservation, equitable access, economic vitality, and transportation system effectiveness, but incorporate locally refined data more telling of the development feasibility of the Specific Plan than would be possible on a regional planning level (also see EIR chapter 14).

The EIR impact analyses conservatively assume that the Specific Plan would be successful in meeting its objectives and, as a result, the Plan area would reach development capacity by the year 2040. The EIR assumes that up to 1,706 net new residential units and 243,112 net new square feet of commercial floor area would be developed in the Plan area by 2040. When and if these numbers are reached, regardless of the year they are reached, new environmental analysis, documentation, and determination pursuant to CEQA would need to be conducted.

Since Specific Plan-facilitated development would be based on market demand, the development capacity assumptions are forecasts, not specific targets. The Specific Plan does not authorize eminent domain by either jurisdictional City. Chapter 3 (Project Description), section 3.5 (Development Capacity Assumptions) provides details.

1.3.2 Impact Assessment Baseline

CEQA Guidelines sections 15125(a) and (e) conservatively stipulate that the existing environmental setting (the environmental conditions in the Project vicinity at the time the environmental analysis is begun) should constitute the baseline physical conditions by which it is determined whether an impact is significant. Consistent with this guideline, all impact evaluations in this EIR use the “Setting” sections of each environmental topic chapter (Air Quality, Biological Resources, Transportation and Circulation, etc.) as the existing environmental setting to describe “what is on the ground now.” These existing conditions are the starting point (baseline) from which impacts resulting from the Specific Plan are identified. Therefore, project effects are added to existing conditions to identify potential impacts resulting from implementation of the Specific Plan. The environmental baseline is “what is on the ground now,” not “what might be on the ground if the Specific Plan is not adopted.”

For the environmental baseline, CEQA and CEQA case law recognize that the inventory of existing conditions is permitted to encompass a reasonable time span; for example, the most recent, available, and precise data should be used instead of more recent anecdotal or speculative data.

For a comparison of impacts resulting from the proposed Specific Plan versus the current El Cerrito General Plan and Richmond General Plan, see the discussion of Alternative 1 (No Project - Existing 2002 El Cerrito and Richmond General Plans) in Chapter 20 of this EIR (Alternatives to the Proposed General Plan).

1.4 EIR SCOPE--SIGNIFICANT ISSUES AND CONCERNS

This EIR addresses the following areas of potential environmental impact or controversy known to the Lead Agency (the City of El Cerrito), including those issues and concerns identified by the

City in its Notice of Preparation (NOP) of this EIR (dated April 4, 2014)[1] and by other agencies, organizations, and individuals in response to the NOP. These environmental concerns relate to the following topics (listed in the order that they are addressed in this EIR):

- Aesthetics and Visual Resources
- Air Quality
- Biological Resources
- Cultural and Historic Resources
- Geology and Soils
- Greenhouse Gas Emissions and Global Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Transportation and Circulation
- Utilities and Service Systems

1.5 "SIGNIFICANT IMPACTS" AND OTHER KEY EIR TERMINOLOGY

This EIR identifies those adverse environmental impacts that are expected to be “significant” and corresponding mitigation measures designed to avoid or reduce those impacts to less-than-significant levels or, if less-than-significant levels cannot feasibly be achieved, to reduce the significant impacts to the extent feasible. Where it is determined in the EIR that a particular impact cannot be mitigated to a less-than-significant level, the EIR identifies that impact as "unavoidable." Section 19.3 of the EIR (Significant Unavoidable Impacts) includes a list of all significant adverse project impacts identified as "unavoidable." Identified significant adverse impacts that are not listed in Section 19.3 as "unavoidable" can be mitigated to a less-than-significant level by implementation of the associated mitigation measure or measures identified in this EIR.

CEQA Guidelines Section 15130 mandates that an EIR shall consider and discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. A cumulative impact is the result of the combination of the impacts resulting from the project together with other projects causing related impacts (Section 15130). Chapter 19 (Section 19.1) in this EIR includes a discussion of potential cumulative impacts.

The particular EIR terms noted above ("significant," “cumulative,” "unavoidable," "mitigation") and other key CEQA terminology used in this EIR are defined in Table 1.1.

[1]The Notice of Preparation (NOP) is a CEQA-required notice sent by the Lead Agency to notify the Responsible Agencies, Trustee Agencies, and potentially involved federal agencies that the Lead Agency plans to prepare an EIR for the project. The NOP is also used to solicit guidance regarding the necessary and appropriate scope and content of the EIR. The City's NOP for the San Pablo Avenue Specific Plan is included in section 24.1 (Appendix: Notice of Preparation and Comments on NOP) of this EIR.

Table 1.1

DEFINITIONS OF KEY EIR TERMINOLOGY	
Significant/Potentially Significant Impact	"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. (CEQA Guidelines, section 15382.) *"An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."* (CEQA Guidelines, section 15382.)
Significant Cumulative Impact	"Cumulative impacts" are defined as *"two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."* (CEQA Guidelines, section 15355.)
Significant Unavoidable Impact	"Significant unavoidable impacts" are defined as those significant adverse environmental impacts for which either no mitigation or only partial mitigation is feasible. If the project is to be approved without imposing an alternative design, the Lead Agency must include in the record of the project approval a written statement of the specific reasons to support its action--i.e., a "statement of overriding considerations." (CEQA Guidelines, sections 15126.2(b) and 15093(b).)
Significance Criteria	The criteria used in this EIR to determine whether an impact is or is not *"significant"* are based on (a) CEQA-stipulated "mandatory findings of significance"--i.e., where any of the specific conditions occur under which the Legislature and the Secretary of Resources have determined to constitute a potentially significant effect on the environment, which are listed in CEQA Guidelines section 15065; (b) specific criteria that a Resources Agency has determined are "normally" considered to constitute a "significant effect on the environment;" (c) the relationship of the project effect to the adopted policies, ordinances and standards of the County and of responsible agencies; and/or (d) commonly accepted practice and the professional judgment of the EIR authors and Lead Agency staff.
Mitigation Measure	For each significant impact, the EIR must identify a specific "mitigation" measure or set of measures capable of *"(a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (d) reducing or eliminating the impact over time by preservation or maintenance operations during the life of the action; or (e) compensating for the impact by replacing or providing substitute resources or environments."* (CEQA Guidelines, section 15370.)
SOURCE: MIG, 2014.	

1.6 REPORT ORGANIZATION AND CONTENT

Each of the topical environmental evaluations presented in chapters 4 through 17 include the following subsections:

Setting, which describes relevant existing conditions related to the environmental topic;

Regulatory Setting, which describes Federal, State and local laws, regulations and policies relevant to potential impacts for the environmental topic; and

Impacts and Mitigation Measures, including:

- *Significance Criteria*, which identifies the CEQA and other agency-recommended criteria for determining the significance of a potential impact;

- *Relevant Specific Plan Components,* which describes aspects of the proposed Specific Plan that would avoid or reduce potential impacts related to the environmental topic; and

- *Impacts and Mitigations*, which identifies potential project impacts; whether each identified impact is “significant” or “less-than-significant”; mitigation for each identified “significant” impact; and whether each impact would be “significant” or “less-than- significant” after mitigation.

In addition, this Draft EIR includes a chapter evaluating the Specific Plan’s consistency with local and regional plans (Chapter 18), a chapter that includes various CEQA-mandated sections (Chapter 19), a chapter comparing various alternatives to the proposed Specific Plan (Chapter 20), and a chapter introducing the mitigation monitoring requirements should the proposed Specific Plan be adopted (Chapter 21).

2. SUMMARY

This EIR chapter provides a summary description of the San Pablo Avenue Specific Plan, a list of associated environmental issues to be resolved, a summary identification of significant impacts and mitigation measures associated with the Specific Plan, and a summary identification of possible alternatives to the Specific Plan (pursuant to CEQA Guidelines section 15123, Summary).

This summary should not be relied upon for a thorough understanding of the details of the project, its individual impacts, and related mitigation needs. Please refer to Chapter 3 for a complete description of the project, Chapters 4 through 17 for a complete description of environmental impacts and associated mitigation measures, Chapter 18 for a discussion of the Specific Plan's consistency with other local and regional plans, Chapter 19 for CEQA-mandated sections, and Chapter 20 for an evaluation of alternatives to the project.

2.1 PROPOSED SAN PABLO AVENUE SPECIFIC PLAN

The Specific Plan ("Project") represents a collaborative planning effort between the cities of El Cerrito and Richmond to identify a shared vision for the future of San Pablo Avenue, identify improvement needs, and adopt implementing regulations that can be applied consistently in the planning area. A major goal of the planning effort is to achieve a coordinated, cohesive environment and character in the Plan area through (1) a Form-Based Code (FBC); (2) multi-modal transportation goals and policies, recommended streetscape design improvements, and design standards as part of the Complete Streets Plan; and (3) infrastructure improvements.

2.1.1 Form-Based Code

The Specific Plan Form-Based Code supports the community vision of a vibrant, walkable, sustainable, and transit-oriented corridor that respects surrounding neighborhoods. As discussed in Chapter 3, Project Description of this EIR, the Form-Based Code is organized by Transect Zones developed to achieve different levels of land use intensity dependent on proximity to the City's two BART stations; the Regulating Plan recognizes the existing distinct characteristics of the Downtown, Midtown, and Uptown districts and relies on Street Type design elements to enhance these unique nodes.

2.1.2 Complete Streets Plan

The Complete Streets Plan provides direction for the redesign and development of the street right-of-way (ROW) in the Plan area, such as travel lanes, intersections, bike lanes, cycletracks, crosswalks, and medians. The Plan also provides guidance for the pedestrian realm of the ROW. The Complete Streets Plan aims to create a streetscape environment that balances the needs of all users and encourages "mode shift" to increase the percentage of pedestrians, cyclists, and transit users.

2.1.3 Infrastructure Systems

The Specific Plan (especially the Infrastructure Systems chapter) includes infrastructure goals and policies, and recommends feasible improvements to infrastructure systems to support the Plan objectives. The systems evaluated in the plan include water, wastewater, storm drainage, and dry utilities (e.g., gas, electric, cable).

2.1.4 Development Capacity Assumptions

The Plan area development capacity assumptions used for the impact analyses in this program EIR are first based on projections provided by the Association of Bay Area Governments (ABAG) for the Plan area, then on entitled and planned projects in the City of El Cerrito and the City of Richmond, and projections for the construction of projects consistent with the Form-Based Code development standards. For the purpose of this EIR, ABAG Plan Bay Area growth projections were applied to the new development standards, including on-site parking, site layout and height parameters, to assume a realistic growth projection for the Specific Plan area. These design standards were developed to be consistent with the goals of Plan Bay Area: climate protection, adequate housing, healthy and safe communities, open space and agricultural preservation, equitable access, economic vitality, and transportation system effectiveness, but incorporate locally refined data more telling of the development feasibility of the Specific Plan than would be possible on a regional planning level (also see EIR chapter 14). No site-specific, individual development proposals would be approved as part of the Specific Plan EIR certification process; any such individual project would be subject to its own CEQA review, including evaluation against the Specific Plan EIR.

2.2 REQUIRED APPROVALS

Implementation of the San Pablo Avenue Specific Plan for the parcels within each City's respective jurisdiction would require, but not be limited to, the following discretionary approvals by the City of El Cerrito and the City of Richmond:

- Certification of the Final Environmental Impact Report
- Adoption of a Mitigation Monitoring and Reporting Program
- Adoption of the San Pablo Avenue Specific Plan for the parcels within the City of El Cerrito; adoption of the Richmond Livable Corridors Form-Based Code development standards for the parcels within the City of Richmond, and amendment to the Richmond Livable Corridors Regulating Plan to add the areas within the Specific Plan
- Adoption of General Plan amendments and zoning changes as necessary to ensure consistency between the Specific Plan and each jurisdiction's respective General Plan and zoning code
- Discretionary review as necessary, including CEQA review, for future individual public and private development proposals in the Plan area

Future individual public and private development proposals in the Plan area would be expected to require review or approvals from other jurisdictional agencies, including, but not limited to:

- East Bay Municipal Utility District (EBMUD)
- Stege Sanitary District (SSD)
- San Francisco Bay Regional Water Quality Control Board (RWQCB)

- Bay Area Air Quality Management District (BAAQMD)
- California Department of Transportation (Caltrans)

2.3 ENVIRONMENTAL ISSUES

As required by the CEQA Guidelines, this EIR addresses the following areas of potential environmental impact or controversy known to the Lead Agency (the City of El Cerrito), including those issues and concerns identified by the City in its Notice of Preparation (NOP) of this EIR (dated April 4, 2014) and by other agencies, organizations, and individuals in response to the NOP. These environmental concerns relate to the following topics (listed in the order that they are addressed in this EIR):

- Aesthetics and Visual Resources
- Air Quality
- Biological Resources
- Cultural and Historic Resources
- Geology and Soils
- Greenhouse Gas Emissions and Global Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Transportation and Circulation
- Utilities and Service Systems

2.4 SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES

For each of the 14 environmental topics listed above, any ***"significant"*** project or cumulative impact and associated mitigation measure or measures identified in this EIR are summarized in Table 2.1, the SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES, which follows. The summary chart has been organized to correspond with the more detailed impact and mitigation discussions in Chapters 5 through 17 of this EIR. The chart is arranged in five columns: (1) impacts, (2) significance without mitigation, (3) mitigation measures, (4) the entity responsible for implementing each mitigation measure, and (5) the level of impact significance after implementation of the mitigation measure(s).

Table 2.1
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
AESTHETICS AND VISUAL RESOURCES				
Impact 4-1: Project Impacts on Scenic Vistas. Specific Plan implementation could interfere with scenic views of Mt. Tamalpais, the Golden Gate Bridge, the San Francisco skyline, the East Bay Hills, and Albany Hill from public rights-of-way (roadways and sidewalks), the two BART station platforms (El Cerrito Plaza and El Cerrito Del Norte), and areas of lower elevation hillside homes located in El Cerrito and Richmond. This is considered a ***potentially significant impact.***	S	**Mitigation 4-1.** For future City decision-making actions for individual project proposals under the Specific Plan, Specific Plan Section 2.02 (Administration of Regulating Code) shall be implemented as it applies to the proposal's potential effect on scenic vistas. The City shall require evaluation (including visual simulations, if deemed necessary) of the proposal's visual effect as viewed from important on-site and off-site viewpoints, including public rights-of-way of east-west streets (roadways and sidewalks) and the two BART station platforms in the Specific Plan area (El Cerrito Plaza and El Cerrito Del Norte). The evaluation shall address the proposal's effect on views of Mt. Tamalpais, the Golden Gate Bridge, the San Francisco skyline, the East Bay Hills, and Albany Hill. This mitigation shall be enforceable by its incorporation into the Specific Plan as a City-adopted policy and shall be implemented through subsequent permits, conditions, agreements, or other measures consistent with Specific Plan Section 2.02. Incorporation of this measure would reduce the impact on scenic vistas. However, because the outcome of this decision-making process for any individual, future proposal cannot be guaranteed within the	City; Individual project applicants	SU

S = Significant
LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		framework of this program EIR, the impact is considered ***significant and unavoidable.***		
Impact 4-2: Project Light and Glare Impacts. The San Pablo Avenue Specific Plan anticipates development on the surface parking lots around the El Cerrito Plaza and El Cerrito Del Norte BART stations. As part of this development, new parking structures for the BART stations are anticipated. These BART parking structures may result in light and glare from vehicles using the parking structure at night.	S	**Mitigation 4-2.** BART shall install landscaping and incorporate other measures into and around any Specific Plan area future parking structure(s) (light source shielding, etc.) as necessary to ensure that potential light and glare from vehicles would be avoided toward the Ohlone Greenway, residential uses, and other sensitive uses, consistent with El Cerrito City Resolution 82-9 and the El Cerrito design review process. With this requirement incorporated into the local and BART design review process, the light and glare impact of future BART parking structures would be ***less-than-significant.***	BART	LS
In addition, future multi-story buildings (or renovations) in the Specific Plan area, if faced in reflective materials (e.g., reflective glass), could result in glare impacts on adjacent and nearby properties. These impacts related to light and glare are considered a ***potentially significant.***		Regarding reflective building materials, for all future development in the Specific Plan area, facades shall be of non-reflective materials, and windows shall incorporate non-reflective coating. This requirement would reduce potential glare impacts of building materials to a ***less-than-significant level.***	City; Individual project applicants	LS
AIR QUALITY				
Impact 5-1: Construction Period Emissions. Implementation of the Specific Plan would result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt	S	**Mitigation 5-1.** Implement the following BAAQMD-recommended measures to control particulate matter emissions during construction. These measures would reduce diesel particulate matter and PM_{10} from construction to ensure that	City; Individual project applicants	LS

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SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Demolition and renovation of buildings can also generate PM_{10} and $PM_{2.5}$ emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_X emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions. The BAAQMD CEQA Air Quality Guidelines do not identify plan-level thresholds that apply to construction. Although construction activities at individual project sites are expected to occur during a relatively short time period, the combination of temporary dust from activities and diesel exhaust from construction equipment poses both a health and nuisance impact to nearby receptors. In addition, NO_X emissions during grading and soil import/export for large projects may exceed the BAAQMD NO_X emission thresholds. Without application of appropriate		short-term health impacts to nearby sensitive receptors are avoided or reduced: *Dust (PM_{10}) Control Measures:* ▪ Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to residences should be kept damp at all times. ▪ Cover all hauling trucks or maintain at least two feet of freeboard. ▪ Pave, apply water at least twice daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas. ▪ Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads. ▪ Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (i.e., previously graded areas that are inactive for 10 days or more). ▪ Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles.		

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See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
control measures to reduce construction dust and exhaust, construction period impacts would be considered a ***potentially significant impact.***		▪ Limit traffic speeds on any unpaved roads to 15 mph. ▪ Replant vegetation in disturbed areas as quickly as possible. ▪ Suspend construction activities that cause visible dust plumes to extend beyond the construction site. ▪ Post a publically visible sign(s) with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. Additional Measures to Reduce Diesel Particulate Matter and $PM_{2.5}$ and other construction emissions: ▪ The developer or contractor shall provide a plan for approval by the City or BAAQMD demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_X reduction and 45 percent particulate reduction compared to the most		

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Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		recent CARB fleet average for the year 2011. ▪ Clear signage at all construction sites shall be posted indicating that diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were on-site or adjacent to the construction site. ▪ The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g., compressors). ▪ Properly tune and maintain equipment for low emissions. Implementation of these measures would reduce project construction-related air quality impacts to a ***less-than-significant level***.		
Impact 5-2: Impacts of Toxic Air Contaminants (TACs) on Sensitive Receptors. Implementation of the Specific Plan would result in the potential construction of a variety of projects. This construction would result in short-term emissions of diesel particulate matter (DPM), a TAC. Construction	S	**Mitigation 5-2.** Require project-level construction health risk assessment. Construction health risk assessment shall be required on a project-by-project basis, either through screening or refined modeling, to identify impacts and, if necessary, include performance standards and industry-recognized measures to	City; Individual project applicants	LS

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NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
would result in the generation of DPM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The calculation of cancer risk associated with exposure to TACs is typically based on a 70-year period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area. Cancer risk and $PM_{2.5}$ exposure would have to be analyzed through project-level analysis to identify the potential for significant impacts and measures to reduce those impacts to less-than-significant. Health risks associated with temporary construction would, therefore, be considered a ***potentially significant impact.***		reduce exposure. Reduction in health risk can be accomplished through, though is not limited to, the following measures: ▪ Construction equipment selection; ▪ Use of alternative fuels and engine retrofits; ▪ Modified construction schedule; and ▪ Implementation of BAAQMD Basic and/or Additional Construction Mitigation Measures for control of fugitive dust. Implementation of these industry-recognized measures would reduce TAC construction impacts to a ***less-than-significant level***.		
Impact 5-3: Toxic Air Contaminant Exposure Long-Term Operations. The Specific Plan would allow growth of new residential land uses that could include sensitive receptors, as well as new non-	S	**Mitigation 5-3.** Implement the following measures in site planning and building designs to reduce TAC and $PM_{2.5}$ exposure where new receptors are located within the overlay distances identified above:	City; Individual project applicants	LS

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LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
residential land uses that would be potential new emissions sources. Typically, these sources would be evaluated through the project-specific BAAQMD permit process or the CEQA process to identify and mitigate any significant exposures. However, some sources that would not be required to undergo such a review, such as truck loading docks or truck parking areas, may have the potential to cause significant increases in TAC exposure. While average daily traffic along Specific Plan area surface streets is not readily available, the *roadway screening analysis tables* indicate that health risk from high volume surface streets such as Central Avenue, Carlson Boulevard, and Potrero Avenue would be less-than-significant at average daily traffic volumes (ADT) of 40,000 vehicles or less at a distance of 10 feet. If projects under the Specific Plan are located within close proximity to surface streets with daily traffic volumes higher than 40,000 ADT this would represent a ***potentially significant impact.***		▪ Future development under the Specific Plan that includes sensitive receptors (such as schools, hospitals, daycare centers, or retirement homes) located within the overlay distances from highways and stationary sources shall require site-specific analysis to determine the level of TAC and $PM_{2.5}$ exposure, or for projects located near surface streets with daily traffic volumes exceeding 40,000 ADT. This analysis shall be conducted following procedures outlined by BAAQMD. If the site-specific analysis reveals significant exposures, such as cancer risk greater than 10 in one million, additional measures shall be employed to reduce the risk to below the threshold. If this is not possible, the sensitive receptors shall be relocated. ▪ Future non-residential developments would be evaluated through the CEQA process or BAAQMD permit process to ensure that they do not cause a significant health risk in terms of excess cancer risk greater than 10 in one million, acute or chronic hazards with a Hazard Index greater than 1.0, or annual $PM_{2.5}$ exposures greater than 0.3 $\mu g/m^3$. ▪ For significant cancer risk exposure, as defined by BAAQMD, indoor air filtration systems shall be installed to effectively reduce particulate levels to a less-than-		

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Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		significant level. Project sponsors shall submit performance specifications and design details to demonstrate that lifetime residential exposures would result in less-than-significant cancer risks (less than 10 in one million chances). Implementation of these measures would reduce air quality impacts to a ***less-than-significant level***.		
Impact 5-4: Impacts from Odors. The Specific Plan area would include potential odor sources that could affect new sensitive receptors. Most of these major existing sources are already buffered. However, it is possible that odors may still be present. Responses to odors are subjective, and vary by individual and type of use. Sensitive land uses that include outdoor uses, such as residences and possibly daycare facilities, are likely to be affected most by existing odors. The Specific Plan does not have policies or implementing measures that address potential conflicts in land uses that could result in odor complaints. As a result, the impact would be considered a ***potentially significant impact.***	S	**Mitigation 5-4.** Add the following policy and action measures to the Specific Plan to reduce odor impacts: ▪ New Policy AQ-4.1: *Avoid Odor Conflicts*. Coordinate land use planning to prevent new odor complaints. ▪ New Action AQ-4.1A: *Identify Potential for Odor Complaints*. Consult with BAAQMD to identify the potential for odor complaints from various existing and planned or proposed land uses in the Specific Plan area. Use BAAQMD Odor Screening Distances or City-specific screening distances to identify odor potential. ▪ New Action AQ-4.1B: *Odor Sources.* Prohibit new sources of odors that have the potential to result in frequent odor	City	LS

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SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		complaints unless it can be shown that potential odor complaints can be mitigated. ▪ New Action AQ-4.1C: *Limit Sensitive Receptors Near Odor Sources.* Prohibit sensitive receptors from locating near odor sources where frequent odor complaints would occur, unless it can be shown that potential odor complaints can be mitigated. Implementation of these measures would reduce odor impacts to a ***less-than-significant level***.		
BIOLOGICAL RESOURCES				
Impact 6-1: **Potential Impacts on Nesting Birds.** The Specific Plan is intended to improve and expand the natural environment in the Specific Plan area, including the use of native and drought-tolerant plants (a beneficial environmental measure). Without a proactive mitigation procedure in place, Specific Plan implementation could inadvertently result in the removal of existing trees containing nests or eggs of migratory birds, raptors, or bird species during the nesting season, which would be considered an "unlawful take" under the Federal Migratory Bird Treaty Act and USFW provisions protecting migratory and nesting birds (see Regulatory Setting above). This is considered a ***potentially significant impact.***	S	**Mitigation 6-1.** The removal of trees, shrubs, or weedy vegetation shall be avoided during the February 1 through August 31 bird nesting period to the extent possible. If no vegetation or tree removal is proposed during the nesting period, no further action is required. If it is not feasible to avoid the nesting period, the project applicant shall retain a qualified wildlife biologist to conduct a survey for nesting birds no sooner than 14 days prior to the start of removal of trees, shrubs, grassland vegetation, buildings, grading, or other construction activity. Survey results shall be valid for 21 days following the survey; therefore, if vegetation or building removal is not started within 21 days of the survey, another survey shall be required. The area surveyed shall include all construction sites,	City; Individual project applicants	LS

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NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		access roads, and staging areas, as well as areas within 150 feet outside the boundaries of the areas to be cleared or as otherwise determined by the biologist. In the event that an active nest is discovered in the areas to be cleared, or in other habitats within 150 feet of construction boundaries, clearing and construction shall be postponed for at least two weeks or until a wildlife biologist has determined that the young have fledged (left the nest), the nest is vacated, and there is no evidence of second nesting attempts. Implementation of this measure would reduce the impact to a ***less-than-significant level.***		
CULTURAL AND HISTORIC RESOURCES				
Impact 7-1: Destruction/Degradation of Historic Resources. There may be one or more properties or features within the plan area that meet the CEQA definition of a historic resource, including properties or features already listed, or properties or features eligible for listing, in a local, State, or Federal register of historic resources. Future development projects that are otherwise consistent with the proposed Specific Plan may cause substantial adverse changes in the significance of one or more such historic resources. Substantial adverse changes that may occur include	S	**Mitigation 7-1.** For any individual discretionary project within the Specific Plan area that the City determines may involve a property that contains a potentially significant historic resource (e.g., a recorded historic resource or an unrecorded building or structure 45 years or older), the resource shall be evaluated by City staff, and if warranted, shall be assessed by a qualified professional on the California Historical Resources Information System (CHRIS) list of consultants who meet the Secretary of the Interior's Professional Qualifications Standards to determine whether the property is a significant	City; Individual project applicants	LS/SU

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SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
physical demolition, destruction, relocation, or alteration of one or more historic resources or its immediate surroundings such that the resource is "materially impaired." The significance of a historic resource would be considered potentially "materially impaired" when and if an individual future development project proposes to demolish or materially alter the physical characteristics that justify the determination of its significance (CEQA Guidelines section 15064.5[b]). Such adverse changes in the significance of a CEQA-defined historic resource would be a ***significant impact.***		historical resource and whether or not the project may have a potentially significant adverse effect on the historical resource. If, based on the recommendation of the qualified professional, the City determines that the project may have a potentially significant effect, the City shall require the applicant to implement the following mitigation measures: (a) Adhere to one or both of the following Secretary of the Interior's Standards: ▪ Secretary of Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*; or ▪ Secretary of Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*. The qualified professional shall make a recommendation to the City as to whether the project fully adheres to the Secretary of the Interior's Standards, and any specific modifications necessary to do so. The final determination as to a project's adherence to the Standards shall be made by the City body with final decision-making authority over the project. Such a determination of individual project adherence to the Secretary of the Interior's		

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Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		Standards will constitute mitigation of the project historic resource impacts to a ***less-than-significant level*** (CEQA Guidelines section 15064.5). (b) If measure (a) is not feasible, the historic resource shall be moved to a new location compatible with the original character and use of the historical resource, and its historic features and compatibility in orientation, setting, and general environment shall be retained, such that the resource retains its eligibility for listing on the California Register. If neither measure (a) nor measure (b) is feasible, a project-specific EIR shall be required pursuant to CEQA Guidelines Section 15064.5, particularly in order for specific project alternatives to be designed and evaluated. If after that CEQA process, neither measure (a) nor (b) is found to be feasible, then the City shall, as applicable and to the extent feasible, implement the following measures in the following order: (c) Document the historic resource before any changes that would cause a loss of integrity and loss of continued eligibility. The documentation shall adhere to the Secretary of the Interior's *Standards for Architectural and Engineering Documentation*. The level of documentation shall be proportionate with the level of		

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Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		significance of the resource. The documentation shall be made available for inclusion in the Historic American Building Survey (HABS) or the Historic American Engineering Record (HAER) Collections in the Library of Congress, the California Historical Resources Information System (CHRIS), and the Bancroft Library, as well as local libraries and historical societies, such as the El Cerrito Historical Society. (d) Retain and reuse the historic resource to the maximum feasible extent and continue to apply the Secretary of the Interior's Standards to the maximum feasible extent in all alterations, additions, and new construction. (e) Through careful methods of planned deconstruction to avoid damage and loss, salvage character-defining features and materials for educational and interpretive use on-site, or for reuse in new construction on the site in a way that commemorates their original use and significance. (f) Interpret the historical significance of the resource through a permanent exhibit or program in a publicly accessible location on the site or elsewhere within the Specific Plan area. Implementation of measures (b), (c), (d), (e), and/or (f) would reduce a significant impact on historic resources. However, this program EIR is		

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Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		prohibited from speculating on the details of any future individual development proposal and its potential impact on a historic resource, and the City cannot determine with certainty that this mitigation measure would reduce the potential impact of any individual project on a historic resource to a less-than-significant level. Consequently, this impact may remain ***significant and unavoidable.***		
Impact 7-2: Potential for Disturbance of Buried Archaeological Resources, Including Human Remains. Development facilitated by the Specific Plan could disturb unrecorded sensitive archaeological resources in the plan area. This possibility represents a ***potentially significant impact.***	S	**Mitigation 7-2.** During the City's standard project-specific environmental checklist review process for all future, discretionary, public improvement and private development projects in the Specific Plan area, the City shall determine the possible presence of, and the potential impacts of the action on, archaeological resources. For discretionary projects involving substantial ground disturbance (more than 10,000 square feet), the City shall require individual project applicants or environmental consultants to contact the California Historical Resources Information System (CHRIS) to determine whether the particular project is located in a sensitive area. Future discretionary development projects that CHRIS determines may be located in a sensitive area--i.e., on or adjoining an identified archaeological site--shall proceed only after the project applicant contracts with a qualified archaeologist to conduct a determination in regard to cultural values	City; Individual project applicants	LS

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NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		remaining on the site and warranted mitigation measures. In general, to make an adequate determination in these instances, the archaeologist shall conduct a preliminary field inspection to (1) assess the amount and location of visible ground surface, (2) determine the nature and extent of previous impacts, and (3) assess the nature and extent of potential impacts. Such field inspection may demonstrate the need for some form of additional subsurface testing (e.g., excavation by auger, shovel, or backhoe unit) or, alternatively, the need for on-site monitoring of subsurface activities (i.e., during grading or trenching). If a significant archaeological resource is identified through this field inspection process, the City and project applicant shall seek to avoid damaging effects on the resource. Preservation in place to maintain the relationship between the artifact(s) and the archaeological context is the preferred manner of mitigating impacts on an archaeological site. Preservation may be accomplished by: ▪ Planning construction to avoid the archaeological site; ▪ Incorporating the site within a park, green space, or other open space element;		

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Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		▪ Covering the site with a layer of chemically stable soil; or ▪ Deeding the site into a permanent conservation easement. When in-place mitigation is determined by the City to be infeasible, a *data recovery plan*, which makes provisions for adequate recovery of culturally or historically consequential information about the site, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be submitted to the CHRIS Northwest Information Center. If Native American artifacts are indicated, the studies shall also be submitted to the Native American Heritage Commission. Identified cultural resources shall be recorded on form DPR 422 (archaeological sites). Mitigation measures recommended by these two groups and required by the City shall be undertaken, if necessary, prior to and during construction activities. A *data recovery plan* and data recovery shall not be required if the City determines that testing or studies already completed have adequately recovered the necessary data, provided that the data have already been documented in an EIR or are available for review at the CHRIS		

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Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		Northwest Information Center (CEQA Guidelines section 15126.4[b]). In the event that subsurface cultural resources are otherwise encountered during approved ground-disturbing activities for a plan area construction activity, work in the immediate vicinity shall be stopped and a qualified archaeologist retained to evaluate the finds following the procedures described above. Project personnel shall not collect cultural resources. If human remains are found, special rules set forth in State Health and Safety Code section 7050.5 and CEQA Guidelines section 15126.4(b) shall apply. Implementation of this measure would reduce the impact to a ***less-than-significant level.***		
Impact 7-3: Potential for Disturbance of Paleontological Resources. Development facilitated by the Specific Plan could disturb unrecorded paleontological resources in the plan area. This possibility represents a ***potentially significant impact.***	S	**Mitigation 7-3.** During the City's standard project-specific environmental checklist review process for all future, discretionary, public improvement and private development projects in the Specific Plan area, the City shall determine the possible presence of, and the potential impacts of the action on, paleontological resources. For projects involving substantial ground disturbance (more than 10,000 square feet), the City shall require	City; Individual project applicants	LS

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NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		individual project applicants to carry out the following measures: *(1) Education Program.* Project applicants shall implement a program that includes the following elements: ▪ Resource identification training procedures for construction personnel; ▪ Spot-checks by a qualified paleontological monitor of all excavations deeper than seven feet below ground surface; and ▪ Procedures for reporting discoveries and their geologic context. *(2) Procedures for Resources Encountered.* If subsurface paleontological resources are encountered, excavation shall halt in the vicinity of the resources, and the project paleontologist shall evaluate the resource and its stratigraphic context. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. During monitoring, if potentially significant paleontological resources are found, "standard" samples shall be collected and processed by a qualified paleontologist to recover micro vertebrate fossils. If significant fossils are found and collected, they shall be prepared to a reasonable point of identification.		

S = Significant
LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		Excess sediment or matrix shall be removed from the specimens to reduce the bulk and cost of storage. Itemized catalogs of material collected and identified shall be provided to a local museum repository with the specimens. Significant fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a local museum repository for permanent curatorship and storage. A report documenting the results of the monitoring and salvage activities, and the significance of the fossils, if any, shall be prepared. The report and inventory, when submitted to the City, shall signify the completion of the program to mitigate impacts on paleontological resources. Implementation of this measure would reduce the impact to a ***less-than-significant level.***		
GEOLOGY AND SOILS				
Impact 8-1: Potential Ground Instability Impacts. The potential for ground instability can depend on specific, highly localized underlying soil conditions. Determination of liquefaction, differential settlement, lateral spreading, and subsidence potential in the Specific Plan area would require site-specific geotechnical studies for future individual development proposals. Possible ground instability conditions, if not properly engineered	S	**Mitigation 8-1.** Subject to City review and approval, complete and implement the geotechnical mitigation recommendations identified in the required site-specific geotechnical investigations and engineering studies, in coordination with City grading permit and building permit performance standards. Project incorporation of this mitigation requirement would reduce this impact to a ***less-than-significant level*.**	City; Individual project applicants	LS

S = Significant
LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
for, could result in associated significant damage to project buildings and other improvements, representing a ***potentially significant impact***				
NOISE				
Impact 13-1: Noise and Land Use Compatibility. Residential land uses facilitated by the Specific Plan would be exposed to exterior noise levels exceeding 60 dBA L_{dn} from traffic noise and 70 dBA L_{dn} from BART noise. Future noise levels would exceed both El Cerrito's and Richmond's noise and land use compatibility standards. This is a ***potentially significant impact.***	S	**Mitigation 13-1.** Future development would be exposed to outdoor noise levels exceeding acceptable levels as defined in the El Cerrito and Richmond general plans. Noise levels inside residential structures proposed in such noise environments would exceed 45 dBA L_{dn}, the local established land use compatibility threshold. In areas where residential developments would be exposed to an L_{dn} of greater than 60 dBA, El Cerrito General Plan Policy H3.9 requires the evaluation of mitigation measures for specific projects. In Richmond General Plan Action SN4.A, new noise-sensitive uses that are located in an area with day-night average sound levels (L_{dn}) of 55 or greater require a noise study report; the report shall identify noise mitigation measures that limit noise to an acceptable level compared to existing conditions. ▪ Utilize site planning to minimize noise in residential outdoor activity areas (shared outdoor space in multi-family developments) by locating the areas behind noise barriers, the buildings, in courtyards, or orienting the	City; Individual project applicants	LS

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LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		terraces to alleyways rather than streets, whenever possible. The goal is a maximum noise level of 60 dBA L_{dn} from roadway traffic and 70 dBA L_{dn} from BART noise.		
		▪ The City of El Cerrito requires project-specific acoustical analyses to achieve interior noise levels of 45 dBA L_{dn} or lower, and the adopted instantaneous noise levels in residential units exposed to exterior noise levels greater than 60 dBA L_{dn} should not exceed 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms. Building sound insulation requirements would need to include the provision of forced-air mechanical ventilation in noise environments exceeding 60 dBA L_{dn} so that windows could be kept closed at the occupant's discretion to control noise. Special building construction techniques (e.g., sound rated windows and building facade treatments) may be required where exterior noise levels exceed 65 dBA L_{dn}. These treatments include, but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, acoustical caulking, etc. The specific determination of what treatments are necessary will be conducted on a unit-by-unit basis during project design. Results of the analysis, including the description of the necessary noise control treatments, will be submitted to the City,		

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LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		along with the building plans, which shall be revised as necessary or approved prior to issuance of a building permit. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 dBA L_{dn} or lower and meet instantaneous noise limits. ▪ Similar to above, noise insulation features shall be considered on a case-by-case basis for noise-sensitive offices and commercial uses proposed where noise levels exceed 65 dBA L_{dn}, in order to meet adopted noise standards. Implementation of these measures would reduce potential noise and land use compatibility impacts to a ***less-than-significant level***.		
Impact 13-2: Commercial Development Noise. The San Pablo Avenue Specific Plan would introduce commercial uses adjacent to residential land uses. Specific tenants for the commercial uses have not been identified, but uses would probably include retail stores, grocery stores, restaurants, or cafes. New commercial development proposed along with or next to residential development could result in noise levels exceeding City standards. Typical noise levels generated by loading and unloading would be similar to noise levels generated by truck movements on local	S	**Mitigation 13-2.** New commercial development proposed in the same building as or adjacent to residential development could result in noise levels exceeding City standards. ▪ Noise levels at residential property lines from commercial development shall be maintained not in excess of the general plan and municipal code limits for the Cities of El Cerrito and Richmond. The approval of the commercial development shall require a noise study demonstrating how the business--including loading docks, refuse areas, and	City; Individual project applicants	LS

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SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
roadways. Mechanical equipment would also have the potential to generate noise and would be a potential noise impact. This is a ***potentially significant impact.***		ventilation systems--would meet these requirements and would be consistent with the respective City's noise standards. ▪ Ensure that noise-generating activities, such as maintenance activities and loading and unloading activities, are limited to the hours of 7:00 AM to 9:00 PM. Implementation of these measures would reduce the potential commercial development noise impacts to a ***less-than-significant level***.		
Impact 13-3: Construction Noise. Businesses and residences would be intermittently exposed to high levels of noise throughout the 2040 plan horizon. Construction would elevate noise levels at adjacent businesses and residences by 15 to 20 dBA or more. This is a ***significant impact.***	S	**Mitigation 13-3.** Construction equipment shall be well-maintained and used judiciously to be as quiet as practical. The following measures, when applicable, are recommended to reduce noise from construction activities: ▪ Equip all internal combustion engine-driven equipment with mufflers that are in good condition and appropriate for the equipment. ▪ Utilize "quiet" models of air compressors and other stationary noise sources where technology exists. ▪ Locate stationary noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction area.	City; Individual project applicants	SU

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NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		▪ Prohibit unnecessary idling of internal combustion engines. ▪ Pre-drill foundation pile holes to minimize the number of impacts required to seat the pile. ▪ Construct solid plywood fences around construction sites adjacent to operational business, residences, or noise-sensitive land uses. ▪ A temporary noise control blanket barrier could be erected, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected. ▪ Route construction-related traffic along major roadways and as far as feasible from sensitive receptors. ▪ Ensure that construction activities (including the loading and unloading of materials and truck movements) are limited to the hours of 7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 8:00 PM on weekends and holidays.		

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LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		▪ Ensure that excavating, grading, and filling activities (including warming of equipment motors) are limited to between the hours of 7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 8:00 PM on weekends and holidays. ▪ Businesses, residences, or noise-sensitive land uses adjacent to construction sites shall be notified of the construction schedule in writing. Designate a "construction liaison" who would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site. Although the above measures would reduce noise generated by construction, the impact would remain ***significant and unavoidable*** as a result of the extended period of time that adjacent receivers could be exposed to construction noise.		
Impact 13-4: Construction-Related Vibration. Residences, businesses, and historic structures could be exposed to construction-related vibration during the	S	**Mitigation 13-4.** The following measures are recommended to reduce vibration from construction activities:	City; Individual project applicants	SU

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LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
excavation and foundation work of buildings. This is a ***significant impact.***		▪ Avoid impact pile driving where possible. Drilled piles causes lower vibration levels where geological conditions permit their use. ▪ Avoid using vibratory rollers and tampers near sensitive areas. ▪ In areas where project construction is anticipated to include vibration-generating activities, such as pile driving, in close proximity to existing structures, site-specific vibration studies shall be conducted to determine the area of impact and to present appropriate mitigation measures that may include the following: - Identify sites that would include vibration compaction activities (such as pile driving) and have the potential to generate ground-borne vibration, and the sensitivity of nearby structures to ground-borne vibration. Vibration limits shall be applied to all vibration-sensitive structures located within 200 feet of the project. A qualified structural engineer should conduct this task. - Develop a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific		

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LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. - Design construction contingencies that would be implemented when vibration levels approached the limits. - At a minimum, conduct vibration monitoring during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for more or less intensive measurements. - When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures. - Conduct post-survey on structures under either of these circumstances: (a) when construction monitoring has indicated high vibration levels or (b) when complaints of damage have been made due to construction activities. Make appropriate repairs or compensation when damage has resulted from construction activities. It may not be possible to avoid using pile drivers, vibratory rollers, and tampers entirely during construction facilitated by the		

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LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

Impacts	Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Significance With Mitigation
		San Pablo Avenue Specific Plan. Due to the density of development in the area, some of these activities may take place near sensitive areas. In these cases, the mitigation measures listed above may not be sufficient to reduce ground-borne vibrations below a level of significance. Therefore, this impact would be ***significant and unavoidable***.		
TRANSPORTATION AND CIRCULATION				
Impact 16-1: Cumulative Traffic Impacts. The project would have a significant cumulative impact, relative to the City's current LOS standard of D, at San Pablo Avenue/Cutting Boulevard, which would fall from LOS D in the Cumulative No Project case to LOS E in the Cumulative With Project case. This would be a ***significant project impact.***	S	**Mitigation 16-1.** Adoption and full implementation of the San Pablo Avenue Specific Plan/Complete Streets Plan is projected to reduce auto trips relative to the baseline assumption in the impact analysis, which would reduce this impact to a *less-than-significant level*. Furthermore, adoption of the plan would change the City's LOS standard of D to an LOS goal of E, which should be considered in conjunction with the multi-modal LOS standards for transit, pedestrian and bicycle modes, with transit and pedestrian modes being the primary priorities in the corridor. This would also render the impact *less-than-significant*. However, because the projected mode shift cannot be guaranteed, and adoption of the proposed new multi-modal LOS goals as defined in the draft plan cannot be assured, the impact relative to the current City LOS standard remains ***significant and unavoidable*** after mitigation.	City	SU

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LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

See Table 1.1 for definitions.

2.5 SUMMARY OF ALTERNATIVES

To provide a basis for further understanding of the environmental effects of a proposed project and possible approaches to reducing its identified significant impacts, the CEQA Guidelines require an EIR to also "…describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."

2.5.1 Identified Alternatives

Pursuant to these CEQA sections, Chapter 20 identifies and evaluates the following four alternatives to the project:

- **Alternative 1: No Project--Existing El Cerrito and Richmond General Plans.** Under Alternative 1, no Specific Plan would be adopted and development in the "specific plan" area would develop generally according to the policies and development capacity assumed in the adopted 1999 El Cerrito General Plan and 2012 Richmond General Plan. Alternative 1 would result in approximately 1,291 net new households (415 fewer than the Specific Plan) and population growth of 2,937 between 2010 and 2035 (based on ABAG Projections 2009 data), which is approximately 903 less than the Specific Plan forecast. New commercial floor area would be approximately the same as the proposed Specific Plan development capacity assumption of 243,112 square feet.

- **Alternative 2: Plan Bay Area 2040 Growth Allocations.** Alternative 2 assumes the San Pablo Avenue Specific Plan would be adopted but that the net new residential development capacity assumptions for the Plan area would be those listed in the Plan Bay Area "Final Forecast of Jobs, Population and Housing, Housing Growth by Jurisdiction and PDA/Investment Area, Contra Costa County" (July 2013). The boundaries of the San Pablo Avenue Corridor PDA described in Plan Bay Area would match the Specific Plan area. Net new residential units development would be approximately 1,010 units between 2010 and 2040 (based on Plan Bay Area growth projections), which is 696 fewer units than the Specific Plan, and population growth of 2,273, approximately 1,567 less than the Specific Plan forecast.

- **Alternative 3: Mitigation of Significant Unavoidable Impacts.** Under Alternative 3, the San Pablo Avenue Specific Plan would be adopted, and the EIR development capacity assumptions would remain the same. However, EIR-identified significant unavoidable impacts related to scenic vistas, historic resources, construction noise and construction-related vibration, and cumulative traffic would be reduced to less-than-significant levels. Both the proposed Specific Plan and Alternative 3 forecast 1,706 net new residential units and population growth of 3,840 between 2010 and 2040 (see EIR Chapter 14, Population and Housing).

- **Alternatives Considered But Rejected--Alternative 4: Alternative Project Location.** Section 15126.6(a) of the CEQA Guidelines states, "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects of the project[.]" Further, section 15126.6(c) explains, "Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i)

failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental effects."

Because an alternative project location would be infeasible, would not achieve the project objectives, and would not necessarily avoid or lessen the significant impacts of the project and might result in new significant impacts, an alternative that would involve a different project location was eliminated from further detailed consideration.

2.5.2 Environmentally Superior Alternative

The CEQA Guidelines (Section 15126[e][2]) stipulate, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Of all the identified alternatives, Alternative 2: Plan Bay Area Growth Allocations would result in the least adverse overall environmental impacts, and would therefore be the "environmentally superior alternative." This conclusion is based on the overall reduction in the severity of significant impacts (see EIR Table 20.1).

2.6 MITIGATION IMPLEMENTATION

For those mitigation measures identified in this EIR that are adopted by each jurisdictional City, a ***mitigation monitoring and reporting program*** will be undertaken by City staff to ensure and verify mitigation implementation. Implementation of most of the mitigation measures recommended in this EIR could be effectively implemented through incorporation into the final version of one or more of the various Specific Plan components and/or can be implemented (monitored and verified) through the City's standard development review procedures following adoption of these components. Pursuant to CEQA Guidelines Section 15087, adoption of a mitigation monitoring and reporting program will be necessary before the Specific Plan can be adopted by the El Cerrito City Council and Richmond City Council. Chapter 21 (Mitigation Monitoring) of this EIR provides additional detail.

3. PROJECT DESCRIPTION

This EIR chapter describes the proposed San Pablo Avenue Specific Plan actions ("Project") addressed in this EIR. As explained by CEQA Guidelines section 15124 (Project Description), the project description that follows has been detailed to the extent needed for adequate evaluation of environmental impacts. This description includes: (a) the location and boundaries of the Specific Plan area; (b) the background leading up to the proposed Plan; (c) the overall objectives of the Plan; (d) the various project characteristics identified in the Specific Plan; (e) the development capacity assumptions used to evaluate quantitative environmental impacts; and (f) the jurisdictional approvals required to implement the Plan.

In order to avoid repetition and provide a manageable environmental document, this project description, as well as the other EIR chapters, does not duplicate the detailed contents of the Specific Plan document. As recommended for other portions of this EIR (e.g., the "Relevant Specific Plan Components" section of each environmental topic chapter), the reader is encouraged to review the entire Specific Plan or the sections that interest the reader for more detail.

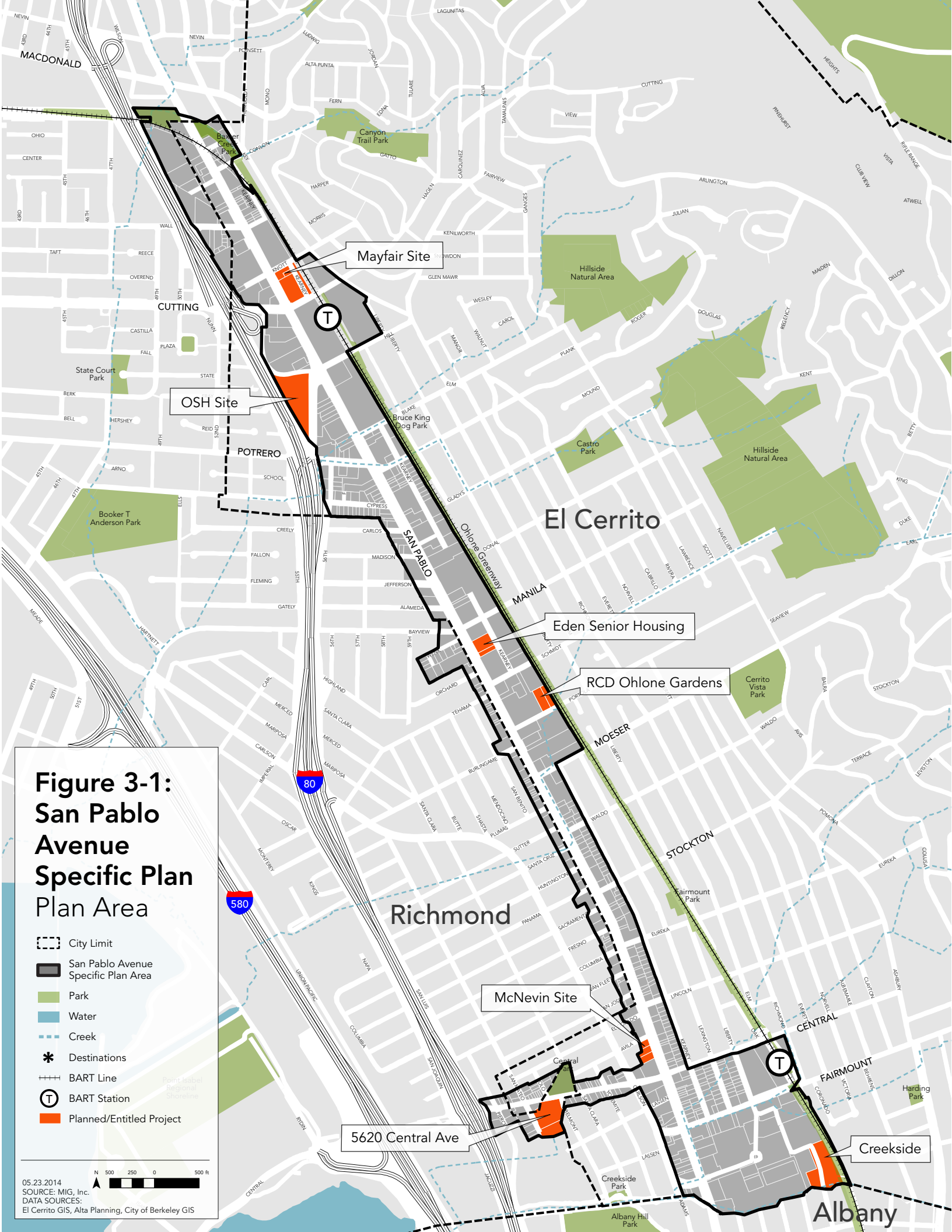
3.1 LOCATION

See Figure 3-1 (Plan Area). The Specific Plan area is located in the east Bay of the San Francisco Bay Area. Extending through the western portion of Contra Costa and Alameda counties, San Pablo Avenue is a major north-south route that parallels Interstate 80 (I-80). Additionally, the Avenue is designated as State Route 123 in the Plan area. As a result of the number of communities that it connects and its proximity to freeways, San Pablo Avenue carries both heavy regional through-traffic and local traffic accessing the Avenue's mix of commercial services, civic uses, and two BART stations and utilizing the Avenue to access the primarily residential neighborhoods to its east and west.

The Specific Plan area is located in portions of the cities of El Cerrito and Richmond. The approximately 206-acre Plan area extends for approximately 2.5 miles from El Cerrito Plaza and El Cerrito's border with the City of Albany on the south to the Ohlone Greenway near the BART tracks and Baxter Creek on the north.

At the south end of the Plan area, the project boundary extends east to include the El Cerrito Plaza BART Station and west along Central Avenue to I-80. Generally, the Plan area includes the San Pablo Avenue roadway and the parcels fronting on the avenue.

The majority of the parcels (approximately 174 acres, or 84 percent) in the Plan area are in the City of El Cerrito, while other parcels on the west side of San Pablo Avenue (about 32 acres, or 16 percent) are in the City of Richmond.


Mayfair Site
OSH Site
Eden Senior Housing
RCD Ohlone Gardens
McNevin Site
5620 Central Ave
Creekside
El Cerrito
Richmond
Albany
POTRERO
SAN PABLO
Ohlone Greenway
MANILA
MOESER
STOCKTON
CENTRAL
FAIRMOUNT
CUTTING
MACDONALD
Canyon Trail Park
Baxter Creek Park
Hillside Natural Area
State Court Park
Bruce King Dog Park
Castro Park
Booker T Anderson Park
Cerrito Vista Park
Fairmount Park
Harding Park
Creekside Park
Albany Hill Park
Central Park
80
580
Figure 3-1: San Pablo Avenue Specific Plan
Plan Area
City Limit
San Pablo Avenue Specific Plan Area
Park
Water
Creek
Destinations
BART Line
BART Station
Planned/Entitled Project
N 500 250 0 500 ft
05.23.2014
SOURCE: MIG, Inc.
DATA SOURCES:
El Cerrito GIS, Alta Planning, City of Berkeley GIS

The existing land use character of the San Pablo Avenue Specific Plan area is largely shaped by auto-oriented commercial uses developed primarily between the 1940s and 1980s. Strip malls with parking fronting the street are intermixed with small retailers, restaurants, offices, residences, and auto-related businesses. The El Cerrito del Norte and El Cerrito Plaza BART stations are located in the Plan area and play a significant role in shaping land use character along the corridor. Large amounts of surface parking currently exist at key activity nodes. Single- and multi-family residential uses are located primarily on streets perpendicular and parallel to San Pablo Avenue. In recent years, some new, mixed-use development incorporating retail, office, and residential uses has occurred in the Plan area. Also, several recent public investments have taken place in the Plan area, including improvements to the Ohlone Greenway (a multi-modal path and linear open space for pedestrians and bicyclists), a new El Cerrito City Hall, bicycle and pedestrian infrastructure, and streetscape improvements.

The Plan area generally is composed of three areas (see Figure 3-2):

- ***Downtown*** is an entertainment and shopping node that serves as the southern gateway to El Cerrito. Located within a ½-mile walk of the El Cerrito Plaza BART Station, the district is characterized by constrained commercial lots with adjoining residential uses, the El Cerrito Plaza regional shopping center, and the BART station, with a large surface parking lot to the west of the station and smaller parking lots to the east.

- ***Midtown*** is a civic and community-oriented area with two neighborhood-scale commercial nodes at Stockton and Moeser. Characterized by larger blocks next to the BART tracks, the district has both recent and planned mixed-use and residential development, as well as the El Cerrito City Hall.

- ***Uptown*** is a mixed-use commercial district that serves as the northern gateway to El Cerrito. Located within a ½-mile walk of the El Cerrito del Norte BART Station (a regional multi-modal center), the district is characterized by larger lots and building footprints, and extensive surface parking lots, as well as the del Norte BART station, with large surface parking lots to the station's east and west and a parking structure to the station's east

These districts are also used to help organize the Specific Plan.

3.2 BACKGROUND

The San Pablo Avenue Specific Plan was developed in coordination with previous and concurrent planning efforts and incorporates City (El Cerrito and Richmond), stakeholder, and community input from each stage of the planning process. This section outlines the planning efforts, process, and context which formed the foundation of the Specific Plan.

El Cerrito General Plan (1999/2003). The El Cerrito General Plan was updated in 1999, with the Housing Element updated most recently in 2012. The General Plan identified San Pablo Avenue as one of the most significant opportunity areas for the City. The General Plan targets most commercial and residential growth along the Avenue, particularly near the El Cerrito Del Norte and El Cerrito Plaza BART stations and in Midtown. The Specific Plan is intended to be consistent with the El Cerrito General Plan (see chapter 18 of this EIR).

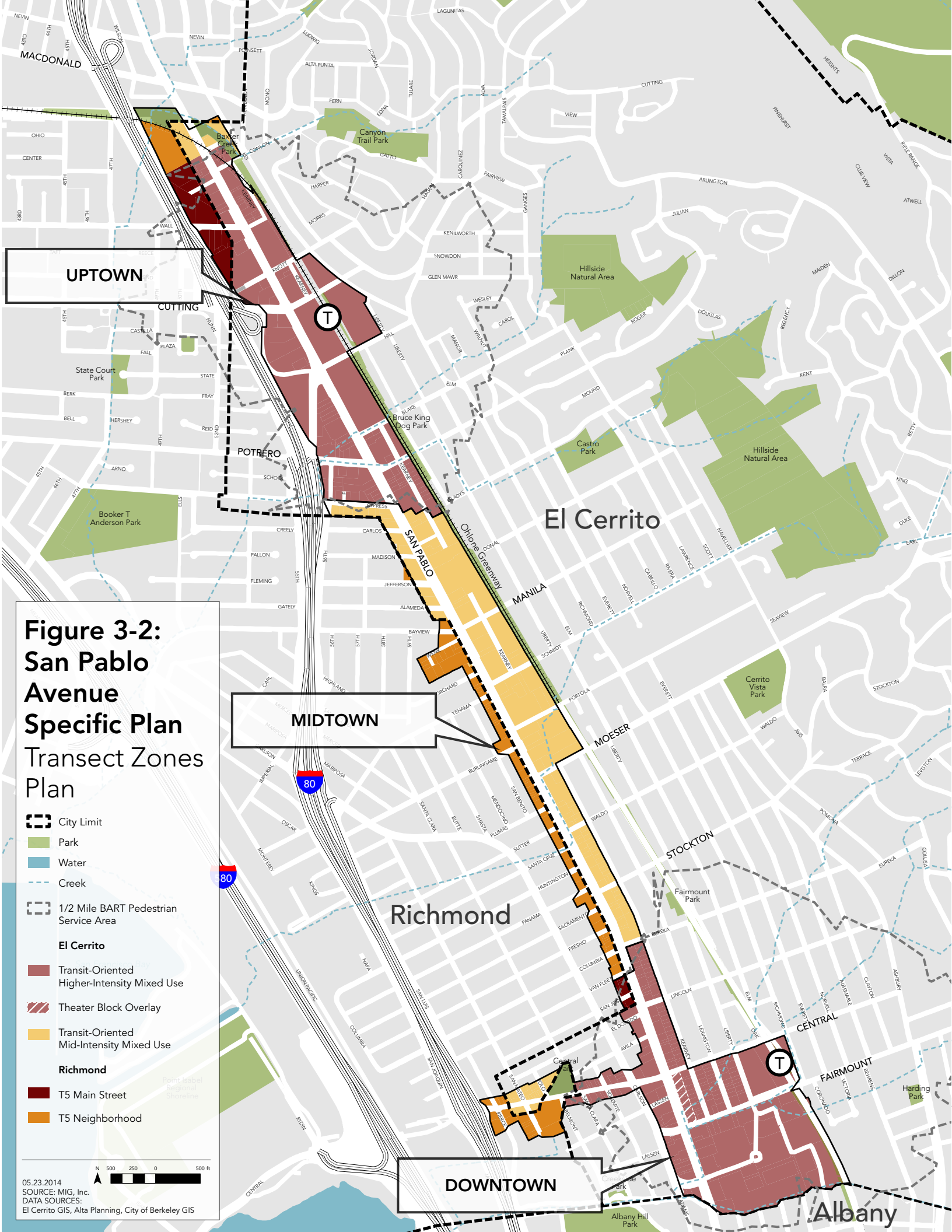


Figure 3-2: San Pablo Avenue Specific Plan
Transect Zones Plan
City Limit
Park
Water
Creek
1/2 Mile BART Pedestrian Service Area
El Cerrito
Transit-Oriented Higher-Intensity Mixed Use
Theater Block Overlay
Transit-Oriented Mid-Intensity Mixed Use
Richmond
T5 Main Street
T5 Neighborhood
05.23.2014
SOURCE: MIG, Inc.
DATA SOURCES:
El Cerrito GIS, Alta Planning, City of Berkeley GIS
N
500 250 0 500 ft
UPTOWN
MIDTOWN
DOWNTOWN
POTRERO
CENTRAL
FAIRMOUNT
SAN PABLO
Ohlone Greenway
MACDONALD
CUTTING
MANILA
MOESER
STOCKTON
Richmond
El Cerrito
Albany
Baxter Creek Park
Canyon Trail Park
Hillside Natural Area
State Court Park
Bruce King Dog Park
Castro Park
Booker T Anderson Park
Cerrito Vista Park
Fairmount Park
Harding Park
Albany Hill Park
Central Park
80

Ohlone Greenway Master Plan (2009). The Ohlone Greenway Master Plan outlines the goals and conceptual improvements proposed for the Greenway. The Plan recommends circulation improvements that connect with San Pablo Avenue and adjacent development.

El Cerrito Strategic Plan (2013). The Strategic Plan involved a year-long effort of community engagement to help guide development of the Specific Plan.

El Cerrito Climate Action Plan (2013). The Climate Action Plan assists the El Cerrito City Council and community in determining the best actions to reduce locally produced greenhouse gas emissions (GHGs), including a primary strategy of encouraging more compact, higher density infill development along transportation corridors and continuing to invest in infrastructure that invites people to walk, bike, and take transit more in El Cerrito.

El Cerrito Urban Greening Plan (in development 2014). This plan is an effort by the City to enhance and create new public places and open spaces leading to a greener, more environmentally sustainable and livable city while accommodating future infill development.

El Cerrito Active Transportation Plan (in development 2014). This plan is part of El Cerrito's efforts to create a more walkable, bikeable, and sustainable city, including by improving connectivity and interconnectivity throughout the Specific Plan area.

Richmond General Plan 2030 (2012). The San Pablo Avenue corridor is identified as a "Change Area" in the current Richmond General Plan. The corridor is envisioned as a more mixed-use and pedestrian-oriented environment. The San Pablo Avenue Specific Plan is intended to be consistent with the Richmond General Plan (see Chapter 18 of this EIR).

Richmond Livable Corridors Form-Based Code Draft (2013). This code will guide development of the Richmond portions of Macdonald Avenue, San Pablo Avenue, and 23rd Street. *The San Pablo Avenue Specific Plan defers to the Livable Corridors Form-Based Code for the Richmond parcels within the Specific Plan area.*

Community Workshops (Summer and Fall 2013). Two community workshops were held to present updates on the concurrent Specific Plan, Urban Greening Plan, and Active Transportation Plan. Community feedback informed revisions to the plans.

Technical Advisory Group Meetings (2013-2014). The streetscape design concepts and standards for San Pablo Avenue and other Plan area streets were developed in consultation with, and reviewed by, a Technical Advisory Group comprised of representatives from the City of El Cerrito, the City of Richmond, the City of Albany, AC Transit, Caltrans, BART, Contra Costa Health Services, and the East Bay Bicycle Coalition.

Planning Commission and City Council Study Sessions (Fall 2013). During study sessions, the El Cerrito Planning Commission and City Council reviewed the Specific Plan's key principles, urban design framework, draft Form-Based Code standards, and draft Complete Streets standards. The recommendations guided development of the draft Specific Plan.

Developer and Architect Charrette (Spring 2014). The charrette was an opportunity for the development and building design community to offer input on the proposed Form-Based Code

standards. The charrette's implementation-oriented perspective helped ensure the feasibility and flexibility of the code to allow for innovative developments that would fulfill plan objectives.

Public Process Prior to 2013. The current San Pablo Avenue Specific Plan is a revision to an earlier draft that was released in 2009 and revised in 2010. At an El Cerrito City Council meeting in 2011, City Council directed staff to create an updated Plan that reflected increased heights, more flexible parking, and a more flexible approach to mixed-use development. On April 13, 2013 City Council authorized the revision and addition of a Complete Streets chapter and Environmental Impact Report.

3.3 PROJECT OBJECTIVES

The Specific Plan goals and strategies, as identified by the City of El Cerrito and the City of Richmond, are listed below. In this EIR, these goals and strategies are referred to collectively under the CEQA term "project objectives" (CEQA Guidelines section 15124[b]). The goals and strategies are listed in Specific Plan section 1.04.

Goal A: Strengthen Sense of Place.

Strategy 1: Articulate the distinctive role and identity of each focus area: Downtown, Midtown, and Uptown.

Strategy 2: Reinforce a distinguishing sense of place by responding to existing assets such as the Ohlone Greenway and key views.

Strategy 3: Optimize placemaking in all developments.

Strategy 4: Attract pedestrian activity to key nodes to foster community and identify places of interest.

Goal B: Ensure Return on Investment.

Strategy 1: Maximize TOD (transit-oriented development) potential (BART and AC Transit).

Strategy 2: Stimulate investment in vacant/underutilized sites at key focus areas.

Strategy 3: Build on recent and planned private and public investments.

Strategy 4: Leverage all investments to catalyze new investments.

Goal C: Encourage Practical and Market Friendly Development.

Strategy 1: Provide development clarity to encourage investment.

Strategy 2: Incorporate flexible development codes that respond to constrained parcels, surrounding context, and the market.

Strategy 3: Allow ground floor residential development to provide flexibility and expand the Specific Plan area's residential base.

Goal D: Enhance and Humanize the Public Realm.

Strategy 1: Design streets for living instead of just driving through reStreet placemaking principles.

Strategy 2: Make large blocks human-scale through midblock connections.

Strategy 3: Create new gathering places to serve the needs of existing and new users.

Strategy 4: Promote environmental sustainability.

Strategy 5: Celebrate and strengthen the unique natural context.

Goal E: Catalyze Mode Shift.

Strategy 1: Promote infill development through increased land use intensity close to existing transit infrastructure.

Strategy 2: Reduce parking requirements to encourage transit use, reduce reliance on the private automobile and allow valuable land to be utilized for more intense and active uses.

Strategy 3: Strengthen pedestrian and bicycle connectivity through existing and new connections and infrastructure..

Strategy 4: Improve connectivity between the Green Belt (Wildcat Canyon Trail) and the Blue Belt (Bay Trail) through pedestrian and bicycle connections.

3.4 SAN PABLO AVENUE SPECIFIC PLAN

The San Pablo Avenue Specific Plan represents a collaborative planning effort between the cities of El Cerrito and Richmond to identify a shared vision for the future of San Pablo Avenue, identify improvement needs, and adopt implementing regulations that can be applied consistently in the planning area. A major goal of the planning effort is to achieve a coordinated, cohesive environment and character in the Plan area through (1) a Form-Based Code (FBC); (2) multi-modal transportation goals and policies, recommended streetscape design improvements, and design standards as part of the Complete Streets Plan portion of the Specific Plan; and (3) infrastructure improvements. Each of these Plan components is described below.

To avoid repetition and help keep the EIR manageable, more details on these topics are included in the appropriate environmental topic chapters (Aesthetics and Visual Resources, Air Quality, Biological Resources, etc.) as they apply specifically to that environmental topic. This helps ensure that environmental impacts are evaluated to the level of detail required by CEQA Guidelines sections 15124 (Project Description) and 15126.2 (Consideration and Discussion of Significant Environmental Impacts).

3.4.1 Form-Based Code (Chapter 2 of the Specific Plan)

The Specific Plan Form-Based Code is intended to guide change and development of the physical environment and character of the streets, buildings, and open spaces in the Plan area. The Form-Based Code supports the community vision to create a vibrant, walkable, sustainable, and transit-oriented corridor that respects surrounding neighborhoods. The code addresses the following topics:

- Intent and Use of the Code
- Administration of Regulating Code
- Regulating Plan
  - Transect Zones
  - Street Types
- Development Standards
  - Regulation by Street Type
- Supplemental General Development Standards
  - Site Layout
  - Building Articulation
  - Frontage Types
  - Sustainable and Environmentally Friendly Elements
  - Landscaping, Fencing and Screening Standards
  - Parking Standards
  - Signage Standards
- General Public and Private Open Space Standards
  - On-Site Open Space
  - Planting Standards
- Definitions

Figure 3-2 illustrates the proposed Transect Zones Plan for the Form-Based Code within the framework of the Downtown, Midtown, and Uptown areas. In the El Cerrito portion of the Plan area, the two primary Zones are (1) Transit-Oriented Higher-Intensity Mixed Use for areas generally within a ½-mile walk of a BART station, and (2) Transit-Oriented Mid-Intensity Mixed Use for the remainder of the corridor. The Transect Zones regulate the building heights, parking requirements, and land uses for new development in the El Cerrito portion of the Plan area.

For the Richmond parcels in the Specific Plan area, the San Pablo Avenue Specific Plan defers to the Richmond Livable Corridors Form-Based Code. Land use types will be determined by the City of Richmond General Plan designations.

3.4.2 Complete Streets Plan (Chapter 3 of the Specific Plan)

The Complete Streets Plan provides direction for the redesign and development of the street right-of-way (ROW) in the Plan area, such as travel lanes, intersections, bike lanes, cycletracks, crosswalks, and medians. The Plan also provides guidance for the pedestrian realm of the ROW, including the following sidewalk zones (from closest to the street inward):

- Amenity Zone--can contain landscaping, seating, lighting, and other urban furniture
- Pedestrian Zone--a clear pathway allowing pedestrian movement and full accessibility
- Activity Zone--provides space for activities such as outdoor dining for commercial uses and buffer zones at residential uses

The Complete Streets Plan aims to create a road and streetscape environment that balances the needs of all users and encourages “mode shift” to increase percentage of pedestrians, cyclists, and transit users. The Complete Streets performance measures were developed to understand impacts on all modes, as opposed to traditional traffic evaluation tools that simply measure delay to auto drivers; this new evaluation tool is referred to as “multi-modal level of service” (MMLOS).

The Complete Streets Plan includes multi-modal transportation goals and policies, recommended streetscape design improvements, and design standards to support the following overarching framework of the Specific Plan:

- Shift modes toward pedestrians, bicyclists, and transit users
- Utilize complete streets performance measures (MMLOS--multi-modal level of service)
- Improve connectivity
- Build on recent investments
- Optimize upcoming investments
- Enhance and catalyze economic development
- Design a balanced and comfortable streetscape environment
- Welcome and accommodate users with a range of needs and abilities
- Work with key partners to assure feasibility
- Comply with state and regional Complete Streets policies

Figure 3-3 illustrates the proposed Street Types Plan for the Specific Plan. These types address San Pablo Avenue, cross and adjacent streets, and potential new connections. Figure 3-4 shows the Proposed Streetscape Design in the Plan area. Recommended streetscape actions and improvements would include:

- Downtown:
  - Create a southern gateway to the City with special paving, trees, public art, and signage
  - Provide midblock crosswalks at key locations, designed to be consistent with NCHRP 562 standards and forthcoming Active Transportation Plan (in development 2014) policies
  - Add landscaped bulb-outs with two standard curb ramps at all intersections
  - Highlight crosswalks with special paving and striping treatments consistent with existing special treatments in the City
  - Work with private developments to widen sidewalks to accommodate amenity, pedestrian, and activity zones as outlined in the FBC
  - Increase median along left turn lanes and at intersections for enhanced landscaping and to provide a pedestrian refuge
  - Consider consolidating and moving to far-side-of-intersection bus stops with bus platforms
  - Provide bicycle Super Sharrows (marked shared lanes for bicycles and motor vehicles) in outside lanes to clearly indicate bicyclists’ place on the Avenue
  - Re-stripe travel lanes to an 11-foot width to accommodate additional bicycle infrastructure, while maintaining the majority of the existing curb edge and stormwater flowline and existing travel and turning movements

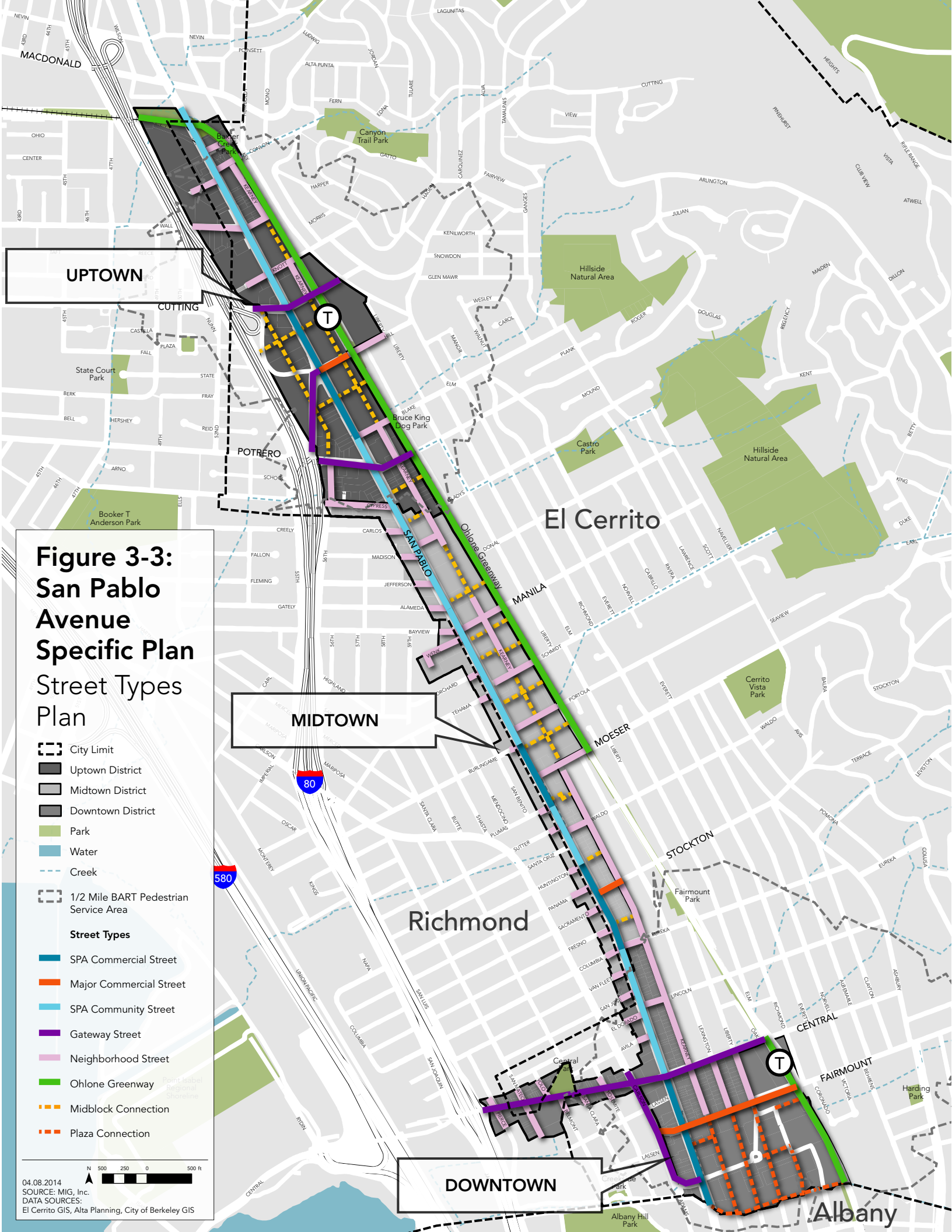


Figure 3-3: San Pablo Avenue Specific Plan

Street Types Plan

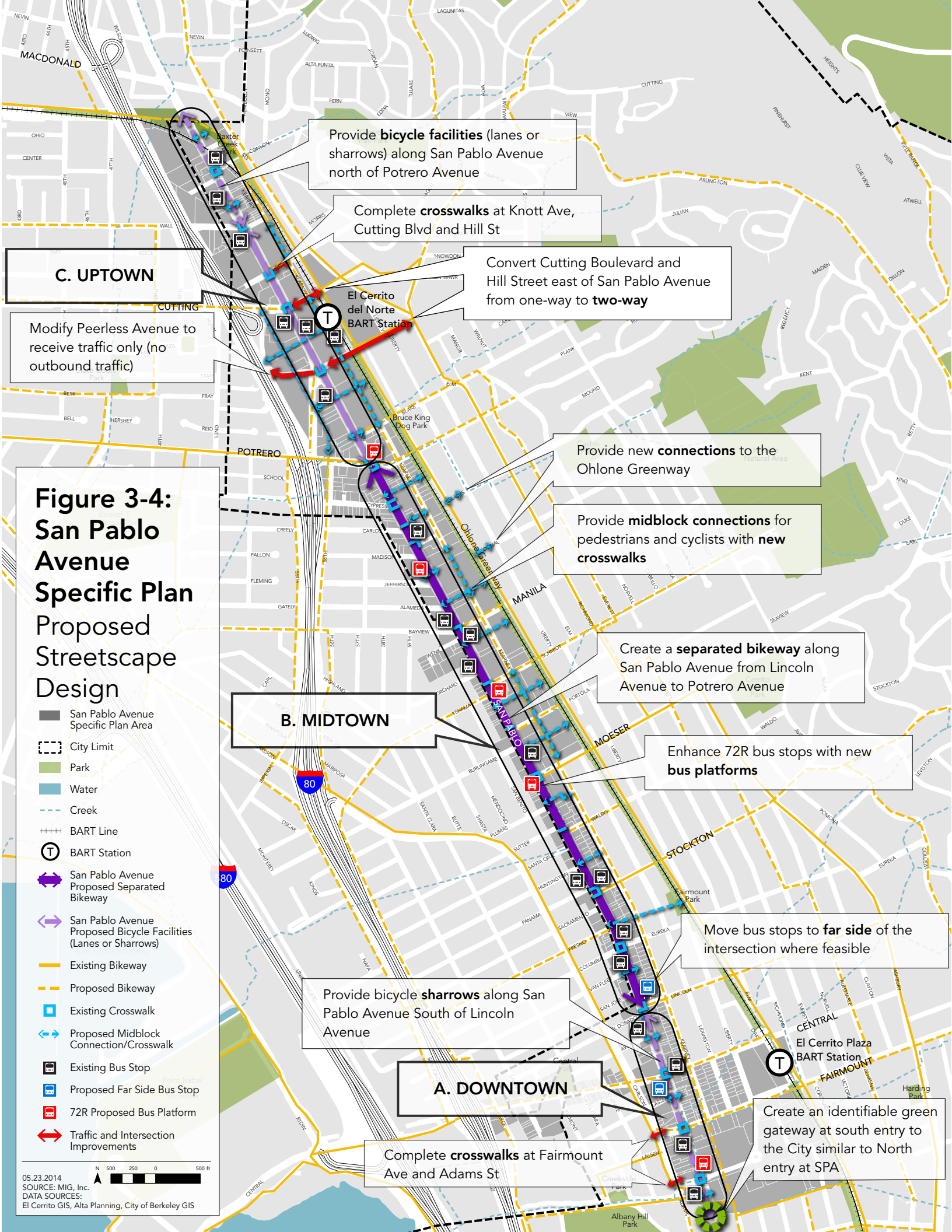
- City Limit
- Uptown District
- Midtown District
- Downtown District
- Park
- Water
- Creek
- 1/2 Mile BART Pedestrian Service Area

Street Types

- SPA Commercial Street
- Major Commercial Street
- SPA Community Street
- Gateway Street
- Neighborhood Street
- Ohlone Greenway
- Midblock Connection
- Plaza Connection

N 500 250 0 500 ft

04.08.2014
SOURCE: MIG, Inc.
DATA SOURCES:
El Cerrito GIS, Alta Planning, City of Berkeley GIS


Provide **bicycle facilities** (lanes or sharrows) along San Pablo Avenue north of Potrero Avenue
Complete **crosswalks** at Knott Ave, Cutting Blvd and Hill St
C. UPTOWN
Convert Cutting Boulevard and Hill Street east of San Pablo Avenue from one-way to **two-way**
El Cerrito del Norte BART Station
Modify Peerless Avenue to receive traffic only (no outbound traffic)
Provide new **connections** to the Ohlone Greenway
Provide **midblock connections** for pedestrians and cyclists with **new crosswalks**
Create a **separated bikeway** along San Pablo Avenue from Lincoln Avenue to Potrero Avenue
B. MIDTOWN
Enhance 72R bus stops with new **bus platforms**
Move bus stops to **far side** of the intersection where feasible
Provide bicycle **sharrows** along San Pablo Avenue South of Lincoln Avenue
A. DOWNTOWN
El Cerrito Plaza BART Station
Create an identifiable green gateway at south entry to the City similar to North entry at SPA
Complete **crosswalks** at Fairmount Ave and Adams St
MACDONALD
CUTTING
POTRERO
MANILA
MOESER
STOCKTON
Ohlone Greenway
Bruce King Dog Park
Baxter Creek Park
Fairmount Park
Albany Hill Park
Harding Park
80
Figure 3-4: San Pablo Avenue Specific Plan
Proposed Streetscape Design
San Pablo Avenue Specific Plan Area
City Limit
Park
Water
Creek
BART Line
BART Station
San Pablo Avenue Proposed Separated Bikeway
San Pablo Avenue Proposed Bicycle Facilities (Lanes or Sharrows)
Existing Bikeway
Proposed Bikeway
Existing Crosswalk
Proposed Midblock Connection/Crosswalk
Existing Bus Stop
Proposed Far Side Bus Stop
72R Proposed Bus Platform
Traffic and Intersection Improvements
N 500 250 0 500 ft
05.23.2014
SOURCE: MIG, Inc.
DATA SOURCES:
El Cerrito GIS, Alta Planning, City of Berkeley GIS

- Midtown:
  - Provide midblock crosswalks at key locations, designed to be consistent with NCHRP 562 standards and forthcoming Active Transportation Plan (in development 2014) policies
  - Highlight crosswalks with special paving and striping treatments consistent with existing special treatments in the City
  - Work with private developments to widen sidewalk to accommodate amenity, pedestrian and activity zones as outlined in the FBC
  - Add landscaped bulb-outs with two standard curb ramps at all intersections
  - Install rain gardens planned at Moeser and Stockton
  - Consider consolidating and moving to far-side-of-intersection bus stops with bus platforms
  - Add separated and buffered bike lanes through cycle tracks
  - Decrease median width and re-stripe travel lanes to 11-feet wide to re-purpose ROW for a buffered cycle track. Ensure minimal impact to existing planting and irrigation system, while maintaining the majority of the existing curb edge and stormwater flowline

- Uptown:
  - Provide midblock crosswalks at key locations, designed to be consistent with NCHRP 562 standards and forthcoming Active Transportation Plan (in development 2014) policies
  - Work with private developments to widen sidewalk to accommodate amenity, pedestrian and activity zones as outlined in the FBC
  - Highlight crosswalks with special paving and striping treatments consistent with existing special treatments in the City
  - Increase median along left turn lanes and at intersections for enhanced landscaping and to provide a pedestrian refuge
  - Add landscaped bulb-outs with two standard curb ramps at intersections
  - Consider consolidating and moving to far-side-of-intersection bust stops with bus platforms
  - Provide bike lanes south of Wall Street and Super Sharrows north of Wall Street due to constrained ROW
  - Re-purpose second left-turn lanes on San Pablo Avenue where possible and re-stripe travel lanes to 11-feet wide to re-purpose ROW where needed. Ensure minimal impact to existing planting and irrigation system, while maintaining the existing curb edge and stormwater flowline

Chapter 16 (Transportation and Circulation) of this EIR provides more detail of the Complete Streets Plan specific to evaluating potential environmental effects.

3.4.3 Infrastructure Systems (Chapter 4 of the Specific Plan)

The Specific Plan (especially the Infrastructure Systems chapter) includes infrastructure goals and policies, and recommends feasible improvements to infrastructure systems to support the Plan objectives. The systems evaluated in the Plan include water, wastewater, storm drainage, and dry utilities (e.g., gas, electric, cable).

Chapter 17 (Utilities and Service Systems) of this EIR provides more detail of the Infrastructure Systems chapter specific to evaluating potential CEQA-defined environmental impacts (water, wastewater, storm drainage).

3.5 DEVELOPMENT CAPACITY ASSUMPTIONS

Table 3-1 shows the estimated existing and forecasted residential units and commercial (retail, office) square footage for the entire Plan area, i.e., in El Cerrito and in Richmond collectively. The development capacity forecast encompasses the entire Plan area. However, no site-specific, individual development proposals will be approved as part of the Specific Plan EIR certification process. Any such individual project would be subject to its own CEQA review, including evaluation against the Specific Plan EIR (see "Planned and Entitled Projects" below).

Table 3-1 indicates a development capacity of approximately 1,706 net new residential units and 243,112 net new square feet of commercial space in the 206-acre Plan area through 2040.

Table 3-1
SAN PABLO AVENUE SPECIFIC PLAN AREA DEVELOPMENT CAPACITY
2013-2040

	Residential (Units)	Commercial (Square Feet)
Existing 2013	1,340[1]	2,016,370
Additional (Net New) Capacity 2040	1,706	243,112
Total 2040	3,046	2,259,482
SOURCE: City of El Cerrito and MIG, March 2014.		

The Plan area development capacity assumptions used for the impact analyses in this program EIR are first based on projections provided by the Association of Bay Area Governments (ABAG) for the Plan area, then on entitled and planned projects in the City of El Cerrito and the City of Richmond, and projections for the construction of projects consistent with the Form-Based Code development standards. For the purpose of this EIR, ABAG Plan Bay Area growth projections were applied to the new development standards, including on-site parking, site layout and height parameters, to assume a realistic growth projection for the Specific Plan area. These design standards were developed to be consistent with the goals of Plan Bay Area: climate protection, adequate housing, healthy and safe communities, open space and agricultural preservation, equitable access, economic vitality, and transportation system effectiveness, but incorporate locally refined data more telling of the development feasibility of the Specific Plan than would be possible on a regional planning level (also see EIR chapter 14).

Planned and Entitled Projects:

To maintain both a short-term and long-term planning perspective for the San Pablo Avenue Specific Plan, development capacity through the year 2040 includes four planned projects in varying preliminary states of discussion between City staff and potential applicants, one planned project whose EIR has been certified, and two projects that were previously entitled (with

[1]Association of Bay Area Governments and Metropolitan Transportation Commission, Draft Plan Bay Area: Strategy for a Sustainable Region, Final Forecast of Jobs, Housing and Population, July 2013, Housing Growth by Jurisdiction and PDA/Investment Area (Contra Costa County). The Plan Bay Area policy document was adopted July 18, 2013. The existing housing data is from 2010 and is the most recent systematic data available because Plan Bay Area includes the Specific Plan area as a distinct Priority Development Area (PDA).

certified CEQA documentation). These planned/entitled projects are summarized below and identified on Figure 3-1.

It is emphasized that the planned (non-entitled) projects are listed below in order to provide full disclosure of preliminary information that has been provided by potential applicants to the City staffs of El Cerrito and Richmond. Although the possible development program for each planned project is included in the overall Specific Plan area development capacity, the certification of a San Pablo Avenue Specific Plan EIR and approval of a Specific Plan itself will not confer approval on any of these planned (non-entitled) projects. Each project proposal will need to undergo the City review process, including reviews related to the completeness of the project application, conformance with the Specific Plan, applicability of the Specific Plan EIR and the possible need for additional CEQA work or technical studies, and the City decision-making process, including public hearings.

Three of the projects listed below already have certified EIRs. For those projects, the EIR being prepared for the Specific Plan is not required. However, to maintain both a short-term and long-term (year 2040) planning perspective, the Specific Plan and its EIR will include the three projects in the development capacity for the Specific Plan area so that overall development potential is accurately evaluated.

Planned Projects:

- Mayfair site: 240 dwelling units; 13,000 square feet (sq. ft.) retail; 5,000 sq. ft. leasing and common area; 4,000 sq. ft. building services; pedestrian plaza and mini-park; two 5-story buildings over 15-foot high parking podium for a total height of approximately 65 feet
- OSH (Orchard Supply Hardware) site: general retail and/or athletic fitness; no square footage identified
- McNevin site: 60 dwelling units; 12,000 sq. ft. commercial; two levels of residential over commercial
- 5260 Central Avenue: 172 dwelling units; 309 parking spaces; 67 feet in height
- Eden Senior Housing (EIR certified): 63 senior housing dwelling units; 1,156 sq. ft. retail/café; 1,906 sq. ft. community clinic; 2,710 sq. ft. public plaza; rehabilitation of existing on-site Contra Costa Florist building for use as Eden Housing community and management functions

Entitled Projects:

- RCD (Resources for Community Development) Ohlone Gardens: 57 affordable dwelling units; 4,650 sq. ft. commercial
- Creekside: 128 dwelling units; 192 parking spaces

3.6 REQUIRED APPROVALS

3.6.1 El Cerrito and Richmond Discretionary Approvals

Implementation of the San Pablo Avenue Specific Plan for the parcels within each City's respective jurisdiction would require, but are not limited to, the following discretionary approvals by the City of El Cerrito and the City of Richmond:

- Certification of the Final Environmental Impact Report
- Adoption of a Mitigation Monitoring and Reporting Program
- Adoption of the San Pablo Avenue Specific Plan for the parcels within the City of El Cerrito; adoption of the Richmond Livable Corridors Form-Based Code development standards for the parcels within the City of Richmond, and amendment to the Richmond Livable Corridors Regulating Plan to add the areas within the Specific Plan
- Adoption of General Plan amendments and zoning changes as necessary to ensure consistency between the Specific Plan and each jurisdiction's respective General Plan and zoning code
- Discretionary review as necessary, including CEQA review, for future individual public and private development proposals in the Plan area

3.6.2 Other Government Agency Approvals

Future individual public and private development proposals in the Plan area would be expected to require review or approvals from other jurisdictional agencies, including, but not limited to:

- East Bay Municipal Utility District (EBMUD)
- Stege Sanitary District (SSD)
- San Francisco Bay Regional Water Quality Control Board (RWQCB)
- Bay Area Air Quality Management District (BAAQMD)
- California Department of Transportation (Caltrans)

4. AESTHETICS AND VISUAL RESOURCES

This EIR chapter describes aesthetic and visual implications of the proposed Specific Plan. The chapter addresses the specific visual impact concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan result in a substantial adverse effect on a scenic vista, substantially damage scenic resources, substantially degrade the existing visual character or quality of the Specific Plan area or its surroundings, or create a new source of substantial light or glare.[1]

4.1 SETTING

The City of El Cerrito lies between the I-80 Freeway and the East Bay Hills, which afford sweeping views of the Golden Gate Bridge, the San Francisco skyline, and Mount Tamalpais. The City is roughly divided into topographic regions: the lower, western elevations composed of a traditional grid pattern of development; and the higher, eastern elevations along the East Bay Hills ridgeline with an approximate elevation of 900 feet. This topography defines the City's built environment by confining increased development density to the flatter, western portions of the City due to seismic risk and existing public transportation and service levels. The Specific Plan area, which includes parcels in the City of Richmond, falls within the low-lying portion of the City and includes two small, hilly areas adjacent to San Pablo Avenue between Burlingame Avenue and Wenk Avenue, and north of Central Avenue between Yolo Avenue and the I-80 Freeway.

Albany Hill, southwest of the Specific Plan area, is a visually prominent landform in the region, rising about 300 feet above sea level. Albany Hill is densely vegetated and contains residential development on the lower portion of the east side.

Several creeks in El Cerrito have been identified as significant natural resources that have the potential to become recreational amenities and, in some cases, to provide trail connections, such as Cerrito Creek and Baxter Creek.

4.1.1 Visual Character of the Specific Plan Area and Vicinity

(a) General Visual Character. The Specific Plan area is an urbanized environment centered along the relatively flat San Pablo Avenue (State Route 123) and a portion along Central Avenue that extends from I-80 east toward the El Cerrito Plaza shopping center. San Pablo Avenue is a wide, auto-oriented commercial street intermixed with retailers, restaurants, strip malls, offices, and residences, with heights ranging from one to four stories.[2] Developed predominantly in the 1940's through the 1980's, the eclectic architectural styles contribute to a diverse community visual character. The various suburban land uses, building forms, parcel sizes, building layouts and surface parking lots deter pedestrian activity and detract from an

[1] CEQA Guidelines, appendix G, item I (a through d).

[2] On a few structures, elevator machine rooms extend beyond the fourth story.

overall sense of visual identity. Recent and planned mixed use development and streetscape improvements in the Specific Plan area incorporate retail, office, and residential uses designed to provide visual coherence and improve pedestrian accessibility. Sidewalk and median landscaping investments have begun to define a streetscape aesthetic along the length of San Pablo Avenue intended to catalyze context-sensitive development. Single- and multi-family residential uses are located primarily on streets perpendicular and parallel to San Pablo Avenue, including along Central Avenue and Fairmount Avenue.

(b) San Pablo Avenue. North of the Specific Plan area, San Pablo Avenue continues through Richmond (and beyond into San Pablo). Land uses include similar auto-oriented retail, service, commercial, and retail, but with generally lower building heights. Vacant and underutilized land is more abundant. South of the Specific Plan area, San Pablo Avenue continues through Albany, where development tends to exhibit greater visual coherence, though still influenced by auto-related uses.

(c) Central Avenue. Central Avenue provides access from I-80 to the Specific Plan area and continues east beyond the El Cerrito Plaza BART Station to Ashbury Avenue and the El Cerrito High School campus. Uses along Central Avenue vary widely from service commercial near the freeway to multi-family and single-family residential, a park, fast food restaurants, gasoline stations, and parking for the BART station.

(d) Fairmount Avenue. Fairmount Avenue extends east from Carlson Boulevard to Colusa Avenue (at Sunset View Cemetery) and provides access to the El Cerrito Plaza shopping center.[1] Uses along the Specific Plan area portion of Fairmount Avenue include a mixture of retail and commercial. The El Cerrito Plaza shopping center opens onto Fairmount Avenue across from the El Cerrito Plaza BART Station and, though defined by its automobile access, it includes pedestrian and landscaping improvements to soften the Plaza's edge.

4.1.2 Existing Scenic Vistas

Existing vistas within the Specific Plan area are of: the East Bay Hills, which though visible from some internal vantage points, are generally limited by the flat terrain and the height of existing development; the San Francisco skyline, the Golden Gate Bridge, and Mount Tamalpais from the El Cerrito del Norte and El Cerrito Plaza BART station platforms, and from east-west running roadways with variations in elevation.

Scenic vistas within El Cerrito can be seen from hillside neighborhoods, which offer views of Albany Hill, the San Francisco Bay, neighboring city skylines, the San Francisco skyline, the Golden Gate Bridge, and Mount Tamalpais, as well as parts of downtown Oakland, Berkeley, Albany, El Cerrito, and Richmond. Private houses on hillsides, east-west running rights-of-way, and City parks offer the best vantage points for these panoramic westerly views. Views from north-south roadsides are often limited by houses, trees, power poles, and transmission lines, even in hill areas.

[1] Additional access is provided by Carlson Boulevard.

4.1.3 Existing Scenic Highways

There are no officially designated State scenic highways in the Specific Plan area. The only officially designated State scenic highways within Contra Costa County are portions of Highway 24 and Interstate 680. These scenic highways are not within the vicinity of the Specific Plan area.

4.1.4 Existing Light and Glare

Existing sources of nighttime light in and around the Specific Plan area include those common to urban areas (e.g., street lights, parking lot lighting, building lighting, illuminated signs, vehicle headlamps, interior lighting visible through windows). Existing sources of glare in and around the Specific Plan area are also those common to urban areas, such as reflection of sunlight and artificial light off of windows, buildings and other surfaces in the day, and glare from inadequately shielded and improperly directed light sources at night. These sources diminish towards the residential areas east and west of San Pablo Avenue.

4.2 REGULATORY SETTING

California State Scenic Highways Program. California's Scenic Highway Program was created by the State legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The State laws governing the Scenic Highways Program are found in the Streets and Highways Code, sections 260 through 263.

El Cerrito Design Review Board. The Design Review Board currently reviews all developments (public or private) as required by section 19.38.020 of the El Cerrito Municipal Code, including all buildings and signage, for the purpose of encouraging quality design. The Specific Plan design review process has been developed to streamline design review, while creating a well-defined process to ensure context-sensitive design that is reflective of and responsive to existing community assets and priorities.

El Cerrito Municipal Code – Section 19.21.050.A. This section of the Municipal Code includes performance standards that apply to all development in El Cerrito. The standards include requirements related to exterior lighting, noise (see chapter 13 of this EIR), fire hazards (see chapter 15 of this EIR), and other environmental issues.

El Cerrito General Plan. Scenic vistas and views described by the El Cerrito General Plan include views of the San Francisco and San Pablo bays, Mount Tamalpais and Marin County, and the Golden Gate Bridge predominantly from the hillside areas of the City. Views toward the East Bay Hills and Albany Hill are also recognized as scenic vistas, though less accessible from within the City and more definitive from the I-80 Freeway looking east. The General Plan includes policies to preserve key public views of the Bay and other prominent visual resources, including the hillsides (see chapter 18, Project Consistency With Local and Regional Plans, of this EIR).

Richmond General Plan. The San Pablo Avenue corridor is identified as "Change Area 4" under the Richmond General Plan, which envisions primarily medium-intensity, mixed use

development along the Avenue. Regulations for the Richmond parcels in the Specific Plan area are defined in the Richmond Livable Corridors Form-Based Code (draft 2014).

4.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts on aesthetics and visual resources that could result from the Specific Plan, and discusses components of the Specific Plan that would avoid or reduce those potential impacts. The section also recommends any mitigation measures needed to reduce remaining significant impacts.

4.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact related to aesthetics and visual resources if it would:

(a) Have a substantial adverse effect on a scenic vista;

(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

(c) Substantially degrade the existing visual character or quality of the plan area or its surroundings; or

(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the plan area or its surroundings.

Criterion (b) does not apply to the proposed Specific Plan, as the Plan area is not located adjacent to or in the vicinity of a State scenic highway. San Pablo Avenue (State Highway 123) is not designated an official State scenic highway. The Specific Plan area does not contain any substantial rock outcroppings, substantial groupings of trees, individual trees, or other visual factors identified as significant by the City of El Cerrito or the City of Richmond. Therefore, this topic is not discussed further.

4.3.2 Relevant Specific Plan Components

The Specific Plan, mainly the Form-Based Code (FBC), includes guidelines that would avoid or reduce potential aesthetic and visual impacts associated with increased development. Components particularly relevant to the evaluation of potential impacts are briefly summarized below. The reader is encouraged to review these Specific Plan sections for more detail. Note that within the context of the Specific Plan, a “standard” is a mandatory requirement, and a “guideline” is not mandatory but strongly recommended.

2.01.03 FBC Summary: Regulation by Street Type. The FBC includes summary tables that outline building placement (e.g., sidewalk zones, multi-modal access, and setbacks) and building form (e.g., ceiling heights, building lengths, transparency and frontage types).

[1] CEQA Guidelines, appendix G, item I (a through d).

2.02.04 Approval Procedures. This section outlines the El Cerrito approval process, including its relationship to CEQA.

2.02.08 Application for Discretionary Actions Requiring a Public Hearing. Design review is required for all projects that require a building permit, with the exception of the construction or alteration of single-family or residential accessory structures, interior alterations, additions and repairs, and color/finish changes. This section details the design review process and its relationship to the Specific Plan.

Design review procedures (2.02.08.01) are divided into four tiers, as follows:

(1) Tier I design review applies to minor projects, including signs, minor additions or alterations, accessory structures on existing lots, structural alterations costing less than 50% of the building's appraised value, building alterations which do not significantly alter the visual character or function of a building.

(2) Tier II design review applies to new projects that are designed in full compliance with the development and design standards of the Specific Plan.

(3) Tier III design review applies to all allowed modifications to existing nonconforming buildings and structures in the Specific Plan area exceeding 50% of the building's appraised value.

(4) Tier IV design review is intended to allow innovative, high-quality developments that would not otherwise be allowed under a strict interpretation of the Specific Plan regulations but still comply with the intent of the plan.

Section 2.02.08 also details review requirements for Conditional Use Permits (2.02.08.02), Variances (2.02.08.03), Waivers (2.02.08.04), Development Agreements (2.02.08.04.03), and Specific Plan Amendments (2.02.08.04.05).

2.02.10 Sign Regulations. These regulations explain the review process for sign permits and any Master Sign Programs (coordinated signs for an entire site), including the roles of the Zoning Administrator and Design Review Board.

2.02.13 Nonconforming Uses and Structures. This section notes, "All nonconforming buildings or structures shall comply with Chapter 19.27 (Nonconforming Uses, Structures, and Lots) of the El Cerrito Municipal Code, unless otherwise specified in this section." The section then explains that all rehabilitation of, or alterations to, nonconforming buildings and structures must comply with the Specific Plan.

2.03.02 Transect Zones. The Specific Plan Transect Zones are shown on Figure 3-2 in this EIR Project Description (Chapter 3). In El Cerrito, the zones are Transit-Oriented Higher-Intensity Mixed Use (TOHIMU) and Transit-Oriented Mid-Intensity Mixed Use (TOMIMU). Section 2.03.02 of the FBC describes the intent, desired form, general use, and parking requirements for each Transect Zone in El Cerrito. For Richmond, the zones are T5 - Main Street and T5 – Neighborhood; regulations for the Richmond zones are included in the Richmond Livable Corridors Form-Based Code (draft 2014).

Especially relevant to aesthetics and visual resources, the El Cerrito FBC would allow a maximum building height of 65 feet in TOHIMU, with 85 feet allowed utilizing State density

bonus law. In TOMIMU, the maximum allowable building height would be 55 feet, with 65 feet allowed utilizing State density bonus law. Richmond Livable Corridors would permit a maximum building height of 55 feet in the T5 - Main Street and T5 - Neighborhood zones.

2.04 Development Standards. The FBC regulates development standards based on street type, with the intent of creating sensitive design regulations that allow for increased density while preserving the visual character of streets, particularly in predominantly residential neighborhoods (see Figure 3-3 in EIR Chapter 3). Each street type includes sidewalk zones divided into the following (from closest to the street inward):

- Amenity Zone – may contain landscaping, seating, lighting, and other urban furniture to buffer traffic and provide visual interest along the street
- Pedestrian Zone – a clear pathway designed for pedestrian movement and full accessibility
- Activity Zone – a sidewalk-activating zone that provides space for activities such as outdoor dining for commercial uses, strategic gathering spaces and buffer zones for residential uses

In areas of constrained sidewalk width, zones may be accommodated within building setbacks consistent with the Specific Plan. The Development Standards further define transparency levels, setbacks, building lengths, and frontage types to create a consistent built form along the public right-of-way intended to create visual cohesion and encourage pedestrian mobility.

2.05.02.02 Shadow Standards. The FBC establishes design standards intended to minimize the impact of shadows on public rights-of-way, open space, and adjacent existing residential uses through front and upper floor setbacks. These standards were developed to reduce the impact on existing structures and uses of the high-intensity buildings allowed by the FBC.

2.05.02.03 Views. The Specific Plan acknowledges existing key natural and scenic views of Mt. Tamalpais, the Golden Gate Bridge, and the San Francisco skyline from public rights-of-way (roadways and sidewalks) of east-west streets and from the City's two BART station platforms (El Cerrito Plaza and El Cerrito Del Norte).

FBC section 2.05.02.03 describes how the Specific Plan leverages context-sensitive design in order to minimize the visual impacts of new development on views. Design solutions might include adjustments in building height, bulk, setbacks, and orientation to frame or retain partial views. The guidelines to minimize visual impacts are:

> "In new developments, buildings should break to ground level every 200 feet Downtown and every 300 feet Uptown and Midtown in the East-West direction to allow view corridors through the site. Distance between buildings should be no less than 25'-0" wide. These breaks can be designed as mid-block connections…The Zoning Administrator reserves the right to require a more context-sensitive solution if available." (2.05.02.03.03 View Design Guidelines).

As guidelines, these are not mandatory but are strongly recommended. A project proposal's solution to minimizing visual impacts would be evaluated by the Zoning Administrator.

2.05.04 Building Articulation. To respect the scale and grain of existing development and ensure that the design and character of new buildings enhance San Pablo Avenue and the surrounding neighborhoods, the FBC encourages variation in height, wall plane, colors, materials and textures, and the provision of art, open spaces, and sustainable design elements

to create a more interesting pedestrian environment at a scale that encourages walking, biking, shopping, active recreation, and gathering.

2.05.08.06 Parking Lot Landscaping Standards. This section requires landscaping (including trees) and screening in parking areas, for both the interior and the perimeter of the parking area. The standards require the coordinated use of setbacks, landscaping (e.g., plants, earth berms, raised planters, hedges, shade trees), decorative masonry walls, and fences. The standards also require that the Zoning Administrator evaluate the solutions adjacent to residential uses for their effectiveness in addressing land use compatibility issues such as light/glare and noise.

2.05.10 Signage Standards. This section establishes signage standards for the Specific Plan area. The standards are designed to establish and reinforce a pedestrian-oriented environment. Installing a sign within the Specific Plan area would require a sign permit in accordance with the FBC and relevant Municipal Code requirements.

4.3.3 Impacts and Mitigations

Impact 4-1: Project Impacts on Scenic Vistas. Specific Plan implementation could interfere with scenic views of Mt. Tamalpais, the Golden Gate Bridge, the San Francisco skyline, the East Bay Hills, and Albany Hill from public rights-of-way (roadways and sidewalks), the two BART station platforms (El Cerrito Plaza and El Cerrito Del Norte), and areas of lower elevation hillside homes located in El Cerrito and Richmond. This is considered a ***potentially significant impact*** (see criterion [a] in subsection 4.3.1, “Significance Criteria,” above).

As an urbanized environment primarily along a relatively flat roadway corridor separated from the San Francisco Bay by freeway infrastructure, the San Pablo Avenue Specific Plan area does not afford expansive scenic views. The existing visual character of the Specific Plan area is largely shaped by one-story, auto-oriented commercial uses developed between the 1940s and 1980s with little or no visual reference to, or coordination with neighboring properties. Strip malls with parking fronting the street are intermixed with retailers, restaurants, auto-related businesses, offices, and residences. Large amounts of surface parking exist at key activity nodes.

Single- and multi-family residential uses are located primarily on streets perpendicular and parallel to San Pablo Avenue; given the topography of the Specific Plan area, these dwelling units are visually separated from the El Cerrito hills by quick changes in elevation and the elevated BART tracks running parallel to San Pablo Avenue. The elevated platforms at the El Cerrito Plaza and El Cerrito del Norte BART stations are two of the highest points in the Specific Plan area and afford scenic views of Mt. Tamalpais, the Golden Gate Bridge, and the San Francisco skyline along their length. Fairly wide east-west streets provide views of the East Bay Hills, the San Francisco Bay, and the three key views recognized by the FBC.

The El Cerrito General Plan, Richmond General Plan, San Pablo Avenue Specific Plan, and Richmond Livable Corridors Plan (draft 2014) locate future, higher-intensity, mixed-use development within the Specific Plan area, which may result in building heights greater than existing conditions. The Specific Plan proposes an increase in the allowable building heights in the Specific Plan area over current El Cerrito standards. A general comparison of these

discrepancies is described below. It should be noted that these are general comparisons, not parcel-specific, detailed comparisons of the precise development requirements and options. The Transect Zones (TOHIMU and TOMIMU) are described in FBC Section 2.03.02.

- The Transit-Oriented Higher-Intensity Mixed Use (TOHIMU) zone proposes a maximum building height of 85 feet (with State density bonuses). El Cerrito currently allows building heights up to 65 feet with a conditional use permit (CUP) discretionary approval within approximately the same area.

- The Transit-Oriented Mid-Intensity Mixed Use (TOMIMU) zone proposes a maximum building height of 65 (with State density bonuses). El Cerrito currently allows building heights between 50 and 65 feet with a CUP within approximately the same area.

Generally, the Specific Plan Transect Zones would result in building heights greater than existing conditions in the Specific Plan area, where much of existing development is one-story commercial with associated parking lots. These taller buildings may result in impacts to key existing scenic views within the Specific Plan area, particularly from the El Cerrito Plaza and El Cerrito del Norte BART station platforms.

As noted in subsection 4.3.2 (Relevant Specific Plan Components), the Specific Plan includes components that would avoid or reduce these potential aesthetic and visual impacts. These components directly address visual conditions in the Specific Plan area related to Mt. Tamalpais, the Golden Gate Bridge, and the San Francisco skyline. Also, the Specific Plan considers views from public rights-of-way of east-west streets (roadways and sidewalks) and from the two BART station platforms in the Specific Plan area (El Cerrito Plaza and El Cerrito del Norte); the plan, however, does not address existing views from areas of hillside homes in El Cerrito and Richmond, as the vast majority will see no visual impacts due to their elevation. In addition, the Specific Plan components related to views are considered guidelines, which are not mandatory but strongly recommended; therefore, their implementation is not ensured. The Zoning Administrator of the San Pablo Avenue Specific Plan reserves the right to require a more context-sensitive design solution, as it relates to view, if available. The mitigation measure below would reduce potential project impacts on scenic vistas.

Mitigation 4-1. For future City decision-making actions for individual project proposals under the Specific Plan, Specific Plan Section 2.02 (Administration of Regulating Code) shall be implemented as it applies to the proposal's potential effect on scenic vistas. The City shall require evaluation (including visual simulations, if deemed necessary) of the proposal's visual effect as viewed from important on-site and off-site viewpoints, including public rights-of-way of east-west streets (roadways and sidewalks) and the two BART station platforms in the Specific Plan area (El Cerrito Plaza and El Cerrito Del Norte). The evaluation shall address the proposal's effect on views of Mt. Tamalpais, the Golden Gate Bridge, the San Francisco skyline, the East Bay Hills, and Albany Hill. This mitigation shall be enforceable by its incorporation into the Specific Plan as a City-adopted policy and shall be implemented through subsequent permits, conditions, agreements, or other measures consistent with Specific Plan Section 2.02. Incorporation of this measure would reduce the impact on scenic vistas. However, because the outcome of this decision-making process for any individual, future proposal cannot be guaranteed within the framework of this program EIR, the impact is considered ***significant and unavoidable.***

Project Impacts on Existing Visual Character and Quality. Section 4.1 (Setting) describes the existing visual character of the Specific Plan area and vicinity. The Specific Plan is a collaborative effort between the cities of El Cerrito and Richmond to implement a shared vision for the Specific Plan area, identify improvements, and adopt regulations that can be consistently applied throughout the Specific Plan area. A major objective of the joint planning effort is to achieve increased residential and commercial density along the well-served transit corridor through a set of coordinated, cohesive development standards that support and maintain a strong sense of place and visual identity on San Pablo Avenue. The Specific Plan--including the Form-Based Code (FBC) and Complete Streets chapter--provides design and development standards supportive of this goal. Section 4.3.2 (Relevant Specific Plan Components) above provides brief summaries of Specific Plan components especially relevant to aesthetics and visual resources. Chapter 3 (Project Description) of this EIR summarizes the Specific Plan. The reader is encouraged to review the entire Specific Plan for more information.

New development throughout the Specific Plan area would include a combination of residential, commercial, public/semi-public, light industrial, and mixed uses in buildings that range from 55' to 85' (with State density bonus incentives) and front the pedestrian right-of-way. Residential uses would be located throughout the Specific Plan area. New commercial uses may include combinations of retail, office, restaurant, and live/work uses in single or mixed-use buildings. New public/semi-public uses may include community centers, government offices, and residential care facilities. Light industrial uses may include handicraft/custom manufacturing, limited industrial uses, and storage.

Open spaces in the Specific Plan area would be composed of public open spaces, plazas, midblock connections, greenways, daylit creeks, pedestrian pathways, repurposed open spaces (e.g., in underutilized surface parking lots), and temporary open spaces. The Ohlone Greenway would remain an important pedestrian and bicycle pathway running parallel to San Pablo Avenue; the Greenway would be improved and new connections between it and the Specific Plan area would be designed to both physically and visually strengthen the relation of this multi-

modal open space to the City's commercial and public service nodes. Related improvements throughout the Specific Plan area would include a complete streets program, public art, and landscaping to support a strong sense of place, pursuant to the City's Complete Streets Plan (incorporated into the Specific Plan) and the City's Art in Public Places ordinance, which requires new development to contribute 1% of its development costs to public art.

When applied within the administrative procedures of the Specific Plan (FBC section 2.02, Administration of Regulating Code), the Specific Plan would serve to achieve a coordinated, cohesive environment within the Specific Plan area and to surrounding, predominantly residential neighborhoods, while increasing land use intensity, through unified development standards and context-sensitive design strategies. The impact of the Specific Plan on the existing visual character and quality of the Specific Plan area and its surroundings is considered ***less-than-significant*** (see criterion [c] in subsection 4.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Impact 4-2: Project Light and Glare Impacts. The San Pablo Avenue Specific Plan anticipates development on the surface parking lots around the El Cerrito Plaza and El Cerrito Del Norte BART stations. As part of this development, new parking structures for the BART stations are anticipated. These BART parking structures may result in light and glare from vehicles using the parking structure at night.

In addition, future multi-story buildings (or renovations) in the Specific Plan area, if faced in reflective materials (e.g., reflective glass), could result in glare impacts on adjacent and nearby properties.

These impacts related to light and glare are considered a ***potentially significant*** (see criterion [d] in subsection 4.3.1, "Significance Criteria," above).

Specific Plan implementation in the El Cerrito portion of the Specific Plan area would be subject to El Cerrito City Resolution 82-9, the El Cerrito design review process, and the development standards of the Form-Based Code, which allow exterior lighting only as necessary for safety and security, with overhead light fixtures to be shaded and directed away from adjacent residential uses and other sensitive land uses, and for all fixtures to be Dark Sky Certified or equivalent. Similarly, Specific Plan implementation in the Richmond portion of the Specific Plan area would be subject to applicable Richmond standards (e.g., requiring cut-off lighting and prohibiting sodium-vapor lighting) and the Richmond design review process.

Specific Plan lighting characteristics are not expected to be substantially out of character with existing lighting conditions and the overall urbanized nature of the Specific Plan area, or to represent a source of substantial new light or glare which would adversely affect views and vision. Therefore, application of the City of El Cerrito and City of Richmond standard procedures described above would reduce potential light and glare impacts resulting from Specific Plan implementation.

Mitigation 4-2 addresses (1) potential light and glare impacts from anticipated future BART parking structure construction in the El Cerrito portion of the Specific Plan area and (2) the

potential use of reflective building materials in the Specific Plan area. The mitigation related to potential BART construction is derived from the El Cerrito Mixed-Use Development Project Draft Subsequent EIR (November 1, 2004).

Mitigation 4-2. BART shall install landscaping and incorporate other measures into and around any Specific Plan area future parking structure(s) (light source shielding, etc.) as necessary to ensure that potential light and glare from vehicles would be avoided toward the Ohlone Greenway, residential uses, and other sensitive uses, consistent with El Cerrito City Resolution 82-9 and the El Cerrito design review process. With this requirement incorporated into the local and BART design review process, the light and glare impact of future BART parking structures would be ***less-than-significant.***

Regarding reflective building materials, for all future development in the Specific Plan area, facades shall be of non-reflective materials, and windows shall incorporate non-reflective coating. This requirement would reduce potential glare impacts of building materials to a ***less-than-significant level*****.**

5. AIR QUALITY

This chapter examines air quality emissions in the Specific Plan area and region, includes a summary of applicable air quality regulations and policies, and analyzes potential air quality impacts associated with the proposed San Pablo Avenue Specific Plan. This EIR air quality analysis has been closely coordinated with the climate change analysis in chapter 9 of this EIR. The technical analysis for this chapter was prepared by the EIR air quality and climate change/ greenhouse gas consultant, Illingworth & Rodkin, Inc.

5.1 SETTING

5.1.1 Air Basin Characteristics

The Specific Plan area is in the central portion of the San Francisco Bay Area Air Basin. The Air Basin includes the counties of San Francisco, Santa Clara, San Mateo, Marin, Napa, Contra Costa, and Alameda, along with the southeast portion of Sonoma County and the southwest portion of Solano County.

In the Specific Plan area, marine air intrusion through the Golden Gate, across San Francisco, and through the San Bruno Gap is a dominant weather factor throughout the year. The Oakland-Berkeley Hills cause a split of westerly flow in the vicinity, with southerly winds observed over the San Francisco Bay north of the Golden Gate and northwesterlies over the bay to the south of the Golden Gate.

Temperatures have a narrow range due to the proximity of the moderating marine air. Maximum temperatures in summer average in the upper 60's to low 70's, with minimums in the mid-50's. Winter highs are in the mid- to high-50's, and winter lows are in the low to mid-40's. Precipitation totals generally increase from south to north and from the lowlands to the Oakland-Berkeley Hills' ridge line.

Air quality is a function of both local climate and local sources of air pollution. Air quality is the balance of the natural dispersal capacity of the atmosphere and emissions of air pollutants from human uses. Climate and topography are major influences on air quality in the Specific Plan area.

5.1.2 Air Pollutants and Ambient Standards

Air pollutant levels are typically described in terms of “concentration,” which refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$). The federal and California Clean Air Acts have established ambient air quality standards for different pollutants. NAAQS were established by the federal Clean Air Act for six criteria pollutants, including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates (PM_{10} and $PM_{2.5}$), and lead (Pb). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility

reducing particles. These standards are designed to protect the health and welfare of the public with a reasonable margin of safety. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each criteria pollutant. Pollutants regulated under the California Clean Air Act are similar to those regulated under the Federal Clean Air Act.

The CARB is required to designate areas of the State as attainment, nonattainment, or unclassified for all State standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An "unclassified" designation signifies that data does not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

Health effects of criteria pollutants and their potential sources are described below and summarized in Table 5-1. Table 5-2 shows the State and Federal standards for criteria pollutants and provides a summary of the attainment status for the San Francisco Bay Area with respect to National and State ambient air quality standards.

(a) Ozone. Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_X). The main sources of ROG and NO_X, often referred to as ozone precursors, are combustion processes (including combustion in motor vehicle engines) and the evaporation of solvents, paints, and fuels. In the Bay Area, automobiles are the single largest source of ozone precursors. Ozone is referred to as a regional air pollutant because its precursors are transported and diffused by wind concurrently with ozone production through the photochemical reaction process. Ozone causes eye irritation, airway constriction, shortness of breath, and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

(b) Carbon Monoxide. Carbon monoxide (CO) is an odorless, colorless gas usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicles. While CO transport is limited, it disperses with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthful levels that adversely affect local sensitive receptors (e.g., residents, school children, the elderly, hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service (LOS) or with extremely high traffic volumes. Exposure to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, fatigue, impair central nervous system function, and induce chest pain in persons with serious heart disease. Very high levels of CO can be fatal.

(c) Nitrogen Dioxide. NO_2 is a reddish brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to ozone formation, NO_2 also contribute to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2 may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. NO_2 decreases lung function and may reduce resistance to infection. On January 22, 2010, the EPA strengthened the health-based NAAQS for NO_2.

Table 5-1
HEALTH EFFECTS OF AIR POLLUTANTS

Pollutant	Sources	Primary Effects
Carbon Monoxide (CO)	▪ Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. ▪ Natural events, such as decomposition of organic matter.	▪ Reduced tolerance for exercise. ▪ Impairment of mental function. ▪ Impairment of fetal development. ▪ Death at high levels of exposure. ▪ Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	▪ Motor vehicle exhaust. ▪ High temperature stationary combustion. ▪ Atmospheric reactions.	▪ Aggravation of respiratory illness. ▪ Reduced visibility. ▪ Reduced plant growth. ▪ Formation of acid rain.
Ozone (O_3)	▪ Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	▪ Aggravation of respiratory and cardiovascular diseases. ▪ Irritation of eyes. ▪ Impairment of cardiopulmonary function. ▪ Plant leaf injury.
Lead (Pb)	▪ Contaminated soil.	▪ Impairment of blood functions and nerve construction. ▪ Behavioral and hearing problems in children.
Suspended Particulate Matter ($PM_{2.5}$ and PM_{10})	▪ Stationary combustion of solid fuels. ▪ Construction activities. ▪ Industrial processes. ▪ Atmospheric chemical reactions.	▪ Reduced lung function. ▪ Aggravation of the effects of gaseous pollutants. ▪ Aggravation of respiratory and cardiorespiratory diseases. ▪ Increased cough and chest discomfort. ▪ Soiling. ▪ Reduced visibility.
Sulfur Dioxide (SO_2)	▪ Combustion of sulfur-containing fossil fuels. ▪ Smelting of sulfur-bearing metal ores. ▪ Industrial processes.	▪ Aggravation of respiratory diseases (asthma, emphysema). ▪ Reduced lung function. ▪ Irritation of eyes. ▪ Reduced visibility. ▪ Plant injury. ▪ Deterioration of metals, textiles, leather, finishes, coatings, etc.
Toxic Air Contaminants	• Cars and trucks, especially diesels. • Industrial sources such as chrome platers. • Neighborhood businesses such as dry cleaners and service stations. ▪ Building materials and product.	• Cancer. • Chronic eye, lung, or skin irritation. • Neurological and reproductive disorders.
SOURCE: CARB, 2008.		

Table 5-2
SAN FRANCISCO BAY AREA ATTAINMENT STATUS

Pollutant	Averaging Time	California Standards [a]		National Standards [b]	
		Concentration	Attainment Status	Concentration	Attainment Status
Carbon Monoxide (CO)	8-Hour	9 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment [f]
	1-Hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment
Nitrogen Dioxide (NO_2)	Annual Mean	0.030 ppm (57 mg/m^3)	Attainment	0.053 ppm (100 µg/m^3)	Attainment
	1-Hour	0.18 ppm (338 µg/m^3)	Attainment	0.100 ppm [j]	Unclassified
Ozone (O_3)	8-Hour	0.07 ppm (137 µg/m^3)	Nonattainment [h]	0.075 ppm	Nonattainment [d]
	1-Hour	0.09 ppm (180 µg/m^3)	Nonattainment	Not Applicable	Not Applicable [e]
Suspended Particulate Matter (PM_{10})	Annual Mean	20 µg/m^3	Nonattainment [g]	Not Applicable	Not Applicable
	24-Hour	50 µg/m^3	Nonattainment	150 µg/m^3	Unclassified
Suspended Particulate Matter ($PM_{2.5}$)	Annual Mean	12 µg/m^3	Nonattainment[g]	12 µg/m^3	Attainment
	24-Hour	Not Applicable	Not Applicable	35 µg/m^3 See footnote [i]	Nonattainment
Sulfur Dioxide (SO_2) [k]	Annual Mean	Not Applicable	Not Applicable	80 µg/m^3 (0.03 ppm)	Attainment
	24-Hour	0.04 ppm (105 µg/m^3)	Attainment	365 µg/m^3 (0.14 ppm)	Attainment
	1-Hour	0.25 ppm (655 µg/m^3)	Attainment	0.075 ppm (196 µg/m^3)	Attainment

SOURCE: Bay Area Air Quality Management District, 2013.

Notes:

[a] California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM_{10}, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average.

[b] National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.075 ppm (75 ppb) or less. The 24-hour PM_{10} standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m^3. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m^3.

Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.

[c] National air quality standards are set by EPA at levels determined to be protective of public health with an adequate margin of safety.

[d] On September 22, 2011, the EPA announced it will implement the current 8-hour ozone standard of 75 ppb.

[e] The national 1-hour ozone standard was revoked by EPA on June 15, 2005.

[f] In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.

[g] In June 2002, CARB established new annual standards for $PM_{2.5}$ and PM_{10}. Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

[h] The 8-hour CA ozone standard was approved by the CARB on April 28, 2005 and became effective on May 17, 2006.

[i] EPA lowered the 24-hour $PM_{2.5}$ standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$ in 2006. EPA designated the Bay Area as nonattainment of the $PM_{2.5}$ standard on October 8, 2009. The effective date of the designation is December 14, 2009, and the Air District has three years to develop a SIP that demonstrates the Bay Area will achieve the revised standard by December 14, 2014. The SIP for the new $PM_{2.5}$ standard must be submitted to the EPA by December 14, 2012.

[j] To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100ppm (effective January 22, 2010).

[k] On June 2, 2010, the EPA established a new 1-hour SO_2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO_2 NAAQS however must continue to be used until one year following EPA initial designations of the new 1-hour SO_2 NAAQS. EPA expects to designate areas by June 2012.

Lead (Pb) is not listed in the above table because it has been in attainment since the 1980s.
ppm = parts per million
mg/m^3 = milligrams per cubic meter
$\mu g/m^3$ = micrograms per cubic meter

(d) Sulfur Dioxide. Sulfur dioxide (SO_2) is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels in the region. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

(e) Particulate Matter. Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles are those that are larger than 2.5 microns but smaller than 10 microns (PM_{10}). $PM_{2.5}$ refers to fine suspended particulate matter with an aerodynamic diameter of 2.5 microns or less that is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM_{10} and $PM_{2.5}$. These small particles can be directly emitted into the atmosphere as by-products of fuel combustion, through abrasion, such as tire or brake lining wear, or through fugitive dust (wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens and other toxic compounds that adhere to the particle surfaces, and can enter the human body through the lungs.

(f) Lead. Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

Mobile sources used to be the main contributor to ambient lead concentrations in the air. In the early 1970s, the U.S. EPA established national regulations to gradually reduce the lead content in gasoline. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector and levels of lead in the air decreased dramatically.

(g) Toxic Air Contaminants (TACs). In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the EPA and the CARB. Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants.

High volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high-volume transit centers, or schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

(h) Sensitive Receptors. Some groups of people are more affected by air pollution than others. The State has identified the following people who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

5.1.3 Current Air Quality

The air pollution potential of the areas closest to the marine air is minor, due to frequent good ventilation and less influx of high pollutant concentrations from upwind sources. Occurrence of light winds, however, mainly during the night and early morning, may set the scene for occasional elevated pollutant levels.

BAAQMD monitors air quality conditions at more than 28 locations throughout the Bay Area. Data for the Specific Plan area is read at a monitoring station located at 1865 Rumrill Boulevard in the City of San Pablo. $PM_{2.5}$ monitoring concentrations are not available at this site and are, instead, reported from the Concord monitoring station located at 2975 Treat Boulevard. Summarized air pollutant data for this station are provided in Table 5-3. This table shows the highest air pollutant concentrations measured at the station over the five year period from 2008 through 2012.

The significance of a pollutant concentration is determined by comparing the concentration to an appropriate ambient air quality standard. The standards represent the allowable pollutant concentrations designed to ensure that the public health and welfare are protected, while including a reasonable margin of safety to protect the more sensitive individuals in the population. The San Francisco Bay Area is considered to be one of the cleanest metropolitan areas in the country with respect to air quality.

5.2 REGULATORY SETTING

5.2.1 Federal

Federal Clean Air Act (FCAA). At the federal level, the EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the Federal Clean Air Act (FCAA), which was enacted in 1963. The FCAA was amended in 1970, 1977, and 1990.

The FCAA required EPA to establish primary and secondary NAAQS and required each state to prepare an air quality control plan referred to as a State Implement Plan (SIP). Federal standards include both primary and secondary standards. Primary standards set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.[1] The Federal Clean Air Act Amendments of 1990 (FCAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA has responsibility to review all state SIPs to determine conformity with the mandates of the FCAAA and determine if implementation will achieve air quality goals. If the EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) may be prepared for the nonattainment

[1] U.S. Environmental Protection Agency, 2013. Website: www.epa.gov/air/criteria.html. February.

Table 5-3
HIGHEST MEASURED AIR POLLUTANT CONCENTRATIONS AT SAN PABLO MONITORING STATION

Pollutant	Average Time	Measured Air Pollutant Levels				
		2008	**2009**	**2010**	**2011**	**2012**
Ozone (O_3)	1-Hour	0.084 ppm	0.043 ppm	**0.097 ppm**	0.078 ppm	0.086 ppm
	8-Hour	0.064 ppm	0.040 ppm	**0.082 ppm**	0.059 ppm	0.059 ppm
Carbon Monoxide (CO)	8-Hour	1.3 ppm	0.8 ppm	0.9 ppm	1.0 ppm	0.9 ppm
Nitrogen Dioxide (NO_2)	1-Hour	0.067 ppm	0.041 ppm	0.049 ppm	0.051 ppm	0.055 ppm
	Annual	0.012 ppm	ND	ND	0.009 ppm	0.009 ppm
Respirable Particulate Matter (PM_{10})	24-Hour	44.3 $\mu g/m^3$	34.0 $\mu g/m^3$	41.2 $\mu g/m^3$	**73.4 $\mu g/m^3$**	46.7 $\mu g/m^3$
	Annual	20.8 $\mu g/m^3$	15.4 $\mu g/m^3$	16.1 $\mu g/m^3$	19.7 $\mu g/m^3$	15.7 $\mu g/m^3$
Fine Particulate Matter ($PM_{2.5}$) [a]	24-Hour	**60.3 $\mu g/m^3$**	**39.0 $\mu g/m^3$**	**36.4 $\mu g/m^3$**	**47.5 $\mu g/m^3$**	32.2 $\mu g/m^3$
	Annual	9.5 $\mu g/m^3$	8.4 $\mu g/m^3$	7.1 $\mu g/m^3$	7.9 $\mu g/m^3$	6.6 $\mu g/m^3$

SOURCE: CARB, iADAM Air Quality Statistics, see http://www.arb.ca.gov/adam/.

Notes:

ppm = parts per million
$\mu g/m^3$ = micrograms per cubic meter
Values reported in bold exceed ambient air quality standard.
ND = No Data available.
[a] Monitoring values reported from the Concord station.

area which imposes additional control measures. Failure to submit an approvable SIP or to implement the plan within the mandated timeframe may result in the application of sanctions on transportation funding and stationary air pollution sources in the air basin.

The 1970 FCAA authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The FCAA Amendments of 1990 changed deadlines for attaining NAAQS as well as the remedial actions required of areas of the nation that exceed the standards. Under the FCAA, State and local agencies in areas that exceed the NAAQS are required to develop SIPs to show how they will achieve the NAAQS by specific dates. The FCAA requires that projects receiving federal funds demonstrate conformity to the approved SIP and local air quality attainment plan for the region. Conformity with the SIP requirements would satisfy the FCAA requirements.

5.2.2 State

California Clean Air Act (CCAA). In 1988, the CCAA required that all air districts in the State endeavor to achieve and maintain CAAQS for carbon monoxide (CO), ozone (O_3), sulfur dioxide (SO_2) and nitrogen dioxide (NO_2) by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

California Air Resources Board (CARB). The CARB is the agency responsible for the coordination and oversight of State and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA), adopted in 1988. The CCAA requires that all air districts in the State achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CCAA specifies that districts should focus on reducing the emissions from transportation and air-wide emission sources, and provides districts with the authority to regulate indirect sources.

CARB is also responsible for developing and implementing air pollution control plans to achieve and maintain the NAAQS. CARB is primarily responsible for statewide pollution sources and produces a major part of the SIP. Local air districts provide additional strategies for sources under their jurisdiction. CARB combines this data and submits the completed SIP to the EPA. Other CARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control and air quality management districts), establishing CAAQS (which in many cases are more stringent than the NAAQS), determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, and off-road vehicles.

California Air Resources Board Handbook. In 1998, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled

engines.[1] CARB subsequently developed an Air Quality and Land Use Handbook[2] (Handbook) in 2005 that is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. The CARB Handbook recommends that planning agencies consider proximity to air pollution sources when considering new locations for "sensitive" land uses, such as residences, medical facilities, daycare centers, schools, and playgrounds.

Air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the Handbook relative to the Plan Area include taking steps to consider or avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day.
- Within 300 feet of gasoline fueling stations.
- Within 300 feet of dry cleaning operations (note that dry cleaning with TACs is being phased out and will be prohibited in 2023).

5.2.3 Regional

Bay Area Air Quality Management District (BAAQMD). The BAAQMD seeks to attain and maintain air quality conditions in the San Francisco Bay Area Air Basin (SFBAAB) through a comprehensive program of planning, regulation, enforcement, technical innovation, and education. The clean air strategy includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The BAAQMD also inspects stationary sources and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by law.

Bay Area Clean Air Plan. The BAAQMD is responsible for developing a Clean Air Plan which guides the region's air quality planning efforts to attain the CAAQS. The BAAQMD's 2010 Clean Air Plan is the latest Clean Air Plan which contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NO_X), particulate matter and greenhouse gas emissions.

The Bay Area 2010 Clean Air Plan, which was adopted on September 15, 2010 by the BAAQMD's board of directors:

- Updates the Bay Area 2005 Ozone Strategy in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce ozone;
- Provides a control strategy to reduce ozone, particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;
- Reviews progress in improving air quality in recent years; and

[1] California Air Resources Board, 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.

[2] California Air Resources Board, 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

- Establishes emission control measures to be adopted or implemented in the 2010 to 2012 timeframe.

BAAQMD CARE Program. The Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area. The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program is being implemented in three phases that include an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses will be used to focus emission reduction measures in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. The BAAQMD has identified six communities as impacted: Concord, Richmond/San Pablo, Western Alameda County, San Jose, Redwood City/East Palo Alto, and Eastern San Francisco.

BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines. The BAAQMD *CEQA Air Quality Guidelines*[1] were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for air toxics, odors, and greenhouse gas emissions. In June 2010, the BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of their *CEQA Guidelines*. In May 2011, the updated BAAQMD *CEQA Air Quality Guidelines* were amended to include a risk and hazards threshold for new receptors and modify procedures for assessing impacts related to risk and hazard impacts.

On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the thresholds of significance in the 2011 BAAQMD *CEQA Air Quality Guidelines*. The court issued a writ of mandate ordering the BAAQMD to set aside the thresholds and cease dissemination of them until the BAAQMD complied with CEQA. However, the First District of the California Court of Appeal reversed this earlier judgment in August 2013. (See further explanation in subsection 5.3.2 below.)

5.2.4 Local

(a) City of El Cerrito General Plan. Chapter 7, Resources and Hazards, of the El Cerrito General Plan[2] contains the following goals and policies directly related to air quality and the Specific Plan:

[1]Bay Area Air Quality Management District, 2011. *CEQA Air Quality Guidelines*. May.

[2]City of El Cerrito, 1999. *City of El Cerrito General Plan*.

Goal R1: Protect natural resources (important habitat, ecological resources, key visual resources, ridges and ridgelines, creeks and streambanks, steeper slopes, vista points, and major features), and clean air and water.

R1.4: Air Quality. Strive to achieve federal and state air quality standards by managing locally generated pollutants, coordinating with other jurisdictions, and implementing measures to limit the increase of automobile trips in El Cerrito and the region.

R1.5: Clean Energy Sources. Support efforts by public and private agencies to develop new sources of energy for all uses, heating, and industrial activities, as well as transportation that will be non-polluting of our atmosphere.

Implementation Strategy 1: Air Quality Strategies. Implement trip reduction and energy conservation measures for jobs/housing balance, Transportation Demand Management (TDM) and transit, as identified in the Community Design and Development and Housing Elements, and coordinate with regional and state agencies and other West County jurisdictions in enhancing air quality.

(b) City of Richmond General Plan. Chapter 11, Community Health and Wellness, of the City of Richmond General Plan 2030[1] contains the following goals and policies related to Air Quality and the Specific Plan:

Goal HW4: Safe and Convenient Public Transit and Active Circulation Options. Support access to adequate and safe public transit and active circulation options that increase physical activity, reduce air and noise pollution, and make streets safe for people of all ages.

Policy HW4.1: Expanded and Affordable Public Transit. Coordinate with regional transportation agencies and support enhanced and expanded public transit to improve mobility options for residents and visitors. Public transit provides an environmentally-friendly, cost-effective and equitable mode of travel for residents and visitors. Encouraging transit-supportive development patterns can further maximize efficiency of these systems and help reduce air pollution and greenhouse gas emissions within Richmond.

Goal HW9 : Improved Environmental Quality. Continue to support projects that improve the quality of built and natural environments to support a thriving community and to reduce disparate health and environmental impacts, especially to low-income and disadvantaged communities. Clean air, water and soil, and a healthy eco-system are critical for human development and contribute to reduced toxic exposure, incidence or disease and environmental degradation.

Policy HW9.1: Air Quality. Support regional policies and efforts that improve air quality to protect human and environmental health and minimize disproportionate impacts on sensitive population groups. Work with business and industry, residents, and regulatory agencies to reduce the impact of direct, indirect, and cumulative impacts of stationary and non-stationary sources of pollution such as industry, the Port, railroads, diesel trucks, and busy roadways. Fully utilize Richmond's police power to regulate industrial and commercial emissions. Ensure that sensitive uses such as schools, childcare centers, parks and playgrounds, housing, and community gathering places are protected from adverse impacts of emissions.

[1]City of Richmond, 2012. *Richmond General Plan 2030*. April.

Continue to work with stakeholders to reduce impacts associated with air quality on disadvantaged neighborhoods and continue to participate in regional planning efforts with nearby jurisdictions and the Bay Area Air Quality Management District to meet or exceed air quality standards. Support regional, state, and federal efforts to enforce existing pollution control laws and strengthen regulations.

Action HW9.B: Air Pollution Reduction Strategy. Support local and regional efforts to develop strategies that reduce air pollution, reduce auto use, expand transit and non-motorized transportation options, and reduce congestion and idling time including programs to reduce air pollution from stationary sources such as power plants, oil refineries, and commercial and residential buildings. Work with regional agencies as they monitor air quality impacts and establish best practices for reducing emissions.

5.3 IMPACTS AND MITIGATION MEASURES

Air quality impacts from future development pursuant to the San Pablo Avenue Specific Plan can be divided into construction-related impacts and operational-related impacts. Construction-related impacts are associated with construction activities likely to occur in conjunction with future development allocated by the Specific Plan. Operational-related impacts are associated with continued and future operation of developed land uses, including increased vehicle trips and energy use.

Community health risk exposure related to certain pollutants, as well as impacts related to odor exposure, are also considered in terms of potential impacts from adoption and implementation of the Specific Plan.

Analysis for each significance criterion includes a policy-level discussion of anticipated impacts. Significant impacts are identified and mitigation measures are provided where appropriate.

5.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] a significant air quality impact would occur if San Pablo Avenue Specific Plan implementation would:

(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 air pollutant for which the region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);

(d) Expose sensitive receptors to substantial criteria air pollutant concentrations; or

(e) Create objectionable odors affecting a substantial number of people.

[1] CEQA Guidelines, appendix G, items II(a) through (e).

BAAQMD has developed specific plan-level thresholds of significance for use in evaluating general plans and other area-wide plans within the San Francisco Bay Area Air Basin (SFBAAB). These include the following:

(f) Criteria Pollutants and Ozone Precursors (Operational): Consistency with current air quality plan (AQP) control measures (i.e., Bay Area 2010 Clean Air Plan);

(g) Criteria Pollutants and Ozone Precursors (Operational): Result in a projected vehicle miles traveled (VMT) or vehicle trip increase that is greater than projected population increase;

(h) Risks and Hazards: Conflict with recommended special overlay zones around existing and planned sources of toxic air contaminants (TACs);

(i) Risks and Hazards: Conflict with recommended special overlay zones of at least 500 feet on each side of all freeways and high-volume roadways; and

(j) Odors: Create objectionable odors affecting a substantial number of people by failing to include policies that would reduce impacts of existing or planned sources of odors.

The impact analysis in this chapter uses the methodology described below to determine if the Specific Plan would violate these significance criteria.

5.3.2 BAAQMD CEQA Guidelines

The BAAQMD adopted CEQA Guidelines in June 2010, which were revised in May 2011. Methodology and thresholds for criteria air pollutant impacts and community health risk, as set forth in the BAAQMD Guidelines, are utilized in this analysis.[1] The following screening thresholds and significance criteria would be applicable to the Specific Plan.

(a) Consistency with Clean Air Planning Efforts. According to the BAAQMD Air Quality Guidelines, proposed plans must show over the planning period of the plan that (1) the plan incorporates current air quality plan control measures as appropriate to the plan area; and (2) the rate of increase in vehicle miles traveled or vehicle trips (either measure may be used)

[1]BAAQMD's adoption of significance thresholds contained in the 2011 CEQA Air Quality Guidelines was called into question by an order issued March 5, 2012, in California Building Industry Association (CBIA) v. BAAQMD (Alameda Superior Court Case No. RGI0548693). The order requires BAAQMD to set aside its approval of the thresholds until it has conducted environmental review under CEQA. The ruling made in the case concerned the environmental impacts of adopting the thresholds and how the thresholds would indirectly affect land use development patterns. In August 2013, the Appellate Court struck down the lower court's order to set aside the thresholds. However, this litigation remains pending as the California Supreme Court recently accepted a portion of CBIA's petition to review the appellate court's decision to uphold BAAQMD's adoption of the thresholds. The specific portion of the argument to be considered is in regard to whether CEQA requires consideration of the effects of the environment on a project (as contrasted to the effects of a proposed project on the environment). Those issues are not relevant to the scientific basis of BAAQMD's analysis of what levels of pollutants should be deemed significant. This analysis considers the science informing the thresholds as being supported by substantial evidence. Therefore, the significance thresholds contained in the 2011 CEQA Air Quality Guidelines are applied to this project.

within the plan area is equal to or lower than the rate of increase in population projected for the proposed Specific Plan.

(b) Construction and Operation Emissions. The BAAQMD Air Quality Guidelines do not have quantified thresholds related to direct and indirect criteria pollutant emissions resulting from plan implementation. Instead, proposed plans must show consistency with current air quality control measures and that the plans projected VMT increase is less than or equal to its projected population increase. Traffic resulting from the implementation of the Specific Plan would cause a significant local air quality impact if emissions of CO cause a projected exceedance of the ambient CO State standard of 9.0 parts per million (ppm) for eight-hour averaging period. BAAQMD's CEQA Air Quality Guidelines state that a project would have a less-than-significant impact if it would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour. This would be considered to cause or contribute substantially to an existing or projected air quality violation.

(c) Exposure of New Residences to Toxic Air Contaminants. Unlike industrial or stationary sources of air pollution, residential development and other development where sensitive receptors would be located do not require air quality permits. Nonetheless, this type of development can expose people to unhealthy conditions. The BAAQMD Air Quality Guidelines Thresholds of Significance for plans with regard to community risk and hazard impacts are:

The land use diagram must identify: (1) Special overlay zones around existing and planned sources of TACs and PM (including adopted risk reduction plan areas); and (2) Special overlay zones on each side of all freeways and high-volume roadways.

The plan must also identify goals, policies, and objectives to minimize potential impacts and create overlay zones around sources of TACs, PM, and hazards.

(d) Odors. Odors are assessed based on the potential of the Plan to result in odor complaints. The BAAQMD Air Quality Guidelines Thresholds of Significance for plans with regard to odor impacts are:

- The land use diagram must identify special overlay zones around existing and planned sources of odors; and
- The plan must identify goals, policies, and objectives to minimize potential impacts and create buffer distances between sources of odors and receptors.

5.3.3 Relevant Specific Plan Components

The Regulatory Setting above applies to Specific Plan implementation. The Specific Plan document itself does not include additional components directly related to air quality.

5.3.4 Impacts and Mitigations

Project Consistency with Air Quality Plan. The BAAQMD is the regional agency responsible for overseeing compliance with State and Federal laws, regulations, and programs within the SFBAAB. The BAAQMD, with assistance from ABAG and MTC, has prepared and implements plans to meet the applicable laws, regulations, and programs, the most recent and

comprehensive of which is the *Bay Area 2010 Clean Air Plan*.[1] The BAAQMD has also developed CEQA guidelines to assist lead agencies in evaluating the significance of air quality impacts. In formulating compliance strategies, BAAQMD relies on planned land uses established by local general plans. Land use planning affects vehicle travel, which in turn affects region-wide emissions of air pollutants, and greenhouse gas emissions (GHG).

The Specific Plan would result in an estimated additional 3,840 residents (based on an expected 2.25 residents/new unit and 1,706 new residential units) between 2014 and 2040 (see Chapter 14 of this EIR). Plan Bay Area lists a net growth 830 employees in the plan area between 2010 and 2040, with 3,520 employees in 2010. This represents an increase of about 28 employees/year, which was used to interpolate and estimate 2013 employees to be 3,604. Service population is the number of residents plus workers.

Annual vehicle miles traveled (VMT) for 2040 was based on CalEEMod modeling, described in Chapter 9 (Greenhouse Gas Emissions and Global Climate Change) of this EIR. VMT is included in the output of the model. Existing VMT was estimated at the direction of the Specific Plan EIR traffic consultant.[2] Five percent of the 2005 VMT listed for San Pablo Avenue (within the City of El Cerrito) from the El Cerrito Climate Action Plan[3] was added to estimate VMT in the Specific Plan area, which also includes a portion of the City of Richmond. As with job growth, 2013 VMT was estimated by extrapolating between 2005 VMT and 2040 VMT. Table 5-4 identifies the vehicle miles traveled and service population under the Specific Plan. Using 2013 as a baseline year, VMT attributable to the Specific Plan is anticipated to increase 68 percent and 56 percent under the Without Mode Shift and With Mode Shift cases, respectively. The increase in service population is estimated to be 69 percent. As a result, VMT would increase at a lower rate under both Specific Plan cases than population or service population growth. This impact would be ***less-than-significant*** (see criteria [a] and [g] in subsection 5.3.1, "Significance Criteria," above).

[1]Bay Area Air Quality Management District (BAAQMD). 2010. *Bay Area 2010 Clean Air Plan.*

[2]Personal communication between Joshua Carman, Illingworth & Rodkin, Inc., and Ellen Poling, Fehr & Peers, April 28, 2014.

[3]City of El Cerrito, 2013. *Climate Action Plan*. May.

Table 5-4
SUMMARY OF EXISTING AND FUTURE VEHICLE MILES TRAVELED AND SERVICE POPULATION

Metric/ Variable	2013 (Existing Conditions)	2040 with Specific Plan (without Mode Shift)	2040 with Specific Plan (with Mode Shift)	Increase with Specific Plan (without Mode Shift)	Increase with Specific Plan (with Mode Shift)
VMT	26,707,662	44,887,523	41,782,526	**68%**	**56%**
Population	3,015	6,854	6,854	127%	127%
Employees	3,604	4,350	4,350	21%	21%
Total Service Population	6,619	11,204	11,204	**69%**	**69%**
SOURCE: Fehr & Peers, 2014; El Cerrito Climate Action Plan, 2013; and Plan Bay Area.					

Consistency of the Specific Plan with Clean Air Plan control measures is demonstrated by assessing whether the proposed plan implements all of the applicable Clean Air Plan control measures. The 2010 Clean Air Plan includes about 55 control measures that are intended to reduce air pollutant emissions in the Bay Area either directly or indirectly. The control measures are divided into five categories that include:

- 18 measures to reduce stationary and area sources;
- 10 mobile source measures;
- 17 transportation control measures;
- 6 land use and local impact measures; and
- 4 energy and climate measures.

In developing the control strategy, BAAQMD identified the full range of tools and resources available, both regulatory and non-regulatory, to develop each measure. Implementation of each control measure will rely on some combination of the following:

- Adoption and enforcement of rules to reduce emissions from stationary sources, area sources, and indirect sources.
- Revisions to the BAAQMD's permitting requirements for stationary sources.
- Enforcement of CARB rules to reduce emissions from heavy-duty diesel engines.
- Allocation of grants and other funding by the Air District and/or partner agencies.
- Promotion of best policies and practices that can be implemented by local agencies through guidance documents, model ordinances, and other measures.
- Partnerships with local governments, other public agencies, the business community, non-profits, and other groups.
- Public outreach and education.

- Enhanced air quality monitoring.
- Development of land use guidance and CEQA guidelines, and Air District review and comment on Bay Area projects pursuant to CEQA.
- Leadership and advocacy.

This approach relies upon lead agencies to assist in implementing some of the control measures. A key tool for local agency implementation is the development of land use policies and implementing measures that address new development or redevelopment in local communities. The consistency of the Specific Plan is evaluated with respect to each set of control measures.

(a) Stationary and Area Source Control Measures. The Clean Air Plan includes Stationary Source Control measures that BAAQMD adopts as rules or regulations through their authority to control emissions from stationary and area sources. The BAAQMD is the implementing agency, since these control measures are applicable to sources of air pollution that must obtain District permits. Each jurisdiction (El Cerrito and Richmond) uses BAAQMD's CEQA Air Quality Guidelines to evaluate air pollutant emissions from new sources.

(b) Mobile Source Measures. The Clean Air Plan includes Mobile Source Measures that would reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment through programs such as the BAAQMD's Vehicle Buy-Back and Smoking Vehicle Programs, and promoting advanced technology vehicles that reduce emissions. The implementation of these measures rely heavily upon incentive programs, such as the Carl Moyer Program and the Transportation Fund for Clean Air, to achieve voluntary emission reductions in advance of, or in addition to, CARB requirements. CARB has new regulations that require the replacement or retrofit of on-road trucks, construction equipment, and other specific equipment that is diesel powered.

(c) Transportation Control Measures (TCMs). The Clean Air Plan includes transportation control measures (TCMs) that are strategies meant to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. While most of the TCMs are implemented at the regional level (that is, by MTC or Caltrans), there are measures that the Clean Air Plan relies upon local communities to assist with implementation. In addition, the Clean Air Plan includes land use measures and energy and climate measures whose implementation is aided by proper land use planning decisions.

The Specific Plan policies would generally be consistent with Clean Air Plan measures intended to reduce automobile use and are discussed below. Table 5-5 lists the Clean Air Plan policies relevant to the Specific Plan and indicates compliance or non-compliance with the policies.

One of the key principles of these regional planning goals is to increase the amount of housing in urbanized parts of the Bay Area in order to accommodate the region's residential demand. The Specific Plan would provide mixed-use development in locations within convenient walking distance of amenities (e.g., open space), shopping, restaurants, bus routes, and BART. The plan would include features, policies, and implementing measures that are generally consistent with the Clean Air Plan control measures. Therefore, this impact would be considered ***less-than-significant*** (see criteria [a] and [f] under subsection 5.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Table 5-5
BAAQMD CONTROL STRATEGY MEASURES

BAAQMD Control Strategy Measures	**Compliance**
Transportation Control Measures	
TCM B-4: Goods Movement	Compliant This is primarily a regional measure; however, see Richmond General Plan Actions HW9.H and EC2.K.
TCM C-1: Support Voluntary Employer-Based Trip Reduction Program	Compliant See El Cerrito Climate Action Plan Objectives SC-3.5 and SC-5.1, which encourage commuter trip reductions and encourage residents and businesses to use vehicle trip reduction programs.
TCM C-2: Safe Routes to School and Safe Routes to Transit	Compliant See proposed streetscape improvements from Complete Streets, which has the goal of transforming the area into a thriving walkable, bikeable, and transit-friendly corridor over the long term.
TCM C-3: Promote Rideshare Services and Incentives	Compliant See El Cerrito Climate Action Plan Objective SC-1.3, which promotes instituting flexible parking requirements for TOD such as access to car sharing and bicycle sharing programs. See Form-Based Code Parking Standards, which require TDM measures that may include car-share incentives.
TCM C-4: Conduct Public Outreach	Compliant While this is mostly a regionally implemented TCM, see El Cerrito Climate Action Plan Objective SC-5.1, which will provide information on trip reduction options.
TCM C-5: Promote Smart Driving/Speed Moderation	Compliant While this measure is aimed at educating the public about the air quality benefits of reducing high-speed driving and observing posted speed limits, see El Cerrito General Plan Policy T3.3.
TCM D-1: Improve Bicycle Access and Facilities	Compliant See proposed streetscape improvements and facilities from Complete Streets, which improve connectivity and safety for bicyclists.
TCM D-2: Improve Pedestrian Access and Facilities	Compliant See proposed streetscape improvements and facilities from Complete Streets, which improve connectivity and safety for pedestrians.

BAAQMD Control Strategy Measures	**Compliance**
TCM D-3: Support Local Land Use Strategies	Compliant See proposed streetscape improvements from Complete Streets, which would support mixed-use, transit-oriented development that reduces motor vehicle dependence and facilitate walking, bicycling, and transit use. See also El Cerrito Climate Action Plan Objective SC-2.1.
TCM E-2: Parking Pricing and Management Strategies	Compliant See El Cerrito Climate Action Plan Objective SC-1.3 to develop and implement a parking demand management strategy in TOD areas that both responds to market conditions and encourages higher density development along transit-oriented corridors and alternatives to driving. This would include allowing building owners to unbundle parking to be rented separately from the building space. See Specific Plan Parking Standards, which unbundle all new parking.
Land Use and Local Impact Control Measures	
LUM 1: Goods Movement	Compliant See Richmond General Plan Actions HW9.H and EC2.K.
LUM 3: Enhanced CEQA Program	Compliant While this TCM addresses BAAQMD actions, each City requires appropriate air quality evaluation of projects during CEQA review using the BAAQMD CEQA Air Quality Guidelines.
LUM 5: Reduce Risk in Impacted Communities	This issue is addressed in this EIR, in which the impact of existing or new TAC sources upon sensitive receptors is evaluated, and mitigation measures to reduce any substantial TAC exposures are identified.
Energy and Climate Measures	
ECM 1: Energy Efficiency	Compliant See Complete Streets section 3.05.05 Sustainability, which includes plans to work with AC Transit and BART to incorporate energy-efficient technology in new transit facilities. See also Richmond General Plan Action HW10.B, Green Building Ordinance, and Policy EC3.2, and El Cerrito Climate Action Plan Goals EW-1 and EW-2.
ECM 2: Renewable Energy	Compliant See Complete Streets sections 3.05.05 Sustainability and 3.05.05.03 Sustainability Practices and Energy Generation, which include plans to explore integration of solar and wind energy technology with design and selection of

BAAQMD Control Strategy Measures	Compliance
	street furniture and lighting. See also Richmond General Plan Policy EC3.1 and El Cerrito Climate Action Plan Goal EW-3.
ECM 3: Urban Heat Island Mitigation	Compliant See Complete Streets section 3.05.02.13.03 Amenity Zone, which includes landscaping and selection of species that provide shade and reduce heat gain.
ECM 4: Tree-Planting	Compliant See Complete Streets plans to include trees and bioswales/rain gardens in sidewalk-level planting areas.

Impact 5-1: Construction Period Emissions. Implementation of the Specific Plan would result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Demolition and renovation of buildings can also generate PM_{10} and $PM_{2.5}$ emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_X emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions. The BAAQMD CEQA Air Quality Guidelines do not identify plan-level thresholds that apply to construction. Although construction activities at individual project sites are expected to occur during a relatively short time period, the combination of temporary dust from activities and diesel exhaust from construction equipment poses both a health and nuisance impact to nearby receptors. In addition, NO_X emissions during grading and soil import/export for large projects may exceed the BAAQMD NO_X emission thresholds. Without application of appropriate control measures to reduce construction dust and exhaust, construction period impacts would be considered a ***potentially significant impact*** (see criteria [b], [c], and [d] in subsection 5.3.1, "Significance Criteria," above).

Mitigation 5-1. Implement the following BAAQMD-recommended measures to control particulate matter emissions during construction. These measures would reduce diesel particulate matter and PM_{10} from construction to ensure that short-term health impacts to nearby sensitive receptors are avoided or reduced:

Dust (PM_{10}) Control Measures:

- Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to residences should be kept damp at all times.
- Cover all hauling trucks or maintain at least two feet of freeboard.
- Pave, apply water at least twice daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (i.e., previously graded areas that are inactive for 10 days or more).
- Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles.
- Limit traffic speeds on any unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- Suspend construction activities that cause visible dust plumes to extend beyond the construction site.
- Post a publically visible sign(s) with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Additional Measures to Reduce Diesel Particulate Matter and $PM_{2.5}$ and other construction emissions:

(continued)

Mitigation 5-1 (continued):

- The developer or contractor shall provide a plan for approval by the City or BAAQMD demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_X reduction and 45 percent particulate reduction compared to the most recent CARB fleet average for the year 2011.

- Clear signage at all construction sites shall be posted indicating that diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were on-site or adjacent to the construction site.

- The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g., compressors).

- Properly tune and maintain equipment for low emissions.

Implementation of these measures would reduce project construction-related air quality impacts to a ***less-than-significant level***.

As discussed below in Impact 5-3, implementation of the Specific Plan would result in long-term area and mobile source emissions from operation and use of subsequent individual developments. In addition, implementation of the Specific Plan could include stationary sources of pollutants that would be required to obtain permits to operate in compliance with BAAQMD rules. These sources include, but are not limited to, gasoline stations, dry cleaners, internal combustion engines, and surface coating operations.

As discussed above, the BAAQMD Air Quality Guidelines do not have thresholds related to direct and indirect regional criteria pollutant emissions resulting from plan implementation. The BAAQMD CEQA Air Quality Guidelines only require emissions computations for project-level analysis. From a *long-term planning* standpoint, this impact would be considered *less-than-significant*, since the Specific Plan would not cause significant increases in VMT compared to service population growth and would not interfere with Clean Air Plan control measures.

Ambient Air Quality Impacts. Monitoring data from all ambient air quality monitoring stations in the Bay Area indicate that existing carbon monoxide levels are currently below national and California ambient air quality standards. Monitored CO levels have decreased substantially since 1990 as newer vehicles with greatly improved exhaust emission control systems have replaced older vehicles. The Bay Area has been designated as an attainment area for the CO standards. The highest measured levels in San Pablo (the closest monitoring station to the plan

area) during the past three years are 1.3 ppm for eight-hour averaging periods, compared with state and federal criteria of 9.0 ppm.

Even though current CO levels in the Bay Area are well below ambient air quality standards, and there have been no exceedances of CO standards in the Bay Area since 1991, elevated levels of CO still warrant analysis. CO hotspots (occurrences of localized high CO concentrations) could still occur near busy congested intersections. Recognizing the relatively low CO concentrations experienced in the Bay Area, the BAAQMD's CEQA Air Quality Guidelines state that a project would have a less-than-significant impact if it would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour. Specific Plan peak hour traffic volumes would be far less (see Chapter 16 of this EIR). Since intersections affected by the project would have volumes less than the threshold of 44,000 vehicles per hour, the impact of the project related to localized CO concentrations would therefore be ***less-than-significant*** (see criteria [b] and [d] under subsection 5.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Impact 5-2: Impacts of Toxic Air Contaminants (TACs) on Sensitive Receptors. Implementation of the Specific Plan would result in the potential construction of a variety of projects. This construction would result in short-term emissions of diesel particulate matter (DPM), a TAC. Construction would result in the generation of DPM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The calculation of cancer risk associated with exposure to TACs is typically based on a 70-year period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area. Cancer risk and $PM_{2.5}$ exposure would have to be analyzed through project-level analysis to identify the potential for significant impacts and measures to reduce those impacts to less-than-significant. Health risks associated with temporary construction would, therefore, be considered a ***potentially significant impact*** (see criteria [b], [c], and [d] in subsection 5.3.1, "Significance Criteria," above).

Mitigation 5-2. Require project-level construction health risk assessment. Construction health risk assessment shall be required on a project-by-project basis, either through screening or refined modeling, to identify impacts and, if necessary, include performance standards and industry-recognized measures to reduce exposure. Reduction in health risk can be accomplished through, though is not limited to, the following measures:

- Construction equipment selection;
- Use of alternative fuels and engine retrofits;
- Modified construction schedule; and
- Implementation of BAAQMD Basic and/or Additional Construction Mitigation Measures for control of fugitive dust.

Implementation of these industry-recognized measures would reduce TAC construction impacts to a ***less-than-significant level***.

Impact 5-3: Toxic Air Contaminant Exposure Long-Term Operations. The Specific Plan would allow growth of new residential land uses that could include sensitive receptors, as well as new non-residential land uses that would be potential new emissions sources. Typically, these sources would be evaluated through the project-specific BAAQMD permit process or the CEQA process to identify and mitigate any significant exposures. However, some sources that would not be required to undergo such a review, such as truck loading docks or truck parking areas, may have the potential to cause significant increases in TAC exposure. While average daily traffic along Specific Plan area surface streets is not readily available, the *roadway screening analysis tables* indicate that health risk from high volume surface streets such as Central Avenue, Carlson Boulevard, and Potrero Avenue would be less-than-significant at average daily traffic volumes (ADT) of 40,000 vehicles or less at a distance of 10 feet. If projects under the Specific Plan are located within close proximity to surface streets with daily traffic volumes higher than 40,000 ADT this would represent a ***potentially significant impact*** (see criteria [b], [c], [d], [h], and [i] in subsection 5.3.1, "Significance Criteria," above).

According to the BAAQMD CEQA Air Quality Guidelines, for a plan to have a less-than-significant impact with respect to TACs, overlay zones must be established around existing and proposed land uses that would emit these air pollutants. Overlay zones to avoid TAC impacts must be reflected in local plan policies, land use maps, or implementing ordinances.

The BAAQMD CEQA Air Quality Guidelines consider exposure of sensitive receptors to air pollutant levels that result in an unacceptable cancer risk or hazard, to be significant. For cancer risk, which is a concern with diesel particulate matter and other mobile-source TACs,

the BAAQMD Risk Management Policy considers an increased risk of contracting cancer that is 10 in one million chances or greater, to be significant risk for a single source. The BAAQMD CEQA Guidelines also consider exposure to annual $PM_{2.5}$ concentrations that exceed 0.3 micrograms per cubic meter ($\mu g/m^3$) to be significant. Non-cancer risk would be considered significant if the computed Hazard Index is greater than 1.0.[1]

The Specific Plan would permit and facilitate the development of new sensitive receptors, such as new homes, in locations near arterial and collector roadways, highways, and stationary sources of TAC emissions. Screening levels indicate that sensitive receptors within the Specific Plan area would be exposed to levels of TACs and or $PM_{2.5}$ that could cause an unacceptable cancer risk or hazard near highways and stationary sources.

TAC sources were identified within a 1,000 foot radius from planned and entitled projects in the Specific Plan area. These sources include stationary sources permitted by BAAQMD, roadways with more than 10,000 annual average daily traffic (AADT), and highways or freeways. Then, using the screening analysis tools--the stationary source screening analysis tool, the highway screening analysis tool, and the roadway screening analysis tool--potential risk and hazard impacts were assessed.

(a) Stationary Sources. The Specific Plan area has numerous permitted stationary sources. These sources are located throughout each city (El Cerrito and Richmond), but mostly in industrial and commercial areas. The impact of these sources can only be addressed on a project-by-project basis, since impacts are generally localized. To assist lead agencies, BAAQMD has provided a database of permitted sources for each County. The database is contained in a Google Earth tool that allows a user to identify stationary sources within 1,000 feet of a receptor. The database can then be accessed through Google Earth to determine conservative screening levels of cancer risk, hazards, and $PM_{2.5}$ concentrations. This allows many of the sources to be screened out of any additional analysis. Stationary sources that show the potential for significant community risk impacts after this first level of review are further analyzed by contacting BAAQMD for additional information and applying distance adjustment factors. A refined modeling analysis would be required if there are sources that still have potentially significant impacts after this level of review. A refined analysis would include dispersion modeling of the source using emissions and source information provided by BAAQMD. If the source still has significant community risk impacts following this level of effort, then risk reduction strategies would have to be implemented by the project on a case-by-case basis.

When siting new sensitive receptors, the BAAQMD Guidelines advise that lead agencies examine existing or future proposed sources of TAC and/or $PM_{2.5}$ emissions that would adversely affect individuals within the planned project. New residences and sensitive receptors could be located near stationary sources of TACs located throughout each city, such as gasoline dispensing stations and dry cleaners. Without proper setbacks or mitigation measures, these sources could result in TAC levels that would be significant for new sensitive receptors.

(b) Gasoline Stations. CARB found the cancer risks associated with relatively high volume stations to be about 10 in one million at a distance of 50 feet. Except for the largest gasoline

[1]The Hazard Index is the ratio of the computed receptor exposure level to the level known to cause acute or chronic adverse health impacts, as identified by BAAQMD.

stations, health risks near gasoline stations should be less than 10 in one million at distances beyond 50 feet.

(c) Dry Cleaning Facilities. Perchlorethylene (Perc) is the solvent used commonly in past dry cleaning operations. Perc is a TAC because it has the potential to cause cancer. In 2005, CARB recommended setbacks of 300 feet between dry cleaning facilities that emit Perc and sensitive land uses. Since then, CARB has enacted new rules to substantially reduce Perc emissions and phase out the use of dry cleaning operations that produce these emissions. Cancer risks, on which CARB based their recommended buffers, are computed over a 70-year almost continuous exposure. The Perc exposures would be reduced by 80 percent or more as a result of the new ACTM amendments. As a result, siting of new sensitive receptors could be allowed within 100 feet of these operations.

(d) Emergency Back-Up Generators. Electricity generators that are powered by diesel engines are common. They are typically located at facilities where uninterrupted electricity is necessary. Common facilities include fire and police stations, hospital or medical treatment facilities, pump stations, schools, offices, and data centers. Diesel engines powering these generators are regulated by BAAQMD and CARB. CARB has established strict emissions limits and operating restrictions for engines larger than 50 horsepower. BAAQMD has developed criteria (Regulation 2 Rule 5) for approval of projects with new or modified emission sources of TACs. As a result, all new engines have very localized impacts and would not be permitted if they would cause significant cancer risks or hazards. Existing engines are only permitted to operate for 50 hours per year for maintenance or routine testing.

Specific stationary sources in the Specific Plan area were identified using BAAQMD's *Stationary Source Screening Analysis Tool*, as described above. The BAAQMD data provide the screening risk, hazard, and $PM_{2.5}$ concentration levels associated with each source. Table 5-6 identifies the approximate setback distances from stationary sources that have potentially significant impacts at a distance of 50 feet or greater, using the data provided by BAAQMD. However, refined analysis of the effects from these sources through emissions and dispersion modeling would likely show lower TAC exposure. Stationary sources that do not have impacts at 50 feet or greater were not included in Table 5-6.

Individual project-level TAC analysis could be required based on the screening criteria described above if project with sensitive receptors are proposed within the screening setback distances.

(e) Highway and Roadway Traffic. The BAAQMD *highway screening analysis tool* indicates significant TAC exposures along the following highways in terms of cancer risk and $PM_{2.5}$ exposure: I-80 and State Route 123 (San Pablo Avenue). Table 5-7 identifies the approximate setback distances from highway sources that have potentially significant impacts at a distance of 50 feet or greater, using the data provided by BAAQMD. However, refined analysis of the effects from these sources through emissions and dispersion modeling would likely show lower TAC exposure. In addition, BAAQMD provides screening tables that indicate predicted community risk impacts that roadways pose.

Table 5-6
APPROXIMATE SCREENING SETBACK DISTANCES FOR STATIONARY TAC SOURCES

Source	Distance in Feet to Cancer Risk Threshold	Distance in Feet to $PM_{2.5}$ Threshold
Super Stop Gas & Mart, Plant G11674 11687 San Pablo Avenue, El Cerrito	82	na
SF Bay Area Rapid Transit District generator, Plant 14078 6400 Cutting Boulevard	528	<50
Chevron Stations, Inc #96967, Plant G1334 11319 San Pablo Avenue, El Cerrito	180	na
OK Cleaners, Plant 10588 6109 Potrero Avenue, El Cerrito	Project-specific analysis required	0
Best Gas and Car Wash, Plant G10869 10602 San Pablo Avenue, El Cerrito	131	na
M&P One Hour Cleaner, Plant 4604 10579 San Pablo Avenue, El Cerrito	Project-specific analysis required	0
Unocal #4296, Plant G1318 3160 Carlson Boulevard	131	na
Central Ave Shell, Plant G11946 5500 Central Avenue, Richmond	82	na
Central Valero, Plant G10518 5430 Central Avenue, Richmond	115	na

na = not applicable

Table 5-7
APPROXIMATE SETBACK DISTANCES FOR HIGHWAY TAC SOURCES

Source	Distance in Feet to Cancer Risk Threshold	Distance in Feet to $PM_{2.5}$ Threshold
State Route 123 (west of), San Pablo Avenue	25	<10
State Route 123 (east of), San Pablo Avenue	75	<10
I-80 – south of Central Ave. (east of)	750	300
I-80 – Central Ave. to Sacramento Ave. (east of)	750	300
I-80 – Carlson Blvd. to Bayview Ave. (east of)	500	200
I-80 – Bayview Ave. to Ernest Ave. (east of)	750	300
I-80 – Ernest Ave. to Cutting Blvd. (east of)	500	200

Mitigation 5-3. Implement the following measures in site planning and building designs to reduce TAC and $PM_{2.5}$ exposure where new receptors are located within the overlay distances identified above:

- Future development under the Specific Plan that includes sensitive receptors (such as schools, hospitals, daycare centers, or retirement homes) located within the overlay distances from highways and stationary sources shall require site-specific analysis to determine the level of TAC and $PM_{2.5}$ exposure, or for projects located near surface streets with daily traffic volumes exceeding 40,000 ADT. This analysis shall be conducted following procedures outlined by BAAQMD. If the site-specific analysis reveals significant exposures, such as cancer risk greater than 10 in one million, additional measures shall be employed to reduce the risk to below the threshold. If this is not possible, the sensitive receptors shall be relocated.

- Future non-residential developments would be evaluated through the CEQA process or BAAQMD permit process to ensure that they do not cause a significant health risk in terms of excess cancer risk greater than 10 in one million, acute or chronic hazards with a Hazard Index greater than 1.0, or annual $PM_{2.5}$ exposures greater than 0.3 $\mu g/m^3$.

- For significant cancer risk exposure, as defined by BAAQMD, indoor air filtration systems shall be installed to effectively reduce particulate levels to a less-than-significant level. Project sponsors shall submit performance specifications and design details to demonstrate that lifetime residential exposures would result in less-than-significant cancer risks (less than 10 in one million chances).

Implementation of these measures would reduce air quality impacts to a ***less-than-significant level***.

Impact 5-4: Impacts from Odors. The Specific Plan area would include potential odor sources that could affect new sensitive receptors. Most of these major existing sources are already buffered. However, it is possible that odors may still be present. Responses to odors are subjective, and vary by individual and type of use. Sensitive land uses that include outdoor uses, such as residences and possibly daycare facilities, are likely to be affected most by existing odors. The Specific Plan does not have policies or implementing measures that address potential conflicts in land uses that could result in odor complaints. As a result, the impact would be considered a ***potentially significant impact*** (see criteria [e] and [j] in subsection 5.3.1, "Significance Criteria," above).

Subsequent land use activities associated with implementation of the Specific Plan could allow for the development of uses that have the potential to produce odorous emissions (odors) either during the construction or operation of future development. Additionally, subsequent land use activities may allow for the construction of sensitive land uses (residential development, schools, parks, offices, etc.) near existing or future sources of odors).

Future construction activities could result in odors from diesel exhaust associated with construction equipment. However, because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, exposure of sensitive receptors to these emissions would be limited.

Significant sources of offending odors are typically identified based on complaint histories received and compiled by BAAQMD. It is difficult to identify sources of odors without requesting information by specific facility from BAAQMD. Typical large sources of odors that result in complaints are wastewater treatment facilities, landfills including composting operations, food processing facilities, and chemical plants. Other sources, such as restaurants, paint or body shops, and coffee roasters typically result in localized sources of odors. Table 5-8 identifies screening buffers included in the BAAQMD CEQA Air Quality Guidelines that could apply to the Specific Plan area.

According to the BAAQMD CEQA Guidelines, an odor source with five or more confirmed complaints per year averaged over three years is considered to have a significant impact. To avoid significant impacts, the BAAMQD CEQA Guidelines recommend that buffer zones to avoid adverse impacts from odors should be reflected in local plan policies, land use maps, and implementing ordinances.

Table 5-8
ODOR SCREENING DISTANCES FOR THE SPECIFIC PLAN

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Green Waste and Recycling Operations	1 mile

Mitigation 5-4. Add the following policy and action measures to the Specific Plan to reduce odor impacts:

- New Policy AQ-4.1: *Avoid Odor Conflicts*. Coordinate land use planning to prevent new odor complaints.

- New Action AQ-4.1A: *Identify Potential for Odor Complaints*. Consult with BAAQMD to identify the potential for odor complaints from various existing and planned or proposed land uses in the Specific Plan area. Use BAAQMD Odor Screening Distances or City-specific screening distances to identify odor potential.

- New Action AQ-4.1B: *Odor Sources.* Prohibit new sources of odors that have the potential to result in frequent odor complaints unless it can be shown that potential odor complaints can be mitigated.

- New Action AQ-4.1C: *Limit Sensitive Receptors Near Odor Sources.* Prohibit sensitive receptors from locating near odor sources where frequent odor complaints would occur, unless it can be shown that potential odor complaints can be mitigated.

Implementation of these measures would reduce odor impacts to a ***less-than-significant level***.

6. BIOLOGICAL RESOURCES

This EIR chapter describes biological resource implications of the proposed Specific Plan. The chapter addresses the specific biological resource concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan have a substantial adverse effect on special-status species, sensitive natural habitat, protected wetlands, or wildlife or fish movement, or would it conflict with adopted policies or plans for protecting biological resources.[1]

6.1 SETTING

The Specific Plan area is a highly developed urban area with approximately 90 percent of the land developed, recently disturbed, or ruderal. Only a few vacant lots remain in the Specific Plan area, and these have been graded and are devoid of native vegetation.

Scattered trees (eucalyptus, redwood junipers, palms, cypress, a few scattered coast live oak, and planted pines and redwoods, etc.) and shrubs exist in the Specific Plan area, virtually all of which are introduced species planted as urban landscaping, providing some minor value to wildlife. However, because of the extensive urban setting, these plantings do not represent significant natural resource values or significant resources for native wildlife species. Small patches of typical non-native annual grassland and weeds (*Bromus*, *Avena*, *Brassica*, *Erodium*, etc.) are remnant on pockets of undeveloped ground and do not represent natural habitats or valuable resources.

The Specific Plan area includes approximately 12 acres of parks and open space, including 8 acres in El Cerrito and 4 acres in Richmond. Disturbed or ruderal lands often lack habitat characteristics suitable for special-status species. Due to the extremely small extent of such isolated vacant areas, they provide almost no permanent value to wildlife.

The only identified riparian habitats or other sensitive natural community in the Specific Plan area is the riparian habitat adjacent to Cerrito Creek and Baxter Creek.

A review of the California Natural Diversity Database (CNDDB)[2] identified one special-status species that has the potential to occur in the vicinity of the Specific Plan area, the Alameda whipsnake *(Masticophis lateralis euryxanthus)*, a federal and State threatened species. However, based on conditions in the Specific Plan area, including conclusions from the source documents consulted for this EIR chapter (see subsection 6.3.3, Impacts and Mitigations), suitable habitat for the Alameda whipsnake does not currently exist in the Specific Plan area.

[1] CEQA Guidelines, appendix G, item IV (a through f).

[2] April 9, 2014.

6.2 REGULATORY SETTING

Biological resources in California are managed by a complex network of Federal and State regulations. The California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) administer laws pertaining to the protection of threatened and endangered species, as well as permits for project activities occurring near or in waters of the State or United States. For marine environment species, the National Marine Fisheries Service (NMFS) administers the same or similar laws as the CDFW and USFWS.

Federal Endangered Species Act. The Federal Endangered Species Act of 1973 (as updated in 50 CFR 17.11 and 17.12, January 1992) (FESA) protects plants and wildlife that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Section 9 of the FESA prohibits the taking of endangered wildlife. Taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50CFR 17.3). For plants, this statute pertains to removing, possessing, maliciously damaging, or destroying any endangered plant on Federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-Federal land in knowing violation of state law (16 USC 1538).

Under Section 7 of the FESA, Federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect an endangered species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to another authorized activity provided the action will not jeopardize the continued existence of the species. Consultation would be triggered if a particular project affects wetlands or waters of the U.S., requiring the U.S. Army Corps of Engineers (USACE) to issue a 404 permit. Section 10 of FESA provides for issuance of incidental take permits to private parties provided a habitat conservation plan is developed.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from a variety of activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

Federal Clean Water Act. The Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from the USACE. The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b).

The U.S. Environmental Protection Agency (U.S. EPA) also has authority over wetlands and may override a USACE permit. Substantial impacts on wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

California Endangered Species Act. The California Endangered Species Act of 1970 (California Administrative Code Title 14, sections 670.2 and 670.51) (CESA) generally parallels the main provisions of the federal ESA, but unlike its federal counterpart, the CESA applies the take prohibitions to species proposed for listing (called “candidates” by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. "Take" is defined in section 86 of the Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

The CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the CDFW to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

Fully Protected Species. The State of California first began to designate species as “Fully Protected” prior to the creation of the CESA and the FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, mammals, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, the CDFG prohibits any State agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

Native Plant Protection Act. The Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code sections 1900-1913) was created with the intent to “preserve, protect and enhance rare and endangered plants in this state.” The NPPA is administered by the CDFW. The Fish and Game Commission has the authority to designate native plants as “endangered” or “rare” and to protect endangered and rare plants from take. The CESA provides further protection for rare and endangered plant species, but the NPPA remains part of the Fish and Game Code.

California Streambed Alteration Notification/Agreement. Section 1602 of the California Fish and Game Code requires that a Streambed Alteration Application be submitted to the CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” The CDFW reviews the proposed actions and, if necessary, submits a proposal for measures to protect affected fish and wildlife resources to the applicant. The final proposal that is mutually agreed upon by the CDFW and the applicant is the Streambed Alteration Agreement.

Often, projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the Clean Water Act. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

Porter-Cologne Water Quality Control Act. The Porter-Cologne Water Quality Control Act (Porter-Cologne) imposes stringent controls on any discharges into the "waters of the State" (California Water Code § 13000 et seq.). Waters of the State are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code § 13050(e)). Pursuant to Porter-Cologne, the State Water Resources Control Board (SWRCB) has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne also establishes nine RWQCBs to oversee water quality at the local/regional level.

Under Porter-Cologne, the State retains authority to regulate discharges of waste into any waters of the State, regardless of whether the USACE has concurrent jurisdiction under Section 404 of the CWA. For the San Pablo Avenue Specific Plan Area, RWQCB certification would be under the jurisdiction of the San Francisco Bay Region 2 RWQCB in Oakland, California, and would include consultation with the CDFW.

California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800. These sections of the California Fish and Game Code prohibit the “take, possession, or destruction of birds, their nests or eggs.” Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a “take.” Such a take would violate the Migratory Bird Treaty Act. The act is implemented as part of the review process for any required State agency authorization, agreement, or permit.

San Francisco Bay Conservation and Development Commission. The San Francisco Bay Conservation and Development Commission (BCDC) has regulatory responsibility over development in San Francisco Bay and along the Bay's nine-county shoreline. BCDC is authorized in the public interest to control both: (1) Bay filling and dredging, and (2) Bay-related shoreline development. It is necessary to obtain a BCDC permit prior to undertaking most work in the Bay or within 100 feet of the shoreline, including filling, dredging, shoreline development, and other work. There are several different types of permit applications, depending on the size, location, and potential impacts of a project. No part of the Specific Plan area is within BCDC jurisdiction.

El Cerrito Municipal Code, Chapter 19.12--Creek Protection Overlay District. This purpose of this chapter is to delineate creeks and major drainages, and ensure that development or other activities preserve and protect natural drainages and their vegetation, habitat, wildlife corridors, and adjacent land.

6.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts on biological resources that could result from the Specific Plan, and discusses components of the Specific Plan that would avoid or reduce those potential impacts. The section also recommends mitigation measures as needed to reduce significant impacts.

6.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact on biological resources if it would:

(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 Wildlife or U.S. Fish and Wildlife Service;

(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife 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 (including but not limited to marsh, vernal pool, coastal, etc.) 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) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

No habitat conservation plan or natural community conservation plan is applicable to the Specific Plan area. See discussion below in subsection 6.3.3 (Impacts and Mitigations) for the El Cerrito Ohlone Greenway Master Plan and the Baxter Creek Gateway Restoration project.

6.3.2 Relevant Specific Plan Components

The Specific Plan, mainly the Form-Based Code (FBC), includes components that would avoid or reduce potential impacts on biological resources. Components especially relevant to the evaluation of potential impacts are briefly summarized below. The reader is encouraged to review the entire Specific Plan sections for more detail. Note that within the context of the Specific Plan, a “standard” is a mandatory requirement, and a “guideline” is not mandatory but is strongly recommended.

2.05.06.01.01 Creeks. This section encourages the daylighting of creeks that have been culverted, especially Cerrito Creek and Baxter Creek, and their tributaries. The section also includes standards to: (1) protect or establish riparian corridors, including a minimum 35-foot setback from stream center lines; and, (2) “provide adequate setbacks outside the riparian corridor for creekbed maintenance and pedestrian access”. Municipal Code chapter 19.12 (Creek Protection Overlay District) also would apply to the Specific Plan area (see Regulatory Setting above).

[1] CEQA Guidelines, appendix G, items IV (a) through (f).

2.05.06.01.06(E) Wind Power. This section requires all wind turbines to comply with the *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development*.

6.3.3 Impacts and Mitigations

Impacts on Special-Status Species, Riparian Habitat, Sensitive Natural Communities, and Wetlands. The Specific Plan area and vicinity do not contain any plant or animal 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 Wildlife (CDFW) or U.S. Fish and Wildlife Service (UFWS), nor does the Specific Plan area contain any federally protected wetlands (City of El Cerrito Eden Housing San Pablo Mixed Use Apartment Project Draft EIR, August 2013); Richmond General Plan Map 7.1--Floodplains and Watersheds; El Cerrito General Plan EIR, section 4.12--Biological Resources; Ohlone Greenway Master Plan Negative Declaration and Initial Study Checklist, April 15, 2009; Baxter Creek Gateway Restoration Mitigated Negative Declaration and Initial Environmental Study, July 19, 2005; El Cerrito Plaza Mixed-Use Development Project Draft Subsequent Environmental Impact Report, November 1, 2004).

San Pablo Avenue Specific Plan implementation would be subject to the regulations and standards of both the El Cerrito Ohlone Greenway Master Plan and the El Cerrito Baxter Creek Gateway Restoration project, each of which was subject to its own CEQA review (Ohlone Greenway Master Plan Negative Declaration and Initial Study Checklist, April 15, 2009; Baxter Creek Gateway Restoration Mitigated Negative Declaration and Initial Environmental Study, July 19, 2005). The Regulatory Setting requirements described above would apply to Specific Plan implementation, as would the creek protection and improvement policies of the El Cerrito General Plan and Richmond General Plan, as identified in chapter 18 (Project Consistency With Local and Regional Plans) of this EIR.

The only identified riparian habitat or other sensitive natural community in the Specific Plan area (see references two paragraphs above) is riparian habitat adjacent to Cerrito Creek (i.e., the portion in the El Cerrito Plaza Shopping Center parking lot and the portion nearby at the Ohlone Greenway) and Baxter Creek, including a grove of willows along Baxter Creek under the regulatory jurisdiction of the CDFW under section 1601 of the California Fish and Game Code; as part of the completed Baxter Creek restoration, a Streambed Alteration Permit was issued by the CDFW, and the willow riparian area was expanded. Any improvements to open water channels (e.g., Cerrito Creek) as part of the Ohlone Greenway Master Plan (Master Plan, page 47--Site 1A Conceptual Design Study) would be subject to the Joint Aquatic Resource Permit Application (JARPA) process; the goal of all riparian alteration contemplated in the Master Plan is to improve the quality of natural habitat (Master Plan Initial Study, section IV--Biological Resources).

Consistent with the El Cerrito General Plan, Richmond General Plan, and the Baxter Creek, Cerrito Creek and Ohlone Greenway projects, the San Pablo Avenue Specific Plan (section 2.05.06.01.01--Creeks) encourages the daylighting of creeks that have been culverted, especially Cerrito Creek and Baxter Creek. The plan section also includes standards to: (1) protect or establish riparian corridors, including a minimum 35-foot setback from stream center lines; and, (2) “provide adequate setbacks outside the riparian corridor for creekbed maintenance and pedestrian access”. Municipal Code chapter 19.12 (Creek Protection Overlay District) also would apply to the Specific Plan area (see Regulatory Setting above).

Based on the discussion above, Specific Plan implementation would have a ***less-than-significant*** impact on special-status species, riparian habitat, sensitive natural communities, and wetlands (see criteria [a], [b], [c], and [e] in subsection 6.3.1, “Significance Criteria,” above).

Mitigation. No significant impact has been identified; no mitigation is required.

Impact 6-1: **Potential Impacts on Nesting Birds.** The Specific Plan is intended to improve and expand the natural environment in the Specific Plan area, including the use of native and drought-tolerant plants (a beneficial environmental measure). Without a proactive mitigation procedure in place, Specific Plan implementation could inadvertently result in the removal of existing trees containing nests or eggs of migratory birds, raptors, or bird species during the nesting season, which would be considered an "unlawful take" under the Federal Migratory Bird Treaty Act and USFW provisions protecting migratory and nesting birds (see Regulatory Setting above). This is considered a ***potentially significant impact*** (see criterion [d] in subsection 6.3.1, “Significance Criteria,” above).

Neither the El Cerrito General Plan EIR nor Richmond General Plan identifies any of the City's creeks (including Baxter Creek and Cerrito Creek) as anadromous fish habitat (El Cerrito General Plan EIR, section 4.12--Biological Resources; Richmond General Plan Update, Conservation, Natural Resources and Open Space Element).

The Federal Migratory Bird Treaty Act and California Fish and Game Code sections 3503, 3503.5, 3513, and 3800 protect migratory and nesting birds. Although the Specific Plan does not specify which trees might be removed, there are trees (potential nesting habitat, e.g., close to the existing El Cerrito Plaza Professional Building) that could be disturbed or removed by Plan implementation. Any direct removal of trees or indirect disturbance by construction or operational activities during the nesting season that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a "take." The mitigation measure below would reduce this potentially significant impact to migratory and nesting birds to a less-than-significant level.

Mitigation 6-1. The removal of trees, shrubs, or weedy vegetation shall be avoided during the February 1 through August 31 bird nesting period to the extent possible. If no vegetation or tree removal is proposed during the nesting period, no further action is required. If it is not feasible to avoid the nesting period, the project applicant shall retain a qualified wildlife biologist to conduct a survey for nesting birds no sooner than 14 days prior to the start of removal of trees, shrubs, grassland vegetation, buildings, grading, or other construction activity. Survey results shall be valid for 21 days following the survey; therefore, if vegetation or building removal is not started within 21 days of the survey, another survey shall be required. The area surveyed shall include all construction sites, access roads, and staging areas, as well as areas within 150 feet outside the boundaries of the areas to be cleared or as otherwise determined by the biologist.

In the event that an active nest is discovered in the areas to be cleared, or in other habitats within 150 feet of construction boundaries, clearing and construction shall be postponed for at least two weeks or until a wildlife biologist has determined that the young have fledged (left the nest), the nest is vacated, and there is no evidence of second nesting attempts. Implementation of this measure would reduce the impact to a ***less-than-significant level.***

7. CULTURAL AND HISTORIC RESOURCES

This EIR chapter describes cultural and historic resource implications of the proposed Specific Plan. The chapter addresses the specific cultural and historic impact concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan cause a substantial adverse change in an archaeological or historic resource, destroy a unique paleontological resource, or disturb human remains.[1]

As used in this chapter, the word "historical" refers to "relating to history," while the word "historic" refers to "recognized as having importance in history."

7.1 SETTING

7.1.1 Prehistoric and Historic Resources

(a) Early Settlement. Native Americans in the Bay Area at the time of first Euro-American contact tended to live along alluvial terraces and at the historic margins of San Francisco Bay. El Cerrito was originally inhabited by the Huchuin, part of the larger Ohlone tribe, and spoke Chochenyo or Chocheno, one of the Coastanoan languages. The Huchuin lived in villages and subsisted on acorns, nuts, seeds, berries, game, fish, and shellfish.

The first recorded Spanish expedition to the area occurred in 1772. With the founding of Mission San Francisco de Asis (Mission Dolores) in 1776, Native Americans from around the Bay Area, including the Huchuin, were brought into the mission, sometimes forcibly.

Historical Spanish settlement in the El Cerrito area began shortly after 1823 when the nearly 18,000-acre Rancho San Pablo was provisionally granted to Francisco Maria Castro for service to the Spanish government. In the 1830s, the Castro family began building a series of adobes on the Rancho San Pablo land grant. Maps from the late nineteenth and early twentieth century show that by the mid-1800s, many residential and commercial structures existed in this area.

(b) Pre-Historic Archaeological Resources. Prehistoric archaeological sites in El Cerrito, including the Specific Plan area, and western Contra Costa County as a whole, are commonly located near historical marsh margins on terraces along water courses, and at the base of hills near water courses. Prehistoric archaeological resources often found at such sites include middens and bedrock milling stations, as well as 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.

According to the El Cerrito General Plan, there are five recorded prehistoric archeological sites within the city limits, including a prehistoric habitation site consisting of shell, dietary debris, and

[1] CEQA Guidelines, appendix G, item I (a through d).

chipped stone near the northern boundary of the former El Cerrito Redevelopment Area (which has approximately the same northern boundary as the Specific Plan area).

A 1992 historic and archaeological records search by the California Archaeological Inventory (CAI) at Sonoma State University (prepared for the El Cerrito Redevelopment Project) indicated that less than 5 percent of the project area (generally centered along San Pablo Avenue) had been surveyed. The CAI concluded that other prehistoric, as well as historic, resources could be encountered.

(c) Historic Resources. The State Office of Historic Preservation has determined that buildings, structures, and objects 50 years or older may be of historical value. For example, the Castro Adobe was located at 1 El Cerrito Plaza. The site is a designated California Historic Landmark and is also listed in the Contra Costa County Historic Resource Inventory (2010). The El Cerrito Historical Society, a non-profit organization, works to archive historical materials, collect oral histories, and inventory locally significant sites and properties throughout the City of El Cerrito. While the Historical Society has evaluated specific resources within the Plan area, no comprehensive survey has been completed pursuant to Section 5024.1(g) of the Public Resources Code. For the purposes of this Draft EIR, therefore, historic resources will be those noted by the federal or State directory and those included in the Contra Costa County Historic Resource Inventory (2010).

- 5815 Cutting Boulevard, site of the Save Department Store built in 1942 (State directory),
- 6317 Fairmount Avenue, the Lee House built in 1924 (State directory),
- 609 Kearney Street, the Allinio Home built in 1908 (State directory and County inventory),
- 10057 San Pablo Avenue, the Pastime Building (State directory),
- 10086 San Pablo Avenue, site of the Kiefert Building (State directory),
- 10102 San Pablo Avenue, site of the It Club (State directory),
- 10116 San Pablo Avenue, the Concrete House (State directory),
- 11337 San Pablo Avenue, site of the Cisi Dry Goods store (State directory),
- 11440 San Pablo Avenue, site of the Soldavini Home (State directory and County inventory), and
- 11915 San Pablo Avenue, the Berry House (State directory).

7.1.2 Paleontological Resources

Paleontological resources include fossil remains, as well as fossil localities and rock or soil formations that have produced fossil material. Fossils are the remains or traces of prehistoric animals and plants. Fossils are important scientific and educational resources because of their use in: (1) documenting the presence and evolutionary history of particular groups of now extinct organisms, (2) reconstructing the environments in which these organisms lived, and (3) determining the relative ages of the strata in which they occur and of the geologic events that

resulted in the deposition of the sediments that formed these strata and in their subsequent deformation.

The age and abundance of fossils depend on the location, topographic setting, and particular geologic formation in which they are found. The Late Pleistocene alluvium that underlies the plan area has a high potential for containing fossil resources, and there is the possibility that significant paleontological resources could be discovered during ground-disturbing activities at depths of approximately five feet. Such contact with fossil resources during the construction period might result in impacts to paleontological resources.

7.2 REGULATORY SETTING

National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.) (NHPA). This law was enacted to prevent unnecessary harm to historic properties. The NHPA includes regulations that apply specifically to Federal land-holding agencies, but also includes regulations (Section 106) that pertain to all projects funded, permitted, or approved by any Federal agency that have the potential to affect cultural resources. Provisions of the NHPA establish a National Register of Historic Places, or NRHP (the National Register is maintained by the National Park Service); the Advisory Council on Historic Preservation; State Historic Preservation Offices; and Federal grants-in-aid programs.

National Environmental Policy Act of 1969 (16 U.S.C. 4321, and 4331-4335, as amended) (NEPA). The act establishes guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." All projects that are subject to NEPA are subject to compliance with Section 106 of the NHPA and NEPA requirements concerning cultural resources.

American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996 and 1996a, as amended) and Native American Graves and Repatriation Act of 1990 (25 U.S.C. 3001 et seq., as amended). These acts establish as national policy that traditional religious practices and beliefs, sacred sites (including right of access), and the use of sacred objects shall be protected and preserved. Native American remains are further protected by the Native American Graves Protection and Repatriation Act of 1990.

Secretary of the Interior's Standards. The Secretary of the Interior is responsible for establishing professional standards and providing guidance related to the preservation and protection of all cultural resources listed in, or eligible for listing in, the National Register of Historic Places. The Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*; and the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* apply to all grants-in-aid projects assisted through the National Historic Preservation Fund, and are intended to be applied to a wide variety of resources, including buildings, structures, sites, objects, and districts.

National Register of Historic Places (NRHP): Archaeological and historical sites can be given a measure of protection if they are eligible for the National Register of Historic Places. The criterion most often applied to archaeological sites addresses the potential of a site to yield information important in prehistory or history. The National Register criteria, and other

information issued by the Advisory Council on Historic Preservation, present the legal measures of significance relevant to cultural resources. The NRHP criteria are the following:

- The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that are associated with events that have made a significant contribution to the broad patterns of our history; or

- are associated with the lives of persons significant in our past; or

- embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or

- have yielded, or may be likely to yield, information important to prehistory or history.

Code of Federal Regulations (CFR) Title 43 CAR 8365.1-5. This regulation addresses the collection of invertebrate fossils and fossil plants, including the willful disturbance, removal, and destruction of scientific resources or natural objects.

California Environmental Quality Act (Public Resources Code 21000 et seq.) (CEQA). Section 15064.5 of the CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.) requires lead agencies to determine whether proposed projects that require discretionary government approval may have a significant effect on historic or archaeological resources. This determination applies to cultural resources that meet significance criteria qualifying them as “unique” or “of importance,” or are listed or determined eligible for listing on the California Register of Historical Resources (CRHR). If a project may have an adverse effect on a unique or important historic or cultural resource, the project is determined to have a significant effect on the environment, and the effect must be mitigated. Under CEQA, a historical resource need not be listed already on a local, State, or Federal list of historical resources to meet the CEQA impact criteria requiring mitigation.

The CEQA Guidelines specify that when a proposed individual project may adversely affect a CEQA-defined historic resource, the lead agency is required to carefully consider the possible project impacts on the historic resource before proceeding (Public Resources Code section 21084 and subsection 21084.1). In determining if there is a significant impact on one or more historic resources, the CEQA Guidelines essentially call for a two-part test: (1) is the resource "historically significant," and (2) would the project cause a "substantial adverse change" in the significance of the resource. Under section 15064.5(a) of the CEQA Guidelines, a historic resource shall be presumed to be historically or culturally significant if it is:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (Public Resources Code SS5024.1, Title 14 CCR, Section 4850 et seq.).

2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such

resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (Public Resources Code Section 5024.1, Title 14 CCR, Section 4800.3) as follows:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

B. Is associated with the lives of persons important in our past;

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

D. Has yielded, or may be likely to yield, information important in prehistory or history.

California Register of Historical Resources (CRHR). Under the CRHR, a historical resource may be determined significant under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

California Senate Bill 18 (Chapter 905, amends Section 815.3, California Civil Code, "Traditional Tribal Cultural Places"). Senate Bill 18 requires cities and counties to conduct consultations with Native American tribes before local officials adopt or amend their general plans. These consultations are for preserving or mitigating impacts to Native American historic, cultural, sacred sites, features, and objects located within the city or county. A tribe has 90 days from the date of contact to request a consultation, unless the tribe agrees to a shorter timeframe. Senate Bill 18 also added a new topic that must be addressed in the general plan open space element: open space land for the protection of Native American historic, cultural, sacred sites, features, and objects.

Native American Heritage Commission (NAHC). The NAHC, established in 1976, was created in response to efforts by Native Americans to protect their burial grounds from destruction. The NAHC authorizes Most Likely Descendants the right to determine the treatment, disposition, and analysis of Native American remains. Among the functions of the NAHC is maintenance of lists of Native American Contacts and Most Likely Descendents.

7.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to cultural and historic resources which could result from the Specific Plan and recommends mitigation measures as needed to reduce significant impacts.

7.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact related to historic and cultural resources if it would:

(a) Cause a substantial adverse change in the significance of a historic resource pursuant to CEQA Guidelines section 15064.5;

(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;

(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

(d) Disturb any human remains, including those interred outside of formal cemeteries.

7.3.2 Relevant Specific Plan Components

The Specific Plan, mainly the Form-Based Code (FBC), includes components that would avoid or reduce potential impacts on cultural and historic resources. Components especially relevant to the evaluation of potential impacts are briefly summarized below. The reader is encouraged to review the entire Specific Plan sections for more detail. Note that within the context of the Specific Plan, a “standard” is a mandatory requirement, and a “guideline” is not mandatory but is strongly recommended.

2.02.05.03(B)(2) Application Forms and Fees. This section helps ensure that future site-specific study regarding cultural and historic resources, as required by the Zoning Administrator, would comply with the requirements of CEQA.

2.05.07 Cultural and Historic Resources. This section is intended to: (a) protect and celebrate the distinctive cultural, historical and archaeological heritage of the Specific Plan area by preserving historic structures and cultural resources that make San Pablo Avenue a more attractive and unique place, and (b) avoid the unnecessary demolition or significant alteration of any property that has historic importance.

[1] CEQA Guidelines, appendix G, items V (a) through (d).

7.3.3 Impacts and Mitigations

Impact 7-1: Destruction/Degradation of Historic Resources. There may be one or more properties or features within the plan area that meet the CEQA definition of a historic resource, including properties or features already listed, or properties or features eligible for listing, in a local, State, or Federal register of historic resources. Future development projects that are otherwise consistent with the proposed Specific Plan may cause substantial adverse changes in the significance of one or more such historic resources. Substantial adverse changes that may occur include physical demolition, destruction, relocation, or alteration of one or more historic resources or its immediate surroundings such that the resource is "materially impaired." The significance of a historic resource would be considered potentially "materially impaired" when and if an individual future development project proposes to demolish or materially alter the physical characteristics that justify the determination of its significance (CEQA Guidelines section 15064.5[b]). Such adverse changes in the significance of a CEQA-defined historic resource would be a ***significant impact*** (see criterion [a] in subsection 7.3.1, “Significance Criteria,” above).

In the plan area, the Cerrito Theater, which has been renovated, is considered a "potentially significant historic resource." The theater renovation was subject to its own CEQA review and mitigation requirements, including rehabilitation of the theater in conformance with the U.S. Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (Cerrito Theater Renovation Mitigated Negative Declaration, August 2003), and the project has been completed. Generally, rehabilitation of a historic building in compliance with the Secretary of the Interior's Standards is considered under CEQA (section 15064.5[b][3]) to mitigate potential impacts on that historic resource to a less-than-significant level.

As one example, the Eden Housing San Pablo Mixed-Use Apartment Project, on the Mabuchi property in the Plan area, includes the rehabilitation of the historic Contra Costa Florist shop in accordance with the Secretary of the Interior’s *Standards for the Treatment of Historic Properties*. While two historic resource surveys have concluded in differing opinions of the historical significance of the property, the project’s design will include the retention and rehabilitation of the former florist shop and its façade, an interpretive display celebrating the property’s local significance, and Japanese inspired landscaping intended to reduce the project’s potential adverse impacts to a less-than-significant level. The project is subject to its own CEQA review and mitigation requirements.

The potential for a substantial adverse change to an existing or future historic resource due to individual discretionary development projects proposed under the Specific Plan would be evaluated by the lead agency (one of the two jurisdictional cities) on a case-by-case basis in accordance with CEQA Guidelines section 15064.5. Sections 2.02.05.03(B)(2) and 2.05.07 of the Specific Plan (see Regulatory Setting above) focus specifically on cultural and historic resources in relation to CEQA requirements, plus the Specific Plan’s intent to protect those resources.

Under CEQA, conformance with the Secretary of the Interior’s Standards will normally mitigate impacts to a less-than-significant level. Under the *Standards for Rehabilitation*, new additions,

alterations, or adjacent new construction must not destroy character-defining features, spaces, and spatial relationships. New work must be differentiated from the old and must be compatible with the historic materials, features, size, scale, proportion, and massing. New additions, alterations, and construction must be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

In some cases, it can be challenging to accommodate the needs of new uses while fully adhering to the *Standards for Rehabilitation* and, in many situations, it can be altogether infeasible. In addition, changes to the condition of historic resources and their surroundings between now and the time that individual development proposals are received for specific properties could affect potential impacts on historic resources. As a result, it cannot be determined at this time, without consideration of a specific development proposal, whether it would be feasible to mitigate to a less-than-significant level the impacts of any given subsequent development project under the Specific Plan involving properties that may contain historic resources. Although the following mitigation measures are intended to mitigate impacts on historic resources from implementation of the Specific Plan to the extent feasible, the impacts to historic resources may still remain significant and unavoidable.

Mitigation 7-1. For any individual discretionary project within the Specific Plan area that the City determines may involve a property that contains a potentially significant historic resource (e.g., a recorded historic resource or an unrecorded building or structure 45 years or older), the resource shall be evaluated by City staff, and if warranted, shall be assessed by a qualified professional on the California Historical Resources Information System (CHRIS) list of consultants who meet the Secretary of the Interior's Professional Qualifications Standards to determine whether the property is a significant historical resource and whether or not the project may have a potentially significant adverse effect on the historical resource. If, based on the recommendation of the qualified professional, the City determines that the project may have a potentially significant effect, the City shall require the applicant to implement the following mitigation measures:

(a) Adhere to one or both of the following Secretary of the Interior's Standards:[1]

- Secretary of Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*; or

- Secretary of Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*.

The qualified professional shall make a recommendation to the City as to whether the project fully adheres to the Secretary of the Interior's Standards, and any specific modifications necessary to do so. The final determination as to a project's adherence to the Standards shall be made by the City body with final decision-making authority over the project. Such a determination of individual project adherence to the Secretary of the Interior's Standards will constitute mitigation of the project historic resource impacts to a ***less-than-significant level*** (CEQA Guidelines section 15064.5).

(b) If measure (a) is not feasible, the historic resource shall be moved to a new location compatible with the original character and use of the historical resource, and

(continued)

[1]Under the CEQA Guidelines (section 15064.5[b][3]), a project's adverse impact on a historic resource can be mitigated to a less-than-significant level by following either of these standards.

Mitigation 7-1 (continued):

its historic features and compatibility in orientation, setting, and general environment shall be retained, such that the resource retains its eligibility for listing on the California Register.[1]

If neither measure (a) nor measure (b) is feasible, a project-specific EIR shall be required pursuant to CEQA Guidelines Section 15064.5, particularly in order for specific project alternatives to be designed and evaluated. If after that CEQA process, neither measure (a) nor (b) is found to be feasible, then the City shall, as applicable and to the extent feasible, implement the following measures in the following order:

(c) Document the historic resource before any changes that would cause a loss of integrity and loss of continued eligibility. The documentation shall adhere to the Secretary of the Interior's *Standards for Architectural and Engineering Documentation*. The level of documentation shall be proportionate with the level of significance of the resource. The documentation shall be made available for inclusion in the Historic American Building Survey (HABS) or the Historic American Engineering Record (HAER) Collections in the Library of Congress, the California Historical Resources Information System (CHRIS), and the Bancroft Library, as well as local libraries and historical societies, such as the El Cerrito Historical Society.

(d) Retain and reuse the historic resource to the maximum feasible extent and continue to apply the Secretary of the Interior's Standards to the maximum feasible extent in all alterations, additions, and new construction.

(e) Through careful methods of planned deconstruction to avoid damage and loss, salvage character-defining features and materials for educational and interpretive use on-site, or for reuse in new construction on the site in a way that commemorates their original use and significance.

(f) Interpret the historical significance of the resource through a permanent exhibit or program in a publicly accessible location on the site or elsewhere within the Specific Plan area.

(continued)

[1]The State Historical Resources Code encourages the retention of historical resources on-site and discourages the non-historic grouping of historic buildings into parks or districts. However, it is recognized that moving a historic building, structure, or object is sometimes necessary to prevent its destruction. Therefore, a moved building, structure, or object that is otherwise eligible may be listed in the California Register if it was moved to prevent its demolition at its former location and if the new location is compatible with the original character and use of the historical resource. A historical resource should retain its historic features and compatibility in orientation, setting, and general environment. California Office of Historic Preservation, *California Register and National Register: A Comparison,* Technical Assistance Series 6; Sacramento, CA: California Department of Parks and Recreation, 2001.

Mitigation 7-1 (continued):

Implementation of measures (b), (c), (d), (e), and/or (f) would reduce a significant impact on historic resources. However, this program EIR is prohibited from speculating on the details of any future individual development proposal and its potential impact on a historic resource, and the City cannot determine with certainty that this mitigation measure would reduce the potential impact of any individual project on a historic resource to a less-than-significant level. Consequently, this impact may remain ***significant and unavoidable.***

Impact 7-2: Potential for Disturbance of Buried Archaeological Resources, Including Human Remains. Development facilitated by the Specific Plan could disturb unrecorded sensitive archaeological resources in the plan area. This possibility represents a ***potentially significant impact*** (see criteria [b] and [d] in subsection 7.3.1, "Significance Criteria," above).

Prehistoric archaeological sites have been recorded in the plan area vicinity, including bedrock mortars in rock outcrops and a shell midden (Mayfair Block Mixed-Use Project Initial Study/Mitigated Negative Declaration, June 2006, page 34). Due to the proximity of these resources to the plan area, it is possible that the plan area could contain unidentified archaeological resources. Contact with such resources during construction activities could result in significant impacts to archaeological resources. The mitigation measure below would reduce the impact to a less-than-significant level.

Mitigation 7-2. During the City's standard project-specific environmental checklist review process for all future, discretionary, public improvement and private development projects in the Specific Plan area, the City shall determine the possible presence of, and the potential impacts of the action on, archaeological resources. For discretionary projects involving substantial ground disturbance (more than 10,000 square feet), the City shall require individual project applicants or environmental consultants to contact the California Historical Resources Information System (CHRIS) to determine whether the particular project is located in a sensitive area. Future discretionary development projects that CHRIS determines may be located in a sensitive area--i.e., on or adjoining an identified archaeological site--shall proceed only after the project applicant contracts with a qualified archaeologist to conduct a determination in regard to cultural values remaining on the site and warranted mitigation measures.

(continued)

Mitigation 7-2 (continued):

In general, to make an adequate determination in these instances, the archaeologist shall conduct a preliminary field inspection to (1) assess the amount and location of visible ground surface, (2) determine the nature and extent of previous impacts, and (3) assess the nature and extent of potential impacts. Such field inspection may demonstrate the need for some form of additional subsurface testing (e.g., excavation by auger, shovel, or backhoe unit) or, alternatively, the need for on-site monitoring of subsurface activities (i.e., during grading or trenching).

If a significant archaeological resource is identified through this field inspection process, the City and project applicant shall seek to avoid damaging effects on the resource. Preservation in place to maintain the relationship between the artifact(s) and the archaeological context is the preferred manner of mitigating impacts on an archaeological site. Preservation may be accomplished by:

- Planning construction to avoid the archaeological site;
- Incorporating the site within a park, green space, or other open space element;
- Covering the site with a layer of chemically stable soil; or
- Deeding the site into a permanent conservation easement.

When in-place mitigation is determined by the City to be infeasible, a *data recovery plan*, which makes provisions for adequate recovery of culturally or historically consequential information about the site, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be submitted to the CHRIS Northwest Information Center. If Native American artifacts are indicated, the studies shall also be submitted to the Native American Heritage Commission.

Identified cultural resources shall be recorded on form DPR 422 (archaeological sites). Mitigation measures recommended by these two groups and required by the City shall be undertaken, if necessary, prior to and during construction activities.

A *data recovery plan* and data recovery shall not be required if the City determines that testing or studies already completed have adequately recovered the necessary data, provided that the data have already been documented in an EIR or are available for review at the CHRIS Northwest Information Center (CEQA Guidelines section 15126.4[b]).

(continued)

Mitigation 7-2 (continued):

In the event that subsurface cultural resources are otherwise encountered during approved ground-disturbing activities for a plan area construction activity, work in the immediate vicinity shall be stopped and a qualified archaeologist retained to evaluate the finds following the procedures described above. Project personnel shall not collect cultural resources.

If human remains are found, special rules set forth in State Health and Safety Code section 7050.5 and CEQA Guidelines section 15126.4(b) shall apply.

Implementation of this measure would reduce the impact to a ***less-than-significant level.***

Impact 7-3: Potential for Disturbance of Paleontological Resources. Development facilitated by the Specific Plan could disturb unrecorded paleontological resources in the plan area. This possibility represents a ***potentially significant impact*** (see criterion [c] in subsection 7.3.1, "Significance Criteria," above).

The alluvium that underlies the plan area has a high potential for containing fossil resources, and it is possible that significant paleontological resources could be discovered during ground-disturbing activities. Contact with such fossil resources during ground-disturbing activities could result in significant impacts to paleontological resources. The mitigation below would reduce the impact to a less-than-significant level.

Mitigation 7-3. During the City's standard project-specific environmental checklist review process for all future, discretionary, public improvement and private development projects in the Specific Plan area, the City shall determine the possible presence of, and the potential impacts of the action on, paleontological resources. For projects involving substantial ground disturbance (more than 10,000 square feet), the City shall require individual project applicants to carry out the following measures:

(1) Education Program. Project applicants shall implement a program that includes the following elements:

- Resource identification training procedures for construction personnel;
- Spot-checks by a qualified paleontological monitor of all excavations deeper than seven feet below ground surface; and

(continued)

<u>Mitigation 7-3 (continued)</u>:

- Procedures for reporting discoveries and their geologic context.

(2) Procedures for Resources Encountered. If subsurface paleontological resources are encountered, excavation shall halt in the vicinity of the resources, and the project paleontologist shall evaluate the resource and its stratigraphic context. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. During monitoring, if potentially significant paleontological resources are found, "standard" samples shall be collected and processed by a qualified paleontologist to recover micro vertebrate fossils. If significant fossils are found and collected, they shall be prepared to a reasonable point of identification. Excess sediment or matrix shall be removed from the specimens to reduce the bulk and cost of storage. Itemized catalogs of material collected and identified shall be provided to a local museum repository with the specimens. Significant fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a local museum repository for permanent curatorship and storage. A report documenting the results of the monitoring and salvage activities, and the significance of the fossils, if any, shall be prepared. The report and inventory, when submitted to the City, shall signify the completion of the program to mitigate impacts on paleontological resources.

Implementation of this measure would reduce the impact to a ***less-than-significant level.***

8. GEOLOGY AND SOILS

This EIR chapter describes geology and soils implications of the proposed Specific Plan. The chapter addresses the specific geology and soils impact concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan expose people and structures to geological hazards (e.g., earthquakes, landslides, expansive soils).[1]

8.1 SETTING

8.1.1 Regional Geologic Setting

The approximately 206-acre Specific Plan area is located within the Coast Range geomorphic province that encompasses the San Francisco Bay region. The Coast Range geomorphic province features northwest trending mountain ranges, broad basins, and narrow valleys that roughly parallel major geologic structures and the coastline of central California. Flat lowland areas constitute the broad alluvial plain surrounding the Bay.[2] Alluvial deposits from the surrounding hills, and farther east from the Sierra Nevada, accumulated over the past five to eight million years and covered the Franciscan Formation bedrock. More recent alluvial fan deposits (within the past 15,000 years) occurred during stream formation of the Bay.

8.1.2 Topography and Surface Soils

The plan area is generally flat, with surface elevations ranging from sea level to 100 feet above sea level. The plan area gently slopes from northeast to southwest except for two small hilly areas, one located adjacent to San Pablo Avenue between Burlingame Avenue and Wenk, and the other north of Central Avenue near San Mateo Avenue, heading west toward I-80.

Soil types in the plan area are Tierra loam, Clear Lake clay, and, to a lesser extent, the Los Osos complex. Tierra loam, a moderately well drained soil type, is formed in material weathered from sedimentary terrace deposits. Runoff is medium, and the hazard of erosion is moderate where the soil is bare. The Clear Lake series consists of soils formed in fine-textured alluvium, with very slow runoff and no hazard of erosion where the soil is exposed. The Los Osos complex is well drained, and runoff is rapid, with a high hazard for erosion.[3]

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[1]CEQA Guidelines, appendix G, item VI (a through e).

[2]Helley, E. J. and K. R. Lajoie, Flatland Deposits of the San Francisco Bay Region, California: Their Geology and Engineering Properties, and Their Importance to Comprehensive Planning, USGS Professional Paper 943; 1991.

[3]U.S. Department of Agriculture. Natural Resources Conservation Service, Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed 4-26-14; U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Contra Costa County, California, 1977.

Several creeks pass through El Cerrito, most on private property. Baxter Creek, at the northern border of the plan area, and Cerrito Creek, at the southern border of the plan area, both have underground and above ground portions.

8.1.3 Seismicity

(a) Earthquake Risk. The plan area is not located in an Alquist-Priolo Special Study Zone, and no faults run through the plan area. However, the Hayward fault is located approximately one mile to the east. The plan area could experience strong seismic ground shaking and related effects in the event of an earthquake on the Hayward fault or on one of the other identified active or potentially active faults in the region (e.g., Rogers Creek fault, Calaveras fault, Concord-Green Valley fault, San Andreas fault).

According to the 2007 Working Group on California Earthquake Probabilities, a 63 percent probability exists of a magnitude 6.7 or greater earthquake occurring in the San Francisco Bay Area over the next 30 years, with the following estimates of probability for particular faults: Hayward-Rogers Creek--31 percent; San Andreas--21 percent; Calaveras--7 percent; San Gregorio--6 percent; Concord-Green Valley--3 percent; Greenville--3 percent; and Mount Diablo--1 percent.[1]

(b) Earthquake Hazards. Hazards that can result from an earthquake include landsliding, violent ground shaking, surface rupture, differential settlement, liquefaction, and lateral spreading.

(1) Surface rupture occurs along active fault traces, or where compressed and distorted soils break open to relieve earthquake-induced stress. When this occurs on a fault, everything built across the trace or line of the fracture is generally destroyed, whereas, if it occurs in the course of stress relief, the damage is usually less catastrophic. As noted above, no active or potentially active fault traces have been identified in the plan area.

(2) Ground shaking is caused by the seismic waves that radiate out from an earthquake's epicenter. The severity of ground shaking at a particular location is primarily determined by distance from the epicenter of the earthquake and by the local soil profile. Loose or unconsolidated sedimentary deposits (such as alluvial soils) can transform the relatively high frequency (back and forth) motion of underlying bedrock into lower frequency but higher amplitude motion at the surface. The most commonly used intensity scale for measuring earthquakes is the modified Mercalli intensity scale (MMI scale). The intensity of ground shaking at a site varies for any particular earthquake based on several factors, including the size (magnitude) of the earthquake (which is related to the length of the fault that ruptures); the distance from the site to the fault source for the earthquake; the directivity (focusing of earthquake energy along the fault axis rather than perpendicular to the fault); and the type of geologic material underlying the site, with stronger shaking occurring on softer soils.[2] Table 8.1 shows the Mercalli intensity and moment magnitude scales with a description of effects typically experienced during earthquakes.

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[1]Working Group on California Earthquake Probabilities, The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2), USGS Open File Report 2007-1437, CGS Special Report 203, SCEC Contribution #1138; 2008.

[2]Association of Bay Area Governments, Earthquake and Hazards Program, The San Francisco Bay Area: On Shaky Ground--Documentation for 2003 Mapping Updated in 2010.

Table 8.1
MODIFIED MERCALLI INTENSITY SCALE (MMI) AND MOMENT MAGNITUDE SCALE (MW)

MW Scale	Typical MMI Scale	Typical MMI Scale Description
1.0 to 3.0	I. Instrumental	Generally not felt by people unless in favorable conditions.
3.0 to 3.9	II. Weak	Felt only by a few people at best, especially on the upper floors of buildings. Delicately suspended objects may swing.
3.0 to 3.9	III. Slight	Felt quite noticeably by people indoors, especially on the upper floors of buildings. Many do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration similar to the passing of a truck. Duration estimated.
4.0 to 4.9	IV. Moderate	Felt indoors by many people, outdoors by few people during the day. At night, some awaken. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rock noticeably. Dishes and windows rattle alarmingly.
4.0 to 4.9	V. Rather Strong	Felt inside by most, may not be felt by some outside in nonfavorable conditions. Dishes and windows may break and large bells will ring. Vibrations like large train passing close to house.
5.0 to 5.9	VI. Strong	Felt by all; many frightened and run outdoors, walk unsteadily. Windows, dishes, glassware broken; books fall off shelves; some heavy furniture moved or overturned; a few instances of fallen plaster. Damage slight.
5.0 to 5.9 6.0 to 6.9	VII. Very Strong	Difficult to stand; furniture broken; damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken. Noticed by people driving motor cars.
6.0 to 6.9	VIII. Destructive	Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture moved.
7.0 +	IX. Violent	General panic; damage considerable in specially designed structures, well designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
7.0 +	X. Intense	Some well built wooden structures destroyed; most masonry and frame structures destroyed with foundation. Rails bent.

SOURCE: National Earthquake Information Center (U.S.), 2011.

(3) Landsliding entails sudden slope failure; due to the generally flat topography of the plan area, landsliding does not pose a significant concern.

(4) Differential settlement normally occurs within unconsolidated soils subjected to unequal surface loading. Movement of the ground causes an additional compaction of the soil that is proportional to the soil's pre-existing density and to the magnitude of imposed loads. These conditions often result in unequal settlement, which can cause the failure of poorly stabilized cut-and-fill embankments and of foundations that are not properly engineered to span areas of discontinuous support.

(5) Liquefaction is a loss of foundation support that occurs in saturated granular soils, most notably loose, uniformly graded, fine-grained sand. Under liquefaction, these materials can experience a temporary loss of strength due to build-up of excess pore water pressure, especially during cyclic loadings such as those induced by earthquakes. When this occurs, significant total and differential settlement of structures built on the surface can result. Liquefaction susceptibility for alluvial fan deposits in the plan area is moderate to low, depending on depth to ground water and the age of the deposits.[1] The El Cerrito General Plan (1999) identifies several small areas along Baxter and Cerrito creeks as having a high liquefaction potential. Table 8.2 shows liquefaction hazards based on modified Mercalli intensity and liquefaction susceptibility.

(6) Lateral spreading occurs when local ground shaking causes generally flat-lying alluvial deposits to be displaced horizontally toward an open cut or excavation (such as along the side of a drainage channel). There are currently no banks or permanent excavations in the vicinity that would allow such displacement.

(7) Subsidence is the motion of the ground as it shifts downward, mainly from the removal of subsurface water.

8.2 REGULATORY SETTING

Alquist-Priolo Earthquake Fault Zoning Act. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the potential hazard of surface faults to structures for human occupancy. The main purpose of the Act is to prevent the construction of human-occupied buildings over active faults. The Act only addresses the hazard of fault rupture and is not directed toward other earthquake hazards.

The Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue maps to all affected cities, counties, and State agencies for their use in planning and controlling development. Local agencies must regulate most development projects within the zones, and generally there can be no construction for human occupancy within 50 feet of an active fault zone.

Seismic Hazards Mapping Act. The Seismic Hazards Mapping Act addresses earthquake hazards other than fault rupture, including liquefaction and seismically induced landslides. Seismic Hazard Zones are mapped by the State Geologist to assist local governments in land

[1] USGS, Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California, Open-File Report 2006-1037; 2006.

Table 8.2
ESTIMATE OF LIQUEFACTION HAZARD BASED ON COMBIANTIONS OF MODIFIED MERCALLI INTENSITY AND LIQUEFACTION SUSCEPTIBILITY

MMI Value	Description of Shaking Severity	Liquefaction Susceptibility Category				
		Very Low	Low	Moderate	High	Very High
V	Light	--	--	--	--	--
VI	Moderate	--	--	--	--	--
VII	Strong	--	--	Moderately Low	Moderately Low	Moderate
VIII	Very Strong	--	--	Moderate	Moderate	**High**
IX	Violent	--	--	**High**	**High**	**High**
X	Very Violent	--	--	**High**	**High**	**High**

SOURCE: ABAG Earthquake and Hazards Program, Supplementary Information Used for the 2011 Update of ABAG's Liquefaction Hazard Maps, September 2010.

use planning. The California Geological Survey map "Earthquake Zones of Required Investigation, Hayward Quadrangle, 2012" (released September 21, 2012) shows the location of Alquist-Priolo Earthquake Zones and Seismic Hazard Zones, collectively referred to as Earthquake Zones of Required Investigation. These zones are delineated to assist cities and counties in fulfilling their responsibilities for protecting the public from the effects of surface fault rupture and earthquake-triggered ground failure as required by the Alquist-Priolo Earthquake Fault Zoning Act and the Seismic Hazards Mapping Act.

California Building Standards Code. The California Building Standards Code (CBSC) is contained in the California Code of Regulations (CCR), Title 24. The purpose of the CBSC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of building and structures. The 2013 CBSC is based on the 2012 International Building Code (IBC) published by the International Code Council. The CBSC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

Association of Bay Area Governments (ABAG) Multi-Jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area. The City of El Cerrito and the City of Richmond have adopted the ABAG Multi-Jurisdictional Local Hazard Mitigation Plan ("Taming Natural Disasters") as the City's Local Hazard Mitigation Plan (LHMP). The ABAG Plan involves local agencies throughout its nine-county Bay Area jurisdiction, with an overall strategy to maintain and enhance disaster response of the region, as well as to fulfill the requirements of the Federal Disaster Mitigation Act of 2000. Each partner jurisdiction (including El Cerrito and Richmond) has submitted an "Annex" document that contains jurisdiction-specific hazard

mitigation strategies to attach to the Multi-Jurisdictional Plan. The plan, which focuses on mitigation *before* rather than after disasters: (1) identifies natural hazards the community and region face (e.g., earthquakes, flooding, severe weather), (2) assesses the community's and region's vulnerability to these hazards, and (3) identifies specific preventive actions that can be taken to reduce the risk from the hazards. Adoption of the Multi-Jurisdictional Plan allows the City of El Cerrito to become eligible for Federal Disaster assistance.

8.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to geology (including seismicity) and soils that could result from the Specific Plan. The section also recommends mitigation measures as needed to reduce significant impacts.

8.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact related to geology and soils if it would:

(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

(1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Division of Mines and Geology Special Publication 42);

(2) Strong seismic ground shaking;

(3) Seismic-related ground failure, including liquefaction; or

(4) Landslides;

(b) Result in substantial soil erosion or the loss of topsoil;

(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landsliding, lateral spreading, subsidence, liquefaction, or collapse;

(d) Be located on expansive soil, as defined by Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property; or

(e) 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;

Regarding criterion (a)(1), there are no known active faults in the Specific Plan area (Mayfair Block Mixed-Use Project Initial Study/Mitigated Negative Declaration, p. 37; Richmond General

[1] CEQA Guidelines, appendix G, item VI (a through e).

Plan Map 12.3, Active Faults). No impact from fault rupture would result, and this issue is not discussed further in this EIR.

Regarding criterion (a)(4), the plan area and vicinity are relatively flat. Due to the absence of appreciable slopes in the project vicinity, slope stability hazards are considered less-than-significant. No significant impact would result, and no mitigation is required. This issue is not discussed further in this EIR.

Regarding criterion (e), the plan area is served by a comprehensive, integrated wastewater collection, treatment, and disposal system. Neither septic tank systems nor alternative wastewater disposal systems are proposed as part of Specific Plan implementation. No impact would result, and this issue is not discussed further in this EIR.

8.3.2 Relevant Specific Plan Components

The Regulatory Setting above applies to Specific Plan implementation. The Specific Plan document itself does not include additional components directly related to geology and soils.

8.3.3 Impacts and Mitigations

Effects of Strong Seismic Ground Shaking. The Hayward fault is the nearest active fault to the plan area and is approximately one mile to the east. The plan area could experience strong seismic ground shaking and related effects in the event of an earthquake on the Hayward fault or on one of the other identified active or potentially active faults in the region (e.g., Rodgers Creek fault, Calaveras fault, Concord-Green Valley fault, San Andreas fault). Mandated project compliance with the stringent seismic design provisions of the latest California Building Standards Code (CBSC), as adopted by each City, would reduce the risk of property loss or hazards to occupants to a ***less-than-significant level*** (see criterion [a][2] in subsection 8.3.1, “Significance Criteria,” above).

Mitigation. No significant impact has been identified; no mitigation is required.

Potential Soil Erosion and Loss of Topsoil. Grading and construction activities may result in minor erosion or the minor loss of some topsoil. City-required standard grading- and construction-period erosion control techniques would mitigate this potential impact to a ***less-than-significant level*** (see criterion [b] in subsection 8.3.1, “Significance Criteria,” above).

Mitigation. No significant impact has been identified; no mitigation is required. Also see Chapter 5 (Air Quality) and Chapter 11 (Hydrology and Water Quality) of this EIR.

Impact 8-1: Potential Ground Instability Impacts. The potential for ground instability can depend on specific, highly localized underlying soil conditions. Determination of liquefaction, differential settlement, lateral spreading, and subsidence potential in the Specific Plan area would require site-specific geotechnical studies for future individual development proposals. Possible ground instability conditions, if not properly engineered for, could result in associated significant damage to project buildings and other improvements, representing a ***potentially significant impact*** (see criteria [a][3], [c], and [d] in subsection 8.3.1, "Significance Criteria," above).

Any potential for earthquake-induced on-site liquefaction, differential settlement, lateral spreading, and subsidence, and associated damage to project buildings or other improvements can be mitigated to a less-than-significant level through implementation of City-required geotechnical investigations and associated engineering design standards, specifications, and measures. Geotechnical mitigation requirements identified here include completion of detailed studies to address specific concerns as future site-specific project designs are refined. The CEQA Guidelines and recent court decisions indicate that mitigation measures must be mandated that will alter the potentially significant soil and geologic impacts of the project. In particular, mitigation measures must ensure that a project would be implemented in a manner that renders insignificant or minimizes potentially significant soil and geologic impacts of the project. There is substantial, reasonable, historic information to support the conclusion that the specific subsequent geotechnical/geologic investigations, inspections, and specific formulations required to meet City-adopted standards would adequately mitigate related impacts to less-than-significant levels. Each City routinely requires such geotechnical/geologic investigations and specifications at phases of development review that follow CEQA compliance. Individual measures are typically, and most efficiently, specified at a later, more detailed level of design.

A significant record exists demonstrating the effectiveness of such post-CEQA-certification design and engineering requirements in mitigating the potential soil and geology impacts of concern. Under each City's grading permit and building permit provisions, requirements, and regulations, an individual development project cannot be given final approval without project compliance with geotechnical/geologic requirements. These requirements and related City inspection and verification procedures prior to project operation provide reasonable, professional assurances that the project would incorporate the design and engineering refinements necessary to reduce the degree of impacts to less-than-significant levels by either avoiding identified soil and geologic impact areas altogether (i.e., basic project design changes), or by rectifying the impact through conventional engineering and construction procedures (e.g., suitable foundation design and construction) identified throughout the post-EIR investigation and monitoring process.

Mitigation 8-1. Subject to City review and approval, complete and implement the geotechnical mitigation recommendations identified in the required site-specific geotechnical investigations and engineering studies, in coordination with City grading permit and building permit performance standards. Project incorporation of this mitigation requirement would reduce this impact to a ***less-than-significant level*.**

9. GREENHOUSE GAS EMISSIONS AND GLOBAL CLIMATE CHANGE

This chapter examines greenhouse gas (GHG) emissions in the plan area and region, includes a summary of applicable GHG regulations, and analyzes potential GHG impacts associated with the proposed San Pablo Avenue Specific Plan. The technical analysis for this chapter was prepared by the EIR air quality and climate change/greenhouse gas consultant, Illingworth & Rodkin, Inc.

9.1 SETTING

Global temperatures are affected by naturally occurring and anthropogenic-generated (generated by humankind) atmospheric gases, such as water vapor, carbon dioxide, methane, and nitrous oxide. Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). Solar radiation enters the earth's atmosphere from space, and a portion of the radiation is absorbed at the surface. The earth emits this radiation back toward space as infrared radiation. GHGs, which are mostly transparent to incoming solar radiation, are effective in absorbing infrared radiation and redirecting some of this back to the earth's surface. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This is known as the greenhouse effect. The greenhouse effect helps maintain a habitable climate. Emissions of GHGs from human activities, such as electricity production, motor vehicle use, and agriculture, are elevating the concentration of GHGs in the atmosphere, and are reported to have led to a trend of unnatural warming of the earth's natural climate, known as global warming or global climate change. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred because it implies that there are other consequences to the global climate in addition to rising temperatures. Other than water vapor, the primary GHGs contributing to global climate change include the following gases:

- Carbon dioxide (CO_2), primarily a byproduct of fuel combustion;
- Nitrous oxide (N_2O), a byproduct of fuel combustion; also associated with agricultural operations such as the fertilization of crops;
- Methane (CH_4), commonly created by off-gassing from agricultural practices (e.g. livestock), wastewater treatment and landfill operations;
- Chlorofluorocarbons (CFCs) were used as refrigerants, propellants and cleaning solvents, but their production has been mostly prohibited by international treaty;
- Hydrofluorocarbons (HFCs) are now widely used as a substitute for chlorofluorocarbons in refrigeration and cooling; and
- Perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6) emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

These gases vary considerably in terms of Global Warming Potential (GWP), a term developed to compare the propensity of each GHG to trap heat in the atmosphere relative to another GHG. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time of gas remains in the atmosphere. The GWP of each GHG is measured relative to CO_2. Accordingly, GHG emissions are typically measured and reported in terms of equivalent CO_2 (CO_2e). For instance, SF_6 is 22,800 times more intense in terms of global climate change contribution than CO_2.

An expanding body of scientific research supports the theory that global warming is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California could be adversely affected by the global warming trend. Increased precipitation and sea level rise could increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes, and drought; and increased levels of air pollution.

9.2 REGULATORY SETTING

This section summarizes key federal, State, and City statutes, regulations, and policies that would apply to the Specific Plan. Global climate change resulting from GHG emissions is an emerging environmental concern being raised and discussed at the international, national, and statewide level. At each level, agencies are considering strategies to control emissions of gases that contribute to global climate change.

9.2.1 Federal Regulations

The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC). While the United States signed the Kyoto Protocol, which would have required reductions in GHGs, Congress never ratified the protocol. The federal government chose voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science. In 2002, the United States announced a strategy to reduce the GHG intensity of the American economy by 18 percent over a 10-year period from 2002 to 2012. At this time, there are no federal regulations or policies pertaining to GHG emissions.

9.2.2 State Regulations

The effects of climate change on California, in terms of how it would affect the ecosystem and economy, remain uncertain. The State has many areas of concern regarding climate change with respect to global warming. According to the 2006 State Climate Action Team Report, the following climate change effects and conditions can be expected in California over the course of the next century:

- A diminishing Sierra snowpack, declining by 70 percent to 90 percent, effecting the state's water supply;

- Increasing temperatures from 8 to 10.4 degrees Fahrenheit (°F) under the higher emission scenarios, leading to a 25 to 35 percent increase in the number of days ozone pollution standards are exceeded in most urban areas;

- Coastal erosion along the length of California and seawater intrusion into the Sacramento River Delta from a 4- to 33-inch rise in sea level. This would exacerbate flooding in already vulnerable regions;

- Increased vulnerability of forests due to pest infestation and increased temperatures;

- Increased challenges for the state's important agricultural industry from water shortages, increasing temperatures, and saltwater intrusion into the Delta; and

- Increased electricity demand, particularly in the hot summer months.

Assembly Bill 1575 (1975). In 1975, the State Legislature created the California Energy Commission (CEC). The CEC regulates electricity production, one of the major sources of GHGs.

Title 24, Part 6 of the California Code of Regulations (1978). The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

Assembly Bill 1493 (2002). Assembly Bill (AB) 1493 required the California Air Resources Board (CARB) to develop and adopt regulations that reduce GHGs, emitted by passenger vehicles and light duty trucks.

State of California Executive Order S-3-05 (2005). The Governor's Executive Order established aggressive emissions reductions goals: by 2010, GHG emissions must be reduced to 2000 levels; by 2020, GHG emissions must be reduced to 1990 levels; and by 2050, GHG emissions must be reduced to 80 percent below 1990 levels.

In June 2005, the Governor of California signed Executive Order S-3-05, which identified Cal/EPA as the lead coordinating State agency for establishing climate change emission reduction targets in California. A "Climate Action Team," a multi-agency group of State agencies, was set up to implement Executive Order S-3-05. Under this order, the State plans to reduce GHG emissions to 80 percent below 1990 levels by 2050. GHG emission reduction strategies and measures to reduce global warming were identified by the California Climate Action Team in 2006.

Assembly Bill 32 (AB 32), California Global Warming Solutions Act (2006). AB 32, the Global Warming Solutions Act of 2006, codifies the State's GHG emissions target by directing CARB to reduce the State's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, CEC, California Public Utilities Commission (CPUC), and Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State's main strategies to reduce GHGs from business-as-usual emissions projected in 2020 back down to 1990 levels. Business-as-usual (BAU) is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required CARB and other State agencies to develop and adopt regulations and other initiatives reducing GHGs by 2012.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector- or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 million metric tons of CO_2e. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 million metric tons of CO_2e. Thus, an estimated reduction of 80 million metric tons of CO_2e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

Senate Bill 375, California's Regional Transportation and Land Use Planning Efforts (2008). California enacted legislation (SB 375) to expand the efforts of AB 32 by controlling indirect GHG emissions caused by urban sprawl. SB 375 would develop emissions-reduction goals in which regions can apply in planning activities. SB 375 provides incentives for local governments and developers to implement new conscientiously planned growth patterns. This includes incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The legislation also allows developers to bypass certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Development of more alternative transportation options that would reduce vehicle trips and miles traveled, along with traffic congestion, would be encouraged. SB 375 enhances CARB's ability to reach the AB 32 goals by directing the agency in developing regional GHG emission reduction targets to be achieved from the transportation sector for 2020 and 2035. CARB would work with the metropolitan planning organizations (e.g. Association of Bay Area Governments [ABAG] and Metropolitan Transportation Commission [MTC]) to align their regional transportation, housing, and land use plans to reduce vehicle miles traveled and demonstrate the region's ability to attain its GHG reduction targets. A similar process is used to reduce transportation emissions of ozone precursor pollutants in the Bay Area.

Executive Order S-13-08 (2008). This Executive Order directed California agencies to assess and reduce the vulnerability of future construction projects to impacts associated with sea level rise.

9.2.3 Bay Area Air Quality Management District (BAAQMD)

BAAQMD is the regional government agency that regulates sources of air pollution within the nine San Francisco Bay Area counties. The BAAQMD regulates GHG emissions through the following plans, programs, and guidelines.

Regional Clean Air Plans. BAAQMD and other air districts prepare clean air plans in accordance with the State and Federal Clean Air Acts. The Bay Area 2010 Clean Air Plan (CAP) is a comprehensive plan to improve Bay Area air quality and protect public health through implementation of a control strategy designed to reduce emissions and ambient concentrations of harmful pollutants. The most recent CAP also includes measures designed to reduce GHG emissions.

BAAQMD Climate Protection Program. The BAAQMD established a climate protection program to reduce pollutants that contribute to global climate change and affect air quality in the San Francisco Bay Area Air Basin. The climate protection program includes measures that promote energy efficiency, reduce vehicle miles traveled, and develop alternative sources of energy, all of which assist in reducing emissions of GHG and in reducing air pollutants that affect the health of residents. BAAQMD also seeks to support current climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

BAAQMD CEQA Air Quality Guidelines. The BAAQMD adopted revised CEQA Air Quality Guidelines on June 2, 2010 and then adopted a modified version of the Guidelines in May, 2011. The BAAQMD CEQA Air Quality Guidelines include thresholds of significance for greenhouse gas emissions.[1] Under the latest CEQA Air Quality Guidelines, a local government may prepare a qualified greenhouse gas Reduction Strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified greenhouse gas Reduction Strategy and General Plan that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emissions under CEQA.[2] The BAAQMD also developed a quantitative threshold for project- and plan-level analyses based on estimated GHG emissions, as well as per capita metrics.

9.2.4 City of El Cerrito Climate Action Plan

The City of El Cerrito adopted a Climate Action Plan in May 2013.[3] The Climate Action Plan provides a roadmap for the City in pursuing both community-wide and municipal reductions in

[1] BAAQMD's adoption of significance thresholds contained in the 2011 CEQA Air Quality Guidelines was called into question by an order issued March 5, 2012, in California Building Industry Association (CBIA) v. BAAQMD (Alameda Superior Court Case No. RGI0548693). The order requires BAAQMD to set aside its approval of the thresholds until it has conducted environmental review under CEQA. The ruling made in the case concerned the environmental impacts of adopting the thresholds and how the thresholds would indirectly affect land use development patterns. In August 2013, the Appellate Court struck down the lower court's order to set aside the thresholds. However, this litigation remains pending as the California Supreme Court recently accepted a portion of CBIA's petition to review the appellate court's decision to uphold BAAQMD's adoption of the thresholds. The specific portion of the argument to be considered is in regard to whether CEQA requires consideration of the effects of the environment on a project (as contrasted to the effects of a proposed project on the environment). Those issues are not relevant to the scientific basis of BAAQMD's analysis of what levels of pollutants should be deemed significant. This analysis considers the science informing the thresholds as being supported by substantial evidence. Therefore, the significance thresholds contained in the 2011 CEQA Air Quality Guidelines are applied to this project.

[2] Bay Area Air Quality Management District, 2011. *CEQA Air Quality Guidelines*. May.

[3] City of El Cerrito, 2013. *Climate Action Plan*. May.

GHG emissions. A 2005 baseline emissions inventory for community-wide GHG emissions equaled 147,094 tons of CO_2e, with emissions from automobile use constituting the single largest source in El Cerrito at 51 percent. The Climate Action Plan sets GHG reduction targets of 15 percent and 30 percent below baseline by 2020 and 2035, respectively. To achieve these goals, the Climate Action Plan developed objectives and strategies in transportation and land use, energy and water conservation, waste reduction, and municipal operations.

9.2.5 City of Richmond

The City of Richmond General Plan 2030 was one of the first cities in the nation to include elements dedicated specifically to Energy and Climate Change, and Community Health and Wellness. The Climate Action Plan is an implementing action of the Energy and Climate Change Element and will further the goals of the Energy and Climate Change Element, Community Health and Wellness Element, and other General Plan elements. However, to date, the City has not implemented a Climate Action Plan.

9.3 IMPACTS AND MITIGATION MEASURES

This section addresses cumulative impacts related to anthropogenic (human-caused) GHG emissions from future development pursuant to the proposed Specific Plan and their incremental contribution to global climate change. Impacts from GHG emissions can be divided into construction-related impacts and operational-related impacts. Construction-related impacts from GHG emissions are considered “short-term” because they are shorter-duration activities associated with construction activities likely to occur in conjunction with future development facilitated by the Specific Plan. Construction-related GHG emissions come from fuel combustion in off-road equipment and on-road vehicles associated with worker trips.

Operational-related impacts are associated with ongoing annual releases of GHG emissions into the atmosphere as a result of future operation of both existing and new development from a number of sources, including fuel combustion from mobile sources, direct emissions from natural gas and indirect emissions from generation of electrical power used in residential and commercial buildings, water consumption and wastewater treatment, and emission from decomposing solid waste generated by the community.

Both construction-related and operational-related GHG emissions from an individual city do not cause global climate change in and of themselves, but contribute on a cumulative basis with other regional, statewide, national, and global sources of GHG emissions to cause climate change.

Analysis for each significance criteria includes a policy-level discussion of anticipated impacts. Significant impacts are identified, and mitigation measures are provided where appropriate.

9.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] a significant GHG/climate change impact would occur if Specific Plan implementation would:

(a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

(b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

BAAQMD has developed "plan-level" thresholds of significance for use in evaluating GHG emissions associated with general plans and other area-wide plans within the San Francisco Bay Area Air Basin.[2] These include the following:

(c) Compliance with a qualified GHG reduction strategy; or

(d) 4.6 metric tons of carbon dioxide equivalent per service population[3] per year (MT CO_2e/ SP/year).

9.3.2 Relevant Specific Plan Components

The Regulatory Setting above applies to Specific Plan implementation. The Specific Plan document itself does not include additional components directly related to GHGs/global climate change.

9.3.3 Impacts and Mitigations

GHG Emissions. The BAAQMD CEQA Air Quality Guidelines contain methodology and thresholds of significance for evaluating GHG emissions from land use type projects. The BAAQMD thresholds were developed specifically for the Bay Area after considering the latest Bay Area GHG inventory and the effects of AB 32 scoping plan measures that would reduce regional emissions. BAAQMD intends to achieve GHG reductions from new land use developments to close the gap between projected regional emissions with AB 32 scoping plan measures and the AB 32 targets. The BAAQMD suggests applying a specific plan-level GHG efficiency threshold of 4.6 MT per year per capita.[4] Specific plans with emissions above the threshold would be considered to have an impact that, cumulatively, would be significant.

GHG emissions were computed for both traffic scenarios, Without Mode Shift and With Mode Shift (see EIR chapter 16), with operational emissions in 2040 using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2. Specific Plan land use types and size, plus trip generation rates, were input to CalEEMod. CalEEMod predicts emissions of GHGs in the form of equivalent carbon dioxide emissions, or CO_2e.

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[1] CEQA Guidelines, appendix G, items VII(a and b).

[2] BAAQMD CEQA Guidelines, June 2010.

[3] Service population is defined as residents + employees.

[4] BAAQMD. 2011, *op. cit*.

(a) Construction Period Emissions. The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. BAAQMD encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable, including, but not limited to: using local building materials of at least 10 percent, and recycling or reusing at least 50 percent of construction waste or demolition materials. The 2013 California Green Building Standards Code (CALGreen) requires a diversion rate of at least 50 percent of construction waste or demolition materials.

(b) Operational Period Emissions. The CalEEMod model along with the Specific Plan vehicle trip generation rates (see chapter 16) were used to predict GHG emissions associated with development capacity under the Specific Plan. The model uses mobile emission factors from CARB's EMFAC2011. CalEEMod is sensitive to the year selected, since vehicle emissions have and continue to be reduced due to more stringent exhaust controls, newer vehicle fleet, fuel efficiency standards, and low carbon fuels. Adjustments to the modeling are described below.

(1) Year of Analysis. Emissions associated with vehicle travel depend on the year of analysis. The earlier the year, the higher the emission rates, as CalEEMod uses CARB's EMFAC2011 motor vehicle emissions model. This model assumes reduced emission rates as newer vehicles with lower emission rates replace older, more polluting vehicles through attrition of the overall vehicle fleet. The earliest year the project could be possibly fully constructed and fully operational was assumed to be 2040, though the year 2035 was input to CalEEMod, since this is the latest available year in the model. Thus, the emission rates are conservative.

(2) Land Use Descriptions. For conservative analysis, the following land uses types and sizes were input to CalEEMod: "Strip Mall" (243,112 s.f.), and "Apartments Mid Rise" (1,706 dwelling units).

(3) Trip Generation Rates and Travel Distances. CalEEMod allows the user to enter specific trip generation rates. Fehr & Peers, the EIR transportation consultant, provided the hourly PM trip generation rates for the Specific Plan, which were multiplied by 10 to obtain an estimate of daily trip generation, at the direction of the traffic consultant.[1] The traffic consultant also indicated that average trip lengths in the plan area would be 9.7 miles. Daily trip generation rates were then entered into the model. The mode shift case represented a seven percent reduction from the daily trip rates.

(4) Electricity Generation. Default rates for energy consumption were assumed in the model. Emissions rates associated with electricity consumption were adjusted to account for Pacific Gas & Electric (PG&E) utility's projected 2020 CO_2 intensity rate in place of 2040 (resulting in a conservative estimate), since 2020 is the latest year published to date. This 2020 rate is based, in part, on the requirement of a renewable energy portfolio standard of 33 percent by the year 2020. CalEEMod uses a default rate of 641.35 pounds of CO_2 per megawatt of electricity produced. The derived 2020 rate for PG&E was estimated at 289.84 pounds of CO_2 per

[1]Personal communication between Joshua Carman, Illingworth & Rodkin, Inc., and Ellen Poling, Fehr & Peers, April 8, 2014.

megawatt of electricity delivered and is based on the California Public Utilities Commission (CPUC) GHG Calculator.[1]

(c) Per Capita Rate. The per capita rate for the Specific Plan is the annual GHG emissions expressed in metric tons divided by the estimated number of new residents and employees. The number of future new Plan Area residents is anticipated to be 3,839, which is based on an estimated 2.25 residents per household. The number of future new plan area employees is anticipated at 830, for a total service population of 4,669 for proposed Specific Plan land uses.

(d) GHG Operational Emissions. Table 9-1 presents the results of the CalEEMod model analysis in terms of annual metric tons of equivalent CO_2e emissions (MT of CO_2e/yr) and per capita values.

As shown in Table 9-1, 2040 full development capacity of the Specific Plan would have per capita emissions of 3.9 and 3.7 MT of CO_2e/yr under Without Mode Shift and With Mode Shift cases, respectively, which would not exceed the BAAQMD specific plan-level threshold of 4.6 MT CO_2e/year. This impact is, therefore, considered ***less-than-significant*** (see criteria [a] and [d] in subsection 9.2.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Consistency with Adopted Plans to Reduce GHG Emissions. The Specific Plan would be subject to new requirements under rule making developed at the State and local level regarding greenhouse gas emissions. The plan would also be subject to local and General Plan policies, including the El Cerrito Climate Action Plan, that are expected to reduce emissions of greenhouse gases (see Regulatory Setting above). Therefore, this impact is considered ***less-than-significant*** (see criteria [b] and [c] in subsection 9.2.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

[1]California Public Utilities Commission's GHG Calculator version 3c, October 7, 2010. Available on-line at: http://ethree.com/public_projects/cpuc2.php. Accessed: April 22, 2014.

Table 9-1
2040 PROJECT GHG EMISSIONS (METRIC TONS CO_2E)

Source Category	**Without Mode Shift**	**With Mode Shift**
Area	103.6	103.6
Energy Consumption	2,065.6	2,065.6
Mobile	15,241.6	14,187.2
Solid Waste Generation	473.1	473.1
Water Usage	290.5	290.5
Total	18,174.4	17,120.0
Per Capita Emissions[1]	3.9	3.7
BAAQMD Threshold	4.6 MT CO_2e/year/capita	4.6 MT CO_2e/year/capita

Note:

[1]Based on a total service population of 4,669.

10. HAZARDS AND HAZARDOUS MATERIALS

This EIR chapter describes hazards and hazardous materials implications of the proposed Specific Plan. The chapter addresses the specific hazards and hazardous materials impact concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan create significant hazards to the public or the environment through the use of hazardous materials; emit hazardous emissions; be located on a government-identified hazardous materials site; create a safety hazard related to an airport; interfere with an adopted emergency response plan or create a wildland fire risk.[1]

10.1 SETTING

10.1.1 Hazardous Materials

There are a number of automobile service and other commercial uses within the Specific Plan area that store, use and dispose of hazardous materials. The majority of hazardous materials sites within the plan area are leaking underground storage tank (LUST) cleanup sites associated with gasoline stations and automobile service uses, as well as activities that use on-site underground storage tanks. Active and closed hazardous materials sites within the plan area are summarized in Table 10.1, based on information from the Department of Toxic Substance's (DTSC) EnviroStor[2] database and the State Water Resources Control Board's (SWRCB) Geotracker[3] database. A review of the Environmental Protection Agency's (EPA) CERCLIS[4] database indicated no active sites in the plan area.

[1]CEQA Guidelines, appendix G, item VIII (a through h).

[2]EnviroStor is an online research and Geographic Information System tool that allows you to search for information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted, or have been completed under DTSC's oversight.

[3]Geotracker is an online research tool similar to EnviroStor, but it pulls information from different databases, such as Leaking Underground Storage Sites (LUST).

[4]CERCLIS is the acronym for the EPA's comprehensive environmental response, compensation, and liability information system. CERCLIS is the national database and management system that the EPA uses to track activities of hazardous waste sites considered for cleanup under the Comprehensive Environmental Response and Liability Act (CERCLA), which is commonly known as Superfund. Superfund sites are lands within the United States that have been contaminated by hazardous waste and identified by the EPA as candidates for remediation because they pose a risk to human health and/or the environment.

Table 10.1
HAZARDOUS MATERIALS SITES IN THE SPECIFIC PLAN AREA

Site Name	Address[1]	Status[2]	Project Type[3]
State Department of Toxic Substances Control (DTSC)			
Del Norte Cleaners	11299 San Pablo Avenue	Active	Voluntary Cleanup
El Cerrito Mill and Lumber	10812 San Pablo Avenue	Certified	Voluntary Cleanup
Ohlone Gardens	6495 Portola Drive	No Further Action	Voluntary Cleanup
Omo Fabricare Dry Cleaners	12210 San Pablo Avenue	Inactive - Needs Evaluation	Evaluation
Harbor Plastics Manufacturing Company	4800 Bissell Avenue (Richmond)	Inactive - Needs Evaluation	Evaluation
Regional Water Quality Control Board (RWQCB)			
Emporium Capwell	1 El Cerrito Plaza	Completed - Case Closed	LUST
McDermott Property	10002 San Pablo Ave.	Open - Site Assessment	LUST
Chevron	10192 San Pablo Ave.	Completed - Case Closed	LUST
Gan Property	10392 San Pablo Ave.	Completed - Case Closed	LUST
Pacific Imports	10439 San Pablo Ave.	Completed - Case Closed	LUST
Best Gas and Car Wash	10602 San Pablo Ave.	Completed - Case Closed	LUST
Silverman/San Pablo Avenue Investors Properties	10734-10766 San Pablo Ave.	Completed - Case Closed	LUST
Mifune Property	10793 San Pablo Ave.	Completed - Case Closed	LUST
Commercial	10879 San Pablo Ave. (Richmond)	Completed - Case Closed	LUST
Doherty's Rental	10895 San Pablo Ave.	Completed - Case Closed	LUST
City of El Cerrito Public Safety Building	10900 San Pablo Ave.	Completed - Case Closed	LUST
Civic Center Plaza Apartments	10940 San Pablo Ave.	Completed - Case Closed	LUST
Chevron	11319 San Pablo Ave.	Completed - Case Closed	LUST

Site Name	Address[1]	Status[2]	Project Type[3]
Target	11402 San Pablo Ave.	Completed - Case Closed	LUST
Shell	11541 San Pablo Ave.	Completed - Case Closed	LUST
Unocal	11615 San Pablo Ave.	Completed - Case Closed	LUST
R & P Service	11687 San Pablo Ave.	Open - Remediation	LUST
Chevron	11690 San Pablo Ave.	Completed - Case Closed	LUST
Val Strough Honda	11820 San Pablo Ave.	Completed - Case Closed	LUST
McDonalds	11821 San Pablo Ave.	Completed - Case Closed	LUST
Checker Tune Up	11847 San Pablo Ave.	Completed - Case Closed	LUST
Busy Bee Cleaners In The Bishop Center	11868-11896 San Pablo Ave.	Completed - Case Closed	Cleanup Program Site
Home Depot	11909-39 San Pablo Ave.	Completed - Case Closed	LUST
Pay N Pak Store #229	1711 Eastshore Blvd.	Completed - Case Closed	LUST
El Cerrito Redevelopment Agency	1718 Eastshore Blvd.	Completed - Case Closed	LUST
76 Service Station #4296	3160 Carlson Blvd.	Completed - Case Closed	LUST
Mohawk Getty Oil	3201 Carlson Blvd.	Completed - Case Closed	LUST
Lockaway Storage	3230 Pierce St.	Completed - Case Closed	LUST
Di Gas Company	3254 Pierce St. (Richmond)	Completed - Case Closed	LUST
Former Exxon 7-0246	5430 Central Ave. (Richmond)	Open - Eligible For Closure	LUST
Central Shell	5500 Central Ave. (Richmond)	Completed - Case Closed	LUST
City of El Cerrito	6009 Potrero Ave. (Richmond)	Completed - Case Closed	LUST
Former Unique Cleaners	6109 Potrero Ave.	Open - Inactive	Cleanup Program Site

Site Name	Address[1]	Status[2]	Project Type[3]
RC Imports	6501 Fairmount Ave.	Completed - Case Closed	LUST
Mobil	6700 Fairmount Ave.	Completed - Case Closed	LUST
Plaza Auto Service	6801 Fairmount Ave.	Completed - Case Closed	LUST
Shell	9889 San Pablo Ave.	Completed - Case Closed	LUST

SOURCE: Department of Toxic Substances Control (DTSC) EnviroStor website, www.envirostor.dtsc.ca.gov,viewed April 8, 2014; Regional Water Quality Control Board (RWQCB) GeoTracker website, http://geotracker.waterboards.ca.gov, viewed April 26, 2014.

Notes:

[1]All addresses are in El Cerrito except as noted.

[2]Status:

Certified: Identifies sites that have certified cleanups in place.

No Further Action: Identifies completed sites where DTSC determined after investigation, generally a PEA (initial assessment), that the property does not pose a problem to public health or the environment.

Inactive--Needs Evaluation: Identifies non-active sites where DTSC has determined a Preliminary Endangerment Assessment (PEA) or other evaluation is required.

Open--Site Assessment: Site characterization, investigation, risk evaluation, and/or site conceptual model development are occurring at the site. Examples of site assessment activities include, but are not limited to, the following: (1) identification of the contaminants and the investigation of their potential impacts; (2) determination of the threats/impacts to water quality; (3) evaluation of the risk to humans and ecology; (4) delineation of the nature and extent of contamination; (5) delineation of the contaminant plume(s); and (6) development of the Site Conceptual Model.

Open--Remediation: An approved remedy or remedies that has/have been selected for the impacted area at the site and is being implemented by the responsible party under an approved cleanup plan for the site. This includes any ongoing remedy that is either passive or active, or uses a combination of technologies.

Open--Eligible for Closure: Corrective action at the site has been determined to be completed and any remaining petroleum constituents from the release are considered to be a low threat to human health, safety, and the environment.

Open--Inactive: No regulatory oversight activities are being conducted by the Lead Agency.

[3]Project Type:

Evaluation: Identifies suspected, but unconfirmed, contaminated sites that need or have gone through a limited investigation and assessment process. If a site is found to have confirmed contamination, it will change from Evaluation to either a State Response or Voluntary Cleanup site type. Sites found to have no contamination at the completion of the limited investigation and/or assessment process result in a No Action Required (for Phase I assessments) or No Further Action (for PEAs or Phase II assessments) determination.

Voluntary Cleanup: Identifies sites with either confirmed or unconfirmed releases, and the project proponents have requested that DTSC oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Cleanup Program Sites: Spills, leaks, aboveground tanks, or other discharges.

LUST (Leaking Underground Storage Tanks): Underground storage tanks (USTs) that leak petroleum and other hazardous substances into soil and groundwater, thereby posing a risk to drinking water quality and human health.

The "Project Name" (site) and "Status" terms are defined at the end of the table. Depending on the status of a listed project, the site does not necessarily pose a threat to public health or the environment. The following Status labels indicate that a site is not considered to pose a threat based on the contamination criteria of the oversight agency: No Further Action, and Open-Eligible for Closure. The following Status labels indicate that a site does or might pose a threat, depending on past or future testing and remediation: Inactive-Needs Evaluation; Certified; Active; Inactive-Action Required; Voluntary Cleanup; and all Open cases except Eligible for Closure.

In the plan area, there are 42 sites that have undergone or are undergoing hazardous materials remediation or may require remediation pending further testing. Of these sites, 35 are listed as leaking underground fuel storage tanks (LUST sites). There are 33 sites with "Completed--Case Closed" status, 1 site that is "Open--Eligible for Closure," and 1 site with "No Further Action" status. The remaining 7 sites have status designations indicating that they may pose a threat, depending on past or future testing and remediation.

An active hazardous materials site signifies that there is an ongoing case that has been opened by a federal or State regulatory agency and that the site is undergoing an assessment, remediation, or site monitoring. A closed hazardous materials site signifies that a federal or State regulatory agency has determined that a site does not require any further remediation. However, in some cases a closed hazardous materials site may contain land use restrictions limiting the future use of the site as a result of residual contamination that may exist.

None of the sites identified in Table 10.1 is located within one-quarter mile of a school.

10.1.2 Airport Hazards

There are no public airports within 2 miles of the plan area, nor is the plan area within the airport influence area designated in the appropriate land use plan for the nearest public airports (Metropolitan Oakland International Airport is approximately 24 miles away, and Buchanan Airport in Concord is approximately 14 miles away). There are no private airstrips in the vicinity of the plan area; however, a helipad at Doctors Medical Center is approximately 1.5 miles from the plan area.

10.1.3 Emergency Response

The El Cerrito Fire Department (ECFD) is responsible for the City's Emergency Operations Center (EOC) and development of the Emergency Operations plan in the event of a major disaster affecting El Cerrito and Kensington. The Richmond Fire Department (RFD) Office of Emergency Services (OES) leads the City of Richmond's comprehensive emergency management, including planning and preparedness for, response and recovery from, and mitigation of natural, manmade, and accidental incidents of high consequence. In addition, both the ECFD and RFD participate in the Community Emergency Response Team (CERT) program, which provides training for fire safety, hazardous material and terrorist incidents, disaster medical operations, and search and rescue to provide its citizens with the ability to be self-sufficient for up to 72 hours and beyond in the event of a major disaster.

10.1.4 Wildfire Hazards

Areas of “Very High Fire Hazard Severity” are designated in the El Cerrito General Plan and a “Special Study Map” is prepared and maintained by the City’s Building Official. These areas are located near East Bay Regional Park District open space and certain City parks, but the Specific Plan area is not located within the vicinity of a wildfire hazard area.

10.2 REGULATORY SETTING

U.S. Environmental Protection Agency. The Environmental Protection Agency (EPA) is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and local governments the responsibility for issuing permits and monitoring and enforcing compliance. EPA Region IX has authority in the Bay region, regulating chemical and hazardous materials use, storage, treatment, handling, transport, and disposal practices; protecting workers and the community (along with CalOSHA, see below); and integrating the federal Clean Water Act and Clean Air Act into California legislation.

The Resource Conservation and Recovery Act (RCRA) gives the EPA the authority to control hazardous waste, including generation, transportation, treatment, storage, and disposal. The Act also sets forth a framework for managing nonhazardous solid wastes.

Under the RCRA, most construction sites are conditionally exempt small quantity generators (i.e., generate less than 220 pounds of hazardous waste per month). These generators must meet storage limit requirements (i.e., 2,200 pounds of hazardous waste per month) and ensure proper transportation, waste treatment, and disposal.

California Environmental Protection Agency/Office of Emergency Services. The California Environmental Protection Agency (Cal/EPA) establishes regulations governing the use of hazardous materials in the State in order to protect air, water, and soil. The Office of Emergency Services (OES) coordinates State and local agencies and resources for educating, planning, and warning citizens of hazardous materials and related emergencies, including organized response efforts in case of emergencies.

Federal Occupational Safety and Health Administration. The Federal Occupational Health and Safety Administration (OSHA) establishes and enforces Federal regulations related to health and safety of workers exposed to toxic and hazardous materials. OSHA also sets health and safety guidelines for construction activities and manufacturing facility operations.

California Occupational Safety and Health Administration. The California Occupational Safety and Health Administration (CalOSHA) is responsible for promulgating and enforcing State health and safety standards and implementing Federal OSHA laws. For example, CalOSHA's regulatory purview includes provisions to minimize the potential for release of asbestos and lead during construction and demolition activities.

California Department of Toxic Substances Control. The California Department of Toxic Substances Control (DTSC) regulates hazardous substances and waste, oversees remedial investigations, protects drinking water from toxic contamination, and warns public exposed to listed carcinogens.

California Health and Safety Code, Title 22. Title 22 defines hazardous and special waste, identifies Federal and State hazardous waste criteria, and regulates the storage, transportation, and disposal of hazardous waste, including contaminated soil.

California Highway Patrol/California Department of Transportation. The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) have primary regulatory responsibility for the transportation of hazardous waste and materials.

Regional Water Quality Control Board. One of nine regional boards in the state, the San Francisco Bay Regional Water Quality Control Board (RWQCB) protects surface and groundwater quality from pollutants discharged or threatened to be discharged to the Waters of the State. The RWQCB issues and enforces National Pollutant Discharge Elimination System (NPDES) permits and regulates leaking underground storage tanks and other sources of groundwater contamination.

Bay Area Air Quality Management District. The Bay Area Air Quality Management District (BAAQMD) regulates the demolition of buildings and structures that may contain asbestos. The BAAQMD is vested with authority to regulate airborne pollutants through both inspection and law enforcement, and is to be notified 10 days in advance of any proposed demolition or abatement work.

El Cerrito Municipal Code. The following sections directly address hazardous materials:

Section 8.12.020—Definitions, defines "hazardous waste" as any discarded material that is ignitable, corrosive, reactive, or toxic, and which may cause a substantial hazard to people or the environment.

8.40.090—Best Management Practices, describes requirements businesses subject to the State's Hazardous Material Release Response and Inventory Plan.

Richmond Zoning Ordinance. The following sections directly address hazardous materials:

Section 15.04.820.020--Hazardous Materials. The provisions of this section "govern all…activities which involve hazardous waste or hazardous materials." The purposes of this

section include establishing the basis for the issuance of conditional use permits for activities involving hazardous materials, and encouraging reductions in the amounts of materials managed.

Section 15.04.840.140--Performance Standards--Fire Hazard Standards, requires that the storage, use, transportation, or production of products that constitute flammable, combustible, or explosive material be subject to fire codes and approval by the City of Richmond Fire Department.

Section 15.04.840.150--Performance Standards--Liquid or Solid Waste Standards, requires that the use, handling, storage, and transportation of hazardous materials comply with the provisions of the California Hazardous Materials Regulations and all other applicable laws.

10.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to hazards and hazardous materials that could result from Specific Plan implementation, and discusses components of the Specific Plan that would avoid or reduce those potential impacts.

10.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact related to hazards and hazardous materials if it would:

(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;

(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, create a significant hazard to the public or the environment;

(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in or outside the Planning Area;

(f) For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in or outside the Planning Area;

(g) Impact implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; or

[1] CEQA Guidelines, appendix G, items VIII (a) through (h).

(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.

There are no airports or private airstrips in the vicinity of the plan area (criteria [e] and [f]). However, Doctors Medical Center does include a private helicopter pad that is used at variable times to transport emergency medical patients. This facility does require an operating permit from the California Department of Transportation, and safety compatibility concerns are addressed primarily through the City's standard permit process. Therefore, this issue is not discussed further in this EIR.

Regarding criterion (h), the plan area is not within or adjacent to wildlands. Because portions of El Cerrito contain woodland hills and are adjacent to Wildcat Canyon Regional Park, the El Cerrito General Plan identifies Very High Fire Hazard Severity Zones (General Plan Figure 13, Natural Hazards). The Specific Plan area is not located in such a zone and, therefore, is not subject to the City's Fire Hazard Reduction Program. The adopted Richmond General Plan does not identify any wildland fire hazards. This issue is not discussed further in this EIR.

10.3.2 Relevant Specific Plan Components

The Regulatory Setting above applies to Specific Plan implementation. In addition, the Specific Plan (chapter 3, Complete Streets) includes a particular component regarding emergency access, as summarized below. The reader is encouraged to review the entire Specific Plan section for more detail. Note that within the context of the Specific Plan, a "standard" is a mandatory requirement, and a "guideline" is not mandatory but is strongly recommended.

3.05.02.02.02 Emergency Access. This section states, "All roadways must be engineered to support emergency response apparatuses and must be designed to meet requirements for width and height clearance, facilitate turning radii of apparatus, and proper siting of fire hydrants." The section then details the emergency access design standards.

10.3.3 Impacts and Mitigations

Project-Related Potential Impacts Due to Hazardous Materials Transport, Use, Storage, and Disposal. The residential, commercial, and open space uses proposed by the Specific Plan would not involve the routine transport, use, storage, or disposal of hazardous materials to the extent that a significant public or environmental hazard would occur. Operations in the plan area may involve the occasional transport, use, storage, or disposal of common hazardous substances such as fuel, paint, and solvents. These normal activities would be subject to applicable local, State, and Federal regulations, including standard conditions of the City of El Cerrito and the City of Richmond (see Regulatory Setting above). With implementation of these standard regulations, the potential for associated hazardous materials impacts would be ***less-than-significant*** (see criteria [a] and [c] in subsection 10.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Project-Related Potential Exposure to Existing Hazardous Materials Contamination. Due to the large number of auto-related businesses (e.g., car dealerships, auto repair, gas stations)

in the Specific Plan area, there is always a possibility that project construction could encounter contamination and expose construction workers to existing spilled, leaked, or otherwise discharged hazardous materials or wastes. Each project applicant in the plan area would be required to comply with all applicable, existing jurisdictional City-, regional-, and State-mandated site assessment, remediation, removal, and disposal requirements for soil, surface water, and/or groundwater contamination. In particular, these include the requirements of each City, the Regional Water Quality Control Board (RWQCB), and the California Department of Toxic Substances Control (DTSC). Compliance with these established requirements would be expected to assure that this possible health and safety impact would be *less-than-significant.*

Typically, implementation of these standard procedures would involve the following steps. As explained above, these steps are standard procedures required as part of City-, regional-, and State-mandated requirements; the steps are not additional mitigations required by this EIR.

(a) Soil Contamination. In order to avoid or substantially reduce potential health hazards related to construction personnel or future occupant exposure to soil contamination, project applicants would complete the following steps for each site proposed for disturbance as part of construction activity in the plan area:

Step 1. Investigate the site to determine whether it has a record of hazardous material discharge into soils, and if so, characterize the site according to the nature and extent of soil contamination that is present before development activities proceed at that site.

Step 2. Based on the proposed activities associated with the future project proposed, determine the need for further investigation and/or remediation of the soils conditions on the contaminated site. For example, if the area is slated for commercial land use, such as a retail center, the majority of the site will be paved and there will be little or no contact with contaminated soil. Industrial clean-up levels would likely be applicable. If the slated development activity could involve human contact with soils, such as may be the case with residential use, then Step 3 should be completed. If no human contact is anticipated, then no further mitigation is necessary.

Step 3. If it is determined that extensive soil contact would accompany the intended use of the site, undertake a Phase II Environmental Assessment investigation, involving soil sampling at a minimum, at the expense of the project applicant, property owner, or responsible party. Should further investigation reveal high levels of hazardous materials in the site soils, mitigate health and safety risks according to City of El Cerrito/City of Richmond (depending on jurisdiction), Contra Costa County Health Services Department, and Regional Water Quality Control Board (RWQCB) regulations. This would include site-specific health and safety plans prepared prior to undertaking any building or utility construction. Also, if buildings are situated over soils that are significantly contaminated, undertake measures to either remove the chemicals or prevent contaminants from entering and collecting within the building. If remediation of contaminated soil is infeasible, a deed restriction would be necessary to limit site use and eliminate unacceptable risks to health or the environment.

(b) Surface or Groundwater Contamination. In order to reduce potential health hazards due to construction personnel or future occupant exposure to surface water or groundwater contamination, project applicants would complete the following steps for each site proposed for disturbance as part of construction activity in the Specific Plan area:

Step 1. Investigate the site to determine whether it has a record of hazardous material discharge into surface or groundwater, and if so, characterize the site according to the nature and extent of contamination that is present before development activities proceed at that site.

Step 2. Install drainage improvements in order to prevent transport and spreading of hazardous materials that may spill or accumulate on-site.

Step 3. If investigations indicate evidence of chemical/environmental hazards in site surface water and/or groundwater, then mitigation measures acceptable to the RWQCB would be required to remediate the site prior to development activity.

Step 4. Inform construction personnel of the proximity to recognized contaminated sites and advise them of health and safety procedures to prevent exposure to hazardous chemicals in surface water/groundwater.

Implementation of these required, standard procedures would result in a ***less-than-significant impact*** associated with potential soil and surface/groundwater contamination. (see criterion [b] in subsection 10.3.1, “Significance Criteria,” above).

Mitigation. No significant impact has been identified; no mitigation is required.

Project-Related Potential Asbestos and PCB Exposure. Removal or disturbance of asbestos-containing material (ACM) and/or transformers during alteration, renovation, or demolition of existing structures within the Specific Plan area could expose construction workers and the general public to friable asbestos and/or polychlorinated biphenyls (PCBs). Therefore, as a condition of alteration, renovation, or demolition permit approval for buildings within the plan area, the jurisdictional City would routinely require the project applicant to coordinate with the Bay Area Air Quality Management District (BAAQMD) to determine if asbestos or PCBs are present.

Ensuring proper identification and removal of ACM and/or PCBs requires each project applicant to complete the following steps. As explained above, these steps are standard procedures required as part of City-, regional-, and State-mandated requirements; the steps are not additional mitigations required by this EIR.

Step 1. Thoroughly survey the project site and existing structures for the presence of ACM and PCBs. The survey shall be performed by a person who is properly certified by the Occupational Safety and Health Administration (OSHA) and has taken and passed an Environmental Protection Agency (EPA) approved building inspector course.

Step 2. If building elements containing any amount of asbestos and/or PCBs are present, prepare a written Asbestos/PCB Abatement Plan describing activities and procedures for removal, handling, and disposal of these building elements using the most appropriate procedures, work practices, and engineering controls.

Step 3. Provide the asbestos and PCB survey findings, the written Asbestos/PCB Abatement Plan (if necessary), and notification of intent to demolish to the jurisdictional City and Contra Costa County Health Services Department at least ten days prior to commencement of demolition.

Step 4. Remove any on-site transformers prior to demolition of non-residential buildings.

Implementation of these required, standard procedures would result in a ***less-than-significant impact*** associated with potential asbestos and PCB exposure (see criterion [b] in subsection 10.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Project-Related Potential Lead-Based Paint Exposure. If lead-based paint is present and has delaminated (split into thin layers) or chipped from surfaces, airborne lead particles could be released during alteration, renovation, or demolition of existing structures within the Specific Plan area. California OSHA (CalOSHA) regulations would be applied, and each individual, site-specific project applicant would implement the following standard, mandatory procedures in accordance with those CalOSHA regulations:

- Notify the jurisdictional City's Building Department prior to starting work, describing the nature, location, and schedule of the work;
- Post a sign at all work locations where lead containment is required, stating that lead-based paint abatement is in progress and public access is prohibited;
- Notify the tenant(s) where the lead-based paint abatement work will be performed on a residential property occupied by one or more tenants; and
- Notify the property owner when work on a residential project will disturb lead-based paint.

Lead abatement performance standards are included in the *Guidelines for Evaluation and Control of Lead-Based Paint Hazards* (U.S. Department of Housing and Urban Development). Accordingly, HEPA vacuums may be required for abrasive blasting, water blasting, scraping, or sanding. Burning, torching, and similar activities are prohibited. Following completion of lead-based paint abatement, all visible lead-based paint particles must be removed from the site.

The Building Department and code enforcement division of each jurisdictional City may inspect lead-based paint abatement activities at any time during construction. The Building Department and code enforcement division of each jurisdictional City are also responsible for addressing citizen complaints related to lead-based paint abatement activities and may issue a Notice of Violation, a Stop Work order, or a fine.

Implementation of these required, standard procedures would result in a ***less-than-significant impact*** associated with potential lead-based paint exposure (see criterion [b] in subsection 10.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

East Bay Municipal Utility District (EBMUD) Requirements*.* EBMUD applies standard procedures for installing water pipelines throughout its service area, as described below.

EBMUD will not install pipeline in contaminated soil or contaminated groundwater (if contaminated groundwater is present at any time during the year at the depth piping is to be installed) which must be handled as a hazardous waste, or which may be hazardous to the health and safety of construction or maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping in areas where groundwater contaminant concentrations exceed specified limits for discharge to sanitary sewer systems or sewage treatment plants. Project applicants for EBMUD services requiring excavation in contaminated areas must submit copies of all known reports pertaining to existing soil and groundwater quality within or adjacent to the project boundary and a legally sufficient, complete, and specific written remedial plan establishing the methodology, planning, and design of all necessary systems for the removal, treatment, and disposal of all identified contaminated soil and/or groundwater.

EBMUD will not design the installation of pipelines until such time as soil and groundwater quality data and remediation plans are received and reviewed. EBMUD will not install pipelines until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exist, or the information supplied by the project applicant is considered insufficient by EBMUD, EBMUD may require the project applicant to perform sampling and analysis to characterize the soil being excavated and groundwater that may be encountered during excavation, or EBMUD may perform such sampling and analysis at the project applicant's expense.

Potential for Hazardous Materials Near Schools. See the impact discussions above. Several existing schools are located within one-quarter mile of the plan area; however, the residential, commercial, and open space uses proposed by the Specific Plan would not involve the routine transport, use, storage, or disposal of hazardous materials to that extent that a significant public or environmental hazard would occur. This impact would be ***less-than-significant*** (see criterion [c] in subsection 10.3.1, “Significance Criteria,” above).

Mitigation. No significant impact has been identified; no mitigation is required.

Protocols for Government Code Section 65962.5 Sites. The California Department of Toxic Substances Control (DTSC) maintains the EnviroStor database, which lists and includes data on hazardous materials sites compiled pursuant to Government Code section 65962.5 (Cortese List); such sites are regulated by DTSC because hazardous materials investigations and/or clean-up actions are planned, active, or have been completed at these sites (see Table 10-1 in section 10.1, Setting). The site-specific mitigation protocols administered by DTSC and other jurisdictional agencies--in conformance with Federal, State, regional, and local regulations (see Regulatory Setting above)--would ensure that the clean-up of such sites would result in ***less-than-significant impacts*** (see criterion [d] in subsection 10.3.1, “Significance Criteria,” above).

Mitigation. No significant impact has been identified; no mitigation is required.

Effects on Emergency Response and Evacuation. In the El Cerrito General Plan (Figure 8, Emergency Response and Truck Routes), the emergency response routes identified in the plan area and vicinity include all or portions of: Macdonald Avenue, Key Boulevard, Eastshore Boulevard, Blake Street, Manila Avenue, Schmidt Lane, Portola Drive, Ashbury Avenue, Eureka Avenue, and other roadways. The Richmond General Plan (Map 4.5) identifies San Pablo

Avenue as a County-defined "Route of Regional Significance" but does not specifically identify emergency response routes. Specific Plan implementation is intended to improve traffic and circulation patterns in the plan area and vicinity, based on the traffic analysis prepared for the plan and included in chapter 16 (Transportation and Circulation) of this EIR. In addition, as noted in the Regulatory Setting above, "All roadways must be engineered to support emergency response apparatus. Roadways must be designed to meet requirements for width and height clearance, facilitate turning radii of apparatus, and proper siting of fire hydrants." (Specific Plan section 3.05.02.02.02, Emergency Access) Therefore, project impacts on emergency response and evacuation are considered ***less-than-significant*** (see criterion [g] in subsection 10.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

11. HYDROLOGY AND WATER QUALITY

This EIR chapter describes the hydrology and water quality implications of the proposed Specific Plan. The chapter addresses the specific hydrology and water quality impact concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan violate water quality or waste discharge standards (including wastewater treatment requirements); deplete or interfere with groundwater supplies; alter drainage patterns; degrade water quality; place structures within a 100-year flood zone; expose people to flooding; or expose people to a seiche, tsunami, or mudflow.[1]

11.1 SETTING

11.1.1 Hydrologic Setting

The City of El Cerrito is located in the San Francisco Bay Hydrologic Region. More specifically, the City is in the East Bay Plain Subbasin of the Santa Clara Valley Groundwater Basin. 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, and on the south by the Niles Cone Groundwater Basin. The East Bay Plain Subbasin extends beneath San Francisco Bay to the west.

Several creeks pass through El Cerrito. Baxter Creek, at the northern limit of the plan area, is mainly a constructed earth channel that becomes almost exclusively underground downstream until it discharges to Stege Marsh and San Francisco Bay. North Fork Cerrito Creek discharges to Cerrito Creek, which is almost exclusively a constructed or natural earth channel until it discharges to Albany Flats and San Francisco Bay.

Average annual rainfall in the plan area is approximately 25 inches. Nearly 95 percent of this precipitation falls during the winter rainy season, October through April, with the heaviest rainfall typically occurring in December, January, and February.

11.1.2 Groundwater Conditions

In 1994, the California Department of Water Resources (DWR) calculated total storage capacity in the subbasin to be 2,670,000 acre feet. As discussed in chapter 17 (Utilities and Service Systems) of this EIR, neither the City of El Cerrito nor the City of Richmond uses local groundwater sources. The East Bay Municipal Utility District (EBMUD), which provides water to El Cerrito and Richmond, obtains approximately 90 percent of its water from the Mokelumne River.

[1] CEQA Guidelines, appendix G, items IX (a through j) and XVII (a).

11.1.3 Water Quality

Key pollutants of concern for the San Francisco Bay region include copper, mercury, pesticides, and polychlorinated biphenyls (PCBs). Using historical land use and area data, the Contra Costa Clean Water Program estimated PCB contributions for cities. El Cerrito is estimated to discharge 36 grams of PCBs annually into the Bay, compared with 296 grams per year for Richmond and 1,995 grams per year for the all cities and unincorporated land in the county.[1]

Under the Federal Clean Water Act, the State Water Resources Control Board is required to report on the condition of its surface water quality. Water bodies and pollutants that exceed protective water quality standards are placed on the State's 303(d) List of Impacted Water Bodies. Under the current 303(d) List, Baxter Creek and Cerrito Creek are included in the Total Maximum Daily Load (TMDL) list, due to illegal dumping and urban runoff/storm sewers.[2] (TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards.)

Best Management Practices (BMPs), as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollution Discharge Elimination System (NPDES) Permit, and use of Low Impact Development (LID) features such as reducing impervious surfaces or providing pervious pavements, landscape features, and green roofs, can help reduce groundwater contaminant levels. (See chapter 17, Utilities and Service Systems, for a description of stormwater runoff and storm drainage facilities.)

11.1.4 Flooding and Flood Hazards

According to FEMA maps,[3] most of the plan area is located in Zone X, an area classified as outside the 0.2 percent annual chance floodplain (a "500-year" flood). A small portion of the southwest part of the plan area, near Central Avenue and I-80, is located in Zone A, which is classified as an area that has a one percent annual chance flood (a "100-year" flood).

The plan area is not located within an area likely to be subject to inundation from dam failure. There are no published maps or information on seiche hazards in the Bay Area, though the southwest portion of the plan area (Central Avenue close to I-80) is near the edge of the Tsunami Inundation Area as identified in the Richmond General Plan (Map 12-5) and the Association of Bay Area Governments (ABAG) Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region.

In addition, the plan area is not located close enough to any hills that might pose a risk due to mudflow, which typically starts on steep slopes and is often triggered by natural disasters such as brush-clearing fire followed by sudden rains.

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[1] Contra Costa Clean Water Program, PCB Contributions by City, Technical Memorandum, February 24, 2014.

[2] State Regional Water Quality Control Board, 303(d) List of Water Quality Limited Segments (2010), http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/category5_report.shtml, accessed 4-26-14.

[3] FEMA Map Numbers FEMA Map Numbers 06013C0240F and 0603C0245F, June 16, 2009.

11.2 REGULATORY SETTING

Federal Clean Water Act. The Federal Clean Water Act (CWA) is the primary Federal law that protects the quality of the nation's surface waters, including lakes, rivers, aquifers, and coastal areas. The CWA focuses on the protection of surface water, but certain sections also apply to groundwater. Under the CWA, the U.S. Environmental Protection Agency (EPA) sets national standards and effluent limitations, and delegates many regulatory responsibilities to the California State Water Resources Control Board (SWRCB, or State Water Board).

Section 303(d) of the CWA requires states to (1) develop a list of water bodies that do not meet water quality standards, (2) establish priority rankings for waters on the list, and (3) develop action plans, called Total Maximum Daily Loads (TMDLs), to improve water quality. The list of impaired water bodies is revised typically every two years.

The Clean Water Act (CWA) was amended in 1972 to provide that the discharge of pollutants to water of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit (see below).

U.S. Environmental Protection Agency. In 1990 the EPA published final regulations that establish stormwater permit application requirements. The regulations, also known as Phase I of the NPDES program, provide that discharges of stormwater to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge complies with an NPDES permit. Phase II of the NPDES program expands the requirements by requiring operators of small Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas and small construction sites to be covered under an NPDES permit, and to implement programs and practices to control polluted stormwater runoff.

The National Pollutant Discharge Elimination System. The National Pollutant Discharge Elimination System (NPDES) program directed at stormwater has been implemented in two phases, and has permits under three categories of potential pollutant sources. Construction projects may choose to obtain individual NPDES permits or coverage under a State General Permit. There are General Permits for ten categories of industrial activities. All permit holders are required to implement Best Management Practices (BMPs) and conduct monitoring and annual reporting.

State Department of Water Resources. The Department of Water Resources (DWR) is responsible for the management and regulation of water usage, including the delivery of water to two-thirds of California's population, through the nation's largest state-built water development and conveyance system, the State Water Project. Working with other agencies and the public, DWR develops strategic goals, and near-term and long-term actions, to conserve, manage, develop, and sustain California's watersheds, water resources, and management systems. DWR also works to prevent and respond to floods, droughts, and catastrophic events that would threaten public safety, water resources and management systems, the environment, and property.

State Water Resources Control Board. The State Water Resources Control Board and the nine regional boards protect water quality and allocate surface water rights in the State of California. The cities of El Cerrito and Richmond are under jurisdiction of the Regional Water Quality Control Board (RWQCB) Region 2 (San Francisco Bay Region).

Regional Water Quality Control Board Region 2. Regional Water Quality Control Board (RWQCB) Region 2 (San Francisco Bay Region) regulates stormwater quality under authorities of the federal Clean Water Act and California's Porter-Cologne Water Quality Control Act. The RWQCB issues National Pollutant Discharge Elimination System (NPDES) permits to dischargers of municipal and industrial stormwater runoff and operators of large construction sites. In coordination with permittees of the San Francisco Bay Municipal Regional Stormwater Permit, including El Cerrito and Richmond, RWQCB staff performs an annual performance review and evaluation of the County's stormwater management program and NPDES compliance activities. The RWQCB also protects groundwater through implementation of its regulatory and planning programs.

San Francisco Bay Region Municipal Regional Stormwater NPDES Permit. The San Francisco Bay Municipal Regional Stormwater NPDES Permit (MRP) issues the Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for the discharge of stormwater runoff from the Municipal Separate Storm Sewer Systems (MS4s) of over 70 municipalities and local agencies in five Bay Area Counties, including El Cerrito and Richmond. The MRP replaces the former county-by-county permits.

The municipalities of the Contra Costa Clean Water Program, the Contra Costa County Flood Control and Water Conservation District, Contra Costa County, and its 19 incorporated cities (including El Cerrito and Richmond) are regulated waste dischargers under the MRP (Order R2-2009-0074: NPDES Permit No. CAS612008) administered by the RWQCB. The MRP was adopted October 14, 2009 and revised as recently as December 1, 2012. All new projects in the Specific Plan area that create or replace between 2,500 and 10,000 square feet ("small projects") or more ("large projects") of roofs or pavement are covered under this permit, including new development, redevelopment, and commercial and industrial sites.

The most recent MRP, in effect December 1, 2012, mandates a low impact development (LID) approach. LID treatment measures include rainwater harvesting and re-use, infiltration, evapotranspiration, and bio-treatment. All development projects must follow the Contra Costa Clean Water Program Stormwater C.3 Guidebook (current edition--February 15, 2012, with March 20, 2013 Addendum). Special Projects defined in Table 4-14 (Contra Costa Clean Water Program--6th edition) may use non-LID treatment systems such as tree boxes or vault-based high-flow rate media filters meeting the minimum criteria per the C.3 website.

National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973. In response to increasing losses from flood hazards nationwide, the United States Congress passed the National Flood Insurance Act of 1968, which established the National Flood Insurance Program (NFIP). The 1968 Act provided for the availability of flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The act also required the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those floodplain areas.

As a result of the 1972 Hurricane Agnes flooding along the East coast, the 1968 Act was expanded by the Flood Disaster Protection Act of 1973. The 1973 Act added the mandatory flood insurance purchase requirement and increased the awareness of floodplain mapping needs throughout the country. The Federal Insurance Administration of the Federal Emergency Management Agency (FEMA) administers the NFIP.

Federal Emergency Management Agency (FEMA). Using the results of flood insurance studies required by the 1973 Act, FEMA prepares Flood Insurance Rate Maps (FIRMs) that depict the spatial extent of Special Flood Hazard Areas (SFHAs) and other features related to flood risk assessment. FEMA is responsible for maintaining the FIRMs as communities grow, and as new or better scientific and technical data concerning flood risks becomes available.

The Federal Disaster Mitigation Act of 2000. The Federal Disaster Mitigation Act of 2000 seeks to "reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters; and to provide a source of pre-disaster hazard mitigation measures that are designed to ensure the continued functionality of critical services and facilities after a natural disaster." The Disaster Mitigation Act outlines a process for the development of Local Hazard Mitigation Plans (LHMP) on the part of cities, counties, and special district governments. Development of an LHMP is required to be eligible to receive certain benefits from FEMA and the California Emergency Management Agency (CalEMA).

Multi-Jurisdictional Local Hazard Mitigation Plan (MJ-LHMP). The goal of the Association of Bay Area Government's (ABAG) MJ-LHMP is to maintain and enhance a disaster-resistant region by reducing the potential for loss and damage resulting from natural disasters, including flooding. The purpose of the MJ-LHMP is to serve as a catalyst for dialogue on public policies needed to mitigate the effects of natural hazards that affect the San Francisco Bay Area. The plan includes a number of hazard mitigation strategies, including strategies specifically related to flood hazard mitigation. Both the City of El Cerrito and the City of Richmond have adopted the plan.

El Cerrito Municipal Code and Richmond Municipal Code. The City of El Cerrito adopted management guidelines to comply with NPDES requirements, which are contained in section 8.40.010 of the El Cerrito Municipal Code (Stormwater Management and Discharge Control). As required by the Municipal Code, all construction must conform to the requirements of the California Stormwater Quality Association (CASQA) Stormwater Best Management Practices Handbooks for Construction Activities and New Development and Redevelopment, the Association of Bay Area Governments (ABAG) Manual of Standards for Erosion & Sediment Control measures, the City's grading and erosion control ordinance, and other generally accepted engineering practices for erosion control as required by the Public Works Director. In addition, El Cerrito Municipal Code section 8.40.050 states that every application for a development project is required to submit a stormwater control plan that meets the criteria in the most recent version of the Contra Costa Clean Water Program Stormwater C.3 Guidebook.

Likewise, Richmond Municipal Code chapter 12.22 (Stormwater Management and Discharge Control) addresses NPDES requirements, Best Management Practices, and related regulations and control measures.

11.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to hydrology and water quality that could result from the Specific Plan, and discusses components of the Specific Plan that would avoid or reduce those potential impacts. The section also recommends mitigation measures as needed to reduce significant impacts.

11.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact related to hydrology and water quality if it would:

(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) Substantially alter the existing drainage pattern of the Specific Plan area or vicinity, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation in or outside the plan area;

(d) Substantially alter the existing drainage pattern of the Specific Plan area or vicinity, including through the alteration of the course of a stream or river, or substantially increase the rate of amount of surface runoff in a manner which would result in flooding in or outside the plan area;

(e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

(f) Otherwise substantially degrade water quality;

(g) 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;

(h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

(i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam;

(j) Expose people or structures to a significant risk of loss, injury, or death resulting from inundation by seiche, tsunami, or mudflow; or

Criterion (e), regarding stormwater infrastructure *capacity*, is discussed in chapter 17 (Utilities and Service Systems) of this EIR.

Regarding criterion (j), the plan area is not near a lake and therefore would not experience a seiche (there are no published maps or information on seiche hazards in the Bay Area), but the southwest portion of the plan area along Central Avenue is near a Tsunami Inundation Area as identified in the Richmond General Plan (Map 12.5) and the ABAG Tsunami Inundation Emergency Planning Map. The potential effects of tsunamis are assumed in this EIR chapter

[1] CEQA Guidelines, appendix G, items VIII (a) through (i) and XVI (a).

under the discussion of flooding. The plan area is relatively level and would not be susceptible to mudflow; therefore, mudflow is not discussed further in this EIR.

11.3.2 Relevant Specific Plan Components

The Regulatory Setting above applies to Specific Plan implementation. In particular, the Specific Plan (section 2.05.08.03, Landscaping and Irrigation Plans) requires all landscaping installations to comply with the Contra Costa Clean Water Program Stormwater C.3 Guidebook.

11.3.3 Impacts and Mitigations

Construction Period and Post-Construction Water Quality Impacts. The Regional Water Quality Control Board (RWQCB), City of El Cerrito, and City of Richmond water quality protection requirements and conditions applicable to the project would be anticipated to reduce any potential construction period and post-construction water quality impacts to a *less-than-significant level.* Also see chapter 17 (Utilities and Service Systems), subsection 17.3.3 (Impacts and Mitigations) under Project and Cumulative Need for Water, Wastewater, and Storm Drainage System Infrastructure, item (c) (Projected Storm Drainage Infrastructure Requirements).

Development facilitated by the Specific Plan would need to implement routinely mandated measures to protect water quality, including but not limited to those measures required under the Contra Costa Clean Water Program, as outlined in the California Stormwater Quality Association (CASQA) Stormwater Best Management Practice Handbook for Construction and the Stormwater C.3 Guidebook (see Regulatory Setting above).

Any project grading activities involving disturbance of more than one acre would require a Notice of Intent (NOI) and a National Pollution Discharge Elimination System (NPDES) permit from the San Francisco Bay Regional Water Quality Control Board (RWQCB). The RWQCB administers the NPDES stormwater permitting program in the Bay Area, including the Municipal Regional Stormwater NPDES Permit. Project owners submit a Notice of Intent (NOI) to the RWQCB to be covered by the General Construction Permit prior to the beginning of construction. The General Construction Permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For a project entailing disturbance of more than one acre, the SWPPP must be prepared before construction begins, usually during the planning and design phases of a project, and must include specifications for Best Management Practices (BMPs) that would be implemented during project construction to control contamination of surface flows and the potential discharge of pollutants from commencement of construction through project completion. The SWPPP document itself remains on-site during construction. After completion of the project, the owners are required to submit a Notice of Termination to the RWQCB to indicate that construction is completed.

Also, depending on individual development proposals, grading permits would be required. Under their grading permit issuance procedures, each City routinely requires specific measures to be taken during grading to minimize construction period erosion (see Regulatory Setting above).

The temporary use of hazardous materials (e.g., diesel fuel) and heavy equipment, which represent an incidental component of construction, could also introduce materials that might be spilled in the plan area and subsequently washed into San Francisco Bay. These substances

could have a direct, adverse effect on water quality in the bay. Implementation of the standard, required jurisdictional city construction period measures to reduce the risk of construction period pollutants would reduce this risk to a *less-than-significant level*.

Based on the above discussion, construction period and post-construction water quality impacts resulting from Specific Plan implementation would be ***less-than-significant*** (see criteria [a], [e], and [f] in subsection 11.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Long-Term Water Quality Impacts from Project Operation. Specific Plan long-term implementation could result in contamination of plan area stormwater runoff with petroleum and other contaminants from motor vehicles; however, the project would be required to comply with RWQCB- and jurisdictional City-required post-construction, non-point source pollution control measures which would ensure that such impacts would be reduced to a *less-than-significant level*.

Plan implementation could result in the deposition by motor vehicles of oil and other contaminants along San Pablo Avenue, Central Avenue, other plan area streets, and in parking areas. Rainfall has the potential to wash these contaminants from the plan area into the municipal storm drainage system, potentially contaminating downstream waterways (e.g., Cerrito Creek, Baxter Creek). Such non-point pollution is normally controlled through a combination of source controls (generally through the use of infiltration devices). The project would be required to comply with RWQCB- and jurisdictional City-required post-construction, non-point source pollution control measures (known as "facilities and maintenance practices").

Under the terms of the countywide Municipal Regional Stormwater NPDES Permit (MRP) that each City is subject to, the project must also implement post-construction measures to prevent or control pollutants in runoff (recommended measures are included in the Stormwater C.3 Guidebook), and identify a plan to inspect and maintain these measures. Project designs, in accordance with each jurisdictional City's standard conditions, would be required to include the on-site collection of runoff from all parking facilities and, if feasible, its on-site treatment (oil/grease traps, filters, oil/water separators, or similar in-line filtration systems), and an associated periodic clean out/maintenance program that ensures acceptable trap efficiencies, specifies appropriate disposal procedures, and adequately reduces the risk that the traps become sinks for pollutants. A regular schedule of parking facility sweeping would also be required. In addition, source control features such as roofed trash enclosures would be required to keep pollutants from contacting stormwater. These required stormwater treatment measures would also need to meet engineered sizing criteria approved by the City Engineer of the responsible jurisdiction.

Permanent post-construction Best Management Practices (BMPs) are required for all new projects that create or replace between 2,500 and 10,000 square feet ("small projects") or more ("large projects") of roofs or pavement, including new development, redevelopment, and commercial and industrial sites. Permanent treatment BMPs can include, for example:

- rainwater harvesting and re-use,
- biofiltration swales,

- detention basins,
- bioretention areas, and
- flow-through planter boxes.

All of these BMPs are compatible with Specific Plan standards and guidelines.

Low Impact Development (LID) features can be integrated with BMPs. LID features reduce impervious surfaces and can include pervious pavements, landscape features, and green roofs. Parking stalls and plaza areas in the plan area may be able to utilize pervious asphalt, pervious concrete, or permeable pavers. Medians may be landscaped to increase permeability. Landscaped open space also will contribute to reductions in impervious surfaces.

Under the current version of the 303(d) List of Impacted Water Bodies, Baxter Creek and Cerrito Creek are included in the Total Maximum Daily Load (TMDL) list, which identifies various creeks and water bodies as well as pollutants of concern. TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards.

Given the existing level of urbanization and the potential development under the Specific Plan, BMPs can complement the plan's standards and guidelines, and address existing constraints. For example, bioretention planter areas may be used to treat roadway runoff, and flow-through planter boxes may be used to treat roof runoff. During design, the Stormwater C.3 Guidebook shall be referenced for acceptable BMPs, design considerations, design criteria, and operation and maintenance information. In addition to the C.3 Guidebook, individual development proposals shall determine if drainage will discharge to a water body impacted by specific pollutants. The 2008 303(d) List of Impacted Water Bodies, prepared and issued by the Regional Board, includes Baxter Creek and Cerrito Creek. The Municipal Regional Permit (MRP) provides more detailed information. Based on the discussion above, the effects of contaminated site runoff on water quality in the local (municipal) storm drainage system would represent a ***less-than-significant impact*** (see criteria [a], [c], [e], and [f] in subsection 11.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Effects on Groundwater Recharge. Currently, the plan area is covered almost entirely with structures, surface parking (asphalt paving), and introduced landscaping. As described above, Specific Plan implementation is expected to decrease the proportion of the plan area that is covered with impervious surface; therefore, groundwater recharge would not be negatively affected. The impact on groundwater recharge would be ***less-than-significant*** (see criterion [b] in subsection 11.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Risk of Flooding. Because the plan area is already covered with structures, paved surface parking, and introduced landscaping, development under the Specific Plan would not

significantly alter the total volume or rate of stormwater runoff into the existing municipal storm drain system of each jurisdiction (see EIR chapter 17, Utilities and Service Systems).

Based upon the El Cerrito General Plan, there are no known areas of flooding within the El Cerrito portion of the Specific Plan area. Portions of the plan area in Richmond, along Central Avenue, are identified as subject to a 100-year flood (Map 7.1, Floodplains and Watersheds). Residential uses are proposed in this area by the Specific Plan; therefore, such development would be required to comply with standard Federal Emergency Management Agency (FEMA) and Richmond Municipal Code (chapter 12.56, Flood Damage Prevention) regulations regarding flood hazard protection and flood control (e.g., raised foundations). Therefore, the impact is considered ***less-than-significant*** (see criteria [d], [g], [h], and [i] in subsection 11.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

12. LAND USE AND PLANNING

This EIR chapter describes the potential land use and planning impacts of the proposed Specific Plan. The chapter addresses the land use concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan physically divide a community or conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.[1]

12.1 SETTING

As discussed in chapter 3 (Project Description) of this EIR, El Cerrito is bordered by Richmond to the north and west, Albany to the south, and Wildcat Canyon Regional Park and Kensington to the east. El Cerrito is approximately 5 miles from the campus of the University of California, Berkeley, and is located approximately one-half mile east of the San Francisco Bay.

The Specific Plan area is located in portions of the cities of El Cerrito and Richmond. Primary regional access to the plan area is via Interstate 80 (I-80) and San Pablo Avenue (State Route 123). The plan area is served by two BART stations: the El Cerrito del Norte Station located east of San Pablo Avenue between Cutting Boulevard and Hill Street, and the El Cerrito Plaza station located east of San Pablo Avenue between Central Avenue and Fairmount Avenue. Bus service is provided by AC Transit. See chapter 16 (Transportation and Circulation) of this EIR for a complete description of circulation and transit.

(a) Planning Boundaries. The Specific Plan area is located in portions of the cities of El Cerrito and Richmond. The approximately 206-acre Plan area extends for approximately 2.5 miles from El Cerrito Plaza and the El Cerrito border with the City of Albany on the south to the Ohlone Greenway at Baxter Creek Park near the BART tracks on the north. At the south end, the project boundary extends east to include the El Cerrito Plaza BART station and west along Central Avenue to Interstate 80 (I-80). Generally, the Specific Plan area includes the San Pablo Avenue roadway and the parcels fronting on the Avenue.

The majority of the parcels (approximately 174 acres, 84 percent) in the Specific Plan area are in the City of El Cerrito, with the remaining parcels on the west side of San Pablo Avenue (about 32 acres, 16 percent) in the City of Richmond.

(b) Existing Land Use. The existing land use character of the Specific Plan area is largely shaped by auto-oriented, commercial uses developed primarily between the 1940s and 1980s. Strip malls with parking fronting the street are intermixed with small retailers, restaurants, offices, residences, and auto-related businesses. Big box retail development is found throughout the Plan area, including recent development adjacent to the del Norte BART station. The El Cerrito del Norte and El Cerrito Plaza BART stations are located in the Specific Plan

[1] CEQA Guidelines, appendix G, item X (a and b). Item (c) regarding conservation plans is addressed in chapter 6 (Biological Resources) of this EIR.

area and play a significant role in shaping land use character along the corridor. Single- and multi-family residential uses are located primarily on streets perpendicular and parallel to San Pablo Avenue. Recently completed mixed-use development incorporating retail, office, and residential uses has also occurred in the Specific Plan area. Table 12-1 shows the land use breakdown for the Specific Plan area.[1]

As shown in Table 12-1, retail-oriented business account for approximately 47 percent (98 acres) of the land use in the Specific Plan area. Small businesses range from nail salons, barbers, restaurants, cleaners, etc., to large, nationally recognized chain stores such as Marshall's, CVS, Barnes and Noble, and others. Some businesses are clustered in neighborhood-serving retail centers (e.g., Peppermint Plaza, The Galleria, the Jay Vee Center). Major retailers are located in shopping centers with other chain stores, such as the El Cerrito Plaza, the Moeser Lane shopping center, and the del Norte Marketplace across the street from the El Cerrito del Norte BART Station.

Residential uses account for approximately 16 percent (34 acres) of land use in the Specific Plan area. Multi-family residences represent two-thirds of the total residential uses (approximately 23 acres) and are primarily concentrated along both sides of the BART right-of-way and along Central Avenue. Single-family residences (approximately 10 acres) are generally located in areas removed from the San Pablo Avenue frontage, on both east and west sides, and along Central Avenue and Fairmount Avenue. Mixed-use developments occupy approximately three percent (five acres) of the Specific Plan area and are located along San Pablo Avenue (e.g., Del Norte Place, Civic Plaza Apartments, the Village at Town Center).

Auto-related businesses account for approximately eight percent (17 acres) of the Specific Plan area and include new and used auto dealerships, auto repair and parts stores, car washes, gasoline stations, and oil change, smog check, and other shops.

Park land accounts for approximately three percent (6.4 acres) of land uses in the Specific Plan area, and includes Central Park (Central Avenue and Belmont Avenue), Baxter Creek at Gateway Park (Conlon and San Pablo Avenue), Cerrito Creek at the El Cerrito Plaza (along the southern boundary of the El Cerrito Plaza), and the Ohlone Greenway (which runs underneath the BART tracks).

Light industrial uses occupy one percent (approximately 2.4 acres) of the Specific Plan area and are generally located away from San Pablo Avenue, such as El Cerrito Steel, a sheet metal processing plant on Kearney Street near Madison.

Remaining land uses in the Specific Plan area include office uses (approximately 12 acres, six percent), public uses (approximately 12 acres, six percent), hotel/motel uses (approximately 3 acres, one percent), parking (approximately 11 acres, five percent), and vacant land (approximately 5 acres, three percent).

Maps of the Specific Plan area are in chapter 3 (Project Description) of this EIR.

[1]Geographic Information System (GIS) parcel data from the City was used to determine land use information.

Table 12-1
SAN PABLO AVENUE SPECIFIC PLAN AREA--EXISTING LAND USE

Land Use	**El Cerrito (acres)**	**Richmond (acres)**	**Total Acres**	**Percent**
Single-Family Residential	9.8	0.5	10.4	5%
Multi-Family Residential	19.6	3.6	23.2	11%
Retail-Oriented Business	85.3	12.6	97.9	47%
Mixed-Use	5.2	0.0	5.2	3%
Auto-Related Business	9.6	7.5	17.2	8%
Hotel/Motel	1.3	1.7	3.0	1%
Office	10.8	0.8	11.7	6%
Light Industrial	1.5	0.9	2.4	1%
Vacant	3.2	2.2	5.4	3%
Parking	10.6	0.6	11.2	5%
Public	12.2	0.2	12.4	6%
Parks	4.9	1.5	6.4	3%
Total	174.1	32.2	206	100%
Percentage	84.4%	15.6%		
SOURCE: MIG, Inc., 10-30-13.				

12.2 REGULATORY SETTING

Specific Plan Law (California Government Code Section 65451). California Government Code Section 65451 regulates the substantive and topical requirements of specific plans. A specific plan is a tool for the systematic implementation of the general plan, and establishes a link between implementing policies of the general plan and the individual development proposals in a defined area. A specific plan may be as general as setting forth broad policy concepts, or as detailed as providing direction on every facet of development from the type, location, and intensity of uses to the design and capacity of infrastructure. The San Pablo Avenue Specific Plan is subject to this law.

Association of Bay Area Governments (ABAG) Plans and Policies. The Association of Bay Area Governments (ABAG) is the regional planning agency and council of governments for the nine-county San Francisco Bay Area responsible for addressing in a regional context such intraregional issues as land use, housing, environmental quality, and economic development. The following ABAG regional planning programs warrant consideration:

(1) Plan Bay Area. The primary document and associated process used in implementing ABAG policies is Plan Bay Area, adopted collectively by ABAG and the Metropolitan Transportation Commission (MTC) on July 18, 2013. Plan Bay Area states:

"Adoption of Plan Bay Area does not mandate any changes to local zoning, general plans or project review. The region's cities, towns and counties maintain control of all decisions to adopt plans and permit or deny development projects. Similarly, Plan Bay Area's forecasted job and housing numbers do not act as a direct or indirect cap on development locations in the region. The forecasts are required by [State Bill] SB 375 [The California Sustainable Communities and Climate Protection Act of 2008] and reflect the intent of regional and local collaboration that is the foundation of Plan Bay Area.

"The plan assists jurisdictions seeking to implement the plan at the local level by providing funding for [Priority Development Area] PDA planning and transportation projects." (Plan Bay Area, page 3)

(2) FOCUS Program. In addition to Plan Bay Area, the ABAG-led FOCUS program is a regional development and conservation strategy--in partnership with the Metropolitan Transportation Commission (MTC) and with support from the Bay Area Air Quality Management District (BAAQMD) and the Bay Conservation and Development Commission (BCDC)--that promotes a more compact land use pattern for the Bay Area. The FOCUS program unites the efforts of these four regional agencies into a single program. The FOCUS program seeks to link land use and transportation and to reduce greenhouse gas emissions by encouraging development of complete, livable communities in areas served by transit and promoting conservation of the region's most significant resource lands. Through the FOCUS program, regional agencies support local government commitment to these goals by working to direct existing and future incentives to Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs). The San Pablo Avenue Specific Plan area is an ABAG-designated PDA (identified as "El Cerrito – San Pablo Avenue Corridor, Del Norte & South").

El Cerrito General Plan. The proposed Specific Plan's consistency with the El Cerrito General Plan is discussed in Chapter 18 (Project Consistency With Local and Regional Plans) of this EIR. The General Plan identifies the Specific Plan area as the location of future higher intensity mixed use development.

Richmond General Plan. The proposed Specific Plan's consistency with the Richmond General Plan is discussed in Chapter 18 (Project Consistency With Local and Regional Plans) of this EIR. Similar to the El Cerrito General Plan, the Richmond General Plan identifies the Specific Plan area as the location of future higher intensity mixed use development.

San Pablo Avenue Specific Plan Section 2.02 – Administration of Regulating Code. The administrative procedures section of the Specific Plan describes the processes used for the application, review, and decision-making for land development and use requests in the Specific Plan area, and identifies the land use regulations for the transect zones established by the Specific Plan. The administrative procedures explain the relationship between the Specific Plan and the El Cerrito Municipal Code.

12.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to land use and planning that could result from the Specific Plan, and discusses components of the Specific Plan that would avoid or reduce those potential impacts. The section also recommends mitigation measures needed to reduce remaining significant impacts.

12.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact related to land use and planning if it would:

(a) Physically divide an established community; or

(b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

12.3.2 Relevant Specific Plan Components

The Specific Plan, mainly the Form-Based Code (FBC), includes components that would avoid or reduce potential land use and planning impacts. Components especially relevant to the evaluation of potential impacts are briefly summarized below. The reader is encouraged to review the entire Specific Plan sections for more detail. Note that within the context of the Specific Plan, a “standard” is a mandatory requirement, and a “guideline” is not mandatory but is strongly recommended.

2.02.03 Land Use Regulations. This section prescribes the land use regulations for the Transect Zones and the Theatre Overlay Block. The regulations apply to any new use proposed within an existing building or any new use application submitted in conjunction with a development application.

2.02.04 Approval Procedures. This section explains how the Specific Plan would be administered by the City Council, Planning Commission, Design Review Board, Zoning Administrator/Development Services Manager, and Community Development Director of the City of El Cerrito for properties within the El Cerrito portion of the Plan area. For the Richmond portion of the Plan area, approval procedures are included in the City of Richmond Livable Corridors Form-Based Code.

2.02.08 Application for Discretionary Actions Requiring a Public Hearing. Design review is required for all projects that require a building permit, with some exceptions related to single-family dwellings, replacement-in-kind construction, and color/finish changes. This section details the design review process and its relationship to the Specific Plan.

Design review procedures (2.02.08.01) are divided into four tiers, as follows:

(1) Tier I design review applies to improvements to non-conforming structures totaling less than 50% of the building’s appraised value, and minor improvements and additions.

[1] CEQA Guidelines, appendix G, item X (a and b).

(2) Tier II design review applies to new projects that are designed in full compliance with the development and design standards of the Specific Plan.

(3) Tier III design review applies to all allowed modifications to existing nonconforming buildings and structures in the Specific Plan area that contain 25,000 square feet or less of gross floor area.

(4) Tier IV design review is intended to allow innovative, high-quality developments that would not otherwise be allowed under a strict interpretation of the Specific Plan regulations but still comply with the intent of the plan.

Section 2.02.08 also details review requirements for Conditional Use Permits (2.02.08.02), Variances (2.02.08.03), Waivers (2.02.08.04), Development Agreements (2.02.08.04.03), and Specific Plan Amendments (2.02.08.04.04).

12.3.3 Impacts and Mitigations

Project Effects on the Physical Arrangement of the Community. The analyses and findings in this EIR indicate that future development activity under the San Pablo Avenue Specific Plan would not disrupt or divide the physical arrangement of the community. Project-facilitated development increments identified in the Project Description (chapter 3) would occur within the 206-acre Specific Plan area, a highly urbanized corridor. Implementation of the Specific Plan would reinforce, with no substantial change in, established community-wide land use patterns. A primary objective of the Specific Plan is to provide housing and mixed use development concentrated along San Pablo Avenue. The Specific Plan, in concert with each City's (El Cerrito and Richmond) General Plan, is intended to provide for the expansion of housing choices by encouraging compact, transit-accessible, pedestrian-oriented housing and mixed use (commercial/housing) development in the Specific Plan area at densities and heights greater than currently permitted. The Specific Plan stipulates that this housing and mixed use development be conveniently located near public transportation, shopping, employment, and other community facilities.

The Plan land use provisions and development standards would be expected to encourage infill activity, with significant beneficial land use effects in: (1) revitalizing the corridor; (2) facilitating development where services and infrastructure can be most efficiently provided by promoting higher residential densities near or within an existing shopping, service, employment, and public transportation center; (3) and promoting compact, transit-accessible, pedestrian-oriented, mixed use development patterns and land use. These Specific Plan land use characteristics epitomize the principles and policies of Plan Bay Area and "smart growth," and would represent a ***beneficial land use effect*** (see criterion [a] in subsection 13.3.1, "Significance Criteria," above).

Mitigation. The Specific Plan would result in beneficial land use and planning effects. No mitigation pertaining to project impacts on the physical arrangement of the community is required.

Project Consistency with Policies Adopted for the Purpose of Avoiding or Mitigating Environmental Effects. The El Cerrito General Plan, Richmond General Plan, and San Pablo Avenue Specific Plan identify the Plan area as the location of future higher-intensity, mixed-use

development, which may result in building heights greater than existing conditions. In addition, the Specific Plan proposes increases in allowable building heights over current El Cerrito development standards. General comparisons between existing El Cerrito development standards and the proposed Specific Plan Transect Zones are described below. It should be noted that these are general comparisons, not parcel-specific comparisons of the precise development requirements and options applied to individual parcels. The Transect Zones (TOHIMU and TOMIMU) are described in Form-Based Code section 2.03.02.

- The Transit-Oriented Higher-Intensity Mixed Use (TOHIMU) zone proposes a maximum building height of 85 feet (with State density bonuses). El Cerrito currently allows building heights up to 65 feet with a conditional use permit (CUP) discretionary approval within approximately the same area.

- The Transit-Oriented Mid-Intensity Mixed Use (TOMIMU) zone proposes a maximum building height of 65 (with State density bonuses). El Cerrito currently allows building heights up to between 50 and 65 feet with a CUP within approximately the same area.

Generally, the Specific Plan Transect Zones would result in building heights greater than existing conditions in the Specific Plan area, where much of existing development is one-story commercial with associated parking lots.

As noted in subsection 12.3.2 (Relevant Specific Plan Components), the Specific Plan includes components that would avoid or reduce potential land use and planning impacts. The Specific Plan is a collaborative effort between the cities of El Cerrito and Richmond to implement a shared vision for the Specific Plan area, identify improvements, and adopt regulations that can be consistently applied throughout the Specific Plan area. The Plan stipulates that housing and mixed use development be conveniently located near public transportation, shopping, employment, and other community facilities in the Specific Plan area. The Specific Plan--including the Form-Based Code (FBC), Complete Streets chapter, and Infrastructure Systems chapter--provides complete details. Chapter 3 (Project Description) of this EIR summarizes the Specific Plan. The reader is encouraged to review the entire Specific Plan.

New development throughout the Specific Plan area would include a combination of residential, commercial, public/semipublic, light industrial, and mixed uses. Residential uses would be located throughout the Specific Plan area, but would be concentrated near the BART stations. New commercial uses would include combinations of, for example, retail, office, restaurant, and live/work uses in single or mixed use buildings. New public/semipublic uses would include, for example, community centers, government offices, and residential care facilities. Light industrial uses would include, for example, handicraft/custom manufacturing and storage.

Open spaces in the Specific Plan area would be composed of public open spaces, plazas, midblock connections, greenways, daylit creeks, pedestrian pathways, repurposed open spaces (e.g., in underutilized surface parking lots), and temporary open spaces. The Ohlone Greenway would remain an important pedestrian and bicycle pathway running parallel to San Pablo Avenue; the Greenway would be improved, and new connections between it and the Specific Plan area would be designed to both physically and visually strengthen the relation of this multi-modal open space to the City's commercial and public service nodes. Related improvements throughout the Specific Plan area would include a complete streets program, public art, and landscaping to support a strong sense of place, pursuant to the City's Complete

Streets Plan (incorporated into the Specific Plan) and the City's Art in Public Places ordinance, which requires new development to contribute 1% of its development costs to public art.

When implemented through the administrative procedures of the Specific Plan (FBC section 2.02, Administration of Regulating Code), the Specific Plan would serve to achieve a coordinated, cohesive environment within the Specific Plan area and to surrounding, predominantly residential neighborhoods, while greatly increasing land use intensity through unified development standards and context-sensitive design strategies that result in the efficient use of existing resources and infrastructure. The impact of the Specific Plan on land use and planning is considered a ***beneficial land use effect*** (see criterion [b] in subsection 13.3.1, "Significance Criteria," above).

Mitigation. The Specific Plan would result in beneficial land use and planning effects. No mitigation pertaining to project consistency with policies adopted for the purpose of avoiding or mitigating environmental effects is required. Chapter 18 (Project Consistency With Local and Regional Plans) also discusses this issue.

13. NOISE

This EIR chapter describes the existing noise environment in the project vicinity, anticipated changes in the noise environment as a result of Specific Plan implementation, and related significant adverse noise impacts and mitigation needs. The EIR acoustical consultants, Illingworth & Rodkin, Inc., conducted the technical analyses for this EIR chapter.

This chapter presents the fundamentals of noise and vibration for those unfamiliar with acoustical terminology, provides a discussion of policies and standards applicable in the assessment of noise and vibration impacts, summarizes the results of measurements made on and around the Specific Plan area, and evaluates impacts resulting from the project in terms of noise and land use compatibility, vibration compatibility, permanent noise level increases resulting from project-generated traffic, and temporary noise level increases resulting from project construction activities.[1] Mitigation is presented to reduce significant noise impacts resulting from the project to the extent feasible.

13.1 SETTING

13.1.1 Fundamentals of Environmental Acoustics

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations that produce it. Higher pitched tones sound louder to humans than tones with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave, with higher intensity analogous to a higher wave.

In addition to pitch and loudness, there are several noise measurement scales that are used to describe noise in a particular location. *A decibel (dB)* is a unit of measurement that indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, and so on. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10-decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 13-1.

[1] CEQA Guidelines, appendix G, item XII (a through f).

Table 13-1
DEFINITIONS OF ACOUSTICAL TERMS USED IN THE SAN PABLO AVENUE SPECIFIC PLAN EIR

Term	**Definitions**
Decibel, dB	*A unit describing the amplitude of sound*, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). *Sound pressure level is the quantity that is directly measured by a sound level meter.*
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. *Normal human hearing is between 20 Hz and 20,000 Hz*. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. *The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.*
Equivalent Noise Level, Leq	*The average A-weighted noise level during the measurement period*. The hourly Leq used for this report is denoted as dBA $L_{eq[h]}$.
Day-Night Level, DNL or L_{dn}	The equivalent noise level for a continuous 24-hour period with a 10-decibel penalty imposed during nighttime and morning hours (10:00 PM to 7:00 AM).
Community Noise Exposure Level, CNEL	CNEL is the equivalent noise level for a continuous 24-hour period with a 5-decibel penalty imposed in the evening (7:00 PM to 10:00 PM) and a 10-decibel penalty imposed during nighttime and morning hours (10:00 PM to 7:00 AM).
L_1, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	*That noise which intrudes over and above the existing ambient noise at a given location*. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, and tonal or informational content, as well as the prevailing ambient noise level.

SOURCE: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level or dBA.* This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 13-2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations is utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events over a selected period of time.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night--because excessive noise interferes with the ability to sleep--24-hour descriptors have been developed that incorporate noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level, CNEL*, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 PM to 10:00 PM) and a 10 dB addition to nocturnal (10:00 PM to 7:00 AM) noise levels. The *Day/Night Average Sound Level, DNL or* L_{dn}, is essentially the same as CNEL, except that the evening time period (7:00 PM to 10:00 PM) is dropped and all occurrences during this three-hour period are grouped into the daytime period.

13.1.2 Fundamentals of Ground-borne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the Peak Particle Velocity (PPV) and another is the Root Mean Square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. In this section, a PPV descriptor with units of millimeters per second (mm/sec) or inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints. Table 13-3 displays the reactions of people and the effects on buildings that continuous vibration levels produce. The annoyance levels shown in Table 13-3 should be interpreted with care, since vibration may be found to be annoying at much lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying.

Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where ground-borne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise (e.g., plane or helicopter fly-overs) causing induced vibration in exterior doors and windows.

Table 13-2
TYPICAL NOISE LEVELS IN THE ENVIRONMENT

Common Outdoor Noise Source	Noise Level (dBA)	Common Indoor Noise Source
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background level)
	20 dBA	
		Broadcast/recording studio
	10 dBA	
	0 dBA	

SOURCE: Technical Noise Supplement (TeNS), California Department of Transportation, November 2009.

Table 13-3
REACTION OF PEOPLE AND DAMAGE TO BUILDINGS FROM CONTINUOUS OR FREQUENT INTERMITTENT VIBRATION LEVELS

Velocity Level, PPV (in/sec)	**Human Reaction**	**Effect on Buildings**
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Virtually no risk of damage to normal buildings
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to newer residential structures

SOURCE: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, September 2013.

Construction activities can cause vibration that varies in intensity depending on several factors. Pile driving and vibratory compaction equipment typically generate the highest construction-related ground-borne vibration levels. Because of the impulsive nature of such activities, the use of the peak particle velocity descriptor (PPV) has been routinely used to measure and assess ground-borne vibration, and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration--the potential to damage a structure and the potential to interfere with the enjoyment of life--are evaluated against different vibration limits. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher, and there is no general consensus as to what amount of vibration may pose a threat for structural damage to a building. Construction-induced vibration that can be detrimental to a building is very rare and has only been observed in instances where the structure is already at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

As discussed previously, annoyance is a subjective measure, and vibrations may annoy at much lower levels than those shown in Table 13-3, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying.

Rail operations are potential sources of substantial ground-borne vibration depending on distance, the type and the speed of trains, and the type of railroad track. People's response to ground-borne vibration has been correlated best with the velocity of the ground, which is expressed on the decibel scale. The reference velocity is 1 x 10-6 in/sec RMS, which equals 0 VdB, and 1 in/sec equals 120 VdB. Although not a universally accepted notation, the abbreviation "VdB" is used in this document for *vibration* decibels to reduce the potential for confusion with *sound* decibels.

One of the problems with developing suitable criteria for ground-borne vibration is the limited research into human response to vibration and, more importantly, human annoyance inside buildings. The US Department of Transportation, Federal Transit Administration has developed rational vibration limits that can be used to evaluate human annoyance to ground-borne vibration. These criteria are primarily based on experience with passenger train operations, such as rapid transit and commuter rail systems. The main difference between passenger and freight operations is the time duration of individual events; a passenger train lasts a few seconds whereas a long freight train may last several minutes, depending on speed and length.

Vibration levels below 65 VdB are below the threshold for human perception. Typical background vibration levels in residential areas are usually 50 VdB or lower, well below the threshold of perception for most humans. Perceptible vibration levels inside residences are attributed to the operation of heating and air conditioning systems, door slams, and foot traffic. Construction activities, train operations, and street traffic are some of the most common external sources of vibration that can be perceptible inside residences. Table 13-4 illustrates some common sources of vibration and their association to human perception or the potential for structural damage.

13.1.3 Existing Noise Environment

The San Pablo Avenue Specific Plan study area spans almost the entire length of the roadway in El Cerrito, from the border with the City of Albany to the south, to the City of Richmond to the north. The Specific Plan area extends beyond the San Pablo Avenue corridor itself, to areas surrounding the two BART stations located east of San Pablo Avenue, as well as west into the City of Richmond near Interstate 80 (I-80). Land uses in the Specific Plan area vicinity include large commercial shopping centers located southeast of Central Avenue and at the northern portion of the study area near Cutting Boulevard, as well as various other land use types, ranging from small commercial centers, offices, hotels, educational facilities, and residences. East of San Pablo Avenue, single-family and multi-family residential land uses are typical.

Vehicular traffic along San Pablo Avenue and various cross streets, I-80, and BART trains are the predominant noise sources affecting the noise environment in the study area. Ambient noise measurements were made over a 24-hour period at six locations from March 27, 2014 to March 28, 2014. Attended short-term (10-minutes in duration) measurements were made at eight additional locations throughout the study area to quantify variations in the existing noise environment. Figure 13-1 shows the approximate noise monitoring locations.

Figure 13-1
NOISE MEASUREMENT LOCATIONS

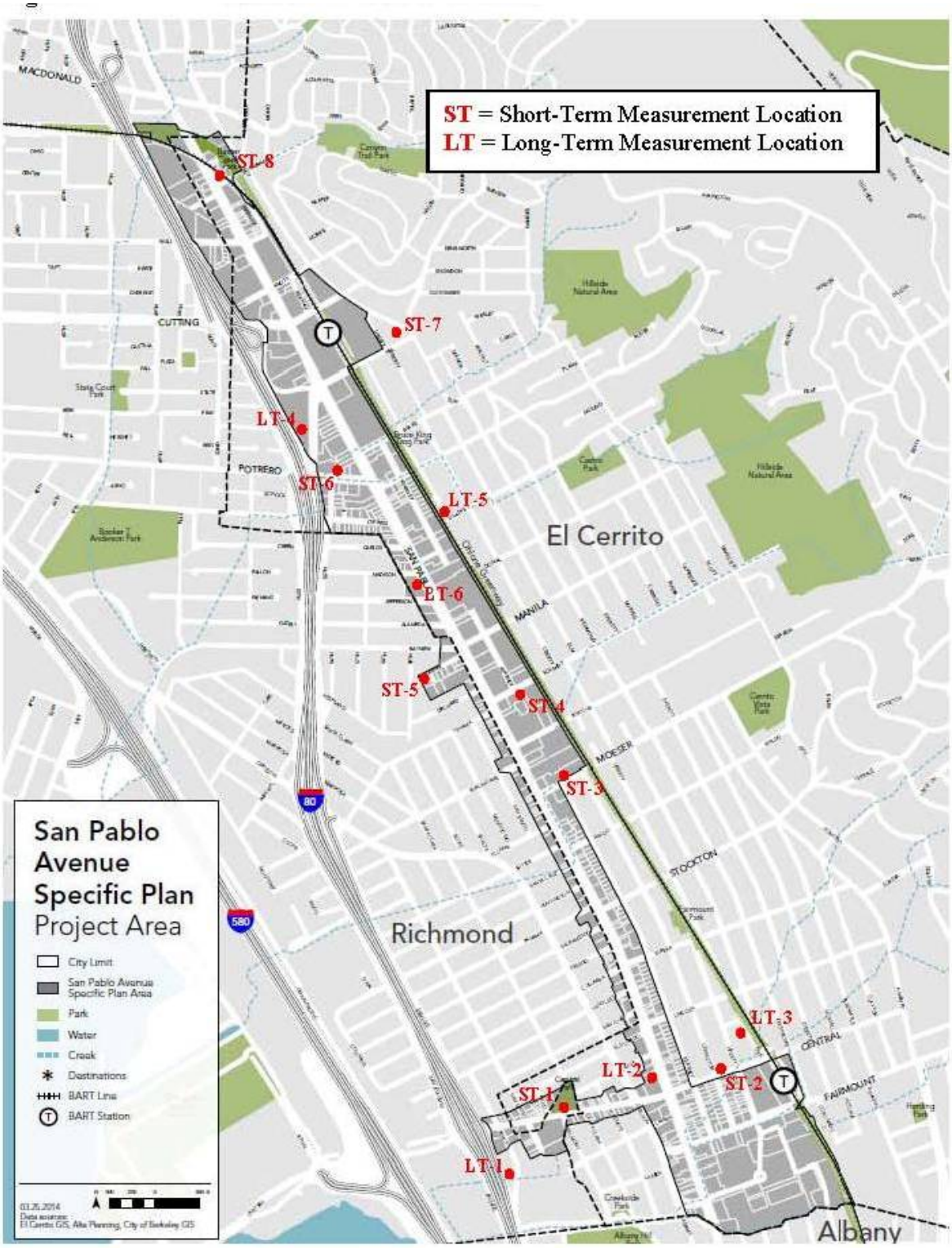


Table 13-4
TYPICAL LEVELS OF GROUND-BORNE VIBRATION

Human/Structural Response	Velocity Level, VdB	Typical Events (50-foot setback)
Threshold, minor cosmetic damage	100	Blasting, pile driving, vibratory compaction equipment
		Heavy tracked vehicles (bulldozers, cranes, drill rigs)
Difficulty with tasks such as reading a video or computer screen	90	
		Commuter rail (upper range)
Residential annoyance, infrequent events	80	Rapid transit (upper range)
Residential annoyance, occasional events		Commuter rail, typical bus or truck over bump or on rough roads
Residential annoyance, frequent events	70	Rapid transit (typical)
Approximate human threshold of perception to vibration		Buses, trucks, and heavy street traffic
	60	
		Background vibration in residential settings in the absence of activity
Lower limit for equipment ultra-sensitive to vibration	50	

SOURCE: Transit Noise and Vibration Impact Assessment, US Department of Transportation, Federal Transit Administration, May 2006.

- Noise measurement site LT-1 was located approximately 170 feet from the center of I-80, south of Central Avenue and east of Pierce Street. This location was selected to quantify noise levels generated by I-80. Hourly average noise levels typically ranged from 73 dBA L_{eq} to 79 dBA L_{eq} during the day and from 72 dBA L_{eq} to 76 dBA L_{eq} at night. The day-night average noise level at location LT-1 was 82 dBA L_{dn}.

- Measurement site LT-2 was located approximately 60 feet from the center of San Pablo Avenue, north of Central Avenue. The dominant noise source at this location was vehicular traffic along San Pablo Avenue. Daytime hourly average noise levels ranged from 64 dBA L_{eq} to 71 dBA L_{eq}, while nighttime noise levels ranged from 56 dBA L_{eq} to 64 dBA L_{eq}. The day-night average noise level at this location was 69 dBA L_{dn}.

- Measurement location LT-3 was north of the El Cerrito Plaza BART Station, in a residential neighborhood along Oak Street. Hourly average noise levels typically ranged from 63 dBA L_{eq} to 68 dBA L_{eq} during the day and from 42 dBA L_{eq} to 68 dBA L_{eq} at night. The L_{dn} at this site was 70 dBA L_{dn}.

- Long-term measurement LT-4 was approximately 160 feet from the center of I-80, in the parking lot of a vacant commercial building along Eastshore Boulevard. This location was selected to quantify noise levels generated by I-80 at the north end of the study area and Eastshore Boulevard. Hourly average noise levels typically ranged from 65 dBA L_{eq} to 76 dBA L_{eq} during the monitoring survey. The 24-hour average noise level at this location was 75 dBA L_{dn}.

- Long-term measurement LT-5 was on the corner of Lexington Avenue and Gladys Avenue, approximately 60 feet from the center of the adjacent BART tracks. This location was selected to quantify noise levels generated by BART trains traveling at slightly higher speeds due to its location between the two stations. Hourly average noise levels ranged from 71 dBA L_{eq} to 75 dBA L_{eq} during the day and from 47 dBA L_{eq} to 71 dBA L_{eq} at night. The day-night average noise level at LT-5 was 75 dBA L_{dn}.

- Measurement location LT-6 was located in front of a senior housing development located between Madison Avenue and Jefferson Avenue, approximately 60 feet from the center of San Pablo Avenue. The dominant noise source at this location was vehicular traffic along the roadway. Average noise levels ranged from 65 dBA L_{eq} to 79 dBA L_{eq} during the day and from 56 dBA L_{eq} to 65 dBA L_{eq} at night. The 24-hour average noise level at this location was 72 dBA.

Attended short-term noise measurements were made at eight additional locations (ST-1 through ST-8) to complete the March 2014 monitoring survey. Table 13-5 summarizes the results of these measurements.

Table 13-5
SUMMARY OF SHORT-TERM NOISE MEASUREMENT DATA

Noise Measurement Location	L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	L_{eq}	L_{dn}
ST-1: ~45 feet from the center of Central Avenue, at Central Park baseball field. (3/27/2014, 2:20 p.m.-2:30 p.m.)	74	72	70	67	60	67	69
ST-2: ~45 feet from the center of Fairmount Avenue, at Lexington Avenue. (3/28/2014, 10:20 a.m.-10:30 a.m.)	72	71	65	59	52	62	63
ST-3: ~45 feet from the center of Moeser Lane, across from Kearney Street. (3/28/2014, 10:40 a.m.-10:50 a.m.)	69	68	63	58	55	60	63
ST-4: ~45 feet from the center of Schmidt Lane, across from Kearney Street. (3/28/2014, 11:00 a.m.-11:10 a.m.)	73	69	63	58	55	60	63
ST-5: Dead end of Wenk Avenue. (3/28/2014, 11:20 a.m.-11:30 a.m.)	62	56	50	47	44	48	<55
ST-6: ~45 feet from the center of Potrero Avenue, between San Pablo Avenue and S. 56th Street. (3/28/2014, 11:40 a.m.-11:50 a.m.)	73	71	68	63	61	65	69
ST-7: ~45 feet from the center of Elm Street. (3/28/2014, 12:00 p.m.-12:10 p.m.)	83	82	66	59	54	67	69
ST-8: ~45 feet from the center of San Pablo Avenue, at Ohio Street. (3/28/2014, 12:20 p.m.-12:30 p.m.)	98	94	74	68	62	78	80

SOURCE: Illingworth & Rodkin, Inc., acoustical consultants, March 2014.

Note: L_{dn} approximated by correlating to corresponding period at long-term measurement location.

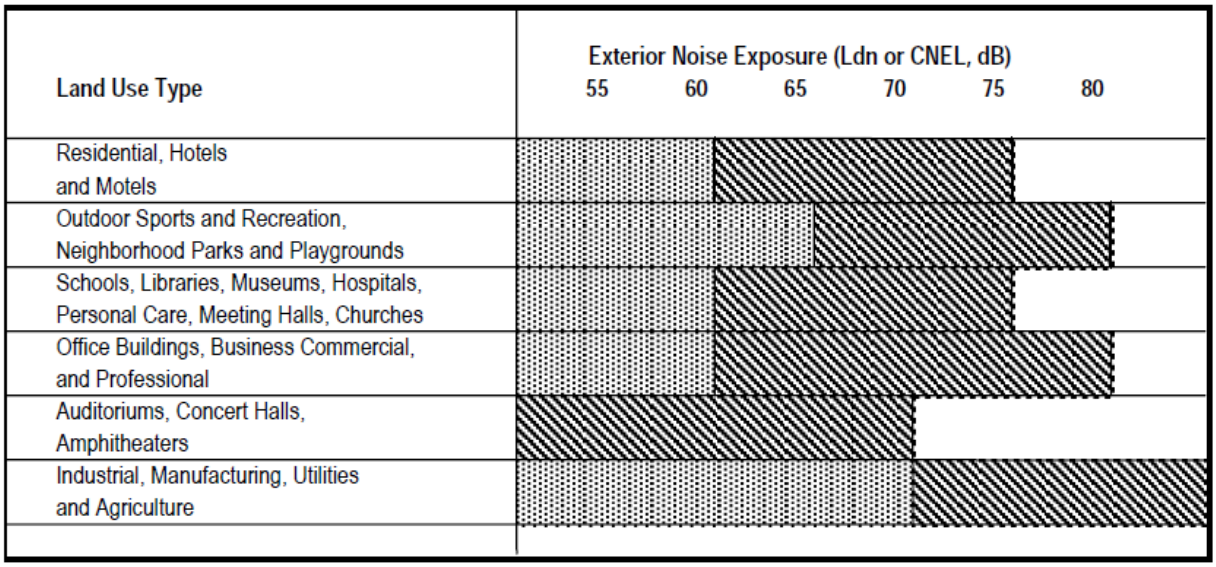
13.2 REGULATORY SETTING

13.2.1 City of El Cerrito

The Noise Element of the City of El Cerrito General Plan identifies noise and land use compatibility standards for various land uses, as shown on Figure 13-2 (Land Use Compatibility for Community Noise Environments). These standards are intended to provide compatible land uses throughout the community as related to environmental noise. Residential land uses are considered “normally acceptable” in exterior noise environments of 60 dBA L_{dn} or less and “conditionally acceptable” in exterior noise environments of 75 dBA L_{dn} or less. Interior noise levels attributable to exterior noise sources shall be maintained at or below 45 dBA L_{dn}. The General Plan also identifies goals and policies designed to limit noise exposure at noise sensitive land uses. Goal H3 states the following: “New development complies with the noise standards established in the General Plan, all new noise sources are within acceptable standards, and existing objectionable noise sources are reduced or eliminated.” General Plan policies applicable to the quantitative evaluation of noise are listed below.

Figure 13-2

Land Use Compatibility for Community Noise Environments



Normally Acceptable
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable
Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.

Unacceptable
New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with Noise Element policies.

SOURCE: El Cerrito General Plan, Noise Element, 1999.

H3.2: Outdoor Noise Levels. "The goal for maximum outdoor noise levels in residential areas is an L_{dn} of 60 dB. This level is a requirement to guide the design and location of future development and is a goal for the reduction of noise in existing development. However, 60 L_{dn} is a goal that cannot necessarily be reached in all residential areas within the realm of economic or aesthetic feasibility. This goal will be applied where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). The outdoor standard will not normally be applied to the small decks associated with apartments and condominiums but theses will be evaluated on a case-by-case basis. Where the city determines that providing and L_{dn} of 60 dB or lower outdoors is not feasible, the outdoor goal may be increased to an L_{dn} of 65 dB at the discretion of the Planning Commission."

H3.3: Indoor Noise Levels. "The indoor noise level as required by the State of California Noise Insulation Standards must not exceed an L_{dn} of 45 dBA in new housing units." As of January 1, 2014, the State of California Building Code no longer regulates interior noise levels in multi-family residential land uses. The intention of Policy H3.3 is to establish an acceptable interior noise limit in new multi-family dwellings. For the purposes of this analysis, the 45 dBA L_{dn} interior noise limit will be used in new housing developments.

H3.4: Indoor Instantaneous Noise Levels. "Interior noise levels in new single-family and multi-family residential units exposed to an L_{dn} of 60 dB or greater should be limited to a maximum instantaneous noise level in the bedroom of 50 dBA. Maximum instantaneous noise levels in other rooms should not exceed 55 dB. The typical repetitive maximum instantaneous noise level at each site would be determined by monitoring. Examples would include truck passbys on busy streets, BART passbys and train warning whistles."

H3.5: Impacts of BART Noise. "If the noise source is BART, then the outdoor noise exposure criterion should be 70 L_{dn} for future development, recognizing that BART noise is characterized by relatively few loud events."

H3.6: New Commercial, Industrial and Office Noise Standards. "Appropriate interior noise levels in commercial, industrial, and office buildings are a function of the use of space and shall be evaluated on a case-by-case basis. Interior noise levels in offices generally should be maintained at 45 dBA L_{eq} (hourly average) or less."

H3.7: Areas Below Desired Noise Standards. "These guidelines are not intended to be applied reciprocally. In other words, if an area currently is below the desired noise standards, an increase in noise up to the maximum should not necessarily be allowed. The impact of a proposed project on an existing land use should be evaluated in terms of the increase in existing noise levels and potential for adverse community impact, regardless…[sic]"

H3.8: Non-Transportation Related Noise Sources. "For non-transportation related noise sources, noise levels outdoors should not exceed the limits in the table above. Interior noise levels shall be 15 decibels lower than those shown in the table."

H3.9: Noise Environment in Existing Residential Areas. "Protect the noise environment in existing residential areas. In general, the City will require the evaluation of mitigation measures for projects under the following circumstances:

1. The project would cause the Ldn to increase 3 dB(A) or more.
2. Any increase would result in an Ldn greater than 60 dB(A).
3. The Ldn already exceeds 60 dB(A).
4. The project has the potential to generate significant adverse community response."

H3.10: Mitigating the Effects of Noise on Adjacent Properties. "Require proposals to reduce noise impacts on adjacent properties by incorporating appropriate measures into the project."

H3.11: Commercial or Industrial Source Noise. "Noise created by commercial or industrial sources associated with new projects or developments shall be controlled so as not to exceed the noise level standards set forth in the table [13-6] below (Maximum Allowable Noise Exposure for Stationary Noise Sources), as measured at any affected residential land use."

13.2.2 City of Richmond

The Public Safety and Noise Element of the City of Richmond General Plan identifies noise and land use compatibility standards for various land uses. These standards are intended to provide compatible land uses throughout the community as related to environmental noise. Residential land uses are considered "normally acceptable" in exterior noise environments of 60 dBA L_{dn} or less, "conditionally acceptable" in exterior noise environments of 70 dBA L_{dn} or less, and "normally unacceptable" in exterior noise environments of 75 dBA L_{dn} or less.

The following General Plan goal applies to quantitative evaluation of noise:

Goal SN4: Acceptable Noise Levels. "Achieve noise levels consistent with acceptable standards and reduce or eliminate objectionable noise sources. Prevent where possible, or mitigate noise impacts from industries, roadways, railroads and businesses in residential areas and sensitive uses in the community. In addition, apply new technology, buffers and other solutions to reduce excessive noise."

13.2.3 Regulatory Criteria--Vibration

The Cities of El Cerrito and Richmond have not identified quantifiable vibration limits that can be used to evaluate the compatibility of land uses with respect to ground-borne vibration. Although there are no local standards that control allowable vibration levels in new residential development, the US Department of Transportation has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects.[1] The Federal Transit Administration (FTA) has proposed vibration impact criteria, based on maximum overall levels for a single event. The impact criteria for ground-borne vibration are shown in Table 13-7. Note that there are criteria for frequent events (more than 70 events of the same source per day), occasional events (30 to 70 vibration events of the same source per day), and infrequent events (less than 30 vibration events of the same source per day).

[1]US Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006, FTA-VA-90-1003-06.

Table 13-6
MAXIMUM ALLOWABLE NOISE EXPOSURE FOR STATIONARY NOISE SOURCES [1]

Noise Metric	**Daytime [5] (7 AM to 10 PM)**	**Nighttime [2,5] (10 PM to 7 AM)**
Hourly Leq, dB [3]	55	45
Maximum Level, dB [3]	70	65
Maximum Level, dB – Impulsive Noise [4]	65	60

SOURCE: El Cerrito General Plan, 1999.

[1] As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.
[2] Applies only where the receiving land use operates or is occupied during nighttime hours.
[3] Sound level measurements shall be made with "slow" meter response.
[4] Sound level measurements shall be made with "fast" meter response.
[5] Allowable levels shall be raised to the ambient noise levels where the ambient levels exceed the allowable levels.

13.3 IMPACTS AND MITIGATION MEASURES

Noise-related impacts from future development can be divided into short-term construction-related impacts and long-term noise exposure impacts. Construction-related impacts are associated with construction activities likely to occur in conjunction with future development allowed by the Specific Plan. Long-term noise exposure is associated with major noise sources (e.g., traffic, trains, other transit, aircraft, and stationary sources).

13.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] a significant noise impact would occur if implementation of the San Pablo Avenue Specific Plan would:

(a) Expose people to or generate noise levels in excess of standards established by the respective jurisdictions (El Cerrito and Richmond), or applicable standards of other agencies (e.g., US Department of Transportation's ground-borne vibration impact criteria);

(b) Expose people to or generate excessive ground vibration or ground-borne noise levels;

(c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project (e.g., an increase of 3 dB or greater);

[1] CEQA Guidelines, appendix G, item XII (a through f).

Table 13-7
GROUND-BORNE VIBRATION IMPACT CRITERIA

Land Use Category	Ground-borne Vibration Impact Levels (VdB re 1 µinch/sec, RMS)		
	Frequent Events[1]	**Occasional Events[2]**	**Infrequent Events[3]**
Category 1 Buildings where vibration would interfere with interior operations.	65 VdB[4]	65 VdB[4]	65 VdB[4]
Category 2 Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3 Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB

SOURCE: US Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006, FTA-VA-90-1003-06.

Notes:

1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
3. "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research should always require detailed evaluation to define the acceptable vibration levels. Ensuring low vibration levels in a building requires special design of HVAC systems and stiffened floors.

(d) Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would expose people residing or working in the project area to excessive noise levels; or

(f) For a project within the vicinity of a private airstrip, would expose people residing or working in the project area to excessive noise levels.

Regarding criteria (e) and (f), there are no airports or private airstrips in the project vicinity.

A significant impact would be identified if land uses proposed by the project would be exposed to noise levels exceeding each City's established guidelines for noise and land use compatibility. A significant noise impact would also result if noise levels increase substantially at existing noise-sensitive land uses (e.g., residences). Following common noise impact assessment practice, a project-related increase in noise level (e.g., traffic noise) of 3 dBA in residential areas where existing noise levels exceed 60 dBA CNEL would constitute a significant impact.

Construction noise levels would be treated differently because they are temporary and intermittent. Significant noise impacts would result from construction if noise levels were sufficiently high to interfere with speech, sleep, or normal residential activities. Construction-related hourly average noise levels received at noise-sensitive land uses above 60 dBA during the daytime and 55 dBA at night and at least 5 dBA higher than ambient noise levels would be considered significant.

Particular to the San Pablo Avenue Specific Plan, a significant noise impact would occur at proposed sensitive land uses where exterior noise levels resulting from BART trains would exceed 70 dBA L_{dn}, or where exterior noise levels from traffic would exceed 60 dBA L_{dn}. A significant impact would also result where interior day-night average noise levels would exceed 45 dBA L_{dn} or where interior maximum noise levels would exceed 50 dBA L_{max} in bedrooms or 55 dBA L_{max} in other habitable rooms. A substantial permanent noise increase would occur if the noise level increase resulting from the project is 3 dBA L_{dn} or greater. A substantial temporary noise level increase would occur where noise from construction activities exceeds 60 dBA L_{eq} and the ambient noise environment by at least 5 dBA L_{eq} at noise-sensitive uses in the project vicinity for a period greater than one year. A substantial permanent cumulative noise increase would occur if the project contributed a minimum noise increase of 1 dBA L_{dn} where cumulative noise levels are anticipated to increase by 3 dBA L_{dn} or more.

13.3.2 Relevant Specific Plan Components

The Specific Plan includes components that would avoid or reduce potential noise impacts. Especially relevant components are briefly summarized below. The reader is encouraged to review the entire Specific Plan sections for more detail. Note that within the context of the Specific Plan, a "standard" is a mandatory requirement, and a "guideline" is not mandatory but is strongly recommended.

2.05.06.01.06 Wind Power. These regulations allow the use of small, urban-scale wind turbines. Turbines must have an American Wind Energy Association (AWEA) rated sound level of 45 dBA or less.

2.05.08.06 Parking Lot Landscaping Standards. This section requires landscaping (including trees) and screening in parking areas, for both the interior and the perimeter of the parking area. The standards require the coordinated use of setbacks, landscaping (e.g., plants, earth berms, raised planters, hedges, shade trees), decorative masonry walls, and fences. The standards also require that the Zoning Administrator evaluate the solutions adjacent to residential uses for their effectiveness in addressing land use compatibility issues such as light/glare and noise.

13.3.3 Impacts and Mitigations

The Specific Plan includes Transit-Oriented Higher-Intensity Mixed Use (TOHIMU) and Transit-Oriented Mid-Intensity Mixed Use (TOMIMU) zones in El Cerrito, and Main Street and Neighborhood zones in Richmond (from the Richmond Livable Corridors Form-Based Code). These designations are intended to encourage a pedestrian-friendly, multi-modal environment with a mix of land uses in the Specific Plan area. Relevant to the existing noise environment, vehicular traffic along major arterials, I-80, and BART trains are the dominant noise sources in the Specific Plan area. Noise levels along these roadways exceed noise levels considered acceptable for residential development. Noise levels in close proximity to roadways within the Specific Plan area would also exceed acceptable levels for less-sensitive developments, such as professional offices. Residential outdoor common use areas and other outdoor spaces where quiet would be a benefit might be located in noise environments exceeding 60 dBA L_{dn} and would require noise mitigation, such as proper site planning, utilizing building massing, or sound barriers, to achieve a compatible noise environment.

Traffic volumes provided by Fehr and Peers (August 2013, see chapter 16 of this EIR) and the El Cerrito and Richmond general plans were used to calculate future noise levels for the Specific Plan noise assessment. The noise exposure levels for the “2040 With Specific Plan” traffic data, used to assess the compatibility of development facilitated by the Specific Plan, are shown in Table 13-8.

Impact 13-1: Noise and Land Use Compatibility. Residential land uses facilitated by the Specific Plan would be exposed to exterior noise levels exceeding 60 dBA L_{dn} from traffic noise and 70 dBA L_{dn} from BART noise. Future noise levels would exceed both El Cerrito’s and Richmond’s noise and land use compatibility standards. This is a ***potentially significant impact*** (see criterion [a] in subsection 13.3.1, "Significance Criteria," above).

Where exterior noise levels exceed 60 dBA L_{dn}, interior noise levels may also exceed the interior 45 dBA L_{dn} residential standard established in El Cerrito’s and Richmond’s general plans. Typical construction required in California provides approximately 15 dBA of noise reduction from exterior noise sources with windows partially open, and approximately 25 dBA of noise reduction with windows kept closed. Where exterior noise levels do not exceed 70 dBA L_{dn}, interior noise can be mitigated with standard wall and window construction and the inclusion of mechanical forced-air ventilation, subject to local building department requirements, to allow occupants the option of maintaining windows closed to control noise.

Table 13-8
"2040 WITH SPECIFIC PLAN" FUTURE TRAFFIC NOISE LEVELS

Noise Source	**L_{dn} (dBA) 50 ft. From Roadway or Rail Centerline**
San Pablo Avenue, between Fairmount Avenue and Manila Avenue	71
San Pablo Avenue, between Manila Avenue and Macdonald Avenue	73
Potrero Avenue	70
Central Avenue	70
Fairmount Avenue	64
Moeser Lane	64
Schmidt Lane	64
BART	76
I-80 with soundwalls (160 feet from center of roadway)	75
I-80 without soundwalls (160 feet from center of roadway)	82

SOURCE: Illingworth & Rodkin, April 2014.

Where exterior noise levels exceed 70 dBA L_{dn}, residential units would not normally be able to meet the 45 dBA L_{dn} interior standard through typical construction methods. This would be a potentially significant impact.

Commercial uses such as offices developed under the Specific Plan along roadways within the plan area would exceed the exterior commercial land use compatibility guideline of 65 dBA L_{dn} established in the El Cerrito General Plan. This would be a potentially significant impact.

Single event noise levels resulting from BART passbys and truck passbys on busy streets would exceed the City of El Cerrito's indoor instantaneous noise guidelines of 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms. This would be a potentially significant impact.

Mitigation 13-1. Future development would be exposed to outdoor noise levels exceeding acceptable levels as defined in the El Cerrito and Richmond general plans. Noise levels inside residential structures proposed in such noise environments would exceed 45 dBA L_{dn}, the local established land use compatibility threshold. In areas where residential developments would be exposed to an L_{dn} of greater than 60 dBA, El Cerrito General Plan Policy H3.9 requires the evaluation of mitigation measures for specific projects. In Richmond General Plan Action SN4.A, new noise-sensitive uses that are located in an area with day-night average sound levels (L_{dn}) of 55 or greater require a noise study report; the report shall identify noise mitigation measures that limit noise to an acceptable level compared to existing conditions.

- Utilize site planning to minimize noise in residential outdoor activity areas (shared outdoor space in multi-family developments) by locating the areas behind noise barriers, the buildings, in courtyards, or orienting the terraces to alleyways rather than streets, whenever possible. The goal is a maximum noise level of 60 dBA L_{dn} from roadway traffic and 70 dBA L_{dn} from BART noise.

- The City of El Cerrito requires project-specific acoustical analyses to achieve interior noise levels of 45 dBA L_{dn} or lower, and the adopted instantaneous noise levels in residential units exposed to exterior noise levels greater than 60 dBA L_{dn} should not exceed 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms. Building sound insulation requirements would need to include the provision of forced-air mechanical ventilation in noise environments exceeding 60 dBA L_{dn} so that windows could be kept closed at the occupant's discretion to control noise. Special building construction techniques (e.g., sound rated windows and building facade treatments) may be required where exterior noise levels exceed 65 dBA L_{dn}. These treatments include, but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, acoustical caulking, etc. The specific determination of what treatments are necessary will be conducted on a unit-by-unit basis during project design. Results of the analysis, including the description

(continued)

Mitigation 13-1 (continued):

of the necessary noise control treatments, will be submitted to the City, along with the building plans, which shall be revised as necessary or approved prior to issuance of a building permit. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 dBA L_{dn} or lower and meet instantaneous noise limits.

- Similar to above, noise insulation features shall be considered on a case-by-case basis for noise-sensitive offices and commercial uses proposed where noise levels exceed 65 dBA L_{dn}, in order to meet adopted noise standards.

Implementation of these measures would reduce potential noise and land use compatibility impacts to a ***less-than-significant level***.

Impact 13-2: Commercial Development Noise. The San Pablo Avenue Specific Plan would introduce commercial uses adjacent to residential land uses. Specific tenants for the commercial uses have not been identified, but uses would probably include retail stores, grocery stores, restaurants, or cafes. New commercial development proposed along with or next to residential development could result in noise levels exceeding City standards. Typical noise levels generated by loading and unloading would be similar to noise levels generated by truck movements on local roadways. Mechanical equipment would also have the potential to generate noise and would be a potential noise impact. This is a ***potentially significant impact*** (see criteria [a] and [d] in subsection 13.3.1, "Significance Criteria," above).

New commercial, office, or other non-residential development could produce noise (HVAC, loading docks, etc.) that could affect existing residences or other noise-sensitive land uses. New projects developed under the San Pablo Avenue Specific Plan would be subject to Richmond's and El Cerrito's general plans and municipal codes, which set limits for permissible noise levels during the day and night, and in terms of L_{dn} according to the land use zoning of the area. Goal SN4 of the Richmond General Plan states: "Prevent where possible, or mitigate noise impacts from industries, roadways, railroads and businesses in residential areas and sensitive uses in the community." Policy H3.11 of the El Cerrito General Plan states: "Noise created by commercial or industrial sources associated with new projects or developments shall be controlled so as not to exceed the noise level standards (shown in Table 4)…as measured at any affected residential land use." These policies would help ensure that existing and future residences and other noise-sensitive land uses would not be exposed to excessive noise from these types of noise sources.

Mitigation 13-2. New commercial development proposed in the same building as or adjacent to residential development could result in noise levels exceeding City standards.

- Noise levels at residential property lines from commercial development shall be maintained not in excess of the general plan and municipal code limits for the Cities of El Cerrito and Richmond. The approval of the commercial development shall require a noise study demonstrating how the business--including loading docks, refuse areas, and ventilation systems--would meet these requirements and would be consistent with the respective City's noise standards.

- Ensure that noise-generating activities, such as maintenance activities and loading and unloading activities, are limited to the hours of 7:00 AM to 9:00 PM.

Implementation of these measures would reduce the potential commercial development noise impacts to a ***less-than-significant level***.

Project-Generated and Cumulative Traffic Noise. Specific Plan development would not result in a substantial increase in traffic noise levels above existing noise levels along area roadways. The Specific Plan would not make a "cumulatively considerable" contribution to noise levels that would be substantially increased as a result of cumulative growth in the area. This is a less-than-significant impact.

Development facilitated by the Specific Plan would increase traffic on area roadways. Projected changes to traffic noise levels from existing levels were calculated by comparing existing and future traffic scenarios ("2040 With Specific Plan" and "2040 With Mode Shift") for the project development capacity (see EIR chapter 16). A substantial noise level increase is considered to be 3 dBA L_{dn} (see subsection 13.3.1, "Significance Criteria," above). Projected traffic noise increases throughout the Specific Plan area would be less than 2 dBA L_{dn}. This is a less-than-significant-impact.

The project would result in a significant cumulative traffic noise impact if existing sensitive receptors would be exposed to cumulative traffic noise level increases greater than 3 dBA L_{dn} above existing traffic noise levels and if the project would make a "cumulatively considerable" contribution to the overall traffic noise increase. A "cumulatively considerable" contribution would be defined as an increase of 1 dBA L_{dn} or more attributable solely to the proposed project (see subsection 13.3.1, "Significance Criteria," above).

Cumulative traffic noise levels, with or without the Specific Plan, are not anticipated to increase substantially along the roadways serving the Specific Plan area, and the project's contribution to cumulative traffic noise level increases is calculated to be less than 1 dBA L_{dn}. Cumulative traffic noise increases would not be considered substantial, and the project would not make a cumulatively considerable contribution to increased noise levels. This impact is considered ***less-than-significant*** (see criteria [a] and [c] in subsection 13.3.1, "Significance Criteria," above).

The development of new buildings facilitated by the Specific Plan, located immediately adjacent to the elevated BART structure, could reflect a minor amount of noise toward receptors east of BART. One-hundred percent of the acoustical energy resulting from BART would have to be reflected by new project buildings to result in a substantial increase in noise (3 dBA L_{dn}). At this time, the location, size, and materials of buildings that would be constructed along the BART right-of-way are not known. However, it can be reasonably assumed that the development facilitated by the project would not reflect 100 percent of the acoustical energy resulting from BART to receptors east of the elevated BART structure, and the impact would be ***less-than-significant*** because the noise increase resulting from possible minor reflections would not be perceptible (see criteria [a] and [c] in subsection 13.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Impact 13-3: Construction Noise. Businesses and residences would be intermittently exposed to high levels of noise throughout the 2040 plan horizon. Construction would elevate noise levels at adjacent businesses and residences by 15 to 20 dBA or more. This is a ***significant impact*** (see criteria [a] and [d] in subsection 13.3.1, "Significance Criteria," above).

Residences and businesses would be affected by construction noise. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction durations last over extended periods of time. Major noise-generating construction activities would include removal of existing pavement and structures, site grading and excavation, building erections, paving, and landscaping. In some cases, residences would be directly adjacent or in close proximity to construction activities.

The highest construction noise levels would be generated during grading and excavation, with lower noise levels occurring during building construction. Large pieces of earth-moving equipment, such as graders, scrapers, and bulldozers, generate maximum noise levels of 85 to 90 dBA at a distance of 50 feet. Typical hourly average construction-generated noise levels are about 80 to 85 dBA measured at a distance of 50 feet from the site during busy construction periods. In addition, pile driving may occur at some of the project sites. This type of construction activity can produce very high noise levels of approximately 105 dBA at 50 feet, which are difficult to control. These noise levels drop off at a rate of about 6 dBA per doubling of distance between the noise source and receptor. Intervening structures or terrain would result in lower noise levels.

Although construction noise would be localized to the individual site location, businesses and residences would be intermittently exposed to high levels of noise throughout the plan horizon. Construction would elevate noise levels at adjacent businesses and residences by 15 to 20 dBA or higher. Such a large increase in noise levels, although short-term in duration, would be a potentially significant impact.

Mitigation 13-3. Construction equipment shall be well-maintained and used judiciously to be as quiet as practical. The following measures, when applicable, are recommended to reduce noise from construction activities:

- Equip all internal combustion engine-driven equipment with mufflers that are in good condition and appropriate for the equipment.
- Utilize "quiet" models of air compressors and other stationary noise sources where technology exists.
- Locate stationary noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction area.
- Prohibit unnecessary idling of internal combustion engines.
- Pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.
- Construct solid plywood fences around construction sites adjacent to operational business, residences, or noise-sensitive land uses.
- A temporary noise control blanket barrier could be erected, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.
- Route construction-related traffic along major roadways and as far as feasible from sensitive receptors.
- Ensure that construction activities (including the loading and unloading of materials and truck movements) are limited to the hours of 7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 8:00 PM on weekends and holidays.
- Ensure that excavating, grading, and filling activities (including warming of equipment motors) are limited to between the hours of 7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 8:00 PM on weekends and holidays.
- Businesses, residences, or noise-sensitive land uses adjacent to construction sites shall be notified of the construction schedule in writing. Designate a "construction liaison" who would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of

(continued)

<u>Mitigation 13-3 (continued)</u>:

the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site.

Although the above measures would reduce noise generated by construction, the impact would remain ***significant and unavoidable*** as a result of the extended period of time that adjacent receivers could be exposed to construction noise.

Impact 13-4: Construction-Related Vibration. Residences, businesses, and historic structures could be exposed to construction-related vibration during the excavation and foundation work of buildings. This is a ***significant impact*** (see criterion [b] in subsection 13.3.1, "Significance Criteria," above).

Construction of projects within the San Pablo Avenue Specific Plan area may, in some cases, be located directly adjacent to existing structures, including weakened structures. Construction activities may include demolition of existing structures, site preparation work, excavation of below-grade levels, foundation work, pile driving, and new building erection. Demolition for an individual site may last several weeks and at times may produce substantial vibration. Excavation for underground levels would also occur on some project sites and vibratory pile driving could be used to stabilize the walls of the excavated area. Piles or drilled caissons may also be used to support building foundations.

Pile driving has the potential of generating the highest ground vibration levels and is of primary concern to architectural damage, particularly when it occurs within 100 to 200 feet of structures. Vibration levels generated by pile driving activities would vary depending on project conditions such as soil conditions, construction methods, and equipment used--but could exceed the recommended PPV thresholds to avoid architectural damage. Other project construction activities--such as caisson drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.)--may also potentially generate substantial vibration in the immediate vicinity.

Depending on the proximity of existing structures to each construction site, the structural soundness of the existing buildings, and the methods of construction used, vibration levels may be high enough to damage existing structures. Given the scope of the Specific Plan and the close proximity of many existing structures, ground-borne vibration impacts would be potentially significant.

As with any type of construction, vibration levels may at times be perceptible. However, construction phases that have the highest potential of producing vibration (pile driving and use of jackhammers and other high power tools) would be intermittent and would only occur for short periods of time for any individual project site. By use of administrative controls such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration to hours with least potential to affect

nearby businesses, perceptible vibration can be kept to a minimum and would not result in a physical or perceived significant impact.

Mitigation 13-4. The following measures are recommended to reduce vibration from construction activities:

- Avoid impact pile driving where possible. Drilled piles causes lower vibration levels where geological conditions permit their use.
- Avoid using vibratory rollers and tampers near sensitive areas.
- In areas where project construction is anticipated to include vibration-generating activities, such as pile driving, in close proximity to existing structures, site-specific vibration studies shall be conducted to determine the area of impact and to present appropriate mitigation measures that may include the following:
  - Identify sites that would include vibration compaction activities (such as pile driving) and have the potential to generate ground-borne vibration, and the sensitivity of nearby structures to ground-borne vibration. Vibration limits shall be applied to all vibration-sensitive structures located within 200 feet of the project. A qualified structural engineer should conduct this task.
  - Develop a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions.
  - Design construction contingencies that would be implemented when vibration levels approached the limits.
  - At a minimum, conduct vibration monitoring during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for more or less intensive measurements.
  - When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.
  - Conduct post-survey on structures under either of these circumstances: (a) when construction monitoring has indicated high vibration levels or (b) when complaints of damage have been made due to construction activities. Make

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Mitigation 13-4 (continued):

appropriate repairs or compensation when damage has resulted from construction activities.

It may not be possible to avoid using pile drivers, vibratory rollers, and tampers entirely during construction facilitated by the San Pablo Avenue Specific Plan. Due to the density of development in the area, some of these activities may take place near sensitive areas. In these cases, the mitigation measures listed above may not be sufficient to reduce ground-borne vibrations below a level of significance. Therefore, this impact would be ***significant and unavoidable***.

Ground Vibration from BART Operations. Future development under the Specific Plan would not expose persons to excessive vibration from BART operations. This impact is considered less-than-significant.

Along the entire Specific Plan area, BART operates on an elevated platform. According to data in the FTA Transit Noise and Vibration Impact Assessment, vibration levels resulting from BART would be well below the 72 VdB guidelines for Category 2 land uses near the footprint of the elevated structure. This impact is considered ***less-than-significant*** (see criterion [b] in subsection 13.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

14. POPULATION AND HOUSING

This EIR chapter describes population and housing implications of the proposed Specific Plan. The chapter addresses the specific population and housing impact concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan induce substantial population growth, displace substantial numbers of existing housing, or displace substantial numbers of people.[1]

14.1 SETTING

14.1.1 Population

Table 14.1 shows 2010 and the projected 2040 population characteristics within El Cerrito, based on demographic data developed by the Association of Bay Area Governments (ABAG).[2] As shown, the estimated year 2010 population of El Cerrito was approximately 27,277. El Cerrito's population is projected by ABAG to grow to 31,790 by 2040, a 16.5-percent increase over the 30-year period from 2010 to 2040.

14.1.2 Housing

As indicated in Table 14.1, in 2010, there were approximately 10,720 housing units in El Cerrito, according to ABAG. ABAG expects that the number of housing units in El Cerrito will increase by about 11.9 percent between 2010 and 2040, reaching a projected total of 12,000 housing units by 2040.

14.2 REGULATORY SETTING

El Cerrito Municipal Code – Section 19.22.030. This section (Affordable Housing Bonus) is intended to: (1) implement the General Plan Housing Element "for encouraging and expanding housing opportunities for households with very-low and lower incomes, seniors, disabled, and other persons with special housing needs"; (2) "allow for density bonuses and additional incentives, consistent with State Government Code section 65915"; (3) "provide additional incentives for affordable housing containing three or more bedrooms"; and (4) "ensure that lower income rental units remain affordable for at least 30 years or such other term approved by the City, consistent with State law."

This Municipal Code section would be applied to requests for additional height and other incentives as described in the Specific Plan Form-Based Code.

[1] CEQA Guidelines, appendix G, item XIII (a through c).

[2] Association of Bay Area Governments and Metropolitan Transportation Commission, Draft Plan Bay Area: Strategy for a Sustainable Region, Final Forecast of Jobs, Housing and Population, July 2013, Housing Growth by Jurisdiction and PDA/Investment Area (Contra Costa County).

Table 14.1
ESTIMATED POPULATION AND HOUSING GROWTH, 2010-2040--EL CERRITO (CITYWIDE)

	2010	2040	Percent Change, 2010-2040
Total population (residents)	27,277	31,790	+16.5
Total households	10,140	11,560	+14.0
Persons per household	2.69	2.75	+2.2
Housing units	10,720	12,000	+11.9

SOURCE: ABAG, 2013; MIG, 2014.

Richmond Municipal Code – Chapter 15.04.810.050. This chapter (Housing Density Bonus), similar to section 19.22.030 of the El Cerrito code, is intended to comply with Government Code section 65915 and allow for increased residential densities for projects that include senior housing or housing that is "affordable to moderate, lower, or very-low income persons."

This Municipal Code section would be applied to requests for additional height as described in the Specific Plan Form-Based Code.

14.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to population and housing that could result from the Specific Plan.

14.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact related to population and housing if it would:

(a) Induce substantial population growth either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure); or

(b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere.

14.3.2 Relevant Specific Plan Components

The Specific Plan document itself does not include components directly related to the CEQA-identified population and housing issues.

[1]CEQA Guidelines, appendix G, item XIII (a through c).

14.3.3 Impacts and Mitigations

This section describes potential impacts on population and housing that could result from the San Pablo Avenue Specific Plan. Related to the significance criteria above, it is noted that the Specific Plan is a long-term plan intended to guide expected growth in the Specific Plan area through 2040. Because the Plan is not a specific development project, the forecasted development capacity in the Specific Plan area may or may not occur, based on market conditions. This EIR evaluates potential impacts based on the forecasted development capacity, consistent with the conservative approach encouraged by the California Environmental Quality Act (CEQA).

Effects on Population Growth. Based on the forecasted development capacity under the proposed Specific Plan (see chapter 3, Project Description, of this EIR), the plan is anticipated to result in the following approximate net new development:

- 1,706 net new residential units, and
- 243,112 net new square feet of commercial space.

This capacity forecast is based on entitled and planned projects within the Plan area in the cities of El Cerrito and Richmond and projections for the construction of projects consistent with the Form-Based Code development standards. The Specific Plan assumes an average of 2.25 persons per household (pph) in the Specific Plan area (based on ABAG Projections and Priorities 2009, Building Momentum, p. 58). Using this factor, Specific Plan implementation could generate up to approximately 3,840 new residents in the Specific Plan area by the year 2040 (the estimated plan buildout horizon).

The El Cerrito General Plan identifies the San Pablo Avenue corridor as the focus of new housing and population growth in the City, due its proximity to existing services, including public transportation infrastructure, and the opportunities for increased land use intensity afforded by underutilized land and surface parking lots. Similarly, the Richmond General Plan (Maps 3.6a and 3.6b) identifies its portion of the Specific Plan area as “Change Area 4” for medium density, mixed-use (residential and commercial) development.

The Association of Bay Area Governments (ABAG) and the Metropolitan Transit Commission (MTC) have collaboratively adopted Plan Bay Area: Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2012-2040 (July 18, 2013). Consistent with the General Plans of El Cerrito and Richmond, the San Pablo Avenue Specific Plan area is identified as a "Priority Development Area" in Plan Bay Area (Appendix D: Contra Costa PDA Portfolio), where “infill development and intensification is envisioned.”

Plan Bay Area (Appendix D, pp. D-11 through D-14) forecasts an increase in housing units in the Specific Plan area from approximately 1,340 in 2010 to 2,350 in 2040, an increase of 1,010 units. The Specific Plan has forecast up to approximately 1,706 new residential units in the Specific Plan area through 2040, in recognition of the significant development potential of underutilized parking lots and vacant properties within the Plan area.

It is important to note that the Plan Bay Area forecasts are not mandates, or even goals, identified by ABAG and passed down to cities. Household and job allocations are based on potential Bay Area-wide job, population, and household growth statistics that take into account national, State, and regional economic trends, including affordability, economic feasibility, and

demand; Plan Bay Area then allocated a portion of this future growth to each Priority Development Area across the nine Bay Area counties based on existing infrastructure levels and support services, opportunities for growth, and zoning regulations currently in place in each jurisdiction. The PDA/OBAG (One Bay Area Government) Working Group includes representatives from member jurisdictions, who review PDA boundaries, forecasts, market demand, strategies, and policies as part of an ongoing, coordinated effort. For the purpose of this EIR, Plan Bay Area growth projections were applied to the new development standards, including on-site parking, site layout and height parameters, to assume a more realistic growth projection for the Specific Plan area. These design standards were developed to be consistent with the goals of Plan Bay Area: climate protection, adequate housing, healthy and safe communities, open space and agricultural preservation, equitable access, economic vitality, and transportation system effectiveness, but incorporate locally refined data more telling of the development feasibility of the Specific Plan than would be possible on a regional planning level.

As described throughout this EIR (e.g., chapter 3--Project Description; chapter 16--Transportation and Circulation; chapter 17--Utilities and Service Systems), Specific Plan implementation would not extend roads or infrastructure through undeveloped or low-density areas and, therefore, would not indirectly induce substantial population growth beyond the Specific Plan area boundaries. Rather, Specific Plan implementation would facilitate the projected residential and commercial growth within a transit-rich, mixed use Specific Plan area identified for such growth in both local and regional plans and forecasts. Therefore, this impact is considered ***less-than-significant*** (see criterion [a] in subsection 14.3.1, “Significance Criteria,” above). Also see Chapter 19 (CEQA-Mandated Sections), Section 19.2 (Growth-Inducing Effects).

Mitigation. No significant impact has been identified; no mitigation is required.

Population and Housing Displacement Effects. The San Pablo Avenue Specific Plan is an integrated long-term plan of standards and guidelines whose development potential would be initiated voluntarily by property owners. The Specific Plan does not contain any provisions authorizing residential eminent domain by either the City of El Cerrito or the City of Richmond. Infrastructure, roadway, open space, and other public improvements proposed under the plan would not require the displacement of housing. Over time, existing residential units may be voluntarily replaced by property owners in accordance with Specific Plan provisions and allowable land uses. However, the residential and mixed use (residential/commercial) focus of the Specific Plan provides for the addition of approximately 1,706 net new residential units in the well-served Specific Plan area (see Effects on Population Growth above). The Plan is likely to offset existing high transportation costs for future residents currently dependent on private automobiles by providing a mixture of housing types near existing public transportation infrastructure, while also improving access and connectivity to these support services for existing residents through bicycle and pedestrian infrastructure projects. In addition, the affordable housing density bonuses and regulations implemented by El Cerrito and Richmond (see Regulatory Setting above) would apply to the Specific Plan area. Based on this discussion, impacts on population and housing displacement are considered ***less-than-significant*** (see criterion [b] in subsection 14.3.1, “Significance Criteria,” above).

Mitigation. No significant impact has been identified; no mitigation is required.

Temporary Employment Impacts. Temporary construction jobs would also be created over the timeframe of Specific Plan implementation. It is anticipated that an adequate construction work force will continue to exist within commute distance of the Specific Plan area, thereby making highly unlikely a substantial increase in population due to project construction. The actual number of construction jobs facilitated by the plan would depend on the construction dollars spent and the construction schedules; these variables cannot be accurately quantified at this time. Nevertheless, these project-generated employment opportunities would represent a beneficial temporary economic effect of the Specific Plan. In and of itself, any population growth associated with construction activity under the plan would represent a ***less-than-significant environmental impact*** (see criterion [a] in subsection 14.3.1, “Significance Criteria,” above).

Mitigation. No significant environmental impact has been identified; no mitigation is required.

15. PUBLIC SERVICES

This EIR chapter describes existing conditions for fire protection and emergency medical service, police protection, public schools, parks, and recreational facilities in the Specific Plan area. The chapter addresses the public service impact concerns identified by the CEQA Guidelines--i.e., (1) would significant environmental impacts result from the construction of new or physically altered government facilities proposed or required as part of the Specific Plan or (2) would the project result in substantial physical deterioration of a park or recreational facility.[1]

15.1 SETTING

15.1.1 Fire Protection and Emergency Medical Service

(a) Existing Fire Protection in Plan Area. The El Cerrito Fire Department (ECFD) has automatic aid response agreements with the City of Richmond Fire Department (RFD), Contra Costa County Fire Protection District, and City of Albany Fire Department.

For the 2013-2014 fiscal year, the ECFD has 37 personnel; two paramedic assignments are authorized for each responding engine to provide advanced life support services during emergency medical responses. The El Cerrito General Plan states a goal to maintain an average emergency response time for the first fire engine of less than 6 minutes for 95 percent of all emergency calls for service, provided adequate financial resources are available. The RFD has a total of 97 positions, including 93 sworn personnel plus 3 administrative staff and an emergency services manager. All RFD personnel are trained to the level of EMT-D and HazMat First Responder Operational.

El Cerrito Fire Station 71 is located at 10900 San Pablo Avenue (in the Specific Plan area, at the corner of Manila Avenue). The station was built in 1964 and is the headquarters for both the ECFD and the El Cerrito Police Department. In addition to the Fire Department's administration, Station 71 is home to Engine 71, a 2006 custom Type I fire engine that can pump 1,500 gallons per minute; Truck 71, a 1991 custom aerial ladder truck with a 105-foot aerial ladder and a built-in waterway that can provide an elevated water stream; and OES #300, a 2003 custom Type I fire engine owned by the State of California and provided to the City under contract. In addition, the City recently purchased a 2014 Spartan 4-door cab and chassis with a 103' ladder, which expanded the aerial capability of the Fire Department beyond that of the 1991 custom aerial ladder truck. The new truck was purchased in order to increase access to the roof area of the larger structures anticipated throughout the City. Other ECFD facilities include Station 72 at 1520 Arlington Boulevard, with Engine 72 and Engine 372, and Station 65 at 217 Arlington Avenue in Kensington, with Engine 65 and Engine 365. Station 65 is owned by the Kensington Fire Protection District, but the ECFD has provided personnel and administrative services under contract since 1995.

[1] CEQA Guidelines, appendix G, items XIV (a) and XV (a and b).

The RFD has 7 fire stations, 7 engine companies, 1 truck company, 2 rescue units, 1 HazMat unit, and 1 breathing support unit.

(b) Emergency Training. The ECFD Training Officer supervises and manages the Emergency Medical Programs that encompass the Department's EMT and Paramedic training. Neighborhood disaster preparedness is managed through the Community Emergency Response Team Program (see below). The RFD participates in a joint training program with the ECFD for emergency scene management (including ventilation, forcible entry, and automobile extrication) and emergency patient care (including CPR and EMT re-certification). Richmond firefighters also participate in ongoing training to maintain skill levels and to keep certifications current.

(c) Emergency Services Plan. The ECFD is responsible for the City's Emergency Operations Center (EOC) and development of the Emergency Operations plan in the event of a major disaster affecting El Cerrito and Kensington. The RFD Office of Emergency Services (OES) leads the City of Richmond's comprehensive emergency management, including planning and preparedness for, response and recovery from, and mitigation of natural, manmade, and accidental incidents of high consequence. In addition, both the ECFD and RFD participate in the Community Emergency Response Team (CERT) program, which provides training for fire safety, hazardous material and terrorist incidents, disaster medical operations, and search and rescue to provide its citizens with the ability to be self-sufficient for up to 72 hours and beyond in the event of a major disaster.

15.1.2 Police Protection

(a) Existing Police Services. The El Cerrito Police Department (ECPD) provides community police services through three divisions: Field Operations, Administrative and Support, and Special Operations. The ECPD operates out of the Public Safety Building at 10900 San Pablo Avenue (in the Specific Plan area, at the corner of Manila Avenue), which they share with the Fire Department. The City contracts with State and other local agencies to provide and support police services. Police dispatching is contracted with the Richmond Police Department (RPD); criminalist services and animal control services are contracted with Contra Costa County.

The Field Operations Division provides directed police patrols on a 24-hour basis. The Field Operations Division consists of four teams, each lead by a sergeant. One of the four teams is on-duty at all times. Patrol Officers can deploy with automated external defibrillators to help cardiac patients; all are trained in advanced and tactical first aid. This division also includes the Bicycle Patrol Program and K-9 Unit.

(b) Existing Police Response Times in Project Vicinity. ECPD has a response time standard of 5 minutes for Priority 1 and 2 calls (these are calls for service considered emergencies, with the potential for serious injury and/or death). Response times are calculated by when the call is received by dispatch and when the first unit arrives on scene.

RPD operations are broken into three districts (Northern, Central, and Southern), with each district divided into three beats. The City of Richmond portion of the Specific Plan area is located in the Southern District and covered by officers in Beat 3.

(c) Existing Police Department Staffing. ECPD staffing for 2012 included 46 sworn officers and 10.55 equivalent professional staff. Four teams patrol the city 24 hours a day year round:

Team #1 Dayshift (midweek patrols, 6:00 AM to 6:00 PM), Team #2 Graveyard (midweek patrols, 6:00 PM to 6:00 AM), Team #3 Dayshift (weekend patrols, 6:00 AM to 6:00 PM), and Team #4 Graveyard (weekend patrols, 6:00 PM to 6:00 AM). The El Cerrito General Plan states a goal to maintain the current service level of 1.26 officers per 1,000 daytime population, provided adequate financial resources are available.

RPD staffing is authorized for 195 sworn officers (including all sworn personnel from the newest recruit all the way to the Chief). Approximately 100 officers are assigned to patrol duties as beat cops or supervisors. As of February 2014, 33 police officer positions were either vacant or occupied by personnel unable to work in a solo patrol capacity due to injuries or administrative leave status, or because they were still in the Police Academy or otherwise in an early phase of their training. Other positions in the department are unable to be filled because of budget cuts.

15.1.3 Public Schools

The Specific Plan area is located within the West Contra Costa Unified School District (WCCUSD). The following public schools would serve students in the Specific Plan area: Fairmont Elementary School (K-5), Harding Elementary School (K-5), Madera Elementary School (K-5), Portola Middle School (6-8), and El Cerrito Senior High School (9-12). None of the schools are in the Specific Plan area. Table 15.1 shows school enrollment for the 2012-13 school year. Table 15.2 shows school district 2013 student yield factors.

WCCUSD is responsible for levying impact fees on new development. New residential and commercial development in the Specific Plan area would be required to pay the State-authorized school impact fees to the extent approved by the school district. Pursuant to section 65995(3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees *"...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization...."*

15.1.4 Parks and Recreational Facilities

(a) Existing Parks and Recreational Facilities. The City of El Cerrito Recreation Department offers a variety of family activities and programs, including visual arts, sports, tutoring, performing arts, swimming, child care, martial arts, and special events. The department also schedules activities and rentals of buildings, picnic areas, sports fields, and tennis courts. Parks and recreational facilities located in El Cerrito are:

- Arlington Park and Clubhouse
- Baxter Creek Park (in Specific Plan area)
- Canyon Trail Park and Clubhouse
- Central Park (in Specific Plan area)
- Cerrito Vista Park
- El Cerrito Community Center
- Fairmont Park and Clubhouse
- Harding Park and Clubhouse
- Hillside Natural Area
- Huber Park
- Madera Clubhouse

Table 15.1
WCCUSD SPECIFIC PLAN AREA SCHOOL ENROLLMENT, 2012-2013

School	Enrollment
Fairmont Elementary School	590
Harding Elementary School	343
Madera Elementary School	551
Portola Middle School	525
El Cerrito Senior High School	1,297

SOURCE: West Contra Costa Unified School District (WCCUSD), School Accountability Report Cards, Data from the 2012-13 School Year.

Table 15.2
2013 WCCUSD YIELD FACTORS

Residential Unit Type	K-6 students	7-8 students	9-12 students
Single Family Detached Units	0.210	0.056	0.147
Single Family Attached Units	0.047	0.015	0.014
Multi-family Attached Units	0.333	0.154	0.185

SOURCE: Davis Demographics & Planning, Inc., April 23, 2013.

Note:

Yield factors = students generated per household across school district.

- Ohlone Greenway (in Specific Plan area)
- Poinsett Park
- Tassajara Park and Pottery Studio

(b) Park and Recreational Service Standard. The El Cerrito General Plan states a minimum level of service standard of 5 acres per 1,000 residents. In 2010, the City had 182 acres of park and open space, including 32 acres of publicly owned parks, 100 acres of public open space, 23 acres of recreational facilities, and 27 acres of school district-owned recreation areas.[1] Based on the 2010 El Cerrito population of 27,277 residents, the City has a baseline level of service for parks and open spaces of 6.67 acres per 1,000 residents.

15.1.5 Other Public Facilities

(a) Libraries. The El Cerrito Library was built in 1949 and expanded to its current size in 1960. It is located at 6510 Stockton Avenue (next to Fairmont Elementary School) and shares a parking lot with the Open House Senior Center. The library is part of the Contra Costa County Library System.

The library is approximately 6,400 square feet, offers a collection of 36,426 pieces, and has 9 computers. The collection includes books in Spanish, Chinese, and Japanese, and also offers a wide range of videos, CDs, magazines, and recorded books. The library also offers special children's programs as well as local author readings and slide lectures.

(b) Senior Center. Built in 1980, the Open House Senior Center provides programming for senior and adult activities as well as a rental facility for community use.

15.2 REGULATORY SETTING

15.2.1 Fire Protection and Emergency Medical Service

California Emergency Management Agency (CAL EMA). CAL EMA serves as the lead State agency for emergency management in California. CAL EMA coordinates the State response to major emergencies in support of local government. It is also responsible for collecting, verifying, and evaluating information about the emergency, facilitating communication with local government, and providing affected jurisdictions with additional resources when necessary. CAL EMA may task State agencies to perform work outside their day-to-day and statutory responsibilities. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the Statewide Mutual Aid System.

Federal Emergency Management Agency. In March 2003 the Federal Emergency Management Agency (FEMA) became part of the US Department of Homeland Security. FEMA's continuing mission within the new department is to lead the effort to prepare the nation for all hazards and effectively manage Federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the US Fire Administration.

[1] Eden Housing Draft Environmental Impact Report, August 2013.

Uniform Fire Code. The Uniform Fire Code (UFC) contains Federal regulations relating to construction and maintenance of buildings and the use of premises, including specialized technical regulations related to fire and life safety. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and premises.

California Fire Code (Title 24, Part 9, California Code of Regulations). The California Fire Code incorporates the Uniform Fire Code with necessary California amendments. This code prescribes regulations consistent with nationally recognized good practices for the safeguarding, to a reasonable degree, of life and property from the hazards of fire explosion. It also addresses dangerous conditions arising from the storage, handling, and use of hazardous materials and devices; conditions hazardous to life or property in the use or occupancy of buildings or premises; and provisions to assist emergency response personnel.

California Building Standards Code. The 2013 California Building Code (CBC) became effective January 1, 2014, including Part 9 of Title 24, the California Fire Code.

California Code of Regulations, Title 19. Title 19, chapters one through six of the California Code of Regulations (CCR), establishes regulations related to emergency response and preparedness under CAL EMA.

California Health and Safety Code (Sections 13000 et seq.). This code establishes State fire regulations, including regulations for building standards (also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Occupational Safety and Health Administration Regulations. The Occupational Safety and Health Administration (OSHA), under the US Department of Labor, sets and enforces workplace standards and provides training, outreach, education, and assistance.

15.2.2 Police Protection

The El Cerrito Police Department and the Richmond Police Department administer regulations within their jurisdictions.

15.2.3 Public Schools

California Code of Regulations. The California Code of Regulations, Title 5, Education Code, governs all aspects of education within the state.

15.2.4 Parks and Recreational Facilities

Quimby Act (1975). The Quimby Act allows cities and counties to adopt park dedication standards/ordinances requiring developers to set aside land, donate conservation easements, or pay fees towards parkland.

15.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to public services that could result from the Specific Plan, and discusses components of the Specific Plan that would avoid or reduce those potential impacts. The section also recommends any mitigation measures needed to reduce remaining significant impacts.

15.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would have a significant impact related to public services if it would:

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

- fire protection and emergency medical service,
- police protection,
- public schools,
- parks, or
- other public facilities;

(b) Result in an increased use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

(c) Include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

15.3.2 Relevant Specific Plan Components

The Specific Plan includes components that would avoid or reduce potential impacts on public services. Components especially relevant to the evaluation of potential impacts are briefly summarized below. The reader is encouraged to review the entire Specific Plan sections for more detail. Note that within the context of the Specific Plan, a “standard” is a mandatory requirement, and a “guideline” is not mandatory but is strongly recommended.

2.01.06 FBC Summary: Open Space Standards - On-Site Open Space Requirements. This section defines the following requirements:

- Private/common open space - 80 sq. ft./dwelling unit minimum
- Public open space - each sq. ft. of public open space counts as 2 sq. ft. toward private open space requirement
- Public open space for buildings over 25,000 sq. ft. - additional 25 sq. ft./1,000 sq. ft. of building

[1] CEQA Guidelines, appendix G, items XIV (a) and XV (a and b).

- "Applicants may apply to pay an in-lieu fee. Sites identified on the Open Space Regulatory Plan will be strongly encouraged to provide on-site open space."

2.06 General Public and Private Open Space Standards. This section details the requirements outlined in section 2.01.08 (see above). The standards are intended to: (1) encourage urban open spaces, which include plazas, public open spaces, midblock connections, and community gardens; (2) allow for private open space in residential buildings; and (3) customize the design of open space to the site context, including daylighting or landscaping of creeks, contributing to stormwater improvements, and implementing the Urban Greening Plan. The section includes design guidelines for public open spaces, plazas, midblock connections, greenways/creek greenways, repurposed open spaces (vacant or underutilized spaces), and temporary open spaces.

15.3.3 Impacts and Mitigations

Increase in Fire Protection/Emergency Medical Service (EMS) Demands. The El Cerrito Fire Department would provide first response services to the portion of the Specific Plan area within El Cerrito, and the Richmond Fire Department would do the same for the Richmond portion of the Specific Plan area. Additionally, the two cities have an automatic response agreement with each other to provide service across jurisdictional boundaries. Both El Cerrito and Richmond fire department service standards set a maximum response time of 6 minutes for 90 percent or more of emergency calls. As part of the standard citywide development review process for each individual project proposal, the project applicant must demonstrate that adequate emergency water supply (fire flow), storage, and conveyance facilities, as well as unobstructed access for fire protection equipment and personnel, will be provided. Also, final project designs are subject to review and approval from the jurisdictional fire department. Without these departmental approvals, the development would not receive a building permit or occupancy permit, depending on the specific fire protection issue (e.g., emergency access provisions, hydrant pressure, fire alarm and smoke detector adequacy).

For each jurisdiction, any demand for additional fire protection personnel or equipment resulting from Specific Plan implementation (e.g., for higher buildings than allowed under current zoning) would be funded by currently adopted public facility fees levied on the new development (in Richmond) and by the annual budget review and allocation (in El Cerrito). This demand is not expected to require new or physically altered fire protection facilities, the construction of which would cause significant environmental impacts. Based on the above standard requirements of each jurisdictional city, project impacts on fire protection/EMS demands are considered ***less-than-significant*** (see criterion [a] in subsection 15.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Increase in Police Service Demands. The El Cerrito Police Department would provide police protection to the portion of the Specific Plan area within El Cerrito, and the Richmond Police Department would do the same for the Richmond portion of the Specific Plan area. El Cerrito contracts with the City of Richmond for emergency dispatching and with State and County agencies for investigative support services. The El Cerrito Police Department has a 3-minute service standard for emergency responses, and the Richmond Police Department has a comparable 3-to-5-minute standard. As part of each City's standard police department development review process for each individual project proposal, the police department makes

a determination regarding the ability of the department to provide services and makes project-specific recommendations in order to maintain acceptable levels of service (e.g., in addition to the department's response time standard, the El Cerrito General Plan states a goal to maintain the current service level of two officers per 1,000 daytime population, provided adequate financial resources are available). Also, final project designs are subject to review and approval from the jurisdictional police department. Without these departmental approvals, the development would not receive a building permit or occupancy permit, depending on the specific police protection/security issue (e.g., security lighting, parking area security provisions, public visibility/defensible space--"eyes-on-the-street").[1]

The Specific Plan would result in more "eyes-on-the-street" by facilitating a more pedestrian-friendly Specific Plan area. For example, the Specific Plan components summarized in subsection 15.3.2 above require private and public open spaces that would contribute to a more publicly accessible streetscape, including connecting plazas, pocket parks, midblock connections, and community gardens. The anticipated increase in pedestrian activity would provide a safer public environment.

For each jurisdiction, any demand for additional police protection personnel or equipment resulting from Specific Plan implementation (e.g., to account for an increased residential population) would be funded by currently adopted public facility fees levied on the new development (in Richmond) and by the annual municipal budget review and allocation process (in El Cerrito). This demand is not expected to require new or physically altered police protection facilities, the construction of which would cause significant environmental impacts. Based on the above standard requirements of each jurisdictional city, project impacts on police protection are considered ***less-than-significant*** (see criterion [a] in subsection 15.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Impacts on Public Schools. The Specific Plan area is located within the West Contra Costa County Unified School District. Long-term Specific Plan implementation would result in up to approximately 1,706 net new residences. According to the school district student yield factors for multi-family units (the most conservative factors--see Table 15.2), these residences would generate approximately 1,147 new students in the district schools over the approximately 25-year horizon of the Specific Plan. The new students would be accommodated in existing schools, and Specific Plan implementation would not result in the need for new or expanded school facilities. The residential and commercial components of the project would be required to pay the State-authorized school impact fees to the extent approved by the school district. Pursuant to section 65995(3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees *"...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization...."* Therefore, subsequent to payment of statutory fees, school impacts would be

[1]"Eyes-on-the-street" is a concept derived from defensible space, which is a model for residential environments in which urban design, architecture, and site planning are used to enable residents to maintain views of, and collectively use, a site's public areas in order to indirectly inhibit the potential for crime. (Newman, Oscar. Defensible Space: Crime Prevention Through Urban Design, 1973.)

considered ***less-than-significant*** (see criterion [a] in subsection 15.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Impacts on Parks and Recreational Facilities. As discussed in chapter 14 (Population and Housing) of this EIR, the anticipated 1,706 net new residences facilitated by the Specific Plan would increase local population by approximately 3,840 people (2.25 persons/unit). These residents could be expected to increase demand for parks and recreational facilities, reducing the City's level of service to 5.85 acres per 1,000 residents (below the 2010 level of 6.67 acres per 1,000 residents) with no increase in acreage of parks or open spaces; this is above the level of service standard adopted under the City's General Plan. In addition, the Specific Plan includes numerous provisions for new open spaces, as summarized in subsection 15.3.2 (Relevant Specific Plan Components) above. In the Plan's Open Space Plan, potential public open space locations are noted near San Pablo Avenue and Fairmount, Avila, Stockton, Burlingame, Donal, Cutting, Knott, and Conlon. The Specific Plan open space strategy is intended to benefit both the Specific Plan area and the surrounding neighborhoods.

The Ohlone Greenway, including greenway improvements and numerous connections with San Pablo Avenue, will remain an important pedestrian and bicycle pathway running generally parallel with San Pablo Avenue. The City of El Cerrito is currently implementing the Ohlone Greenway Master Plan, which was developed under the direction of the City's Parks and Recreation Department by the Department of Public Works. The Richmond Greenway branches off the Ohlone Greenway to parallel the BART tracks as they curve into Richmond. The San Pablo Avenue Specific Plan has been intentionally formulated to complement, and be consistent with, both the Ohlone Greenway Master Plan and the Richmond Greenway.

In addition to the Specific Plan open space provisions described above, State law (the Quimby Act) authorizes local governments to require the dedication of park land or on-site provision of open space/recreational facilities, or to impose an in-lieu fee or a combination of these options, to offset the additional demand for parks and recreational facilities generated by new residential development. The City of Richmond implements such requirements for new residential development. Implementation of the Specific Plan open space standards in conjunction with the Quimby Act would ensure that impacts to parks and recreational facilities would be ***less-than-significant*** (see criteria [a] through [c] in subsection 15.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required. See "Construction Period Impacts" below.

Impacts on Other Public Facilities. The project-facilitated increase in residential, commercial, and public activity in the Specific Plan area, and associated job creation and increases in business activity, would result in a corresponding incremental increase in demand for other public, municipal services (e.g., library). However, these incremental service demand increases would not be sufficient to directly result in the need for new or physically altered government facilities, the construction of which would cause significant environmental impacts, and the impact is considered ***less-than-significant*** (see criterion [a] in subsection 15.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required. Also see EIR chapter 17 (Utilities and Service Systems).

Construction Period Impacts. The construction of project-related parks and recreational facilities would be temporary and would occur within either existing public rights-of-way, City property, a project development site, or private property subject to a municipal easement. Construction period air emissions (dust), noise, and traffic interruption typically associated with parks and recreational facilities construction would be reduced through mandatory City of El Cerrito and City of Richmond construction mitigation procedures (e.g., see chapters 5 [Air Quality] and 13 [Noise] of this EIR). No additional significant environmental impact is anticipated with such construction activity beyond the significant, unavoidable construction-related noise and vibration impacts (Impact/Mitigation 13-3 and Impact/Mitigation 13-4) already identified in chapter 13 as part of overall Specific Plan implementation (see criterion [c] in subsection 15.3.1, “Significance Criteria,” above).

16. TRANSPORTATION AND CIRCULATION

This EIR chapter describes existing and projected transportation conditions in the San Pablo Avenue Specific Plan/Complete Streets Plan (the project) area, identifies the potential impacts of the project on these conditions, and recommends mitigation measures for identified significant impacts. The chapter addresses the project's impacts on transportation operations for transit, pedestrians, bicyclists, and autos. The impact findings and mitigation recommendations in this chapter include those identified relative to the current City of El Cerrito auto level of service standard, as well as relative to the project's proposed multi-modal level of service metrics, specifically (1) built environment factors and (2) person delay calculations. The Specific Plan and EIR transportation consultants, Fehr & Peers, conducted the technical analysis for this EIR chapter.

16.1 SETTING

16.1.1 Study Area and Analysis Locations

The study area is the area defined by the San Pablo Avenue Specific Plan (including Complete Streets). The study area straddles the City of Richmond and City of El Cerrito city limit, which runs generally along the west side of San Pablo Avenue. Figure 16-1 shows Specific Plan area, study intersections, and surrounding transportation network.

Using the City of El Cerrito's traditional auto level of service methodology, project traffic impacts were determined by measuring the effect project auto traffic would have on auto operations at the thirteen (13) signalized intersections in the study area for the morning and evening peak commute hours.

1. San Pablo Avenue and Macdonald Avenue
2. San Pablo Avenue and Conlon Avenue
3. San Pablo Avenue and Knott Avenue
4. San Pablo Avenue and Cutting Boulevard
5. San Pablo Avenue, Hill Street, Eastshore Boulevard, and the Shopping Center driveway
6. San Pablo Avenue and Potrero Avenue
7. San Pablo Avenue and Bayview Avenue
8. San Pablo Avenue and Schmidt Lane
9. San Pablo Avenue and Moeser Lane
10. San Pablo Avenue and Stockton Avenue
11. San Pablo Avenue and Central Avenue
12. San Pablo Avenue and Fairmount Avenue
13. San Pablo Avenue and Carlson Boulevard

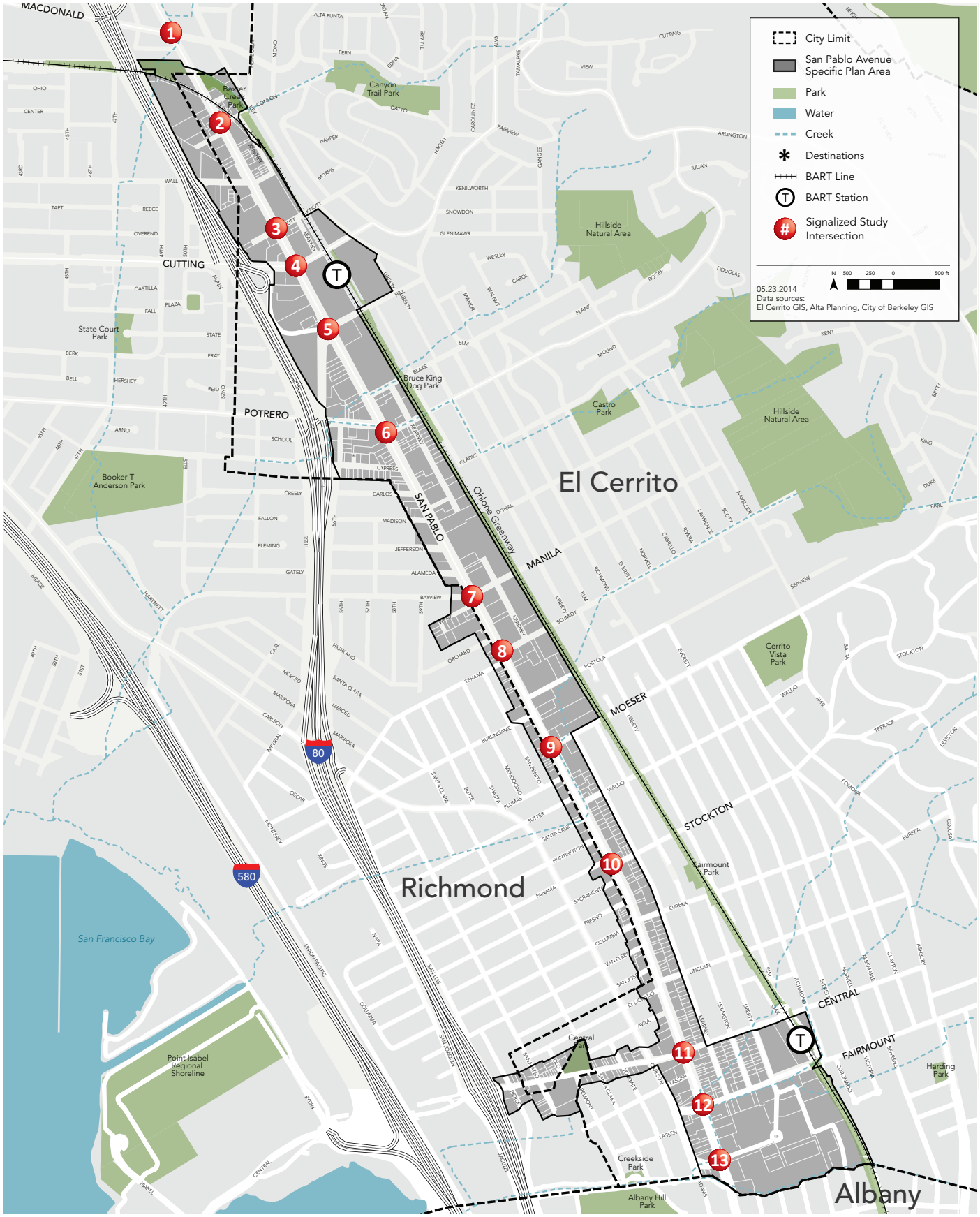


Figure 16-1

San Pablo Avenue Specific Plan Area

SOURCE: Fehr & Peers

In addition to automobile level of service analysis at the thirteen signalized intersections, the corridor is assessed using the multi-modal level of service (MMLOS) performance metrics that are proposed in the project. These metrics consist of two parts: person-delay assessments for each mode (auto, transit, bicycle, and pedestrian) and Built Environment Factors evaluations for each mode. The methodologies for these analyses are described in subsection 16.1.3.

16.1.2 Analysis Scenarios

The following scenarios are evaluated:

- **Existing Conditions** – Existing (2012) conditions
- **Existing Plus Project** – Existing (2012) conditions with project-related traffic and the project's proposed roadway design changes
- **Cumulative No Project** – Future (2040) forecast conditions, which considers local non-project and regional traffic growth. No roadway improvements in the immediate project vicinity are assumed.
- **Cumulative Plus Project** – Future forecast conditions with project-related traffic and the project's proposed roadway design changes.

16.1.3 Analysis Methodology

This section presents the three methodologies used to analyze transportation impacts. In order to provide consistency with the City of El Cerrito's adopted policies regarding the importance of all modes of transportation throughout the City, the analysis employs three methodologies:

- **Auto Operations at Intersections** – To provide consistency with previous environmental documentation and the City's current traffic impact analysis methodology, an analysis of automobile intersection operations using the Transportation Research Board's Highway Capacity Manual method is presented.
- **Built Environment Factors** – To provide a multi-modal perspective and to capture the impacts of proposed project roadway improvements on all users, a scoring rubric was developed to assess the presence of specific improvements that benefit transit, pedestrians, and bicyclists, respectively.
- **Person Delay** – To quantify the effects of the proposed project roadway improvements and project traffic, a person-delay calculation is developed to assess delay by each mode at key intersections.

(a) Auto Operations at Intersections. The operations of roadway facilities are typically described based on intersection operations, with the term "level of service" (LOS). LOS is a qualitative description of traffic flow from an auto driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (best operating conditions) to LOS F (worst operating conditions). LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result, and operations are designated as LOS F. Traffic conditions at the study intersections were evaluated using the LOS method developed by the Transportation Research

Board (TRB), as documented in the 2000 Highway Capacity Manual (HCM). Although the Transportation Research Board has recently published the 2010 HCM, the City of El Cerrito has not adopted the analysis procedures prescribed in the 2010 HCM.

At signalized intersections, the HCM method calculates control delay at an intersection based on average control vehicular delay, using the method described in Chapter 16 of the 2000 HCM. Inputs to the analysis include traffic volumes, lane geometry, signal phasing and timing, pedestrian crossing times, and peak hour factors. Control delay is defined as the delay directly associated with the traffic control device (i.e., a stop sign or a traffic signal) and specifically includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. These delay estimates are considered meaningful indicators of driver discomfort and frustration, fuel consumption, and lost travel time. The relationship between average control delay and LOS for signalized intersections is summarized in Table 16-1.

Table 16-1
SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS) DEFINITIONS

Level of Service	Description of Operations	Average Control Delay (seconds/vehicle)
A	Insignificant Delays: No approach phase is fully used and no vehicle waits longer than one red indication.	≤ 10
B	Minimal Delays: An occasional approach phase is fully used. Drivers begin to feel restricted.	> 10 to 20
C	Acceptable Delays: Major approach phase may become fully used. Most drivers feel somewhat restricted.	> 20 to 35
D	Tolerable Delays: Drivers may wait through no more than one red indication. Queues may develop but dissipate rapidly without excessive delays.	> 35 to 55
E	Significant Delays: Volumes approaching capacity. Vehicles may wait through several signal cycles and long vehicle queues from upstream.	> 55 to 80
F	Excessive Delays: Represents conditions at capacity, with extremely long delays. Queues may block upstream intersections.	> 80

SOURCE: Highway Capacity Manual, Transportation Research Board, 2000.

(1) City of El Cerrito Traffic LOS Standard. The City of El Cerrito has traditionally maintained an LOS standard of D for signalized intersections along San Pablo Avenue. However, the project, if approved, would change the City's LOS standard to be based on an MMLOS assessment as described below in items (b) and (c), and in subsection 16.2.2.

(2) City of Richmond Traffic LOS Standard. The City of Richmond does not have a level of service policy for vehicles, but strives to balance modes of travel and provide equitable access, recognizing that people travel by a variety of modes, not just in vehicles, and that the use of an auto-focused level of service standard does not address the mobility needs for non-auto roadway users.

(3) CCTA CMP Traffic LOS Standard. The Contra Costa Transportation Authority (CCTA) serves as the Congestion Management Agency (CMA) for Contra Costa County. CCTA adopted the County's first Congestion Management Program (CMP) in October 1991. The most recent CMP is referred to as the 2011 CMP. The 2011 CMP requires an analysis of any project that is expected to generate more than 100 peak hour vehicle trips.

The CMP also sets specific intersection LOS standards. Within the study area, the intersections of San Pablo Avenue/Cutting Boulevard and San Pablo Avenue/Central Avenue are both monitored intersections with a threshold of LOS E, using the CCTALOS methodology. This methodology measures the intersection volume to capacity (v/c) ratio with an intersection capacity utilization method that is different than the Highway Capacity Manual method described above. The most recent monitoring report prepared in 2011 showed both intersections operating at LOS A/B in the AM and PM peak hours.

(b) Built Environment Factors (BEFs). In order to understand the trade-offs between multiple modes of transportation, a methodology that assesses the level of service for not only autos but transit, pedestrians, and bicyclists is needed. The project proposes that San Pablo Avenue be assessed using multi-modal level of service (MMLOS) instead of the traditional automobile level of service methodology. In this EIR, both methodologies are presented to provide consistency with currently adopted policy as well as a test of the proposed new methodology. The proposed MMLOS methodology takes a qualitative checklist approach to measuring the quality of service provided to users of the transit, pedestrian, and bicycle facilities. This methodology measures the presence and, in some cases, quality of specific features of the built environment that benefit non-auto modes. Depending on mode, such features might include presence of a separated bikeway to provide comfortable, dedicated bicycle space; curb extensions to reduce pedestrian crossing distances; and bus bulbs to reduce delay for buses by allowing them to stop in the travel lane.

Traditional automobile LOS is assigned letter grades of A through F. For transit, pedestrians, and bicyclists, the BEF methodology consolidates those six letter grades into three categories based on a 0 to 10 point scale. The presence of each factor awards a certain number of points, and when summed together, these create a built environment factor score that corresponds to three ratings: either High (8-10 points), Medium (6-7 points), or Low (5 or fewer points). Where no facilities exist, the designation "No Facilities" is used. Built environment factors are not assessed for automobiles under the assumption that the existing roadway meets the minimum design standards for auto traffic.

While consideration for all modes is important, transit and pedestrian modes are identified as the priority modes for San Pablo Avenue. This is due to the importance of the corridor as a transit route serving the City's downtown and two BART stations, and its role as the City's main commercial and mixed use corridor, where walking between residential, retail, and office uses as well as walking trips to BART should be promoted. Thus, a High rating is desired for these modes, and a Medium to High rating is desired for the bicycle mode.

The BEF methods and the project's proposed standards for each mode are presented below. Templates for the BEF calculations for each mode are included in the transportation appendix of this EIR.

(1) Transit. The Transit BEF method involves scoring all the physical elements present at bus stops, such as presence of a bench, shelter, bus bulb, pedestrian-scale lighting, etc., as well as the Pedestrian BEF (described below) for the nearest crosswalk. The crosswalk is added as a consideration to account for accessibility of the bus stop. The Transit BEF method is designed to apply to a single transit stop. An average BEF score for a length of the corridor can be used to indicate general transit BEF conditions

The project proposes a High level of service standard for transit.

(2) Pedestrian. The Pedestrian BEF method involves scoring the physical pedestrian facilities for both roadway segments and intersections, respectively. Factors include sidewalk width and presence of a buffer (for segments), and crosswalk enhancements and crossing distance (for intersections). The Pedestrian BEF method is designed to allow for separate scores for roadway segments and intersections, if desired. A Pedestrian BEF score for a length of the corridor can be generated by taking a distance-weighted average of BEF scores.

The project proposes a High level of service standard for pedestrians.

(3) Bicycle. The Bicycle BEF method involves scoring the physical bicycle facilities for both roadway segments and intersections separately. The segment assessment includes the presence of a designated bikeway (lane, cycletrack, or sharrow); presence of dedicated bike right-of-way; and presence of a buffer from the adjacent traffic lane and from the adjacent parking lane. The distinction between the designated facility and dedicated right-of-way is the allocation of space within the roadway (example: a designated bike route is a designated facility but has no dedicated bike right-of-way). The intersection assessment includes different measures for signalized and unsignalized intersections.

At signals, measures include the striping design of the bicycle approach to/through the intersection, and the signal phase separation for the bike lane or cycletrack[1]. At unsignalized intersections, measures include the striping design of the bicycle approach at the intersection, the type of buffer (solid or striped) for buffered bike lanes or cycletrack, and whether visibility is good or poor (due to parking, landscaping, or other features).

For consistency with the Minetta Institutes Bicycle Level of Traffic Stress, from which the Bicycle BEFs are derived, the overall segment BEF is considered the worst of either the segment or intersection BEF. A Bicycle BEF score for a length of the corridor can be generated by taking a distance-weighted average of the Bicycle BEFs.

The project proposes a Medium to High level of service standard for bicyclists. In some areas of the corridor, achievement of this standard is challenging due to physical constraints, right-of-way, and other issues. However, though transit and pedestrian MMLOS is the main priority, bicycle facilities should not be allowed to remain 'Low' if measures to improve them to 'Medium' are available. This is because the corridor functions as El Cerrito's main street, with shopping and employment destinations all along the corridor; furthermore, as residential development occurs as part of the Specific Plan, more bicycle trips will originate on the corridor and many of these will take place entirely on San Pablo Avenue. While the Ohlone Greenway bicycle facility

[1] A buffered bike lane is a lane that has additional buffer space separating the lane from the adjacent travel lane and/or parking lane. A cycletrack is an in-roadway bikeway that is physically separated from other modes, via a raised barrier or a parking lane.

parallels the corridor, it does not serve these local-area, shorter trips as well as San Pablo Avenue.

(c) Person Delay. The Person Delay calculation derives from the 2010 HCM auto LOS methodology, and uses person-delay for autos (using an estimated auto occupancy), transit (using transit ridership data), pedestrians (using pedestrian counts and the signal timing plan), and bicycles (based on bicycle counts and the signal timing plan). The method yields mode-specific person delays. The method can also be used to compare the relative delay of each mode to the relative mode share, which can indicate a need for rebalancing the service by mode.

The methodology is described below; detailed calculation methods are provided in the transportation appendix of this EIR.

(1) Transit Person Delay. Unlike the person delay metric for pedestrians and bicyclists, the transit person delay is not reported on an intersection-specific basis, but as a corridor-long travel time, for the northbound and southbound directions. This allows a more meaningful measure of the change in transit delay with the project. The corridor-long travel time is derived from the intersection delays at each signalized intersection, for the bus movements, plus the travel time between intersections at the congested travel speed, plus the time spent at bus stops, with a shorter time required for stops made at far-side bus bulbs than at near-side or far-side standard bus stops, due to the ability of the bus to proceed directly in the travel lane and not wait to merge.

The project's proposed standard for transit person delay is a minimum improvement in corridor travel time of 5 percent with the project.

(2) Pedestrian Person Delay. The pedestrian delay calculates the probability of arriving during a "don't walk" period for each crosswalk and multiplies that by the average length in seconds of the "don't walk" periods at the intersections. Penalties are added for potential crossings that do not have a crosswalk. The pedestrian time also includes the time to actually cross the intersection. The total pedestrian delay at an intersection is calculated by summing the delays for all pedestrians at the intersection, based on the pedestrian counts.

The project does not propose a standard for pedestrian delay. It is intended to be used for informational purposes to assess impacts of vehicle capacity improvements on non-motorized delay, and to support the decision-making process when weighing improvements benefitting different modes.

(3) Bicycle Person Delay. The bicycle delay calculation is derived from the HCM calculation for average intersection delay, after subtracting the average incremental delay (delay for waiting in queues). This accounts for bicyclists' ability to move to the front of a vehicle queue (with or without bicycle facilities). This average delay is multiplied by the hourly bicycle volume at the intersection to determine the total person-delay at an intersection on bicyclists.

The project does not propose a standard for bicycle delay. It is intended to be used for informational purposes to assess impacts of vehicle capacity improvements on non-motorized delay, and to support the decision-making process when weighing improvements benefitting different modes.

(4) Auto Person Delay. The auto delay calculation is derived from the HCM calculation for average intersection delay, which is multiplied by the hourly vehicle volume at the intersection and the average vehicle occupancy to determine the total person-delay at an intersection in autos.

The project proposes to drop the auto LOS as the sole measure of traffic impacts, and instead to use LOS E/80 seconds of delay as a goal to be achieved when possible, while also considering the multi-modal standards set forth in the Built Environment Factors evaluation described above for transit, pedestrians, and bicycles.

16.1.4 Existing Transportation Network

This section describes transportation facilities in the project study area, including the roadway network, pedestrian, bicycle, and transit facilities.

(a) Roadway System. San Pablo Avenue can be divided into roughly three distinct segments through El Cerrito that vary in terms of amount of right-of-way:

- **Uptown** – Between Macdonald Avenue and Potrero Avenue, centered around the Del Norte BART Station
- **Midtown** – Between Potrero Avenue and Lincoln Avenue
- **Downtown** – Between Lincoln Avenue and Carlson Boulevard

(1) Uptown. The Del Norte area has an approximately 115 foot right-of-way, and most of this space is devoted to auto traffic. Key intersections in the Del Norte area include San Pablo Avenue at Cutting Boulevard and Hill Street/Eastshore Boulevard. These intersections serve as primary gateways to/from the Del Norte BART Station for auto and bus traffic, while also serving north-south flows along San Pablo Avenue. The Hill Street/Eastshore Boulevard intersection is a five-legged intersection that includes a Shopping Center Driveway, serving traffic to/from the commercial site west of San Pablo Avenue. Farther north toward the Richmond border, the right-of-way narrows to 100 feet, with two 12 foot travel lanes in each direction and a 14 foot median.

The double left-turn pockets on San Pablo Avenue southbound at Hill and northbound at Cutting support the one-way couplet that flanks the Del Norte BART Station. Cutting Boulevard is one-way westbound east of the bus aisles at Del Norte BART; however, a contra-flow bus-only lane has recently been striped. Hill Street is currently two-way at San Pablo, becoming one-way east of Lexington Avenue and the BART parking garage driveway.

(2) Midtown. In the Midtown area, San Pablo Avenue has a 120 foot right-of-way with two travel lanes in each direction and 8 foot parking lanes. The landscaped median is approximately 20 feet in width and opens to left-turn pockets at intersections. The landscaped medians are longer through this section, typically 250 to 450 in length, varying by block.

(3) Downtown. In the southern portion of the corridor, San Pablo Avenue has a 115 foot right-of-way, with two travel lanes in each direction and a landscaped median that opens to left-turn pockets at intersections. Turn pockets are long south of Central Avenue (150 to 200 feet). An 8 foot parking lane is located on both sides of the roadway.

Key downtown intersections include Central Avenue and Carlson Boulevard. West of San Pablo Avenue, Central has a four-to-five lane cross-section and provides access to I-80.

(b) Pedestrian Facilities. Sidewalks are continuous on San Pablo Avenue. Crosswalks are typically marked at signalized intersections, with additional marked crosswalks at unsignalized locations.

(1) Uptown. The median is small through this section at 8 feet in width, and northbound San Pablo Avenue has three travel lanes in addition to two left-turn lanes. As a result, the sidewalks are narrow in this section at 12 feet or less, including landscaping, on both sides of the roadway. Some of the blocks in the Del Norte area are some of the longest in the corridor, as much as 700 to 900 feet, with no crosswalks in between. In front of the Del Norte BART Station, sidewalks are reduced to 9 feet, including landscaping.

(2) Midtown. Sidewalks are typically 16 to 20 feet in width, including streetscape features. In this section, the street grid of Richmond Annex and the street grid of El Cerrito meet at San Pablo Avenue, frequently creating off-set intersections. The Richmond Annex grid has shorter block lengths fronting San Pablo Avenue, which are approximately 250 feet in length, as compared to the 650 to 700 foot blocks of the El Cerrito grid. This creates intersection offsets that vary from 25 feet to 100 or more feet, which places crosswalks and intersections in close proximity to one another. Multiple unsignalized crosswalks are marked through this section, some of which include overhead flashing beacons. Many crosswalks have 4-to-5 foot medians that may allow pedestrians to cross the street in “two steps” but do not provide a full refuge.

(3) Downtown. Sidewalks are wide through this area, with typical 16 foot sidewalks (with some exceptions) on the west side and 20 foot sidewalks on the east side of the roadway. Through this section, all crosswalks are signalized, and crosswalks are marked on each intersection approach except in front of Mechanic’s Bank.

Pedestrian volumes in the corridor, based on counts conducted in May 2012, are shown on Figure 16-2.

(c) Bicycle Facilities. Bicycle facilities include the following:

- Bike paths (Class I) – Paved trails that are separated from roadways
- Bike lanes (Class II) – Dedicated lanes on roadways designated for use by bicycles through striping, pavement legends, and signs
- Bike Routes (Class III) – Designated roadways for bicycle use by signs only; may or may not include additional pavement width for cyclists

No bicycle facilities are currently provided or designated on San Pablo Avenue through El Cerrito. San Pablo Avenue is a Special Study Corridor in the City’s Circulation Plan. Many existing and planned east-west bikeways connect to San Pablo Avenue, as shown on Figure 16-3.

Bicycle volumes in the corridor, based on counts conducted in May 2012, are shown on Figure 16-4.

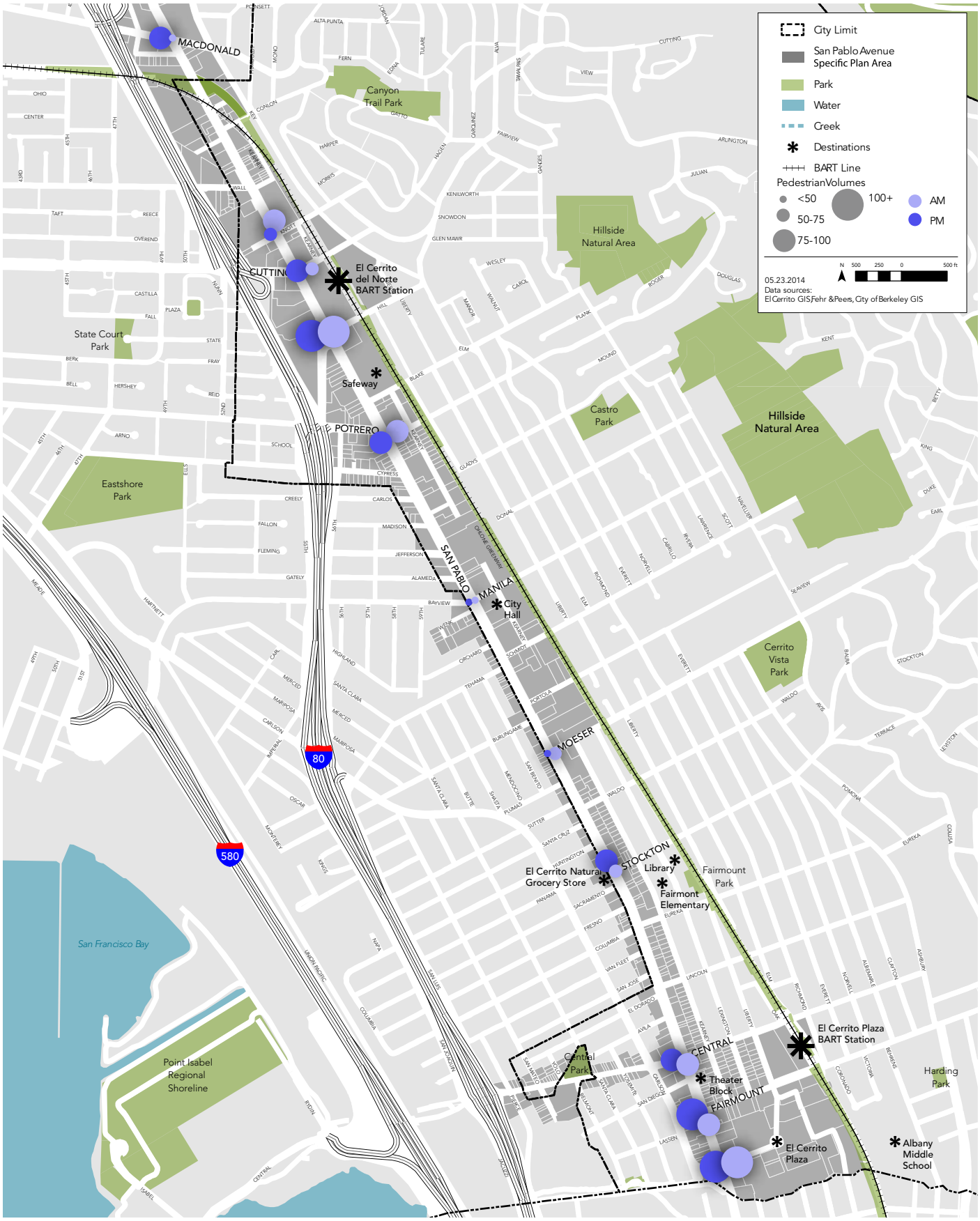


Figure 16-2

Existing Peak Hour Pedestrian Volumes

SOURCE: Fehr & Peers

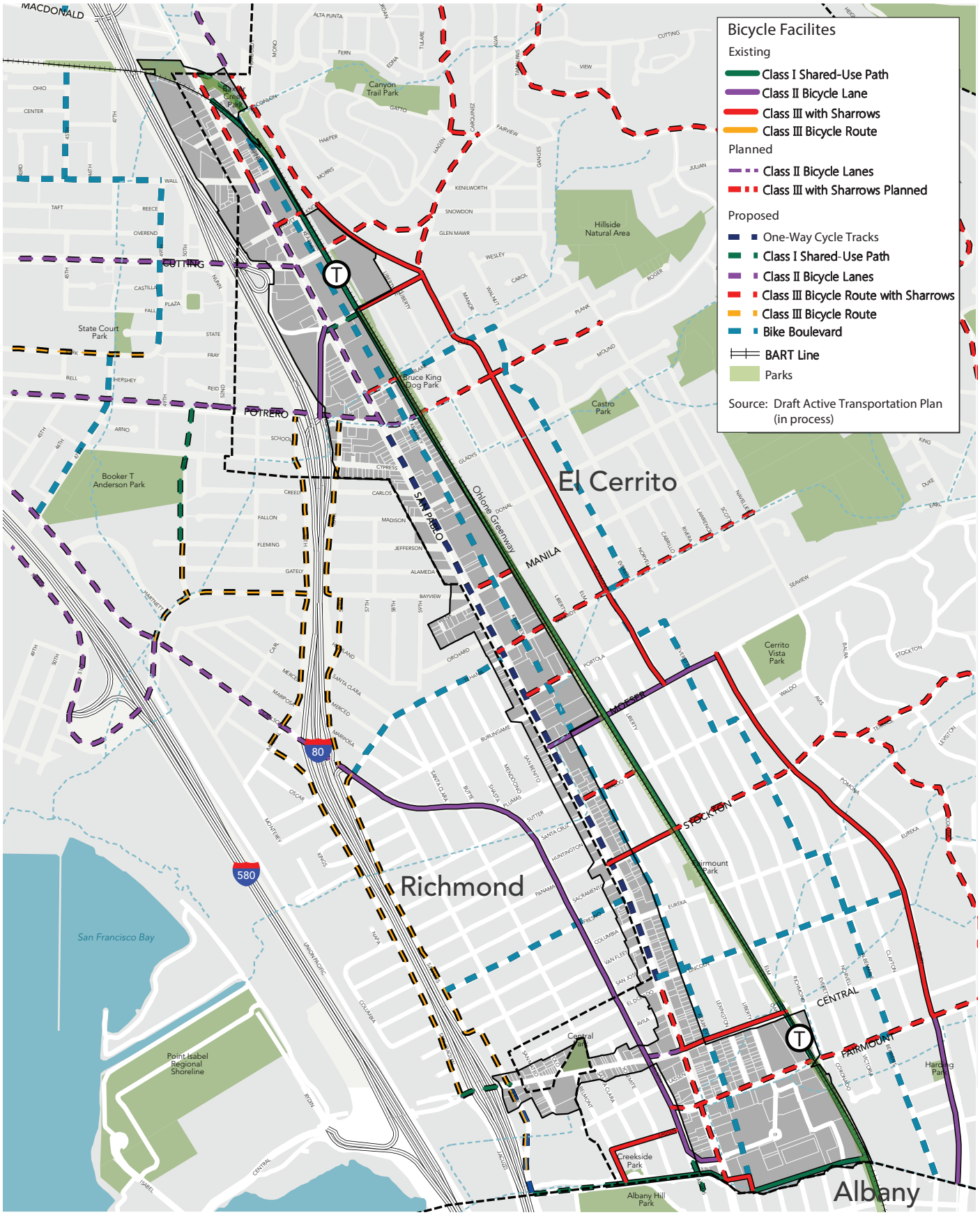


Figure 16-3

Existing and Proposed Bicycle Facilities

SOURCE: Fehr & Peers

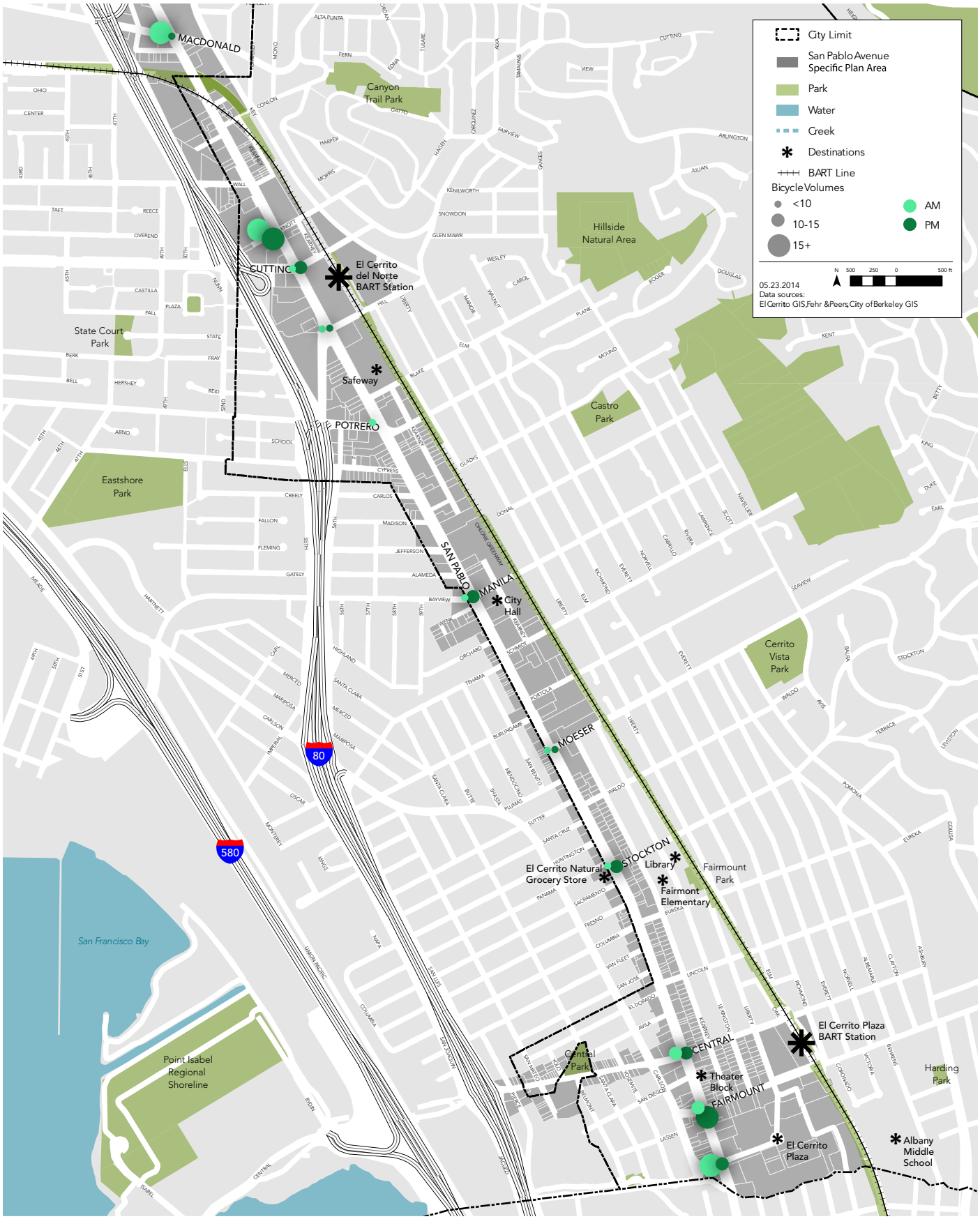


Figure 16-4

Existing Peak Hour Bicycle Volumes

SOURCE: Fehr & Peers

(d) Transit Facilities. Transit service providers in the project vicinity include Bay Area Rapid Transit (BART), which provides regional rail service, and Alameda-Contra Costa Transit District (AC Transit), which provides local and Transbay bus service with connections to the Transbay Terminal in San Francisco. Figure 16-5 shows the existing transit services provided near the project area. Each service is described below.

(1) BART. BART provides regional transit service to Alameda, San Francisco, Contra Costa, and San Mateo counties. Weekday service is provided from 4:00 AM to 1:00 AM, while Saturday and Sunday service is provided from 6:00 AM to 1:00 AM, and 8:00 AM to 1:00 AM, respectively. Trains have a typical headway of 15 minutes on weekdays and Sundays, and 20 minutes on Saturdays. The El Cerrito Del Norte and El Cerrito Plaza BART stations are located directly to the east of the Specific Plan area. The Del Norte BART Station acts as a regional transportation hub and an “end of the line” station, connecting AC Transit, Golden Gate Transit, SolTrans, Fairfield and Suisun Transit, and WestCAT.

(2) AC Transit. AC Transit provides bus service in 13 cities and adjacent unincorporated areas in Alameda County and Contra Costa County, with Transbay service to destinations in San Francisco, San Mateo and Santa Clara counties. The 72, 72M, 72 R, 667, 668, 800, L, and LC provide service on San Pablo Avenue through El Cerrito. Routes 667 and 668 are school bus routes. Additionally, numerous other bus routes provide service to the El Cerrito Del Norte and Plaza BART stations, respectively. The characteristics of the AC Transit routes operating on San Pablo Avenue through the project area are summarized in Table 16-2.

Local adult fares, as of August 2011, are $2.10, and youth and senior fares are $1.05. A transfer to other local AC Transit lines is an additional $0.25. Transbay adult fares are $4.20 and provide a free transfer to or from connecting AC Transit lines. Ten-ride and 31-day passes are also available for both local and Transbay services. Fares are paid on the bus, and passengers must have exact change. AC Transit also honors Clipper, a universal fare card.

16.1.5 Existing Automobile Intersection Operations

(a) Existing Traffic Counts. Weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak period intersection turning movement counts were conducted at the study locations in May and June 2012 with area schools in session. These turning movement counts were verified against prior counts from other sources.

The single hour with the highest traffic volumes during each count period was identified as the peak hour. Existing lane configurations and signal controls were obtained through field observations. The peak hour volumes are presented on Figure 16-6 along with the existing lane configurations and traffic control devices. The traffic count sheets are included in the Transportation Technical Appendix, available on-line at www.el-cerrito.org/SPASP.

(b) Automobile Intersection Level of Service. Existing intersection lane configurations, signal timings, and peak hour turning movement volumes were used to calculate LOS for the key intersections during each peak hour. The results of the LOS analysis using the Synchro software program for Existing Conditions are presented in Table 16-3. The LOS calculation sheets are included in the Transportation Technical Appendix, available on-line at www.el-cerrito.org/SPASP.

Figure 16-5

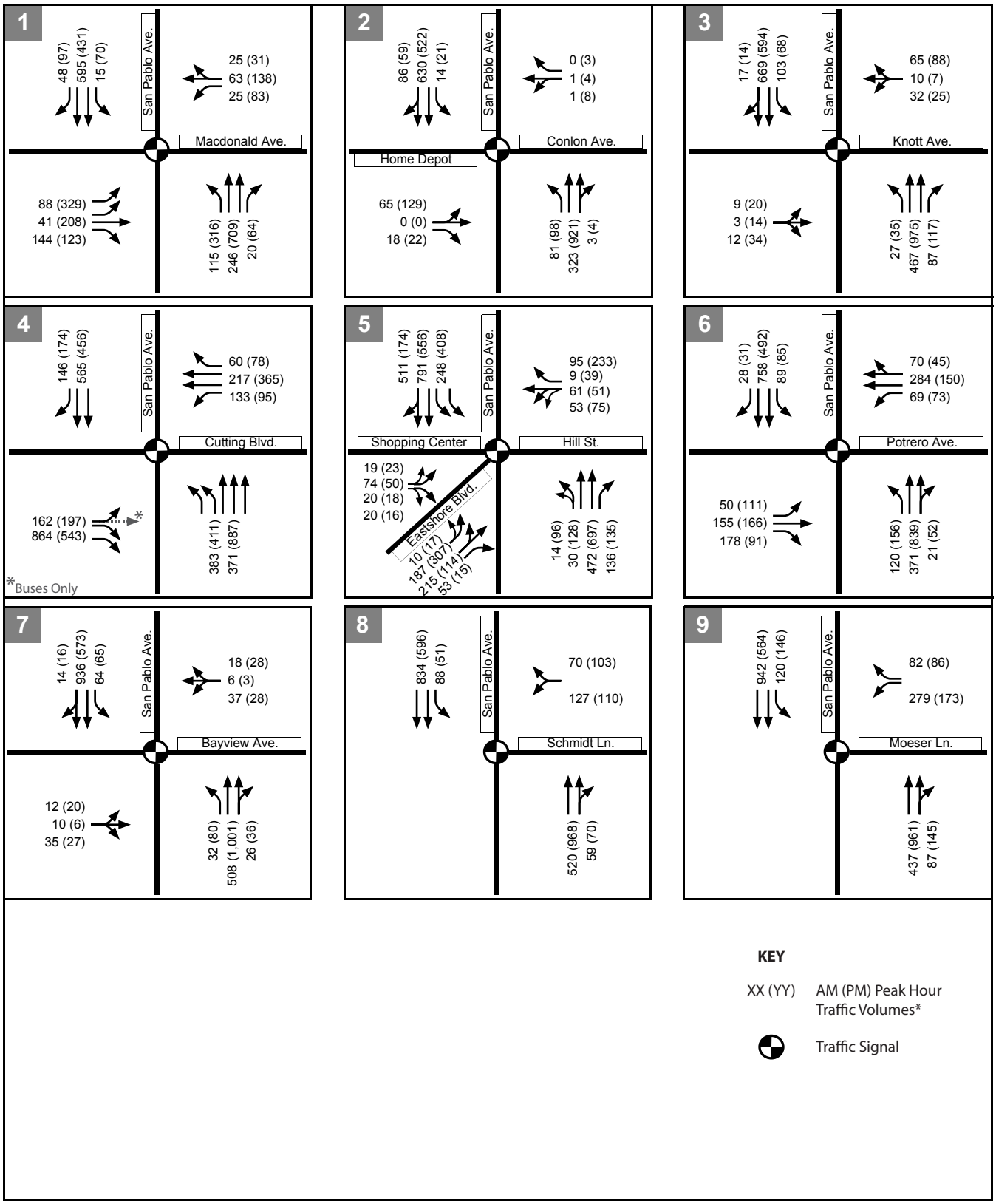
Existing Bus Routes

SOURCE: Fehr & Peers

Table 16-2
AC TRANSIT SERVICE SUMMARY

		Weekday Service		Weekend Service	
Line	Route	Hours	Headway	Hours	Headway
72	Oakland Amtrak Station to Hilltop Mall	5:00 AM-1:45 AM	30 min. (15 min. with 72M)	5:00 AM-1:00 AM	30 min. (15 min. with 72M)
72 M	Oakland Amtrak Station to Richmond BART Station	4:45 AM-1:00 AM	30 min. (15 min. with 72)	6:00 AM-1:00 AM	30 min. (15 min. with 72)
72 R	Jack London Square to Contra Costa College	6:00 AM-8:15 PM	12 min.	No weekend service	
800	Civic Center BART to Richmond BART	12:40 AM-6:30 AM	60 min.	12:40 AM-7:40 AM	30 min.
L/LC	San Francisco Transbay Terminal to Princeton Plaza Shopping Center	5:30 AM-9:00 AM (WB) 3:00 PM-10:30 PM (EB)	20-30 min. AM, 15-60 min. PM	No weekend service	

SOURCE: AC Transit, 2014.

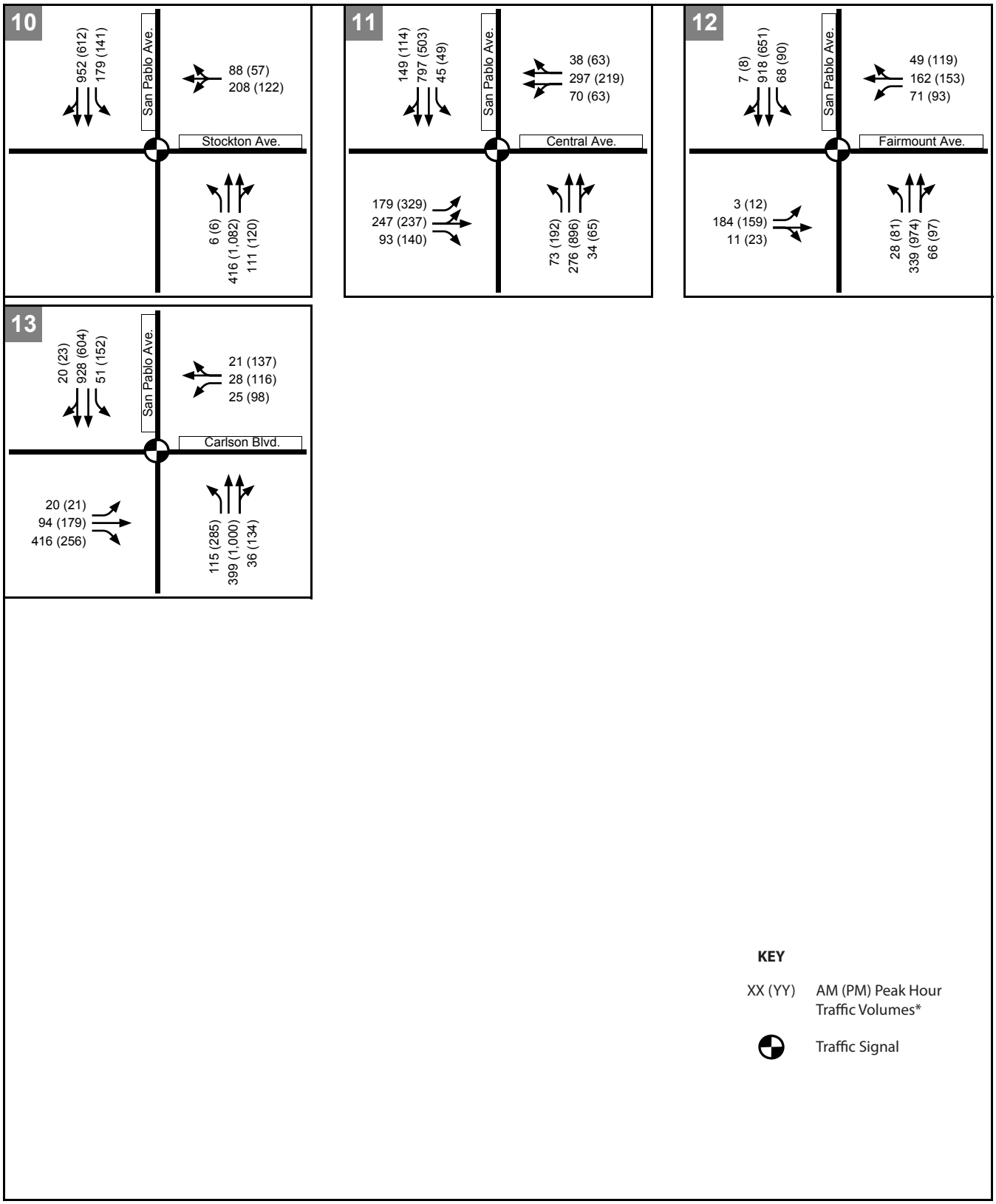


*May 2012 counts for the corridor peak hours: 7:45 - 8:45 AM and 5:00 - 6:00PM.

Figure 16-6A

Existing Conditions
Peak Hour Traffic Volumes

SOURCE: Fehr & Peers



*May 2012 counts for the corridor peak hours: 7:45 - 8:45 AM and 5:00 - 6:00PM.

Figure 16-6B

Existing Conditions
Peak Hour Traffic Volumes

SOURCE: Fehr & Peers

Table 16-3
INTERSECTION LEVELS OF SERVICE--EXISTING CONDITIONS

#	Intersection	Existing Intersection Control	AM Peak Hour		PM Peak Hour	
			LOS[1]	Delay[2]	LOS	Delay
1	San Pablo Avenue/Macdonald Avenue	Signal	C	30.7	**E**	**59.0**
2	San Pablo Avenue/Conlon Avenue	Signal	B	16.0	B	17.7
3	San Pablo Avenue/Knott Avenue	Signal	B	10.9	B	12.4
4	San Pablo Avenue/Cutting Boulevard	Signal	D	35.3	C	33.1
5	San Pablo Avenue/Eastshore Boulevard/ Hill Street/Shopping Center Driveway	Signal	**E**	**60.4**	**E**	**72.7**
6	San Pablo Avenue/Potrero Avenue	Signal	C	24.8	C	22.7
7	San Pablo Avenue/Manila Avenue/ Bayview Avenue	Signal	A	8.7	B	13.1
8	San Pablo Avenue/Schmidt Lane	Signal	B	10.1	B	13.2
9	San Pablo Avenue/Moeser Lane	Signal	C	21.2	B	13.4
10	San Pablo Avenue/Stockton Avenue	Signal	B	17.8	B	11.8
11	San Pablo Avenue/Central Avenue	Signal	C	34.3	C	31.6
12	San Pablo Avenue/Fairmount Avenue	Signal	B	18.9	C	20.6
13	San Pablo Avenue/Carlson Boulevard	Signal	C	23.0	D	39.8

SOURCE: Fehr & Peers, March 2014.

Notes:

[1] LOS = Level of Service.

[2] Reported delay for signalized intersections is the average delay in seconds per vehicle.

Bold font indicates conditions that exceed the City's current LOS standard.

All but two of the study intersections currently operate at acceptable service levels; the exceptions are San Pablo Avenue/Macdonald Avenue, which operates at LOS E in the PM peak hour, and San Pablo Avenue/Eastshore Boulevard/Hill Street, which operates at LOS E in both peak hours.

16.1.6 Existing Multi-Modal Performance Evaluation: Built Environment Factors

The following discussion presents the BEF scores for transit, pedestrian, and bicyclist modes under the Existing Conditions scenario.

(a) Transit. Table 16-4 presents the built environment factor level of service for transit. Some existing bus stops on San Pablo Avenue do not provide bus shelters and do not have the recommended 80 feet for the bus to pull in and out of the stop, which creates a mix of 'Low' and 'Medium' scores.

(b) Pedestrian. Tables 16-5 and 16-6 present the pedestrian built environment factors by segment and intersection, respectively. The existing pedestrian environment typically has sidewalks that are 8 feet in width or more. However, continuous buffers between the sidewalk and roadway are less frequent, and there are a limited number of crosswalks on the corridor. This typically creates 'Low' conditions on the corridor, with the exception of Midtown. At intersections, signalized crossings received a 'Medium' or 'High' score in the existing condition, with a reduced score where crossing is prohibited on one or more approaches (i.e., crosswalks are not striped on all four approaches).

(c) Bicycle. Tables 16-7 and 16-8 present the bicycle built environment factors level of service at segments and intersection approaches, respectively. The existing condition for segments and intersections is 'No Facilities', as San Pablo Avenue through El Cerrito is not currently a designated bikeway.

16.1.7 Existing Multi-Modal Performance Evaluation: Person Delay

Tables 16-9 and 16-10 present the AM and PM peak hour person delay calculations for vehicles, bicyclists, and pedestrians for each study intersection. Table 16-11 presents the transit corridor travel times for the AM and PM peak hours.

Table 16-4
EXISTING TRANSIT BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE

District	Location	Direction	Existing BEF LOS[1]
Uptown	Conlon Street	NB	3
Midtown	Moeser Lane	SB	7
Downtown	Fairmount Avenue	SB	4

SOURCE: Fehr & Peers, March 2014.

Notes:
[1] Maximum score is 10.

Table 16-5
EXISTING PEDESTRIAN BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE--BY SEGMENT

District	Segment	Existing[1]
Uptown	Macdonald Avenue to Potrero Avenue	4
Midtown	Potrero Avenue to Lincoln Avenue	7
Downtown	Lincoln Avenue to Albany City Limit	5

SOURCE: Fehr & Peers, March 2014.

Note:
[1] Maximum score is 10. The conditions here represent the “typical conditions” along the corridor. Within each segment, several non-representative areas may have a narrower sidewalk and/or no buffer space. Analyzing those “weakest links”, Uptown scores as a 5 (Low), Midtown as a 7 (Medium), and Downtown as a 5 (Low).

Table 16-6
EXISTING PEDESTRIAN BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE--BY INTERSECTION

District	Control	Location	Existing[1]
Uptown	Signalized	Cutting Boulevard	7
Uptown	Unsignalized	Mid-Block at Del Norte BART	-
Midtown	Signalized	Moeser Lane	7
Midtown	Unsignalized	Plumas Avenue	-
Downtown	Signalized	Fairmount Avenue	9
Downtown	Unsignalized	San Diego Street	-

SOURCE: Fehr & Peers, March 2014.
Note:
[1] Maximum score is 10. No reported score indicates that no crosswalk is currently marked.

Table 16-7
EXISTING BICYCLE BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE--BY SEGMENT

District	Segment	Existing
Uptown	Macdonald Avenue to Wall Avenue	No Facilities
Uptown	Wall Avenue to Cutting Boulevard	No Facilities
Uptown	Cutting Boulevard to Potrero Avenue	No Facilities
Midtown	Potrero Avenue to Lincoln Avenue	No Facilities
Downtown	Lincoln Avenue to Albany City Limit	No Facilities

SOURCE: Fehr & Peers, March 2014.

Table 16-8
EXISTING BICYCLE BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE--BY INTERSECTION APPROACH

District	Control	Location	Existing
Uptown	Signalized	Cutting Boulevard	No Facilities
Midtown	Signalized	Moeser Lane	No Facilities
Midtown	Unsignalized	Waldo Avenue	No Facilities
Downtown	Signalized	Fairmount Avenue	No Facilities

SOURCE: Fehr & Peers, March 2014.

Table 16-9
PERSON DELAYS--EXISTING CONDITIONS (AM PEAK HOUR)

#	Intersection	Vehicles	Pedestrians	Bicyclists
1	San Pablo Avenue/Macdonald Avenue	30.7	67.8	28.2
2	San Pablo Avenue/Conlon Avenue	16.0	32.2	11.2
3	San Pablo Avenue/Knott Avenue	10.9	49.0	9.7
4	San Pablo Avenue/Cutting Boulevard	35.3	115.8	34.2
5	San Pablo Avenue/Eastshore Boulevard/Hill Street/Shopping Center Driveway	60.4	107.8	49.9
6	San Pablo Avenue/Potrero Avenue	24.8	64.2	23.7
7	San Pablo Avenue/Manila Avenue/Bayview Avenue	8.7	54.6	8.2
8	San Pablo Avenue/Schmidt Lane	10.1	79.0	8.6
9	San Pablo Avenue/Moeser Lane	21.2	85.5	17.0
10	San Pablo Avenue/Stockton Avenue	17.8	59.6	12.6
11	San Pablo Avenue/Central Avenue	24.3	59.3	30.9
12	San Pablo Avenue/Fairmount Avenue	18.9	58.2	18.0
13	San Pablo Avenue/Carlson Boulevard	23.0	58.0	21.8

SOURCE: Fehr & Peers, March 2014.
Note:
All values reported are in units of seconds/person.

Table 16-10
PERSON DELAYS--EXISTING CONDITIONS (PM PEAK HOUR)

#	Intersection	Vehicles	Pedestrians	Bicyclists
1	San Pablo Avenue/Macdonald Avenue	59.0	67.6	38.5
2	San Pablo Avenue/Conlon Avenue	17.7	30.6	13.6
3	San Pablo Avenue/Knott Avenue	12.4	54.6	11.4
4	San Pablo Avenue/Cutting Boulevard	33.1	119.9	31.1
5	San Pablo Avenue/Eastshore Boulevard/Hill Street/Shopping Center Driveway	72.7	81.7	36.2
6	San Pablo Avenue/Potrero Avenue	22.7	66.8	20.7
7	San Pablo Avenue/Manila Avenue/Bayview Avenue	13.1	58.2	11.9
8	San Pablo Avenue/Schmidt Lane	13.2	76.4	10.5
9	San Pablo Avenue/Moeser Lane	13.4	78.3	11.5
10	San Pablo Avenue/Stockton Avenue	11.8	62.7	10.7
11	San Pablo Avenue/Central Avenue	31.6	61.0	27.3
12	San Pablo Avenue/Fairmount Avenue	20.6	60.9	18.6
13	San Pablo Avenue/Carlson Boulevard	39.8	61.3	31.1

SOURCE: Fehr & Peers, March 2014.
Note:
All values reported are in units of seconds/person.

Table 16-11
EXISTING TRANSIT CORRIDOR TRAVEL TIMES

Peak Hour	**Northbound**	**Southbound**
AM	13:40	16:50
PM	14:30	15:40

SOURCE: Fehr and Peers, March 2014.
Note:
All values reported are in units of minutes:seconds/person.

16.2 REGULATORY SETTING

This section presents relevant plans and policies from the following local and regional agencies with jurisdiction and interests in the Specific Plan area:

- City of El Cerrito
- City of Richmond
- West County Transportation Advisory Commission
- Contra Costa County Transportation Advisory Commission
- California Department of Transportation (Caltrans)

(a) City of El Cerrito. The City of El Cerrito's General Plan, Climate Action Plan, and Circulation Plan for Bicyclists and Pedestrians include strong policy statements for transit and active modes of transportation on San Pablo Avenue.

The City of El Cerrito General Plan (1999) includes policies related to multi-modal transportation. These are included in Table 18.1 (Project Consistency With El Cerrito General Plan, Transportation and Circulation Element) in chapter 18 of this EIR.

The City of El Cerrito Climate Action Plan (2012) establishes citywide goals and policies for reducing greenhouse gas emissions in El Cerrito through a diverse set of policies, including land use and transportation policies. These policies emphasize the critical role of transit, walking, and biking, and create a policy imperative for enhancing opportunities to travel by those modes. Relevant policies include:

SC-1 Encourage higher density TOD and infill development on transportation corridors.

SC-1.1 Update General Plan and other applicable plans and ordinances to support higher densities along major transportation corridors.
SC-1.2. Develop planning mechanisms to encourage development of higher densities in designated areas.
SC-1.3 Develop a parking demand management strategy to encourage high density development and alternatives to driving.

SC-2 Diversify El Cerrito's economy to increase El Cerrito's job base, create greater commercial vitality and more pedestrian-friendly economic activity.

SC-2.1 Create a walkable physical environment that invites people to spend time in El Cerrito's commercial areas.

SC-3 Invest in pedestrian-, bicycle-, and transit-friendly infrastructure.

SC-3.1 Create design standards for bicycle and pedestrian friendly design.
SC-3.4 Expand and improve the City's bicycle and pedestrian infrastructure.

SC-3.5 Work with regional agencies to support improvements and greater access to transit facilities in El Cerrito.

SC-5 Develop alternative transportation outreach and incentive programs to increase the number of trips made by walking, biking or taking transit.

SC-5.1 Encourage residents and businesses to adopt trip reduction programs.
SC-5.2 Develop education and outreach campaigns and events to promote walking, biking, and transit.

The Circulation Plan for Bicyclists and Pedestrians (2007) established citywide walking and biking policies. El Cerrito is currently updating its Active Transportation Plan, which will focus on creating dedicated facilities for bicyclists, enhancing the pedestrian environment, and improving east-west connections to San Pablo Avenue. Relevant policies from the 2007 adopted plan include:

1. Create a comprehensive citywide network of bicycle and ADA accessible pedestrian routes that connect travelers to both local and regional destinations.

4. Provide safe and accessible routes to schools, transit stops and stations, and City facilities.

5. Create bicycle and pedestrian facilities that fulfill the needs of both utilitarian and recreational users.

In addition to these adopted plans, the City is currently developing an Urban Greening Plan in tandem with the San Pablo Avenue Specific Plan.

(b) City of Richmond. The City of Richmond General Plan creates a multi-modal vision for mobility and access in Richmond. San Pablo Avenue through Richmond is defined as a "Community Connector Street" in Richmond, which are roadways that link neighborhoods citywide and prioritize transit while balancing all modes. Bicycle and parking facilities are optional on Community Connector Streets. Richmond General Plan policies relevant to transportation are included in Table 18.2 (Project Consistency With Richmond General Plan, Circulation Element) in chapter 18 of this EIR.

The City of Richmond Bicycle Master Plan (2011) establishes a citywide bicycle network for Richmond. San Pablo Avenue in Richmond is designated as a proposed Class III Bicycle Route, signifying that bicyclists and autos must share a lane. A "super sharrow" treatment, consisting of a green band with sharrows (a pavement stencil indicating bicyclists' optimum position in the lane, and indicating that they are allowed to share the lane with autos) centered on the outside travel lane, is proposed assuming the City receives permission to experiment with this innovative facility.

The City of Richmond Pedestrian Plan (2011) treats San Pablo Avenue as a key corridor for pedestrians. In addition to echoing the Class III super sharrows recommendation in the short-term, the plan recommends consideration of installation of median islands, narrowed travel lanes, Class II Bicycle Lanes, pedestrian-scale lighting, and curb extensions and ramps in the medium-term. In the long-term, reconstruction of intersections is recommended so that key intersections intersect at a right-angle.

(c) West Contra Costa Transportation Advisory Committee (WCCTAC). WCCTAC has an adopted West County Action Plan for Routes of Regional Significance (2009), which is updated periodically to provide guidance on cooperative planning efforts and capital improvement projects in West County. WCCTAC has recently completed an update to the West County Action Plan, and has transmitted that update to the Contra Costa Transportation Authority for incorporation into the 2014 Countywide Comprehensive Transportation Plan. It is anticipated that the updated West County Action Plan will be formally adopted by WCCTAC at the end of 2014. Both the current (adopted in 2009) Action Plan and the updated Action Plan call for cooperation between partner agencies to improve traffic congestion on San Pablo Avenue, and emphasize the importance of better serving all corridor users by enhancing transit services, including the Rapid Bus, and improving bicycle and pedestrian facilities. Both the current and the updated Action Plans specify that the multi-modal transportation service objective (MTSO) for San Pablo Avenue is to maintain LOS E or better at all signalized intersections. In addition, the updated Action Plan specifies that this LOS MTSO will not be applied within ½-mile of a BART station, and instead the performance measures in the relevant specific plan(s) for the area will be followed. Additional objectives from the updated Action Plan include:

A. Enhance local and regional transit service, particularly in terms of connections to BART.
B. Increase the use of active transportation modes.
C. Implement Complete Streets enhancements identified in local plans.
D. Actively manage growth to support regional land use and transportation goals.

WCCTAC has also adopted the Transit Enhancement Strategic Plan and Wayfinding Plan (2010), which provides guidance for improvements at West County transit hubs, including the two El Cerrito BART stations. The plan also includes transportation demand management and parking strategies.

(d) Contra Costa Transportation Authority (CCTA). The Congestion Management Program (CMP, 2013) coordinates land use, air quality, and transportation planning among the CCTA local jurisdictions to reduce traffic congestion, improve mobility, and increase sustainability of the countywide transportation system. The CMP establishes traffic level of service standards for designated roadways and principal arterial streets, as well as a seven-year capital improvement program. San Pablo Avenue has an LOS standard of E at the two monitored intersections in El Cerrito: Cutting Boulevard and Central Avenue.

(e) California Department of Transportation (Caltrans). The Caltrans Smart Mobility 2010 (February 2010) document develops a planning framework for assessing how plans, programs, and projects meet six key principles:

1. Location Efficiency
2. Reliable Mobility
3. Health and Safety
4. Environmental Stewardship
5. Social Equity
6. Robust Economy

To help evaluate the application of these principles to Caltrans' policies and planning decisions, Caltrans developed seventeen Smart Mobility Performance Measurements (SMPMs). The sixteen measures are:

Location Efficiency

1. Support for sustainable growth
2. Transit mode share
3. Accessibility and connectivity

Reliable Mobility

4. Multi-modal travel mobility
5. Multi-modal travel reliability
6. Multi-modal service quality

Health and Safety

7. Multi-modal safety
8. Design and speed suitability
9. Pedestrian and bicycle mode share

Environmental Stewardship

10. Climate and energy conservation
11. Emissions reduction

Social Equity

12. Equitable distribution of access and mobility
13. Congestion effects on productivity

Robust Economy

14. Efficient use of system resources
15. Network performance optimization
16. Return on investment

16.3 IMPACTS AND MITIGATION MEASURES

16.3.1 Significance Criteria

The San Pablo Avenue Specific Plan would be considered to have a significant effect on the transportation network based on the following criteria.

(a) Signalized Intersections. The City of El Cerrito does not have adopted significance criteria for intersection impacts; however, the following criteria are consistent with past practice in El Cerrito, Richmond, and other Bay Area jurisdictions, and are proposed for use in this EIR:
A significant traffic-related impact would occur at signalized intersections if:

- The addition of project traffic causes intersection operations to degrade from LOS D or better to LOS E or F; or

- The project traffic increases the average control delay by more than 5 seconds at an intersection already operating at LOS E or LOS F under the No Project condition.

With regard to the City's traditional traffic impact significance criteria cited above, it is important to note the following considerations:

1. The West Contra Costa Transportation Advisory Committee (WCCTAC) also maintains Multi-Modal Transportation Service Objectives (MTSOs) for Regional Routes, of which San Pablo Avenue is one. The MTSO for San Pablo Avenue is to "maintain LOS E or better at all signalized intersections along San Pablo Avenue." The significance thresholds above is consistent with, and in fact higher than, the WCCTAC MTSO. It is also noted that the WCCTAC Action Plan is currently being updated, and the update is anticipated to alter the significance threshold criteria to be generally consistent with the Specific Plan's proposed traffic LOS standard, as stated in the next paragraph.

2. The San Pablo Avenue Specific Plan/Complete Streets Plan proposes to eliminate traffic LOS D as a standard, and replace it with a goal of LOS E (delay of 80 seconds), which should be considered in conjunction with the multi-modal LOS standards for transit, pedestrian and bicycle modes, with transit and pedestrian modes being the primary priorities in the plan area.

(b) Bicycle/Pedestrian Facilities. The project would have a significant impact if it would:

- Hinder or eliminate an existing or designated bikeway, or interfere with implementation of a proposed bikeway;
- Result in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts; or
- Adversely affect an existing pedestrian facility or result in unsafe conditions for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflicts.

With regard to the above significance criteria, it is noted that the San Pablo Avenue Specific Plan/Complete Streets Plan proposes to implement a multi-modal LOS standard consisting of a Built Environment Factor rating of High (8-10) for pedestrians and Medium (6-7) to High (8-10) for bicycles.

(c) Transit. The project would have a significant impact if it would:

- Cause a substantial delay in transit service or increase demand for transit beyond existing or planned service capacity.

With regard to the above significance criteria, it is noted that the San Pablo Avenue Specific Plan/Complete Streets Plan proposes to implement a multi-modal LOS standard consisting of (1) a Built Environment Factor rating of High (8-10) and (2) a decrease in corridor travel time of 5 percent or more.

(d) Additional Significance Criteria. The project will also be judged to have a significant impact if it would:

- Result in inadequate emergency access;
- Substantially increase hazards due to a design feature or incompatible uses, or create unsafe conditions for pedestrians or bicyclists; or

- Conflict with local or regional policies or programs supporting active transportation and transit.

16.3.2 Proposed Project

The key components of the Specific Plan that affect the transportation impact analysis are described below.

(a) Proposed New Development Capacity. The Project Description is provided in chapter 3 of this EIR. Potential additional development capacity would include 988 new housing units and 205,400 square feet of new commercial space in the plan area plus 718 new housing units and 37,712 new square feet of commercial development which is already entitled or planned. Therefore, the total additional development capacity by the year 2040 in the Specific Plan area would be 1,706 new residential units and 243,112 new square feet of commercial development.

(b) Roadway Design. The project envisions a re-allocation of the right-of-way along the entire San Pablo Avenue corridor to better balance service to autos, buses, bicycles, and pedestrians. The following sections describe the changes in the Uptown (MacDonald to Potrero), Midtown (Potrero to Lincoln), and Downtown (Lincoln to Carlson) sections of the corridor.

Uptown – The proposed concept for Uptown includes wider sidewalks, a shared bicycle facility (super sharrow) from MacDonald to Wall, and bicycle lanes from Wall to Potrero. Several vehicle circulation lane changes are included to facilitate better circulation to/from the Del Norte BART Station and to make room for the bicycle facilities:

- Conversion of Cutting Boulevard east of San Pablo Avenue to two-way traffic;
- Elimination of the second left turn lane northbound at Cutting and southbound at Hill;
- Transition of the outside northbound through lane between Hill and Cutting to feed into a right turn lane serving turns to eastbound Cutting;
- Elimination of the outside northbound through lane between Cutting and Knott;
- Elimination of the southbound right-turn pocket lane at Cutting; and
- Provision of a new signalized intersection mid-block between Cutting and Hill/Eastshore to serve the development site on the west BART parking lot and to provide a new protected pedestrian crossing opportunity on this long block.

On-street parking will be eliminated between Cutting and Wall to provide space for the new bicycle lanes.

Midtown – The proposed concept for Midtown retains the existing four-lane cross-section plus median with turn pockets, and narrows the travel lanes to 11 feet. At intersections with bus stops, bus stops would be located on the far side of intersections and would have a 10 foot bus bulb to allow buses to stop in-lane, facilitating re-entering traffic after each stop. The excess right-of-way would allow for directional cycletracks. The cycletracks would be in-roadway and

run curbside. They would be separated from the travel lanes by the parking lane or a striped buffer space.

Downtown – The proposed concept for Downtown retains the existing four-lane cross-section plus median with turn pockets. The median would be widened to provide a 5 foot pedestrian refuge. At intersections with bus stops, bus stops would be located on the far side of intersections and would have a 10 foot bus bulb to allow buses to stop in-lane. A super sharrow treatment would be striped in the outside travel lane, which would consist of a continuous green strip of pavement with sharrows centered on the outside travel lane.

(c) Multi-Modal LOS Standards. As described in subsections 16.1.3 and 16.2.2 above, the Specific Plan establishes new multi-modal level of service standards for the corridor. The standard for the transit and pedestrian modes is a 'High' rating, and the standard for the bicycle mode is a 'Medium' to 'High' rating. Auto LOS will be considered in conjunction with the other mode standards, with the goal of maintaining LOS E when possible, considering the standards for other modes.

(d) Travel Mode Shift Goals. In addition the Multi-Modal LOS standards, the City would measure the performance of the Specific Plan through regular monitoring of the citywide travel mode share and comparing it to an achievable goal based on the physical, operational, and policy changes set forth in the plan. The City's Climate Action Plan states the required greenhouse gas emission (GHG) and vehicle miles traveled (VMT) reduction necessary to achieve the City's climate goals. According to the CAP, in order to achieve the 2020 emission reduction goal, each El Cerritan would need to reduce his/her weekly VMT by 19 miles each week. Assuming that each household produces 9 trips per day (ITE Trip Generation, weighted average of single-family and multi-family trip generation rates), that the average trip length is 9.72 miles (NHTSA, 2009), and that there are 10,340 households in El Cerrito with an average household size of 2.25 (CAP), approximately 6,500 out of approximately 93,100 daily auto trips would need to shift to other modes to meet the VMT reduction target. This equates to an approximately 7 percent mode shift from autos to walking, biking, and transit, based on calculations provided in the *San Pablo Avenue Complete Street Memorandum – Evaluation Program*.

While many of the infrastructure enhancements proposed in the plan would help to achieve this mode split, in order to change behavior and travel patterns, significant transportation demand management (TDM) strategies and citywide walking, biking, and transit infrastructure enhancements will be required.

16.3.3 Project Trip Generation, Distribution, and Assignment

The trip generation associated with new development capacity (both proposed and planned/entitled) anticipated in the plan area (see [a] above) was calculated with Institute of Transportation Engineers, 9th Edition rates, and adjusted using the MXD model which accounts for the mode splits and linked trips that occur in transit-proximate, mixed use areas. The trip generation calculations are included in the Transportation Technical Appendix, available on-line at www.el-cerrito.org/SPASP.

The net trip generation is estimated at 740 AM peak hour trips and 1,590 PM peak hour trips for the potential new development capacity, plus 100 AM peak hour trips and 370 PM peak hour

trips for development that is already entitled or planned. This trip generation is the basis for the Existing Plus Project and Cumulative (2040) Plus Project traffic analysis.

The trip generation was also estimated with an additional mode shift of 7 percent of trips from auto to non-auto modes, for purposes of assessing conditions with the anticipated mode shift that the project is expected to create. This lower trip generation is included as a separate scenario in the Cumulative analysis only (see Table 16-20), to test the auto LOS that can be achieved if the mode shift goal is achieved.

The proposed trip distribution is based on existing trip patterns observed along the corridor.

16.3.4 Existing Plus Project Conditions

The project trips were added to the existing peak hour traffic volumes to estimate the Existing Plus Project peak hour traffic volumes, as shown on Figure 16-7. Roadway improvements were assumed based on the concepts for the Uptown, Midtown, and Downtown segments, as presented in subsection 16.2.2 above.

(a) Auto Intersection Operations. Table 16-12 presents the auto LOS results for the Existing and Existing Plus Project cases. The new mid-block signalized intersection between Cutting and Hill is listed as intersection #14. The addition of project-generated traffic, in conjunction with the roadway design changes proposed in the project, do not result in any significant impacts to auto LOS, and in fact the intersections of San Pablo Avenue/Cutting Boulevard and San Pablo Avenue/Hill Street/Eastshore Boulevard improve due to the lane configuration changes which better accommodate turning movements and traffic flows to/from the BART station at the two intersections. It is noted that the analysis includes changes to auto and bus turn movements with the conversion of Cutting east of San Pablo Avenue to two-way traffic.

(b) Built Environment Factors Assessment

(1) Transit. Table 16-13 presents the built environment factor (BEF) level of service for transit. Under the roadway redesign, all bus stops would have bus shelters, 80-foot long stops, and ADA accessible door zones, producing an ‘High’ score.

(2) Pedestrian. Tables 16-14 and 16-15 present the pedestrian built environment factors by segment and intersection, respectively. With the project, additional crosswalks would be marked to accommodate pedestrian demand and create a spacing of approximately every 400 feet, which creates ‘High’ conditions in both Midtown and Downtown. In all segments, sidewalk widening is assumed with the project. In the proposed condition, all crosswalks at signalized intersections would be striped, and unsignalized crosswalks would be marked and include some combination of flashing beacons, median refuges, and curb extensions to create optimum scores.

Figure 16-8 illustrates the change in the pedestrian built environment scores with the project.

(3) Bicycle. Tables 16-16 and 16-17 present the bicycle built environment factors level of service at segments and intersection approaches, respectively. The existing condition for segments and intersections is ‘No Facilities’, as San Pablo Avenue through El Cerrito is not currently a designated bikeway. On the northern and southern end of the corridor, the proposed super sharrow treatment would improve the rating to ‘Low’, as this treatment still requires

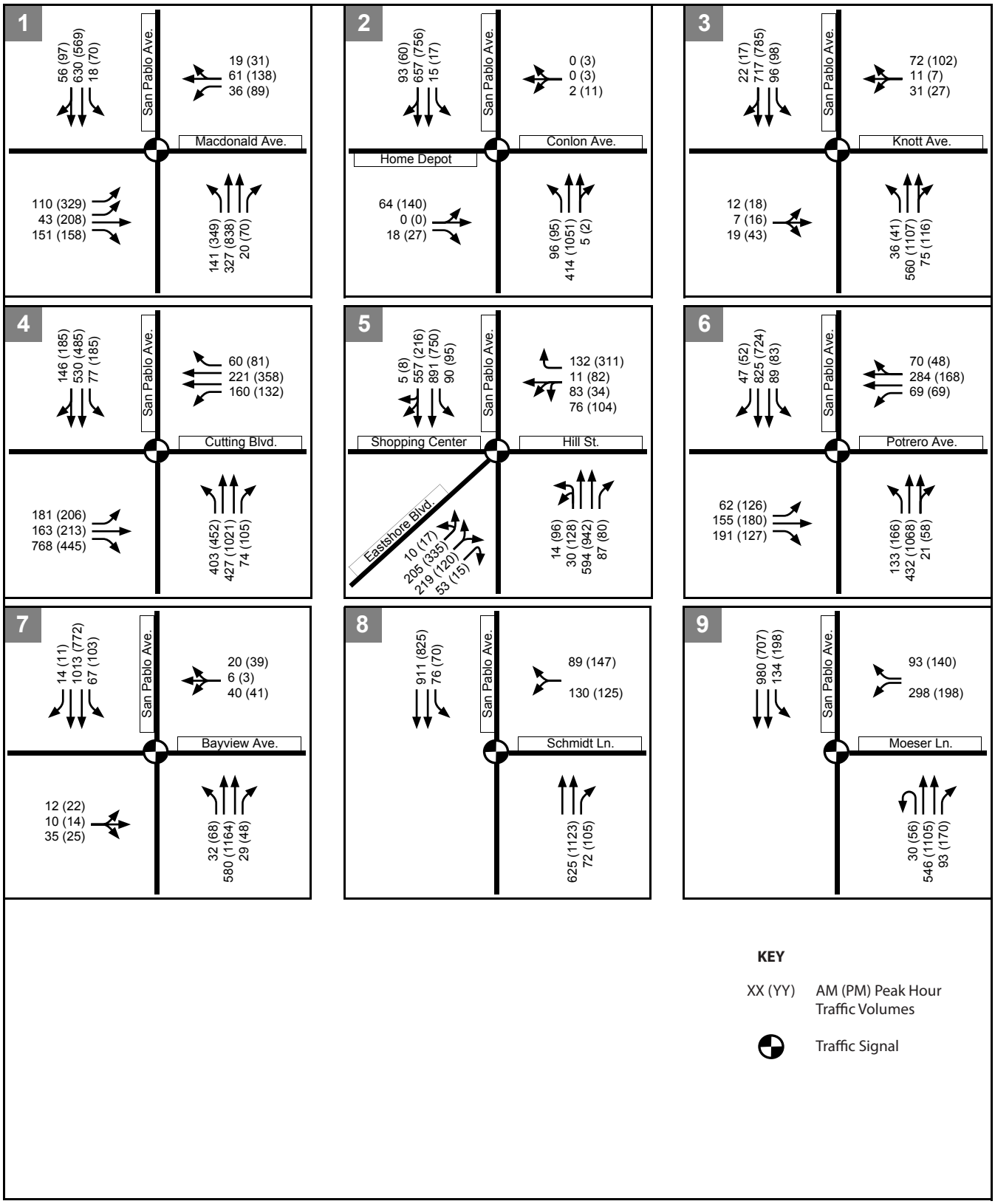
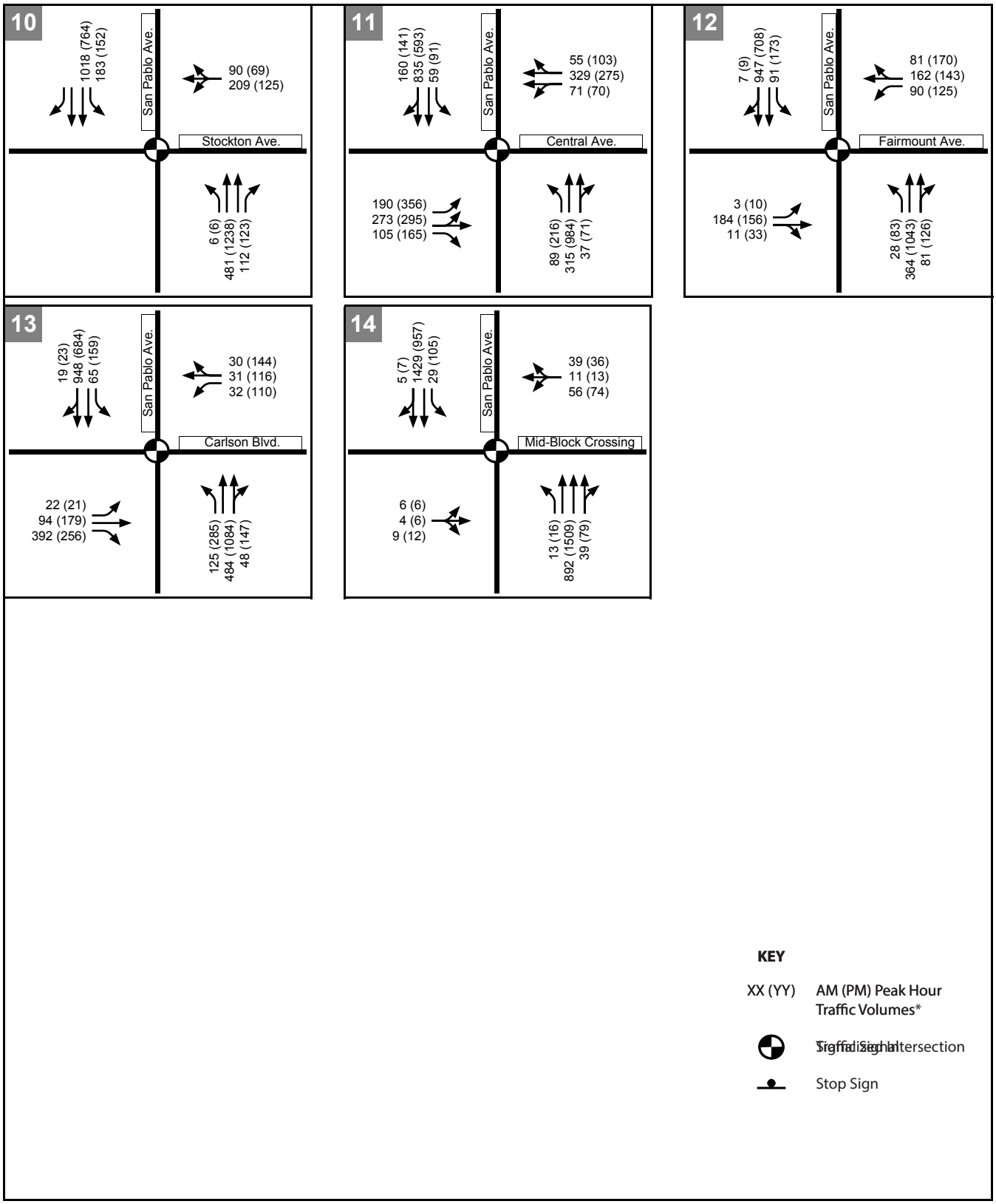


Figure 16-7A

Existing Conditions With Specific Plan Peak Hour Traffic Volumes

SOURCE: Fehr & Peers



*May 2012 counts for the corridor peak hours: 7:45 - 8:45 AM and 5:00 - 6:00PM.

Figure 16-7B

Existing Conditions With Specific Plan
Peak Hour Traffic Volumes

SOURCE: Fehr & Peers

Table 16-12
INTERSECTION LEVELS OF SERVICE--EXISTING PLUS PROJECT CONDITIONS

#	Intersection	Peak Hour	Existing Conditions LOS[1]	Existing Conditions Delay[2]	Existing Plus Project Conditions LOS	Existing Plus Project Conditions Delay
1	San Pablo Avenue/Macdonald Avenue	AM	C	30.7	C	31.1
		PM	**E**	**59.0**	**E**	**63.0**
2	San Pablo Avenue/Conlon Avenue	AM	B	16.0	B	15.6
		PM	B	17.7	B	18.9
3	San Pablo Avenue/Knott Avenue	AM	B	10.9	B	11.8
		PM	B	12.4	B	11.9
4	San Pablo Avenue/Cutting Boulevard	AM	D	35.3	D	54.4[3]
		PM	C	33.1	D	49.7[3]
5	San Pablo Avenue/Eastshore Boulevard/	AM	**E**	**60.4**	**E**	**57.8**
	Hill Street/Shopping Center Driveway	PM	**E**	**72.7**	D	48.5
6	San Pablo Avenue/Potrero Avenue	AM	C	24.8	C	29.6
		PM	C	22.7	C	28.2
7	San Pablo Avenue/Manila Avenue/	AM	A	8.7	A	8.1
	Bayview Avenue	PM	B	13.1	B	13.5
8	San Pablo Avenue/Schmidt Lane	AM	B	10.1	A	9.6
		PM	B	13.2	B	14.1
9	San Pablo Avenue/Moeser Lane	AM	C	21.2	C	22.8
		PM	B	13.4	B	19.7
10	San Pablo Avenue/Stockton Avenue	AM	B	17.8	B	16.2
		PM	B	11.8	B	11.1
11	San Pablo Avenue/Central Avenue	AM	C	34.3	D	37.4
		PM	C	31.6	D	38.4
12	San Pablo Avenue/Fairmount Avenue	AM	B	18.9	C	20.3
		PM	C	20.6	C	27.1
13	San Pablo Avenue/Carlson Boulevard	AM	C	23.0	C	23.4
		PM	D	39.8	D	43.1
14	San Pablo Avenue/New Intersection	AM	N/A	N/A	A	8.3
	between Cutting and Hill	PM	N/A	N/A	B	13.3

SOURCE: Fehr & Peers, March 2014.

Notes:

[1] LOS = Level of Service.

[2] Reported delay for signalized intersections is the average delay in seconds per vehicle.

[3] Results without SB right-turn pocket on San Pablo Avenue. With SBR pocket – AM: D (49.9), PM: D (45.5).

Bold font indicates conditions that exceed the City's current LOS standard.

Table 16-13
EXISTING PLUS PROJECT TRANSIT BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE

District	Location	Direction	Existing	Proposed[1,2]
Uptown	Conlon Street	NB	3	9
Midtown	Moeser Lane	SB	7	9
Downtown	Fairmount Avenue	SB	4	9

SOURCE: Fehr & Peers, March 2014.

Notes:
[1] Under the Specific Plan, all bus stops are assumed to have bus bulbs, shelter, wayfinding information, bicycle parking, clear paths, and ADA accessible door zones.
[2] Maximum score is 10.

Table 16-14
EXISTING PLUS PROJECT PEDESTRIAN BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE--BY SEGMENT

District	Segment	Existing	Proposed[1]
Uptown	Macdonald Avenue to Potrero Avenue	4	8
Midtown	Potrero Avenue to Lincoln Avenue	7	10
Downtown	Lincoln Avenue to Albany City Limit	5	8

SOURCE: Fehr & Peers, March 2014.

Note:
[1] Maximum score is 10. The proposed conditions here represent the “typical conditions” along the corridor. Within each segment, several non-representative areas may have a narrower sidewalk and/or no buffer space. Analyzing those existing “weakest links”, Uptown scores as a 5 (Low), Midtown as a 7 (Medium), and Downtown as a 5 (Low).

Table 16-15
EXISTING PLUS PROJECT PEDESTRIAN BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE--BY INTERSECTION

District	Control	Location	Existing[1]	Proposed
Uptown	Signalized	Cutting Boulevard	7	10
Uptown	Unsignalized	Mid-Block at Del Norte BART	No Facilities	8
Midtown	Signalized	Moeser Lane	7	10
Midtown	Unsignalized	Plumas Avenue	No Facilities	10
Downtown	Signalized	Fairmount Avenue	9	9
Downtown	Unsignalized	San Diego Street	No Facilities	10

SOURCE: Fehr & Peers, March 2014.
Note:
[1] Maximum score is 10.

Table 16-16
EXISTING PLUS PROJECT BICYCLE BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE--BY SEGMENT

District	Segment	Existing	Proposed NB	Proposed SB
Uptown	Macdonald Avenue to Wall Avenue	No Facilities	2	2
Uptown	Wall Avenue to Potrero Avenue	No Facilities	6	6
Midtown	Potrero Avenue to Lincoln Avenue	No Facilities	8	8
Downtown	Lincoln Avenue to Albany City Limit	No Facilities	2	2

SOURCE: Fehr & Peers, March 2014.

Note:
Maximum score is 10.

Table 16-17
EXISTING PLUS PROJECT BICYCLE BUILT ENVIRONMENT FACTORS LEVEL OF SERVICE--BY INTERSECTION APPROACH

District	Control	Location	Existing	Proposed NB	Proposed SB
Uptown	Signalized	Cutting Boulevard	No Facilities	7	6
Midtown	Signalized	Moeser Lane	No Facilities	10	10
Midtown	Unsignalized	Waldo Avenue	No Facilities	10	10
Downtown	Signalized	Fairmount Avenue	No Facilities	2	2

SOURCE: Fehr & Peers, March 2014.

Note:
Maximum score is 10.

Figure 16-8

Pedestrian Built Environment Factors Evaluation

SOURCE: Fehr & Peers

bicyclists and autos to share space. Where dedicated bicycle space is provided in Uptown and Midtown, scores are higher. Typical Class II bicycle lanes through Uptown receive a 'Medium' score. Where a buffer is provided between the bicycle lane and the adjacent travel lane, as in the Midtown section where a cycletrack is proposed, the redesign receives a 'High' score. At intersections, phase separation in the Midtown cycletrack receives a 'High' score. Where bicycle lanes are striped up to the intersection, a 'Medium' score is received, for example, at the northbound approach at Cutting Boulevard.

Figure 16-9 illustrates the change in the bicycle built environment scores with the project.

(c) Person Delay Assessment. Table 16-18 presents the person delay by mode for pedestrians and bicyclists, for the Existing Plus Project scenario. Several intersections, including San Pablo Avenue at Knott, Cutting, Hill/Eastshore, Schmidt and Moeser, show marked decreases in pedestrian delays, due to provision of missing crosswalks and curb bulbs that reduce crossing time. At the other intersections, pedestrian delays decrease slightly or remain the same. Bicycle delay changes are generally small, and increase or decrease largely based on the physical changes proposed at the particular intersection and signal timing changes just noted. Some of the traffic signals are "actuated but uncoordinated," meaning that additional traffic volume can trigger the traffic signal to allocate additional green time to those movements. In some cases, this helps bicyclists by also allowing them more green time; in other cases, competing movements are allocated more green time and bicyclists spend more time waiting at the intersection as a result.

Table 16-19 presents the transit corridor travel times for the Existing Plus Project scenario. The estimated delay savings results from the consolidation of bus stops, moving certain stops to the far side of the intersection, and installing bus bulbs at some locations. The actual travel time savings will depend on the actual bus stop changes that are made, in consultation with AC Transit, during implementation of the Complete Streets Plan.

16.3.5 Cumulative Conditions

This section discusses cumulative traffic conditions, both without and with the project. Three cases are presented in this section: future (2040) traffic conditions without the project's new development and roadway changes; future conditions with the project's development and roadway changes; and future conditions with the project's development and roadway changes and the projected mode shift that is anticipated to occur with full implementation of the Complete Streets policies and programs, along with the supporting infrastructure changes.

(a) Cumulative Roadway Assumptions. No capacity enhancing projects are assumed for the Cumulative No Project case. With the project, the network changes described in subsection 16.2.2 are assumed.

(b) Cumulative Traffic Forecasts. Review of historic traffic data indicates that volumes are declining on San Pablo Avenue through El Cerrito. Growth is limited in part due to gateway constraints at either end of El Cerrito, in particular at the southern end which has several heavily congested intersections in Albany, including San Pablo Avenue at Buchannan Street and at Solano Avenue.

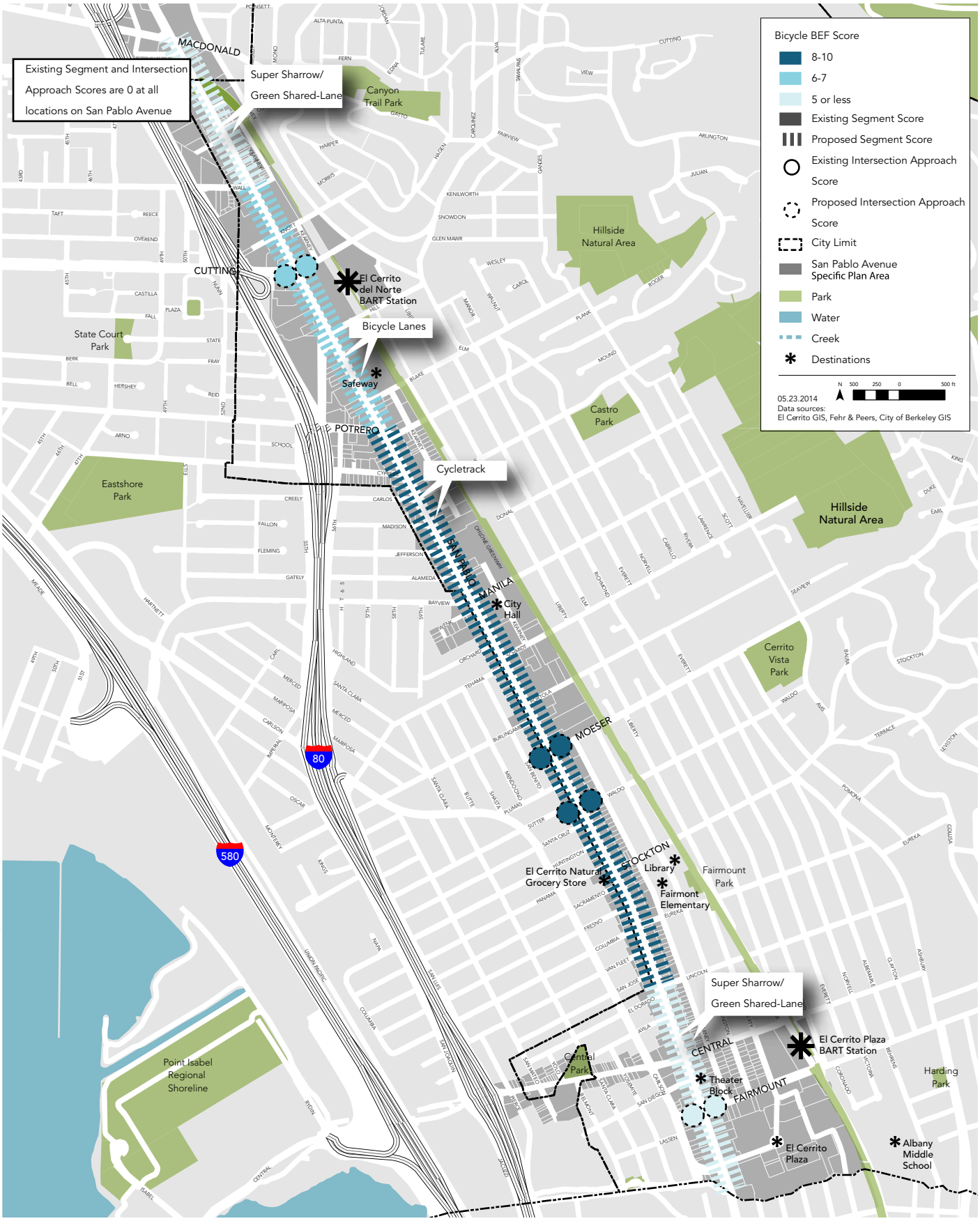


Figure 16-9

Bicycle Built Environment Factors Evaluation

SOURCE: Fehr & Peers

Table 16-18
EXISTING PLUS PROJECT PERSON DELAY: PEDESTRIANS AND BICYCLISTS

			Delay			
			Existing Conditions		Existing Plus Project	
#	Intersection	Mode	AM	PM	AM	PM
1	San Pablo Avenue/Macdonald Avenue	Pedestrian	67.8	67.6	67.8	67.6
		Bicycle	28.2	38.5	28.2	38.8
2	San Pablo Avenue/Conlon Avenue	Pedestrian	32.2	30.6	31.0	30.1
		Bicycle	11.2	13.6	11.1	15.0
3	San Pablo Avenue/Knott Avenue	Pedestrian	49.0	54.6	36.4	37.4
		Bicycle	9.7	11.2	10.0	10.1
4	San Pablo Avenue/Cutting Boulevard	Pedestrian	115.8	119.9	75.5	72.3
		Bicycle	34.2	31.1	41.5	39.9
5	San Pablo Avenue/Eastshore Boulevard/Hill Street/Shopping Center Driveway	Pedestrian	107.8	81.7	68.6	69.6
		Bicycle	49.9	36.2	36.3	41.7
6	San Pablo Avenue/Potrero Avenue	Pedestrian	64.2	66.8	64.2	66.8
		Bicycle	23.7	20.7	28.0	25.7
7	San Pablo Avenue/Manila Avenue/ Bayview Avenue	Pedestrian	54.6	58.2	54.6	58.2
		Bicycle	8.2	11.9	7.6	12.6
8	San Pablo Avenue/Schmidt Lane	Pedestrian	79.0	76.4	57.9	60.0
		Bicycle	8.6	10.5	8.2	11.9
9	San Pablo Avenue/Moeser Lane	Pedestrian	85.5	78.3	57.9	60.5
		Bicycle	17.0	11.5	18.1	16.1
10	San Pablo Avenue/Stockton Avenue	Pedestrian	59.6	62.7	59.6	62.7
		Bicycle	12.6	10.7	12.2	10.3
11	San Pablo Avenue/Central Avenue	Pedestrian	59.3	61.0	59.3	61.0
		Bicycle	30.9	27.3	32.1	30.1
12	San Pablo Avenue/Fairmount Avenue	Pedestrian	58.2	60.9	58.2	60.9
		Bicycle	18.0	18.6	18.8	20.5
13	San Pablo Avenue/Carlson Boulevard	Pedestrian	58.0	61.3	58.0	61.3
		Bicycle	21.8	31.1	22.1	32.3
14	San Pablo Avenue/New Intersection between Cutting and Hill/Eastshore	Pedestrian	N/A	N/A	46.5	49.6
		Bicycle	N/A	N/A	5.1	9.4

SOURCE: Fehr and Peers, March 2014.

Note:

All values reported are in units of seconds/person.

Table 16-19
EXISTING PLUS PROJECT TRANSIT PERSON-DELAY

Existing	**Northbound**			**Southbound**		
	No Project	**With Project**		**No Project**	**With Project**	
AM Peak Hour	13:40	12:30	-9%	16:50	14:55	-11%
PM Peak Hour	14:30	14:00	-2%	15:40	14:15	-9%

SOURCE: Fehr and Peers, 2014.

Note:

All values reported are in units of minutes:seconds/person.

Policy guidance regarding constraining capacity on San Pablo Avenue is also in place. The City's General Plan notes that the City can constrain capacity on San Pablo Avenue as consistent with the City's adopted policies and land use and urban design goals. The policies of the San Pablo Avenue Specific Plan/Complete Streets Plan will further allow the City to proactively manage auto capacity on San Pablo Avenue for use primarily by local trips and transit, in addition to accommodating access to the BART stations.

As a result, a modest 5 percent growth in traffic volume, to represent growth in regional traffic on the corridor, is assumed under the 2040 condition.

Figures 16-10 and 16-11 show the intersection volumes for the Cumulative With Project case and the Cumulative With Project With Mode Shift case, respectively. As noted previously, the mode shift estimates a 7 percent reduction in traffic volumes that can be achieved with implementation of the roadway redesign and all of the supporting policies and programs in the San Pablo Avenue Specific Plan/Complete Streets Plan.

(c) Cumulative Assessment.

(1) Auto Intersection Operations. Table 16-20 presents the auto LOS results for the Cumulative No Project, Cumulative Plus Project, and Cumulative Plus Project Plus Mode Shift cases. In the Cumulative No Project scenario, with the additional 5 percent regional traffic growth assumptions, the intersection of San Pablo Avenue/Hill Street/Eastshore Boulevard falls to LOS E in the PM peak hour (it is already operating at LOS E in the AM peak hour). All other intersections remain at LOS D or better, except San Pablo Avenue/MacDonald Avenue, which continues to operate at LOS E in the PM peak hour.

With the addition of project traffic and the project roadway redesign, the intersection of San Pablo Avenue/Cutting Boulevard falls from LOS D to LOS E, a significant impact. The intersection of San Pablo Avenue/Hill Street actually improves from LOS E (Cumulative No Project) to LOS D (Cumulative With Project), due to the improved efficiency of BART access with the redesign (see discussion below). The anticipated mode shift from autos to transit,

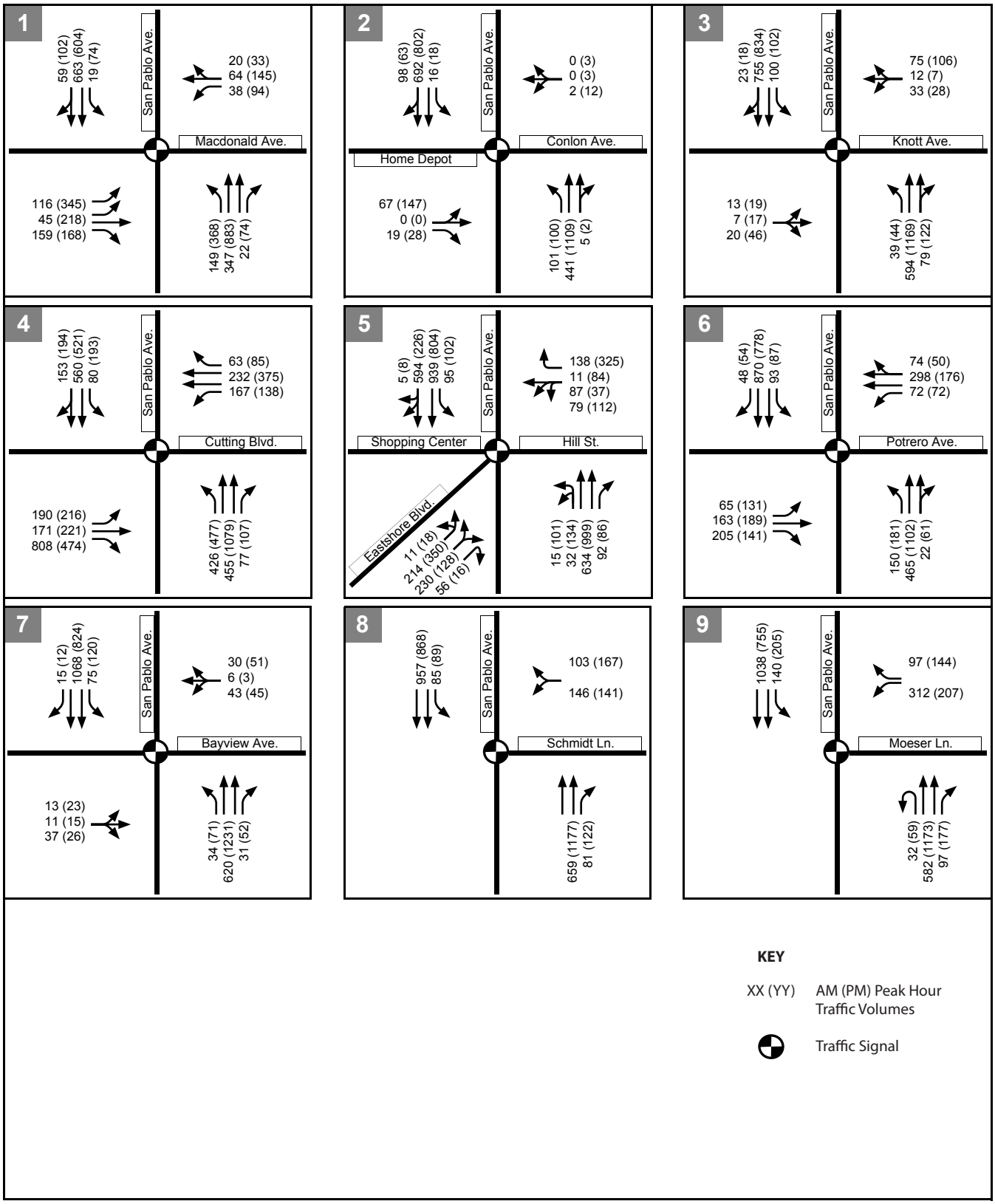


Figure 16-10A

2040 With Specific Plan
Peak Hour Traffic Volumes

SOURCE: Fehr & Peers

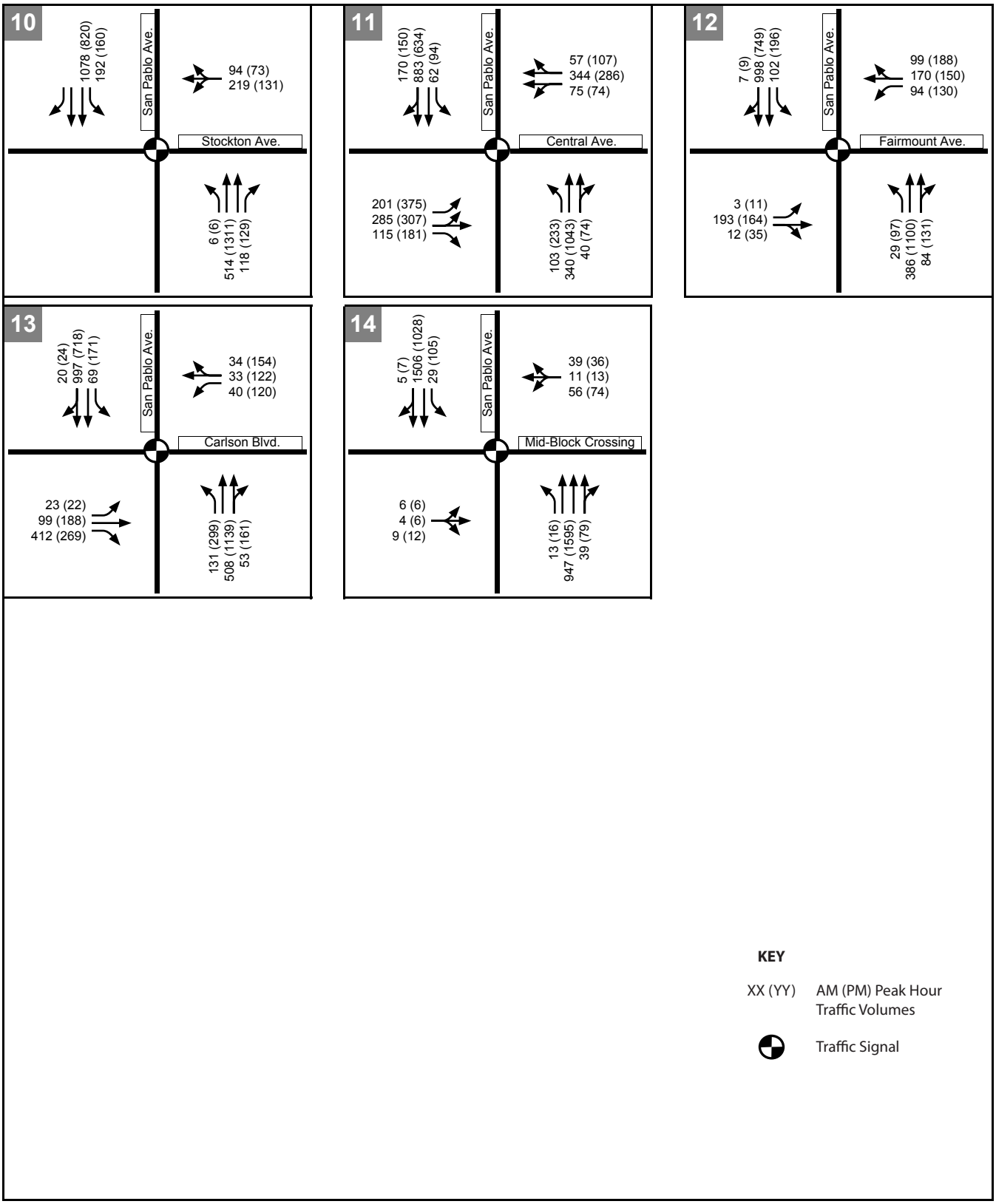


Figure 16-10B

2040 With Specific Plan
Peak Hour Traffic Volumes

SOURCE: Fehr & Peers

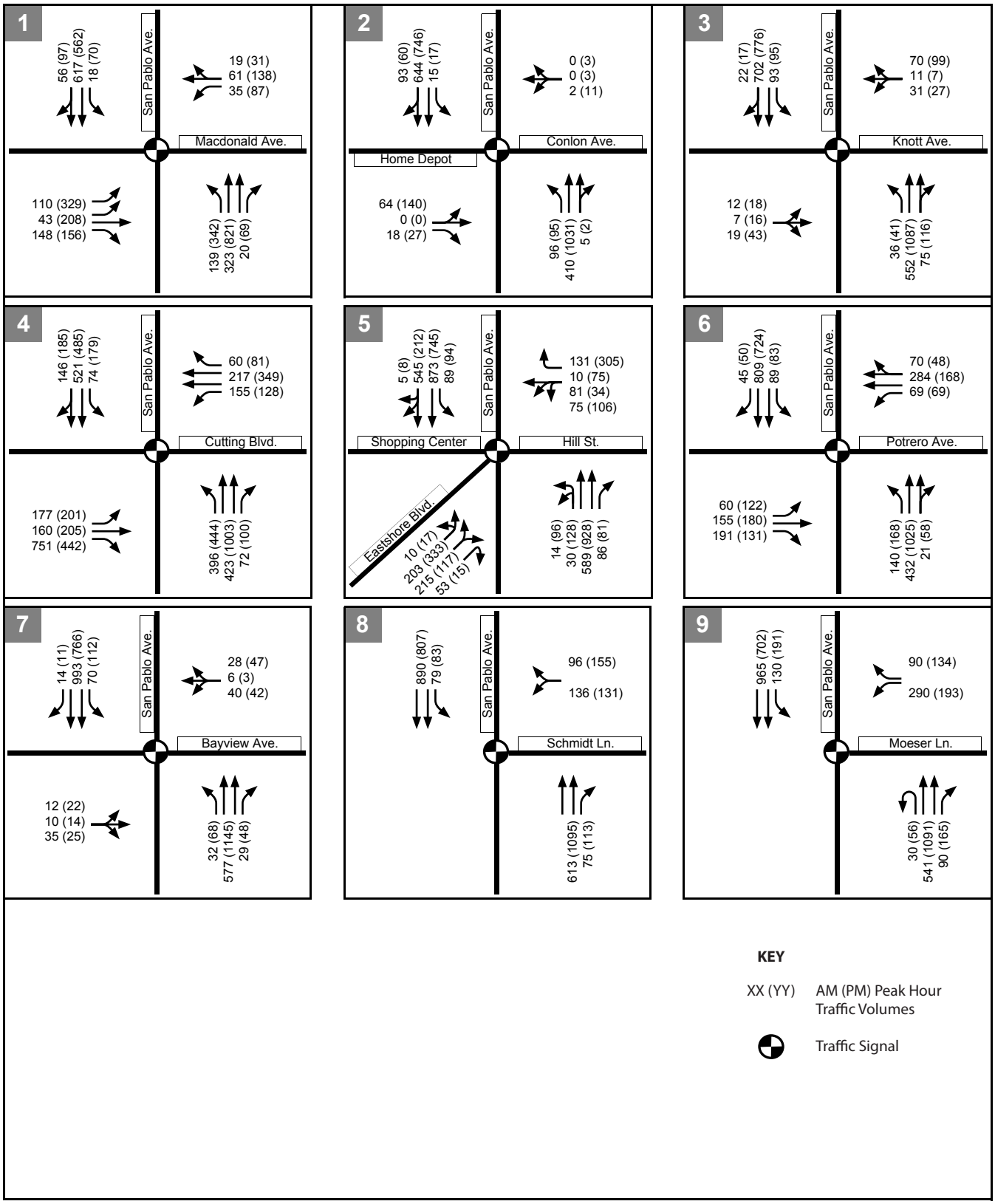


Figure 16-11A

2040 With Specific Plan
Peak Hour Traffic Volumes – With Complete Streets Mode Shift

SOURCE: Fehr & Peers

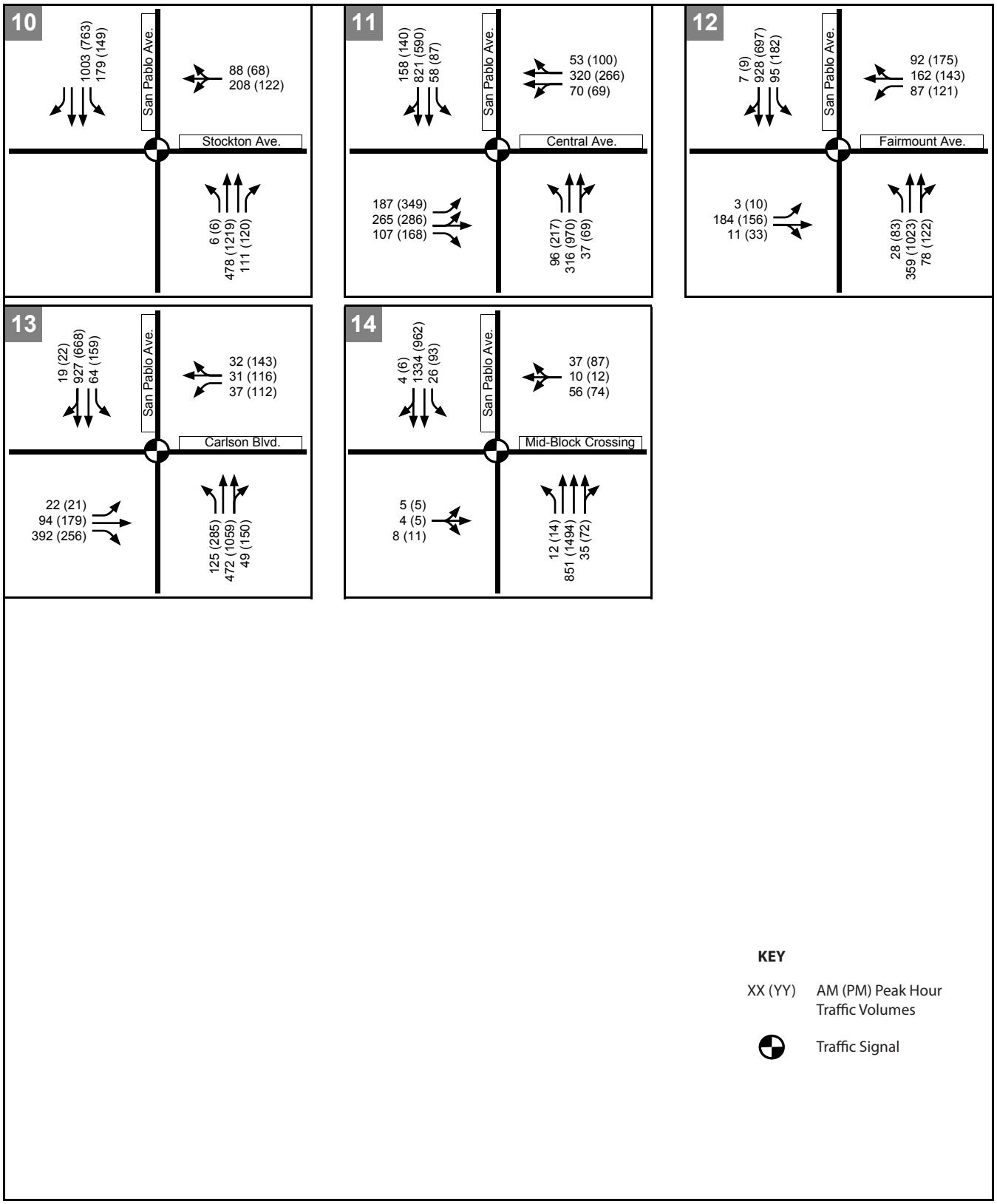


Figure 16-11B

2040 With Specific Plan
Peak Hour Traffic Volumes – With Complete Streets Mode Shift

SOURCE: Fehr & Peers

Table 16-20
INTERSECTION LEVELS OF SERVICE--CUMULATIVE CONDITIONS

#	Intersection	Peak Hour	Cumulative Conditions LOS[1]	Cumulative Conditions Delay[2]	Cumulative Plus Project Conditions LOS	Cumulative Plus Project Conditions Delay	Cumulative Plus Project Conditions with Mode Shift LOS	Cumulative Plus Project Conditions with Mode Shift Delay
1	San Pablo Avenue/Macdonald Avenue	AM	C	31.9	C	31.4	C	30.9
		PM	**E**	**63.4**	**E**	**68.4**	**E**	**61.9**
2	San Pablo Avenue/Conlon Avenue	AM	B	17.3	B	16.9	B	15.5
		PM	B	18.7	C	20.1	B	18.9
3	San Pablo Avenue/Knott Avenue	AM	B	11.6	B	12.4	B	11.8
		PM	B	12.5	B	12.3	B	11.7
4	San Pablo Avenue/Cutting Boulevard	AM	D	37.2	**E**	**63.0**[3]	D	51.7[4]
		PM	C	32.4	D	54.8[3]	D	48.2[4]
5	San Pablo Avenue/Eastshore Boulevard/Hill Street/Shopping Center Driveway	AM	**E**	**68.3**	**E**	**71.1**	D	53.8
		PM	**E**	**79.8**	D	53.8	D	47.3
6	San Pablo Avenue/Potrero Avenue	AM	C	25.4	C	30.5	C	29.8
		PM	C	23.4	C	29.1	C	28.2
7	San Pablo Avenue/Manila Avenue/Bayview Avenue	AM	A	9.0	A	8.5	A	8.4
		PM	B	13.4	B	15.3	B	15.0
8	San Pablo Avenue/Schmidt Lane	AM	B	11.0	B	10.5	B	10.2
		PM	B	15.3	B	16.2	B	15.0
9	San Pablo Avenue/Moeser Lane	AM	C	21.9	C	23.8	C	22.2
		PM	B	13.8	C	20.6	B	19.4
10	San Pablo Avenue/Stockton Avenue	AM	B	18.7	B	17.3	B	15.8
		PM	B	12.1	B	11.1	B	11.0
11	San Pablo Avenue/Central Avenue	AM	D	36.5	D	52.2	D	36.5
		PM	C	33.4	D	42.5	D	37.5
12	San Pablo Avenue/Fairmount Avenue	AM	C	20.1	C	21.2	C	20.2
		PM	C	21.9	C	31.2	C	28.4
13	San Pablo Avenue/Carlson Boulevard	AM	C	23.4	C	23.7	C	23.5
		PM	D	43.6	D	48.9	D	42.6
14	San Pablo Avenue/New Intersection between Cutting and Hill/Eastshore	AM	N/A	N/A	A	8.5	A	7.9
		PM	N/A	N/A	B	13.4	B	12.5

SOURCE: Fehr and Peers, March 2014.

[1] LOS = Level of Service.
[2] Reported delay for signalized intersections is the average delay in seconds per vehicle.
[3] Results without SB right-turn pocket on San Pablo Avenue. With SBR pocket – AM: **E (57.1),** PM: D (49.0).
[4] Results without SB right-turn pocket on San Pablo Avenue. With SBR pocket – AM: D (47.6), PM: D (44.4).
Bold font indicates conditions that exceed the City's current LOS standard. Shading indicates a significant impact.

bicycle, and pedestrian modes with full implementation of the Complete Streets Plan policies and programs, along with the roadway design changes, is projected to improve the LOS at both Cutting and at Hill/Eastshore to LOS D.

It should be noted that the intersections of San Pablo Avenue/Cutting Boulevard and San Pablo Avenue/Hill Street/Eastshore Boulevard are projected to operate better in the cumulative case with the proposed lane changes (two-way Cutting, left turn reductions on San Pablo Avenue) than without these changes. This is because the lane changes facilitate more efficient flows for autos and buses to and from the Del Norte BART Station, with southbound buses and autos no longer required to traverse the Cutting-to-Hill block and all enter on Hill Street. This analysis demonstrates that these intersections will function well with the proposed redesign; however, some BART station access and circulation changes would be needed to complete the revised circulation plan, to provide optimum flows on Cutting, Hill, and through the BART station. These changes can be identified with some follow-on analysis to be performed by the City and BART in a collaborative effort.

(2) Built Environment Factors Assessment. The Cumulative Plus Project scenario does not propose any additional physical changes or additional redesigns to San Pablo Avenue. As a result, the Cumulative BEF analysis is identical to the Existing and Existing Plus Project assessment presented in subsection 16.2.4.

(3) Person Delay Assessment. Table 16-21 presents the cumulative scenario for pedestrian and bicycle person delay at each signalized intersection, both with and without the project. As with the Existing Plus Project assessment, several intersections, including San Pablo Avenue at Knott, Cutting, Hill/Eastshore, Schmidt and Moeser, show marked decreases in pedestrian delays, due to provision of missing crosswalks and curb bulbs that reduce crossing time. At the other intersections, pedestrian delays decrease slightly or remain the same. Bicycle delay changes are generally small, and increase or decrease largely based on the physical changes proposed at the particular intersection and signal timing changes just noted. Some of the traffic signals are "actuated but uncoordinated," meaning that additional traffic volume can trigger the traffic signal to allocate additional green time to those movements. In some cases, this helps bicyclists by also allowing them more green time; in other cases, competing movements are allocated more green time and bicyclists spend more time waiting at the intersection as a result.

Table 16-22 presents the estimated transit travel time through the corridor for the Cumulative and Cumulative Plus Project cases. The estimated delay savings results from the consolidation of bus stops, moving certain stops to the far side of the intersection, and installing bus bulbs at some locations. The actual travel time savings will depend on the actual bus stop changes that are made, in consultation with AC Transit, during the implementation of the Complete Streets Plan.

Table 16-21
CUMULATIVE PLUS PROJECT PERSON DELAY: PEDESTRIANS AND BICYCLISTS

			Delay			
			Cumulative Conditions		Cumulative Plus Project	
#	Intersection	Mode	AM	PM	AM	PM
1	San Pablo Avenue/Macdonald Avenue	Pedestrian	67.8	67.7	67.8	67.7
		Bicycle	28.9	37.9	25.4	38.9
2	San Pablo Avenue/Conlon Avenue	Pedestrian	32.1	30.7	30.9	30.2
		Bicycle	11.5	13.9	10.9	15.1
3	San Pablo Avenue/Knott Avenue	Pedestrian	49.1	54.6	36.4	37.4
		Bicycle	9.8	11.0	10.0	10.0
4	San Pablo Avenue/Cutting Boulevard	Pedestrian	120.0	120.3	76.0	73.3
		Bicycle	35.8	30.2	41.1	39.5
5	San Pablo Avenue/Eastshore Boulevard/Hill Street/Shopping Center Driveway	Pedestrian	108.1	81.8	68.8	70.9
		Bicycle	50.5	36.6	36.2	41.0
6	San Pablo Avenue/Potrero Avenue	Pedestrian	64.2	66.8	64.2	66.8
		Bicycle	23.9	20.7	28.1	25.7
7	San Pablo Avenue/Manila Avenue/ Bayview Avenue	Pedestrian	54.7	58.1	54.7	58.1
		Bicycle	8.4	12.1	7.9	14.0
8	San Pablo Avenue/Schmidt Lane	Pedestrian	78.8	76.5	57.9	60.1
		Bicycle	9.0	11.4	8.6	12.4
9	San Pablo Avenue/Moeser Lane	Pedestrian	85.3	78.4	57.9	60.5
		Bicycle	17.1	11.7	17.9	16.2
10	San Pablo Avenue/Stockton Avenue	Pedestrian	59.5	62.7	59.5	62.7
		Bicycle	12.7	10.8	12.1	10.2
11	San Pablo Avenue/Central Avenue	Pedestrian	57.3	61.0	57.3	61.0
		Bicycle	31.7	28.0	31.9	29.9
12	San Pablo Avenue/Fairmount Avenue	Pedestrian	58.2	60.9	58.2	60.9
		Bicycle	19.0	19.3	18.9	20.8
13	San Pablo Avenue/Carlson Boulevard	Pedestrian	58.0	61.3	58.0	61.3
		Bicycle	22.0	31.9	22.2	32.3
14	San Pablo Avenue/New Intersection between Cutting and Hill/Eastshore	Pedestrian	N/A	N/A	47.6	51.0
		Bicycle	N/A	N/A	4.9	9.8

SOURCE: Fehr and Peers, March 2014.
Note:
All values reported are units of seconds/person.

Table 16-22
CUMULATIVE PLUS PROJECT TRANSIT PERSON-DELAY

2040	**Northbound**			**Southbound**		
	No Project	**With Project**		**No Project**	**With Project**	
AM Peak Hour	13:45	12:30	-9%	17:15	15:30	-11%
PM Peak Hour	14:15	14:15	0%	15:45	14:45	-6%

SOURCE: Fehr and Peers, 2014.
Note:
All values reported are units of minutes:seconds/person.

16.3.6 Summary of Impacts and Mitigations

The following summarizes the impacts identified in this analysis, and recommended mitigations.

Impact 16-1: Cumulative Traffic Impacts. The project would have a significant cumulative impact, relative to the City's current LOS standard of D, at San Pablo Avenue/Cutting Boulevard, which would fall from LOS D in the Cumulative No Project case to LOS E in the Cumulative With Project case. This would be a ***significant project impact*** (see criterion [a] in subsection 16.3.1, "Significance Criteria," above).

The San Pablo Avenue Specific Plan/Complete Streets Plan proposes to eliminate traffic LOS D as a standard, and replace it with a goal of LOS E (delay of 80 seconds) which should be considered in conjunction with the multi-modal LOS standards for transit, pedestrian and bicycle modes, with transit and pedestrian modes being the primary priorities in the corridor. Furthermore, the anticipated mode shift from autos to transit, bicycle, and pedestrian modes with full implementation of the Complete Streets Plan policies and programs, along with the roadway design changes, is projected to improve the LOS at San Pablo Avenue/Cutting to LOS D.

It is also noted that the intersections of San Pablo Avenue/Cutting Boulevard and San Pablo Avenue/Hill Street/Eastshore Boulevard are both projected to operate better in the cumulative case with the proposed lane changes (two-way Cutting, left turn reductions on San Pablo Avenue) than without these changes. This is because the lane changes facilitate more efficient flows for autos and buses to and from the Del Norte BART Station, with southbound buses and autos no longer required to traverse the Cutting-to-Hill block and all enter on Hill Street.

Mitigation 16-1. Adoption and full implementation of the San Pablo Avenue Specific Plan/Complete Streets Plan is projected to reduce auto trips relative to the baseline assumption in the impact analysis, which would reduce this impact to a *less-than-significant level*. Furthermore, adoption of the plan would change the City's LOS standard of D to an LOS goal of E, which should be considered in conjunction with the multi-modal LOS standards for transit, pedestrian and bicycle modes, with transit and pedestrian modes being the primary priorities in the corridor. This would also render the impact *less-than-significant*. However, because the projected mode shift cannot be guaranteed, and adoption of the proposed new multi-modal LOS goals as defined in the draft plan cannot be assured, the impact relative to the current City LOS standard remains ***significant and unavoidable*** after mitigation.

Impacts on Bicycle and Pedestrian Facilities. The project would improve bikeways and pedestrian facilities in the San Pablo Avenue Specific Plan area, and would provide safer conditions for bicyclists and pedestrians, relative to existing conditions. As described in the preceding sections, the San Pablo Avenue Specific Plan/Complete Streets Plan proposes improved bicycle and pedestrian infrastructure throughout the plan area, and also proposes an evaluation system based on built environment factors to assess the need for and performance of these facilities, going forward. Both of these plan elements would promote bicyclist and pedestrian comfort, convenience, and safety. This is a ***beneficial impact*** (see criterion [b] in subsection 16.3.1, "Significance Criteria" above).

Mitigation. No significant adverse impact has been identified; no mitigation is required.

Impacts on Transit. The project would reduce transit delays along the corridor, and is not projected to increase transit demand beyond planned service capacity. This is a less-than-significant impact. As described in the preceding sections, the San Pablo Avenue Specific Plan/Complete Streets Plan is projected to reduce bus travel times along the corridor, by consolidating bus stops and providing far-side bus bulbs where possible. Bus stops would be enhanced to provide good accessibility, shelters and benches, and wayfinding information. The plan also proposes a transit LOS standard consisting of (1) a Built Environment Factor rating of High (8-10) and (2) a reduction in peak hour corridor travel times of 5 percent relative to the No Project case. These metrics would support the continuation of good transit service in the corridor as development under the Specific Plan is constructed over time. Regarding the transit demand, the existing bus occupancy on the corridor varies, but in general is 30 or fewer passengers per bus. Therefore, the projected increase in transit mode share from 10 percent to 13 percent, a 30 percent increase, would result in maximum bus loads of 40 riders, which is less than the bus maximum pasenger load. Therefore, the Specific Plan is not projected to increase transit demand beyond the current service capacity. This is a ***less-than-significant impact*** (see criterion [c] in subsection 16.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Emergency Access. The project would not result in inadequate emergency access. The project would not impede emergency access relative to current conditions; all through-lanes on San Pablo Avenue would remain, and lane widths, while proposed to be narrowed to 11 feet, would still accommodate emergency vehicles. The plan's design guidelines provide for adequate accommodation of fire access to the building frontages and fire hydrants. This is a ***less-than-significant impact*** (see criterion [d] in subsection 16.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Hazards Due to Design Features or Incompatible Uses. The project would not result in hazards due to design features or incompatible uses. The project proposes a redesign of the San Pablo Avenue corridor that will better serve all travel modes, in particular buses, pedestrians, and bicyclists. Conflicts between modes would be reduced through better accommodations, including elements such as sidewalk extensions at crosswalks, a buffer between bicyclists and motorized traffic in the Midtown section, and more accessible and comfortable bus stops. This is a ***less-than-significant impact*** (see criterion [d] in subsection 16.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Conflict with Local or Regional Policies or Programs Supporting Active Transportation and Transit. The project would not conflict with local or regional policies or programs supporting active transportation and transit. The project proposes policies and programs that are purposely consistent with other City documents, including the Climate Action Plan and the Draft Active Transportation Plan (currently in process), and also consistent with the Draft Update to the West County Action Plan. This is a ***less-than-significant impact*** (see criterion [d] in subsection 16.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

17. UTILITIES AND SERVICE SYSTEMS

This EIR chapter describes public utility and service system implications of the proposed Specific Plan. The chapter addresses the specific utility and service system concerns identified by the CEQA Guidelines--i.e., would development under the proposed Specific Plan: have an insufficient water supply; result in the construction of water, wastewater treatment, or drainage facilities which would cause significant construction impacts; have insufficient wastewater capacity or landfill capacity; or not comply with solid waste regulations.[1] The Specific Plan infrastructure consultants, NV5 (Nolte Associates), conducted the water, wastewater, and storm drainage technical analysis for this EIR chapter and helped prepare chapter 4 (Infrastructure Systems) of the San Pablo Avenue Specific Plan.

17.1 SETTING

17.1.1 Water

(a) Existing Potable Water Supply. The East Bay Municipal Utility District (EBMUD) provides water for the City of El Cerrito and the City of Richmond, as well as other jurisdictions and unincorporated lands in Contra Costa and Alameda counties. EBMUD has water rights and contracts for up to 325 million gallons a day (mgd) from the Mokelumne River watershed, which provides virtually all of the water used by EBMUD. Approximately 90 percent of EBMUD water comes from the Mokelumne River watershed, with the remainder supplemented by local run-off collected in EBMUD reservoirs and under a 1970 contract with the U.S. Bureau of Reclamation for up to 134 mgd from the American River.

(b) Recycled Water Supply. Neither El Cerrito nor Richmond has a program to use recycled water. However, EBMUD provides incentives to use recycled water, and during 2010 EBMUD provided more than 9 million gallons a day (mgd) of recycled water for nonresidential landscape irrigation and industrial uses, including reuse at its main wastewater treatment plant. EBMUD promotes recycled water use by development approved by local cities or counties.

(c) Groundwater Supply. Neither El Cerrito nor Richmond use local groundwater sources, and groundwater is not considered a source of municipal potable water supply for either city. However, in 2010 the EBMUD Bayside Groundwater Facility became operational. This project was designed to allow water to be stored in a deep underground aquifer (the South East Bay Plain Groundwater Basin) during wet years, and then extracted, treated, and distributed to EBMUD customers during drought years. EBMUD long-range plans call for investigating future expansion of the facility.

(d) Existing Water Delivery Infrastructure in the Plan Area. Based on EBMUD utility block maps, the sizes of water pipes on the east side of San Pablo Avenue range from 12 inches between Knott Avenue and Potrero Avenue, to 8 inches between Potrero Avenue and

[1] CEQA Guidelines, appendix G, item I (a through g).

Fairmount Avenue. On the west side of San Pablo Avenue, pipe sizes range from 4 inches and 6 inches between Macdonald Avenue and Cutting Boulevard, to 8 inches between Cutting Boulevard and Fairmount Avenue. San Pablo Avenue and its adjacent area are served by two separate pressure zones: Zone GIAa (elevation 355 feet) between Nevin Avenue and Ohio Street, and Zone G0A (elevation 202) between Ohio Street and the north city limits of Albany. San Pablo Avenue elevations range from 50 feet in the north to 40 feet in the south.

17.1.2 Wastewater

(a) Wastewater Collection. Wastewater collection in the San Pablo Avenue area is primarily provided by Stege Sanitary District (SSD), whose Sewer System Management Plan was most recently revised in October 2013. A small portion of the plan area between I-80 and the El Cerrito city limits, from the Ohlone Greenway in the north to Knott Avenue in the south, falls within the Richmond Municipal Sewer District.

Pipelines are located on the westerly (southbound lanes) and easterly (northbound lanes) side of the median along San Pablo Avenue. Block maps indicate that the existing sewer is split into segments along San Pablo Avenue and discharged into larger diameter collector mains that extend along cross streets. From north to south along San Pablo Avenue, the routing of flows is westerly and summarized below:

- A 10-inch collector main along Cutting Boulevard collects flows along San Pablo Avenue.
- A 12-inch collector main along Potrero Avenue collects flows along San Pablo Avenue between Cutting Boulevard and Potrero Avenue and flows from Hill Boulevard and Blake Street.
- An 18-inch collector main along Potrero Avenue collects flows along San Pablo Avenue between Potrero Avenue and Schmidt Lane.
- An 18-inch collector main along Huntington Avenue collects flows along San Pablo Avenue between Schmidt Lane and Waldo Avenue (properties on east side of San Pablo Avenue).
- An 8-inch collector main along Central Avenue collects flows along San Pablo Avenue between El Dorado Street and Central Avenue (properties on west side of San Pablo Avenue).
- An 18-inch collector main just south of Fairmount Avenue collects flows along San Pablo Avenue between Waldo Avenue and Fairmount Avenue (properties on east side of the San Pablo Avenue) and between Central Avenue and Fairmount Avenue (properties on west side of San Pablo Avenue).

(b) Wastewater Treatment. Wastewater collected in the SSD system flows to the EBMUD Special District #1 Interceptor Sewer, where it is then conveyed to the EBMUD Wastewater Treatment Facility in Oakland for processing before being disinfected, dechlorinated, and discharged through a deep-water outfall one mile off the East Bay shore into San Francisco Bay. The EBMUD facility in Oakland has a maximum treatment capacity of 168 million gallons per day (mgd). Average dry weather flows collected and treated in 2010 were 72.5 mgd. The City of Richmond treatment facility has a maximum treatment capacity of 16 mgd. Average dry weather flows collected and treated in 2010 were 8.5 mgd.

(c) Existing Wastewater Infrastructure Deficiencies. A sewer capacity study completed in December 2013 for the Eden Housing project adjacent to City Hall concluded that, based on SSD design criteria, the existing 6-inch sewer main that extends along San Pablo Avenue from Carlos Avenue to Manila Avenue is undersized for estimated peak wet weather flows.

17.1.3 Storm Drainage

(a) Local Topography and Drainage. The topography of the plan area is generally flat and is characterized by a gentle slope extending eastward from the I-80 freeway toward the Berkeley Hills. The general drainage direction is from northeast to southwest, with the exception of two small hilly areas, one adjacent to San Pablo Avenue between Burlingame Avenue and Wenk, and the other along Central Avenue west of San Mateo Avenue rising toward I-80. Drainage on San Pablo Avenue is collected in gutters along the face of existing concrete curbs. Gutters convey runoff flow to inlets along the edges of the roadway. The inlets discharge to underground pipes that flow to Baxter Creek and Cerrito Creek. These underground pipes are assumed to connect to pipes within cross streets to the north and south.

Baxter Creek, at the northern limit of the plan area, is mainly a constructed earth channel and downstream becomes almost exclusively underground until it discharges to Stege Marsh and San Francisco Bay. North Fork Cerrito Creek discharges to Cerrito Creek, which is almost exclusively a constructed or natural earth channel until it discharges to Albany Flats and San Francisco Bay.

(b) Rainfall and Runoff. Average annual rainfall in the plan area is approximately 25 inches. Nearly 95 percent of this precipitation falls during the winter rainy season, October through April, with the heaviest rainfall typically occurring in December, January, and February. The plan area is highly developed and contains substantial impervious surfaces (e.g., buildings, roadways, parking lots, sidewalks, walkways) with limited open, unpaved area. San Pablo Avenue widens at major intersections to accommodate turning lanes, and also accommodates space for parallel parking. Existing medians vary from raised to at-grade. Raised medians are landscaped with grass and trees, and hardscaped with cobbles and concrete. Up to 90 percent of the plan area includes impervious surfaces, with approximately 10 percent remaining as a landscape buffer, typically no more than 10 feet wide. Street trees tend to be located within tree well insets in the sidewalk.

(c) Existing Storm Drainage Deficiencies. The 1999 City of El Cerrito Storm Drain Master Plan (SDMP) noted certain storm drain deficiencies within the Specific Plan area, including: the Potrero Avenue/San Pablo Avenue intersection; along San Pablo Avenue between Moeser Lane and Plumas Avenue; along San Pablo Avenue between Fresno Avenue and Columbia Avenue; and along San Pablo Avenue between Central Avenue and Fairmount Avenue. City staff has also noted localized flooding on Kearney Street and San Pablo Avenue near Fairmount Avenue. Improvements to address these deficiencies are part of the City's ongoing capital improvement program.

17.1.4 Solid Waste Disposal and Recycling

(a) Existing Solid Waste/Recycling Collection and Disposal Services to the Project Area. The West Contra Costa Integrated Waste Management Authority (WCCIWMA) is responsible for the processing and disposal of solid waste from El Cerrito as well as Hercules, Pinole, Richmond,

and San Pablo, and oversees waste management planning activities, including implementation of Assembly Bill 939 (AB 939) (see Regulatory Setting below). Individual municipalities are responsible for the collection of all components of the waste stream.

Solid waste and green waste in El Cerrito is collected by the East Bay Sanitary Company and processed at the Golden Bear Transfer Station in Richmond. After processing, landfill materials are transferred to the Keller Canyon Landfill in Contra Costa County. Solid waste in Richmond is collected by Richmond Sanitary Service and also processed at the Golden Bear Transfer Station before landfill materials are transferred to the Keller Canyon Landfill. As of 2004, Keller Canyon Landfill had an estimated remaining capacity of 85 percent and is scheduled to close in 2030. The City of Richmond has an exclusive franchise agreement with Richmond Sanitary Service, a subsidiary of Republic Services, for residential and commercial solid waste collection through 2025.

(b) Recycling. Curbside recycling service in El Cerrito is provided by the City of El Cerrito. Richmond Sanitary Service provides the curbside recycling service in Richmond. WCCIWMA, responsible for implementation of AB 939 in all of the participating cities, met the AB 939 50 percent waste diversion goal in 2006.

17.2 REGULATORY SETTING

17.2.1 Water

U.S. Environmental Protection Agency. The U.S. Environmental Protection Agency (EPA) is responsible for developing and enforcing regulations that implement environmental laws enacted by Congress. EPA is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits, monitoring, and enforcing compliance.

California Safe Drinking Water Act. The Safe Drinking Water Act (SDWA), administered by EPA in coordination with the California Department of Public Health (CDPH), is the main Federal law that ensures the quality of drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards.

California Water Code. The California Water Code, a section of the California Code of Regulations, is the governing law for all aspects of water management in California.

Urban Water Management Planning Act. In 1983 the California Legislature enacted the Urban Water Management Planning Act (Water Code Section 10610–10656). The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet (af) annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Act requires that urban water suppliers adopt an urban water management plan at least once every five years and submit it to the Department of Water Resources. Noncompliant urban water suppliers are ineligible to receive funding pursuant to Division 24 or Division 26 of the California Water Code, or receive drought assistance from the State, until the urban water management plan (UWMP) is submitted and deemed complete pursuant to the Urban Water Management Planning Act.

EBMUD Urban Water Management Plan 2010. EBMUD prepares, adopts, and helps implement the UWMP for its water supply service area, which encompasses substantial portions of Contra Costa and Alameda counties, including El Cerrito and Richmond. The current UWMP (adopted June 28, 2011) provides an overview of the water supply system, water resources planning, the water shortage contingency plan, water demand, wastewater, recycled water, and water conservation. "In adopting its UWMP, the District commits to achieve conservation and efficient use of its water supplies to protect both customers and its water resources by making every effort to ensure the appropriate level of water service reliability sufficient to meet various demands during normal, dry, and multiple dry years." (p. 1-1)

The UWMP 2010 (p. 4-4) also notes, "As a long-term planning tool, the planning level of [water] demand remains unchanged through the current drought or other events that may temporarily impact demands."

Senate Bills 610 and 221, Water Supply Assessment and Verification. Senate Bills (SB) 610 and 221 amended State law to improve the link between the information on water supply availability and certain land use decisions made by cities and counties. Both statutes require detailed information regarding water availability (water supply assessment or WSA) to be provided to city and county decision-makers prior to approval of specified large (greater than 500 dwelling units) development projects. Both statutes require this detailed information to be included in the administrative record. Under SB 610 WSAs must be furnished to local governments for inclusion in any environmental document for certain projects as defined in Water Code 10912 subject to the California Environmental Quality Act (CEQA). Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. Long-term planning programs, such as the San Pablo Avenue Specific Plan, do not require their own WSAs, but individual future projects under the Specific Plan and subject to SB 610 and SB 221 will require WSAs.

Senate Bill 7x7 Statewide Water Conservation. In November 2009 the California State legislature passed, and the Governor approved, a comprehensive package of water legislation, including Senate Bill (SB) 7x7 addressing water conservation. In general SB 7x7 requires a 20 percent reduction in per capita urban water use by 2020, with an interim 10 percent target in 2015. The legislation requires urban water users to develop consistent water use targets and to use those targets in their UWMPs.

California Department of Public Health. A major component of the California Department of Public Health, Division of Drinking Water and Environmental Management, is the Drinking Water Program (DWP), which regulates public water systems. Regulatory responsibilities include enforcement of the Federal and State Safe Drinking Water acts, regulatory oversight of approximately 8,700 public water systems, oversight of water recycling projects, issuance of water treatment permits, and certification of drinking water treatment and distribution operators.

California Department of Water Resources. The California Department of Water Resources is responsible for preparing and updating the California Water Plan, which is a policy document that guides the development and management of California's water resources.

17.2.2 Wastewater

U.S. Environmental Protection Agency. The U.S. Environmental Protection Agency (EPA) Office of Wastewater Management (OWM) supports the Federal Water Pollution Control Act (Clean Water Act) by promoting effective and responsible water use, treatment, disposal, and management, and by encouraging the protection and restoration of watersheds. The OWM is responsible for directing the National Pollutant Discharge Elimination System (NPDES) permit, pretreatment, and municipal bio-solids management (including beneficial use) programs under the Clean Water Act. The OWM is also home to the Clean Water State Revolving Fund, the largest water quality funding source, focused on funding wastewater treatment systems, non-point source projects, and estuary protection.

Clean Water Act. The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) are responsible for ensuring implementation and compliance with the provisions of the Federal CWA.

State Water Resources Control Board. The SWRCB, in coordination with nine RWQCBs, performs functions related to water quality, including issuance and oversight of wastewater discharge permits (e.g., NPDES), other programs regulating stormwater runoff, and underground and above-ground storage tanks.

The RWQCB requires all wastewater collection and disposal providers to prepare both a Long-Term Wastewater Management Plan (LTWMP) according to wastewater requirements, and a Sewer System Management Plan (SSMP) according to the Statewide General Order Waste Discharge Requirements for Sanitary Sewer Systems.

Title 22 of California Code of Regulations. Title 22 regulates the use of reclaimed wastewater. In most cases, only disinfected tertiary water may be used on food crops where the recycled water would come into contact with the edible portion of the crop. Standards are also prescribed for the use of treated wastewater for irrigation of parks, playgrounds, landscaping, and other non-agricultural irrigation. Regulation of reclaimed water is governed by the nine RWQCBs and the California Department of Public Health (CDPH).

17.2.3 Storm Drainage

Regulations pertaining to storm drainage address stormwater *quality* and *flooding*, not directly storm drainage *infrastructure*, which is the topic covered in this EIR chapter. Therefore, the Regulatory Setting relevant to water quality and flooding is included in chapter 11 (Hydrology and Water) of this EIR.

17.2.4 Solid Waste Disposal and Recycling

Title 40 of the Code of Federal Regulations. Title 40 of the Code of Federal Regulations (CFR), Part 258 (Resource Conservation and Recovery Act RCRA, Subtitle D) contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the Federal landfill criteria. The Federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills.

California Department of Resources Recycling and Recovery (CalRecycle; formerly the California Integrated Waste Management Board). CalRecycle oversees, manages, and monitors waste generated in California. It provides limited grants and loans to help California cities, counties, businesses, and organizations meet the State waste reduction, reuse, and recycling goals. It also provides funds to clean up solid waste disposal sites and co-disposal sites, including facilities that accept hazardous waste substances and non-hazardous waste. CalRecycle develops, manages, and enforces waste disposal and recycling regulations, including AB 939, SB 1016, and AB 341.

Assembly Bill 939. Assembly Bill 939 (AB 939) (Public Resources Code 41780) requires cities and counties to prepare integrated waste management plans (IWMPs) and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. AB 939 also requires cities and counties to prepare Source Reduction and Recycling Elements (SRRE) as part of the IWMP. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the purchase of recycled products.

Senate Bill 1016. Senate Bill (SB) 1016 requires that the 50 percent solid waste diversion requirement established by AB 939 be expressed in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's IWMP. The CalRecycle Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. Beginning January 1, 2018, the Board will be required to review a jurisdiction's source reduction and recycling element and hazardous waste element every two years.

Assembly Bill 341. Assembly Bill 341 (AB 341) sets forth the requirements for the State of California's mandatory commercial recycling program. AB 341 requires a business that generates four cubic yards or more of commercial solid waste per week, or is a multi-family residential dwelling of five units or more, to arrange for recycling services. Local governments are required to implement a commercial solid waste recycling program that consists of education, outreach, and monitoring of businesses and requires that these jurisdictions report the progress achieved in implementing its commercial recycling program to CalRecycle.

17.3 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to utilities and service systems that could result from the Specific Plan, and discusses components of the Specific Plan that would avoid or reduce those potential impacts. The section also recommends mitigation measures as needed to reduce significant impacts.

17.3.1 Significance Criteria

Based on the CEQA Guidelines,[1] implementation of the San Pablo Avenue Specific Plan would result in a significant impact related to utilities and service systems if it would:

(a) Have insufficient water supplies available to serve the Specific Plan area from existing entitlements and resources, or result in a need for new or expanded water supply entitlements;

[1]CEQA Guidelines, appendix G, item XVII (a through g).

(b) Require or result in the construction of new water or wastewater facilities, or expansion of existing facilities, the construction of which would cause significant environmental impacts;

(c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

(d) Result in a determination by the wastewater treatment provider which serves or may serve the Specific Plan area that it does not have adequate capacity to serve the plan area's projected demand in addition to the provider's existing commitments;

(e) Exceed wastewater treatment requirements of the Regional Water Quality Control Board;

(f) Be served by a landfill with insufficient permitted capacity to accommodate the plan area's solid waste disposal needs; or

(g) Fail to comply with Federal, State, and local statutes and regulations related to solid waste.

Item (e) is discussed in chapter 11 (Hydrology and Water Quality) of this EIR. It is also noted that the need for new utility infrastructure in itself is not a significant impact under CEQA unless the ***construction*** of the infrastructure causes significant impacts.

17.3.2 Relevant Specific Plan Components

The Specific Plan includes components that would avoid or reduce potential impacts on utilities and service systems. Chapter 4 (Infrastructure Systems) of the Specific Plan is dedicated to the issues included in this EIR chapter. In addition, Form-Based Code components especially relevant to the evaluation of potential impacts are briefly summarized below. The reader is encouraged to review the entire Infrastructure Systems chapter and other Specific Plan sections for more detail. Note that within the context of the Specific Plan, a "standard" is a mandatory requirement, and a "guideline" is not mandatory but is strongly recommended.

2.05.06.04 Water Conservation. This section describes standards for conserving water, including planting drought-resistant native species, equipping irrigation systems with rain sensors, and complying with the California Model Water Efficient Landscape Ordinance.

2.05.08.03 Landscaping and Irrigation Plans. This section explains the requirements for landscape plans.

2.05.08.07 Maintenance of Landscaped Areas. This section describes landscape maintenance requirements in accordance with the Model Water Efficient Landscape Ordinance.

3.05.05.02 Waste Management. The Complete Streets Plan describes a waste management strategy to include recycling receptacles with street furniture and to use recycled building materials in streetscape construction.

17.3.3 Impacts and Mitigations

Project and Cumulative Water Supply Impacts. Specific Plan implementation would require additional potable water over existing conditions. The Specific Plan area is located in the water

service area of the East Bay Municipal Utility District (EBMUD). Each individual development project in the plan area would be obligated to comply with EBMUD regulations governing water service and EBMUD's schedule of rates and charges. In its response to this EIR's Notice of Preparation (NOP) (see EIR Appendix A), EBMUD notes that the EBMUD Central Pressure Zone would serve proposed projects within the Specific Plan area.

As noted under the Regulatory Setting above (see EBMUD Urban Water Management Plan 2010), EBMUD prepares, adopts, and helps implement the UWMP for its water supply service area, which encompasses substantial portions of Contra Costa and Alameda counties, including El Cerrito and Richmond. The UWMP is required to be adopted at least once every five years (see Regulatory Setting, Urban Water Management Planning Act). A projected water demand study is prepared for each UWMP update; the study reflects updates of the general plans and specific plans of the cities and counties in the EBMUD service area (UWMP 2010, p. 4-4).

The UWMP (p. 4-4) forecasts an adjusted planning level water demand of 230 million gallons per day (mgd) in its service area by the year 2040, the horizon year of the proposed Specific Plan. The UWMP notes, "As a long-term planning tool, the planning level of demand remains unchanged through the current drought or other events that may temporarily impact demands." The demand forecast "adjusts" for EBMUD's existing and future conservation and recycled water efforts, based on ongoing monitoring of the effectiveness of these efforts.

As show in Table 17-1, the proposed Specific Plan's maximum daily total water demand is calculated to be approximately 882,720 gallons per day (gpd) (613 gpm x 60 mins./hour x 24 hrs./day). This total represents approximately 0.38 percent of the planning level water demand forecasted in the UWMP. This relatively small increase is considered a less-than-significant impact on water supply.

In addition, all discretionary development facilitated by the Specific Plan would incorporate the jurisdictional City's requirements for providing adequate water supply, including compliance with adopted performance standards, application of these standards in each jurisdictional City's development review process, coordination of development review with EBMUD (including consistency with the UWMP), and the requirement that new development pay its share of the costs associated with provision of water facilities through project-specific mitigations required as conditions of approval. These provisions would be applied to individual discretionary development projects as they are proposed and would allow consideration of project-specific issues of concern to EBMUD, such as (1) the need for water supply assessments in accordance with the California Water Code (sections 10910-10915; e.g., any individual residential development project of more than 500 units or other types of development [e.g., commercial] expected to use a comparable amount of water); (2) restrictions on installing water services in areas containing contaminated soil or groundwater; and (3) water recycling and conservation measures.

Since future development facilitated by the Specific Plan (1) would require about 0.38 percent of EBMUD's forecasted planning level water demand for its service area by the year 2040, and (2) would be subject to EBMUD and jurisdictional City plans, regulations, and ordinances regarding water supply, the project's impact on water supply is considered ***less-than-significant*** (see criterion [a] in subsection 17.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

Project and Cumulative Need for Water, Wastewater, and Storm Drainage System Infrastructure. The water, wastewater, and storm drainage infrastructure systems would require improvements, including the upgrading of existing deficiencies, in order to accommodate new development facilitated by the Specific Plan. The information below is summarized mainly from chapter 4 (Infrastructure Systems) of the Specific Plan and identifies the water, sewer, and storm drainage infrastructure improvements that are incorporated into the Specific Plan.

An infrastructure analysis prepared for the Specific Plan by NV5 (Nolte Associates) considered two planning scenarios. The Year 2040 planning scenario includes the development capacity forecasted under the proposed Specific Plan. The Buildout planning scenario includes all development forecasted in the Specific Plan (Year 2040 planning scenario) plus development of underutilized parcels that may be developed after 2040. Both planning scenarios take into account planned and entitled projects, including Ohlone Gardens, Creekside, 5620 Central Avenue, and Eden Housing.

The Buildout planning scenario is a long-term planning forecast intended to help both jurisdictional cities (El Cerrito and Richmond) consider infrastructure needs beyond the 2040 Specific Plan horizon. This is a typical process of long-range planning undertaken by cities and agencies because permanent infrastructure improvements are usually expected to remain in place for decades.

(a) Projected Water Demand and Infrastructure Needs. Table 17-1 shows additional water demands for the Year 2040 planning scenario. Table 17-2 shows additional water demands for the Buildout planning scenario.

The following assumptions were made for both planning scenarios:

- A residential demand factor of 80 gallons per day per person and a factor of three persons per unit (this is a conservative factor, since the overall persons per unit average expected in new Specific Plan residences is 2.25).

- A commercial usage factor of 0.13 gallons per day per square foot.

- For pipe sizing, an assumed maximum day factor of 2 is used, and a peak hour factor of 3.

- Fire flows are based on maximum building area, type of building, and if a sprinkler system is required.

- Per 2010 California Fire Code Appendix BB, type V building construction, with a maximum fire area of 55,000 square feet reduced by 50 percent (under the assumption that the building is provided with an approved automatic fire sprinkler system). An additional 500 gallons per minute (gpm) was assigned to the fire sprinkler system, for a total maximum fire demand of 3,625 gpm.

- *Total water demand* includes the maximum daily usage demand in addition to the required fire flow.

Table 17-1
ADDITIONAL WATER DEMANDS--2040 SCENARIO (SPECIFIC PLAN DEVELOPMENT CAPACITY)

Location Along San Pablo Avenue	Proposed Commercial (Sq Ft)	Proposed Residential Units	Total Water Demand, Max Day (gpm)	Fire Demand (gpm)	Total Water Demand, Max Day + Fire (gpm)	Pipe Size (inches)	Length (feet)
Knott Avenue to Potrero Avenue[1]	92,000	680	243	3,625	3,868	12	3,120
Manila Avenue to Santa Cruz Avenue[3]	47,712	198	75	3,625	3,700	12	2,750
Santa Cruz Avenue to Fairmount Avenue[4]	103,400	530	195	3,625	3,820	12	4,700
Creekside Project[5]	0	128	43	3,625	3,668	12	3,360
5620 Central Avenue Project[6]	0	170	57	3,625	3,682	12	1,570
Total	**243,112**	**1,706**	**613**	**18,125**	**18,738**	**--**	**--**

SOURCE: NV5 (Nolte Associates), May 2014.

Notes:

gpm = gallons per minute
sq ft = square feet

[1] Length includes 660 lineal feet along Cutting Boulevard to serve potential development.
[2] Length extends along Kearney Street (Manila to Schmidt) and Schmidt (Kearney to San Pablo).
[3] Length extends along Portola Avenue to serve planned/entitled Ohlone Gardens site.
[4] Length extends along Fairmount Avenue to serve potential development.
[5] Extend 12-inch main along San Pablo Avenue, south of Fairmount Avenue. Looped water main through existing shopping center with connections at Fairmount Avenue and San Pablo Avenue.
[6] Length extends along Central Avenue from Pierce Street to Carlson Boulevard.

Table 17-2
ADDITIONAL WATER DEMANDS—BUILDOUT PLANNING SCENARIO

Location Along San Pablo Avenue	Proposed Commercial (Sq Ft)	Proposed Residential Units	Total Water Demand, Max Day (gpm)	Fire Demand (gpm)	Total Water Demand, Max Day + Fire (gpm)	Pipe Size (inches)	Length (feet)
Knott Avenue to Potrero Avenue[1]	168,000	900	330	3,625	3,955	12	3,120
Kearney and Schmidt[2]	0	200	67	1,500	1,567	8	1,000
Manila Avenue to Santa Cruz Avenue[3]	164,712	408	166	3,625	3,791	12	2,750
Santa Cruz Avenue to Fairmount Avenue[4]	244,400	812	315	3,625	3,940	12	4,700
Creekside Project[5]	0	128	43	3,625	3,668	12	3,360
5620 Central Avenue Project[6]	0	170	57	3,625	3,682	12	1,570
Total	**577,112**	**2,618**	**978**	**19,625**	**20,603**	**--**	**--**

SOURCE: NV5 (Nolte Associates), May 2014.

Notes:

gpm = gallons per minute
sq ft = square feet

[1] Length includes 660 lineal feet along Cutting Boulevard to serve potential development.
[2] Length extends along Kearney Street (Manila to Schmidt) and Schmidt (Kearney to San Pablo).
[3] Improvements excluded for Ohlone Gardens project. EBMUD did not require upgrades to existing system.
[4] Length extends along Fairmount Avenue to serve potential development.
[5] Extend 12-inch main along San Pablo Avenue, south of Fairmount Avenue. Looped water main through existing shopping center with connections at Fairmount Avenue and San Pablo Avenue.
[6] Length extends along Central Avenue from Pierce Street to Carlson Boulevard.

- Proposed development would consist of buildings ranging in maximum height from 55 to 65 feet (bonuses and incentives could allow heights up to 85 feet in the Higher-Intensity Mixed Use zone). To support the plumbing and provide required fire flows, the water system with the higher pressure (GIAa, elevation 355) would need to be used.

- Master Plan level modeling of the existing distribution system will be required. This modeling effort would need to determine if the existing system can provide the additional demands.

- The existing high pressure 36-inch pipeline along Key Boulevard, Liberty Street, and Elm Street (four blocks north of San Pablo Avenue) will be adequate for the Year 2040 planning scenario. This high pressure pipeline is assumed to be sufficient to supply the additional demands and feed the development with new mains to San Pablo Avenue. In addition, EBMUD plans to construct a new 36-inch transmission main along San Avenue starting in 2021 that would connect to existing mains at Nevin Avenue in Richmond and Central Avenue in El Cerrito. The proposed 36-inch transmission main is part of EBMUD's West of Hills Northern Pipelines project.

- The water system is a looped system.

(b) Projected Wastewater Generation and Infrastructure Needs. Table 17-3 and Table 17-4 show projected additional wastewater flows anticipated from development under the two planning scenarios. Pipes sizes listed in the tables are sized to serve only the forecasted development.

A December 2013 sewer capacity study completed for the Ohlone Gardens project concluded that the existing sewer main along Portola Drive adjacent to the project site and the existing sewer main along San Pablo Avenue at Waldo Avenue have sufficient capacity to serve the proposed Ohlone Gardens project. Therefore, improvements to serve that project are not anticipated. Also, modeling of the wastewater system would be required to determine impacts of these projected additional flows on the downstream system.

The following assumptions were made for both planning scenarios:

- Wastewater generation for each scenario is based on 95 percent of indoor water demand projection (average dry weather flow).

- A peaking factor of two times average dry weather flow was used to determine peak dry weather flow, and a factor of four times the peak dry weather flow was used to determine the peak wet weather flow. (SSD Sanitary Sewer Capacity Study Criteria require that wet weather flow be calculated as 400 percent of peak dry weather flow in lieu of wet weather monitoring data.)

- At this stage no modeling has been performed for the existing wastewater system to evaluate the capacity under the new loads. Improvements are proposed for the San Pablo Avenue area and not for downstream systems.

Table 17-3
PROJECTED ADDITIONAL WASTEWATER FLOWS AND COLLECTION SYSTEM IMROVEMENTS--2040 SCENARIO (SPECIFIC PLAN DEVELOPMENT CAPACITY

Location Along San Pablo Avenue	Proposed Commercial (sq ft)	Potential Residential Units	Total PWWF (gpm)	Pipe size (inches)	Length (feet)
Knott Avenue to Potrero Avenue[1]	92,000	680	924	12	3,120
Eden Housing[2]	3,062	63	82	--	--
Ohlone Gardens[3]	4,650	57	75	--	--
Burlingame Avenue to Huntington Avenue	40,000	78	126	8	1,540
Fairmount Avenue, Richmond Street to San Pablo Avenue[4]	77,000	470	648	10	1,300
Avila Avenue to Central Avenue[5]	26,400	60	94	8	500
San Mateo Street, south of Central Avenue[6]	0	170	215	8	400
Creekside Project[7]	0	128	162	6	1,700
Total	**243,112**	**1,706**	**2,326**	**--**	**--**

SOURCE: NV5 (Nolte Associates), May 2014.

Notes:

PWWF = Peak Wet Weather Flow
gpm = gallons per minute
sq ft = square feet

[1] Length includes 660 lineal feet along Cutting Boulevard to serve potential development.
[2] Cost based on December 2013 Sewer Capacity Study recommended improvements to address existing deficiencies.
[3] Per December 2013 sewer capacity study, improvements not required to serve Ohlone Gardens project.
[4] Length consists of 1,300 lineal feet along Fairmount Avenue from Richmond Street west to San Pablo Avenue to serve potential development.
[5] Serves McNevin planned/entitled project.
[6] Serves planned/entitled 5620 Central Avenue project.
[7] Length consists of 1,700 lineal feet to serve planned/entitled Creekside project.

Table 17-4
PROJECTED ADDITIONAL WASTEWATER FLOWS AND COLLECTION SYSTEM IMROVEMENTS--BUILDOUT PLANNING SCENARIO

Location Along San Pablo Avenue	Proposed Commercial (sq ft)	Potential Residential Units	Total PWWF (gpm)	Pipe size (inches)	Length (feet)
Knott Avenue to Potrero Avenue[1]	168,000	900	1,255	15	3,120
Eden Housing[2]	3,062	63	82	--	--
Ohlone Gardens[3]	4,650	57	75	--	--
Kearney Street and Manila Avenue[4]	0	200	253	8	800
Schmidt Avenue to Fairmount Avenue	286,400	462	782	12	5,400
Fairmount Avenue, Richmond Street to San Pablo Avenue[5]	115,000	638	887	12	1,300
San Mateo Street, south of Central Avenue[6]	0	170	215	8	400
Creekside Project[7]	0	128	162	8	1,700
Total	**577,112**	**2,618**	**3,711**	--	**--**

SOURCE: NV5 (Nolte Associates), May 2014.

Notes:

PWWF = Peak Wet Weather Flow
gpm = gallons per minute
sq ft = square feet

[1] Length includes 660 lineal feet along Cutting Boulevard to serve potential development.
[2] Cost based on December 2013 Sewer Capacity Study recommended improvements to address existing deficiencies.
[3] Per December 2013 sewer capacity study, improvements not required to serve Ohlone Gardens project.
[4] Serves McNevin planned/entitled project.
[5] Length consists of 1,300 lineal feet along Fairmount Avenue from Richmond Street west to San Pablo Avenue to serve potential development.
[6] Serves planned/entitled 5620 Central Avenue project.
[7] Length consists of 1,700 lineal feet to serve planned/entitled Creekside project.

- Because computer simulations were not conducted for the infrastructure analysis, Master Plan level modeling of the existing wastewater system will ultimately be required to assist in determining the effects of development facilitated by the Specific Plan on the existing wastewater infrastructure as well as determining required improvements.

- As noted in the Setting above (section 17.1.2[b], Wastewater Treatment): (1) the EBMUD Wastewater Treatment Facility has a maximum treatment capacity of 168 mgd with average dry weather flows of 72.5 mgd, resulting in excess capacity of 95.5 mgd; and (2) the City of Richmond wastewater treatment facility has a capacity of 16 mgd with average dry weather flows of 8.5 mgd, resulting in excess capacity of 7.5 mgd.

  Based on the above wastewater generation assumptions and the total peak wet weather flow (PWWF) shown in Table 17-3, the forecasted development capacity facilitated by the proposed Specific Plan would generate approximately 418,680 gpd of average dry weather flows (2,326 gpm PWWF ÷ 4 = 581.5 gpm peak dry weather flow ÷ 2 = 290.75 gpm average dry weather flows x 1,440 mins./day = 418,680 gallons per day [gpd] average dry weather flows). This total of 418,680 gpd represents approximately 0.44 percent of the existing excess capacity of the EBMUD Wastewater Treatment Facility and about 5.58 percent of the existing excess capacity of the Richmond treatment facility – based on the conservative assumption that 100 percent of the daily flows generated by the Specific Plan would be treated at one or the other facility. Based on these relatively small increases compared to available excess capacity, the wastewater treatment facilities are considered to have adequate capacity to serve the proposed Specific Plan's development capacity.

  To verify the above conclusion, in its response to this EIR's Notice of Preparation (NOP) (see EIR Appendix A), EBMUD reports that its treatment plant and interceptor system "are anticipated to have adequate dry weather capacity to treat the proposed wastewater flows from this project, provided that the project and the wastewater generated by the project meet the requirements of the current EBMUD Wastewater Control Ordinance." (The ordinance includes standards that are applied by both the City of El Cerrito and the City of Richmond.)

  In its NOP response, EBMUD does note that "wet weather flows are a concern." As part of a regional solution that EBMUD is implementing, EBMUD suggests that the proposed Specific Plan include improvements to the affected local wastewater system infrastructure to minimize infiltration/inflow. Such improvements are included as part of the proposed Specific Plan, as described in this EIR chapter.

<u>(c) Projected Storm Drainage Infrastructure Requirements</u>. Due to the plan area's existing urban environment and the County requirement for compliance with hydromodification management, it is assumed that there would be no need for trunk pipe size increases. However, during design it would be cost-effective to rehabilitate or replace existing pipelines in poor condition. Pipelines can be inspected via CCTV to verify condition. Modifications to curbs, gutters, medians, and crossing locations may necessitate the replacement of existing storm drain inlets and connecting pipelines in accordance with City requirements and generally accepted engineering practices. These modifications may also require the addition of manholes at junction points to facilitate maintenance.

Hydromodification Management (HM) is the management of stormwater so that post-project stormwater discharge rates and durations match pre-project discharge rates and durations from 10 percent of the pre-project 2-year peak flow up to the pre-project 10-year peak flow. Typically, if a project creates or replaces more than one acre of impervious surface, it is subject to HM requirements. However, if the project does not increase the impervious surface to levels greater than the existing condition, HM is not required.

In the case of the Specific Plan, the proposed roadway curb-to-curb width is anticipated to be equal to existing conditions. In addition, the existing area is highly developed with very small amounts of remaining pervious surfaces. The validity of the assumption that the impervious surface will not increase will need to be verified when more-defined site plans are developed. Permanent post-construction Best Management Practices (BMPs) would be required. The Municipal Regional Stormwater NPDES Permit (MRP), in effect since October 2009 and revised as recently as December 2012, mandates a low impact development (LID) approach. LID treatment measures include rainwater harvesting and re-use, infiltration, evapotranspiration, and bio-treatment. All development projects must follow the Contra Costa Clean Water Program Stormwater C.3 Guidebook (current edition--February 15, 2012). Special Projects defined in Table 4-14 (Contra Costa Clean Water Program--6th edition) may use non-LID treatment systems such as tree boxes or vault-based high-flow rate media filters meeting the minimum criteria per the C.3 website.

(1) Design Considerations. There are three storm drainage requirements with which Specific Plan-facilitated development must comply:

1. Collection and conveyance of the 10-year storm event.
2. Compliance with hydromodification management (HM).
3. Compliance with stormwater quality regulations.

Currently the San Pablo Avenue area is covered under the California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit Order R2-2009-0074, NPDES Permit No.CAS612008. The Permit was adopted October 14, 2009 and revised as recently as December 1, 2012. All new projects in the Specific Plan area are covered under this permit, including new development, redevelopment, and commercial and industrial sites.

Under the current version of the 303(d) List of Impacted Water Bodies, Baxter Creek and Cerrito Creek are included in the Total Maximum Daily Load (TMDL) list, which identifies various creeks and water bodies as well as pollutants of concern. TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards.

BMPs must be incorporated to accommodate the runoff from impervious surfaces in compliance with the NPDES Permit. This need can be achieved through the use of LID features as well as various BMPs. LID features reduce impervious surfaces and can include pervious pavements, landscape features, and green roofs. Parking stalls and plaza areas in the plan area may be able to utilize pervious asphalt, pervious concrete, or permeable pavers. Medians may be landscaped to increase permeability. Landscaped open space also will contribute to reductions in impervious surfaces.

Given the existing level of urbanization and the potential development under the Specific Plan, BMPs can complement the plan's standards and guidelines, and address existing constraints. For example, bioretention planter areas may be used to treat roadway runoff, and flow-through planter boxes may be used to treat roof runoff. During design, the Stormwater C.3 Guidebook shall be referenced for acceptable BMPs, design considerations, design criteria, and operation and maintenance information. In addition to the C.3 Guidebook, individual development proposals shall determine if drainage will discharge to a water body impacted by specific pollutants. The 2008 303(d) List of Impacted Water Bodies, prepared and issued by the Regional Board, includes Baxter Creek and Cerrito Creek. The Municipal Regional Permit (MRP) provides more detailed information.

(2) Recommended Improvements. The recommended improvements cited relate to the right-of-way limits of San Pablo Avenue. The parcels to be developed into mixed use, office, residential, and commercial sites must accommodate their own storm drainage, hydromodification, and stormwater quality improvements for each parcel. Regional facilities may be desirable to accommodate some developments or to reduce operation and maintenance responsibilities.

The recommended improvements cited relate to the right-of-way limits of San Pablo Avenue. The parcels to be developed into mixed use, office, residential, and commercial sites must accommodate their own storm drainage, hydromodification, and stormwater quality improvements for each parcel. Regional facilities may be desirable to accommodate some developments or to reduce operation and maintenance responsibilities.

In the Specific Plan proposed streetscape design (see Specific Plan chapter 3, Complete Streets), the Downtown, Midtown, and Uptown areas would maintain existing curb edge and stormwater flowline. In the Uptown area, the sidewalks would be widened away from the road. Those additional impervious areas would have to be treated for water quality along the sidewalk.

Improvements related to a 10-year storm event include those items recommended to provide collection and conveyance during a flood. The improvements are not required to address typical daily flows since the proposed streetscape design maintains existing runoff conditions. Deficiencies along San Pablo Avenue have been addressed in the City's Capital Improvement Plan (CIP). Storm drain improvements are recommended because streets may be repaved as part of infill development projects, providing an opportunity to maintain the current system and bring it up to current standards. In addition, modifications to the existing storm drain system may be required with the proposed construction of landscaped bulb-outs at intersections.

The drainage improvements below are incorporated into the Specific Plan (chapter 4, Infrastructure Systems) and, for efficiency and the reduction of construction impacts, would be constructed as part of the Complete Streets improvements. The assumptions for drainage system improvements are as follows:

- The San Pablo Avenue corridor in the plan area is approximately 2.7 miles (14,200 feet) long.
- Assume two existing inlets every 500 feet (replacement of 60 inlets).

- Assume the addition of two new inlets at each midblock crossing, with associated piping and junction structures.
    1. 13 new manholes
    2. 26 new inlets

- Assume 10 percent of existing pipe is in poor condition (offset joints, broken pipe, etc).
    1. Rehabilitate or replace 1,400 feet of 36-inch pipe
    2. Rehabilitate or replace ten manholes

- Improvements related to the hydromodification management (HM) program include those items required to comply with the Contra Costa Clean Water Program. It does not appear that the project would increase impervious surface or discharge; therefore, no HM improvements are anticipated at this time. The existing system is a paved area discharging to inlets, which discharge to pipelines.

- Improvements related to stormwater quality are those items required to comply with section C.3 of the NPDES Permit. Road resurfacing and sidewalk repair/replacement are excluded from C.3 requirements if the replacement is within the existing impervious area footprint. The Specific Plan streetscape design maintains existing road runoff patterns and does not include road widening. The proposed streetscape plan describes future widening of the existing sidewalks in the Uptown area. Any increase in impervious area as a result of widening would be required to be treated for water quality along the sidewalk.

Conclusion. The utility (water, wastewater, storm drainage) infrastructure modifications described above have been designed based on the projected utility demands and are included as part of the proposed Specific Plan. If the projected utility demands change as a result of development under the Specific Plan that is lower than the forecasted development capacity, or as a result of revisions to City or EBMUD standards, design criteria, or UWMP provisions, the utility system modifications proposed to serve the Specific Plan area would be revised accordingly so that the modifications are adequate to meet the revised utility demands.

The construction of project-related utility infrastructure would be temporary and would occur within either existing public rights-of-way, City property, a project development site, or private property subject to a municipal easement. Construction period air emissions (dust), noise, and traffic interruption typically associated with utility infrastructure construction would be reduced through mandatory City of El Cerrito and City of Richmond construction mitigation procedures (e.g., see chapters 5 [Air Quality] and 13 [Noise] of this EIR). No additional significant environmental impact is anticipated with such construction activity beyond the ***significant, unavoidable construction-related noise and vibration impacts*** (Impact/Mitigation 13-3 and Impact/Mitigation 13-4) already identified in chapter 13 as part of overall Specific Plan implementation (see criteria [b], [c], [d], and [e] in subsection 17.3.1, “Significance Criteria,” above).

Mitigation. Significant unavoidable construction-related noise and vibration impacts would occur over time due to Specific Plan implementation. Construction mitigation measures are already included in EIR chapter 13 (Noise).

Project Impacts on Solid Waste Disposal and Recycling Service. Solid waste in El Cerrito is collected by the East Bay Sanitary Company and processed at the Golden Bear Transfer

Station in Richmond. After processing, landfill materials are transferred to the Keller Canyon Landfill in Contra Costa County. Solid waste in Richmond is collected by Richmond Sanitary Service and also processed at the Golden Bear Transfer Station before landfill materials are transferred to the Keller Canyon Landfill. As of 2004, Keller Canyon Landfill had an estimated remaining capacity of 85 percent and is scheduled to close in 2030. The City of Richmond has an exclusive franchise agreement with Richmond Sanitary Service, a subsidiary of Republic Services, for residential and commercial solid waste collection through 2025. Government regulations dictate the process through which transfer stations and landfills apply for permit extensions, so that regional solid waste disposal and recycling service can continue over time (i.e., beyond the Specific Plan's 2040 horizon year). Any expansion of those waste disposal and recycling facilities, or development of new facilities, would be subject to its own CEQA requirements.

Curbside recycling service in El Cerrito is provided by the City of El Cerrito. Richmond Sanitary Service provides the curbside recycling service in Richmond. The West Contra Costa Integrated Waste Management Authority (WCCIWMA), responsible for implementation of AB 939 in all of the participating cities, met the AB 939 50 percent waste diversion goal in 2006.

As noted above (17.3.2, Relevant Specific Plan Components), the Complete Streets Plan includes a waste management strategy for recycling receptacles and recycled building materials.

Specific Plan implementation would not be expected to generate an inordinate amount of solid waste for its size (i.e., a rate inconsistent with adopted plans, policies, and regulations) either during demolition/construction activities or operation, and would be served by solid waste disposal and recycling facilities with sufficient capacities to accommodate the plan's demolition/construction debris and solid waste disposal needs. The Specific Plan's effect on solid waste and recycling services would therefore represent a ***less-than-significant impact*** (see criteria [f] and [g] in subsection 17.3.1, "Significance Criteria," above).

Mitigation. No significant impact has been identified; no mitigation is required.

18. PROJECT CONSISTENCY WITH LOCAL AND REGIONAL PLANS

18.1 LOCAL PLANS

Section 15125(d) of the California Environmental Quality Act (CEQA) Guidelines requires EIRs to "...discuss any inconsistencies between the proposed project and applicable general plans and regional plans." The Guidelines indicate that the objective of this discussion is to identify possible modifications to the project to reduce any inconsistencies with relevant plans and policies.

18.1.1 Project Consistency with Relevant General Plan Policies

As described in Tables 18.1 and 18.2, the proposed San Pablo Avenue Specific Plan is considered consistent or substantially consistent with all applicable policies of both the El Cerrito General Plan and the Richmond General Plan.

In Tables 18.1 and 18.2, “Consistent” means the proposed Specific Plan is considered consistent with the policy with no mitigation required (i.e., a less-than-significant impact) or after any applicable mitigation recommended in this EIR (i.e., a significant impact reduced to a less-than-significant level). “Substantially Consistent” means the same except that, in some cases, a significant unavoidable impact might still remain after mitigation. The EIR chapter references in the “Consistency Analysis” column include the references used to make the consistency conclusion; other portions of the EIR may include additional, supporting information on the topic.

Chapter 20 (Alternatives to the Proposed Project, Alternative 1) provides more details about the proposed Specific Plan’s relationship to the adopted El Cerrito General Plan. In addition, Chapter 3 (Project Description), Section 3.2 (Background) outlines the planning efforts, process, and context which formed the foundation of the Specific Plan.

18.1.2 Specific Plan Area Land Use Designations

The El Cerrito General Plan, Richmond General Plan, and San Pablo Avenue Specific Plan identify the plan area as the location of future higher intensity mixed use development, which may result in building heights greater than existing conditions. In addition, the Specific Plan proposes increases in allowable building heights over current El Cerrito development standards. General comparisons between existing El Cerrito development standards and the proposed Specific Plan Transect Zones are described below. It should be noted that these are general comparisons, not parcel-specific, detailed comparisons of the precise development requirements and options applied to individual parcels. The Transect Zones (TOHIMU and TOMIMU) are described in Form-Based Code section 2.03.02.

- The Transit-Oriented Higher-Intensity Mixed Use (TOHIMU) zone proposes a maximum building height of 85 feet (with State density bonuses). El Cerrito currently allows building heights up to 65 feet with a conditional use permit (CUP) discretionary approval within approximately the same area.

- The Transit-Oriented Mid-Intensity Mixed Use (TOMIMU) zone proposes a maximum building height of 65 (with State density bonuses). El Cerrito currently allows building heights up to between 50 and 65 feet with a CUP within approximately the same area.

Generally, the Specific Plan Transect Zones would result in building heights greater than existing conditions in the plan area, where much of existing development is one-story commercial with associated parking lots. There are also several 2-4 story buildings within the Plan area, including apartment complexes along San Pablo Avenue and in the neighborhoods surrounding both BART stations, intermixed with single-story residences and commercial buildings.

The Specific Plan includes components that would avoid or reduce potential land use and planning impacts. The Specific Plan is a collaborative effort between the cities of El Cerrito and Richmond to implement a shared vision for the plan area, identify improvements, and adopt regulations that can be consistently applied throughout the plan area. The plan stipulates that housing and mixed use development be conveniently located near public transportation, shopping, employment, and other community facilities in the plan area. The Specific Plan--including the Form-Based Code (FBC), Complete Streets chapter, and Infrastructure Systems chapter--provides complete details. Chapter 3 (Project Description) of this EIR summarizes the Specific Plan. The reader is encouraged to review the entire Specific Plan.

New development throughout the plan area would include a combination of residential, commercial, public/semipublic, light industrial, and mixed uses. Residential uses would be located throughout the plan area. New commercial uses would include combinations of, for example, retail, office, restaurant, and live/work uses in single or mixed use buildings. New public/semipublic uses could include, for example, community centers, government offices, and residential care facilities. Light industrial uses would include, for example, handicraft/custom manufacturing and storage.

Open spaces in the plan area would be composed of private and public open space, plazas, midblock connections, promenades, greenways, daylit creeks, pedestrian pathways, repurposed open spaces (e.g., in underutilized surface parking lots), and temporary open spaces, pursuant to the Form Based Code, Complete Streets Plan and related planning efforts, including the City's to-be adopted Urban Greening Plan. The Ohlone Greenway would remain an important pedestrian and bicycle pathway running parallel to San Pablo Avenue in accordance with the City's Ohlone Greenway Master Plan; the Greenway would be improved, and connections between it and the plan area would be created. Related improvements in the plan area would include a complete streets program and public art pursuant to the City's Art in Public Places

When implemented through the administrative procedures of the Specific Plan (FBC section 2.02, Administration of Regulating Code), the Specific Plan would serve to achieve a coordinated, cohesive environment in the plan area (including transition areas at the edges of the plan area) through unified development standards and the efficient use of existing resources and infrastructure.

18.2 PERTINENT REGIONAL PLANS

18.2.1 Association of Bay Area Governments (ABAG) Plans and Policies

The Association of Bay Area Governments (ABAG) is the regional planning agency and council of governments for the nine-county San Francisco Bay Area responsible for addressing in a regional context such intraregional issues as land use, housing, environmental quality, and economic development. The following ABAG regional planning programs warrant consideration:

(1) Plan Bay Area. The primary document and associated process used in implementing ABAG policies is Plan Bay Area, adopted collectively by ABAG and the Metropolitan Transportation Commission (MTC) on July 18, 2013. Plan Bay Area states:

"Adoption of Plan Bay Area does not mandate any changes to local zoning, general plans or project review. The region's cities, towns and counties maintain control of all decisions to adopt plans and permit or deny development projects. Similarly, Plan Bay Area's forecasted job and housing numbers do not act as a direct or indirect cap on development locations in the region. The forecasts are required by [State Bill] SB 375 [The California Sustainable Communities and Climate Protection Act of 2008] and reflect the intent of regional and local collaboration that is the foundation of Plan Bay Area.

"The plan assists jurisdictions seeking to implement the plan at the local level by providing funding for [Priority Development Area] PDA planning and transportation projects." (Plan Bay Area, page 3)

The El Cerrito General Plan identifies the San Pablo Avenue corridor as the focus of new housing and population growth in the city. Similarly, the Richmond General Plan (Maps 3.6a and 3.6b) identifies its portion of the plan area as "Change Area 4" for medium density mixed use (residential and commercial) development. Consistent with the general plans of El Cerrito and Richmond, the San Pablo Avenue Specific Plan area is identified as a "Priority Development Area" in Plan Bay Area (Appendix D: Contra Costa PDA Portfolio), where "infill development and intensification is envisioned." Each jurisdiction's City Council voluntarily applied to have their respective areas identified as Priority Development Areas.

The proposed San Pablo Avenue Specific Plan is considered consistent with Plan Bay Area. Further details are included in EIR Chapter 14 (Population and Housing).

(2) FOCUS Program. In addition to Plan Bay Area, the ABAG-led FOCUS program is a regional development and conservation strategy--in partnership with the Metropolitan Transportation Commission (MTC) and with support from the Bay Area Air Quality Management District (BAAQMD) and the Bay Conservation and Development Commission (BCDC)--that promotes a more compact land use pattern for the Bay Area. The FOCUS program unites the efforts of these four regional agencies into a single program. The FOCUS program seeks to link land use and transportation and to reduce greenhouse gas emissions by encouraging development of complete, livable communities in areas served by transit and promoting conservation of the region's most significant resource lands. Through the FOCUS program, regional agencies support local government commitment to these goals by working to direct existing and future incentives to Priority Development Areas (PDAs) and Priority Conservation

Areas (PCAs). The San Pablo Avenue Specific Plan area is an ABAG-designated PDA (identified as "El Cerrito – San Pablo Avenue Corridor, Del Norte & South").

The proposed project is considered consistent with this ABAG Land Use Policy Framework. Draft Specific Plan consistency with this ABAG policy framework is discussed in chapters 12 (Land Use and Planning) and 14 (Population and Housing) of this EIR.

18.2.2 Bay Area Air Quality Management District (BAAQMD)

The BAAQMD seeks to attain and maintain air quality conditions in the San Francisco Bay Area Air Basin (SFBAAB) through a comprehensive program of planning, regulation, enforcement, technical innovation, and education. The clean air strategy includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The BAAQMD also inspects stationary sources and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by law.

(1) Bay Area Clean Air Plan. The BAAQMD is responsible for developing a Clean Air Plan which guides the region's air quality planning efforts to attain the California Air Quality Standards (CAAQS). The BAAQMD's 2010 Clean Air Plan is the latest Clean Air Plan which contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NO_X), particulate matter, and greenhouse gas emissions.

The Bay Area 2010 Clean Air Plan, which was adopted on September 15, 2010 by the BAAQMD's board of directors:

- Updates the Bay Area 2005 Ozone Strategy in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce ozone;
- Provides a control strategy to reduce ozone, particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;
- Reviews progress in improving air quality in recent years; and
- Establishes emission control measures to be adopted or implemented in the 2010 to 2012 timeframe.

(2) BAAQMD CARE Program. The Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor toxic air contaminants (TACs) in the Bay Area. The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program is being implemented in three phases that include an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses will be used to focus emission reduction measures in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. The BAAQMD has identified six communities as impacted: Concord, Richmond/San Pablo, Western Alameda County, San Jose, Redwood City/East Palo Alto, and Eastern San Francisco.

The proposed Specific Plan is considered consistent with the BAAQMD 2010 Clean Air Plan and CARE program, as discussed in EIR Chapter 5 (Air Quality).

18.2.3 West Contra Costa Transportation Advisory Committee (WCCTAC)

WCCTAC has an adopted West County Action Plan for Routes of Regional Significance (2009), which is updated periodically to provide guidance on cooperative planning efforts and capital improvement projects in West County. WCCTAC has recently completed an update to the West County Action Plan, and has transmitted that update to the Contra Costa Transportation Authority for incorporation into the 2014 Countywide Comprehensive Transportation Plan. It is anticipated that the updated West County Action Plan will be formally adopted by WCCTAC at the end of 2014. Both the current (adopted in 2009) Action Plan and the updated Action Plan call for cooperation between partner agencies to improve traffic congestion on San Pablo Avenue, and emphasize the importance of better serving all corridor users by enhancing transit services, including the Rapid Bus, and improving bicycle and pedestrian facilities. Both the current and the updated Action Plans specify that the multi-modal transportation service objective (MTSO) for San Pablo Avenue is to maintain LOS E or better at all signalized intersections. In addition, the updated Action Plan specifies that this LOS MTSO will not be applied within ½-mile of a BART station, and instead the performance measures in the relevant specific plan(s) for the area will be followed. Additional objectives from the updated Action Plan include:

A. Enhance local and regional transit service, particularly in terms of connections to BART.
B. Increase the use of active transportation modes.
C. Implement Complete Streets enhancements identified in local plans.
D. Actively manage growth to support regional land use and transportation goals.

WCCTAC has also adopted the Transit Enhancement Strategic Plan and Wayfinding Plan (2010), which provides guidance for improvements at West County transit hubs, including the two El Cerrito BART stations. The plan also includes transportation demand management and parking strategies.

The San Pablo Avenue Specific Plan has been prepared consistent with the WCCTAC Action Plan and Wayfinding Plan (see EIR Chapter 16, Transportation and Circulation).

18.2.4 Contra Costa Transportation Authority (CCTA)

The CCTA Congestion Management Program (CMP, 2013) coordinates land use, air quality, and transportation planning among the CCTA local jurisdictions to reduce traffic congestion, improve mobility, and increase sustainability of the countywide transportation system. The CMP establishes traffic level of service standards for designated roadways and principal arterial streets, as well as a seven-year capital improvement program. San Pablo Avenue has an LOS standard of E at the two monitored intersections in El Cerrito: Cutting Boulevard and Central Avenue.

EIR Chapter 16 (Transportation and Circulation) has been prepared consistent with the CMP.

18.2.5 San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (MRP)

The San Francisco Bay Municipal Regional Stormwater NPDES Permit (MRP) issues the Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for the discharge of stormwater runoff from the Municipal Separate Storm Sewer Systems (MS4s) of over 70 municipalities and local agencies in five Bay Area Counties, including El Cerrito and Richmond. The MRP replaces the former county-by-county permits.

The municipalities of the Contra Costa Clean Water Program, the Contra Costa County Flood Control and Water Conservation District, Contra Costa County, and its 19 incorporated cities (including El Cerrito and Richmond) are regulated waste dischargers under the MRP (Order R2-2009-0074: NPDES Permit No. CAS612008) administered by the RWQCB. The MRP was adopted October 14, 2009 and revised as recently as December 1, 2012. All new projects in the Specific Plan area that create or replace between 2,500 and 10,000 square feet ("small projects") or more ("large projects") of roofs or pavement are covered under this permit, including new development, redevelopment, and commercial and industrial sites.

The most recent MRP, in effect December 1, 2012, mandates a low impact development (LID) approach. LID treatment measures include rainwater harvesting and re-use, infiltration, evapotranspiration, and bio-treatment. All development projects must follow the Contra Costa Clean Water Program Stormwater C.3 Guidebook (current edition--February 15, 2012, with March 20, 2013 Addendum). Special Projects defined in Table 4-14 (Contra Costa Clean Water Program--6th edition) may use non-LID treatment systems such as tree boxes or vault-based high-flow rate media filters meeting the minimum criteria per the C.3 website.

The proposed Specific Plan is considered consistent with the MRP (see further discussion in Chapter 11, Hydrology and Water Quality, of this EIR).

Table 18.1
PROJECT CONSISTENCY WITH EL CERRITO GENERAL PLAN[1]

Policies	Consistency Analysis
Land Use Element	
Policy LU1.1: Predominate Single-Family Use. Ensure that the existing single-family neighborhoods remain in predominately single-family use, but including accessory units, by prohibiting incompatible uses.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning). All Specific Plan development would occur outside of predominantly single-family neighborhoods.
Policy LU1.4: Intrusions into Residential Areas. Eliminate, to the greatest extent possible, intrusions into residential areas from nonresidential areas, such as noise and commercial traffic and parking.	**Substantially Consistent.** See EIR chapters 13 (Noise) and 16 (Transportation and Circulation), "Impacts and Mitigations."
Policy LU1.5: Suitable Housing. Promote suitably located housing and services for all age groups within the city.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU1.6: Variety of Housing Types. Encourage diverse housing types, such as live-work units, studio spaces, townhouses, co-housing, congregate care, and garden apartments.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU2.1: San Pablo Avenue. Promote retail, office, and mixed uses along San Pablo Avenue to provide more tax revenues to the city.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU2.2: Commercial Diversification. Maintain a diversity of commercial land uses to ensure stability during economic cycles and enrich the lives of residents. The maintenance of diversity includes encouragement of small businesses, both in terms of creation of new firms and retention of existing ones.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU3.1: Commercial/Residential Interaction. Encourage easy access to local businesses as focal points for neighborhood social interaction.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU3.2: Midtown Center. Promote the organization of properties along San Pablo Avenue from south of Moeser Lane to north of Manila Avenue into a "Midtown Center" which may include a civic center.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU4.1: Mixture of Uses. Encourage a mix of uses that promotes such community values as convenience, economic vitality,	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).

[1]Substantially similar policies not duplicated.

Policies	Consistency Analysis
fiscal stability, public safety, a healthy environment, and a pleasant quality of life.	
Policy LU4.2: Availability of Goods and Services. Provide for economic development that assures the availability and diversity of resident-serving goods and services.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU4.3: Street Frontages. Encourage attractive and accessible street frontages that contribute to the retail vitality of all commercial or mixed-use centers.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy LU4.4: Amenities. Ensure that new development provides a high level of amenity for users of the development, and, wherever possible, includes community-serving facilities.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU4.5: Quality of Development. Ensure that all development in nonresidential areas addresses compatibility and quality of life issues.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU4.6: Crime Prevention. Encourage the use of planning and design features that promote crime prevention to make the city safer and relieve the burden on law enforcement services.	**Consistent.** See EIR chapter 15 (Public Services).
Policy LU5.1: BART Station Areas. Encourage higher densities and a mix of uses near the city's two BART stations to take advantage of the transit opportunities they provide.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy LU5.2: Mixed-Use Centers. Encourage mixed-use centers along San Pablo Avenue--including development along Fairmount Avenue, Stockton Avenue and Moeser Lane, between San Pablo Avenue and the Ohlone Greenway--that provide the opportunity for people to walk among businesses, employment, and residences.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU5.3: Mixed-Use Projects. Encourage mixed uses, especially offices or housing over ground-floor retail uses, where commercial uses are allowed.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU5.5: Pedestrians, Bicycles, and Access. Ensure that business areas have adequate pedestrian and bicycle facilities and accessibility for persons with disabilities, and that easy connections to transit are available wherever possible.	**Consistent.** See EIR chapter 16 (Transportation and Circulation).

Policies	Consistency Analysis
Policy LU5.6: Development Along the Ohlone Greenway. New or substantially altered development abutting the Ohlone Greenway will be evaluated with respect to how the development enhances the aesthetics and ambiance of this important linear recreational and transportation facility, and how the development contributes to the security of users of the Greenway. The City will expect frontage along the Greenway to be treated as if it were public street frontage, with commensurate attention to design quality.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 15 (Public Services).
Policy LU6.1: Natural Features. Preserve or restore the natural terrain, drainage, and vegetation on and near development sites and open-up buried creeks where opportunities can be found, unless there are compelling reasons why this cannot be done.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy LU6.2: Circulation Alternatives. To the extent possible, encourage alternatives to the use of private automobiles. Encourage a full range of transportation options--driving, transit, walking and biking--without allowing any one to preclude the others.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy LU6.4: Water Conservation. Require water conserving landscape design and fixture types in all new development. This policy is not intended to encourage the substitution of paved surfaces and other hardscape for plant materials.	**Consistent.** See EIR chapters 11 (Hydrology and Water Quality) and 17 (Utilities and Service Systems).
Community Design Element	
Policy CD1.1: Neighborhood Character. Preserve and enhance the character of existing residential neighborhoods by limiting encroachment of new buildings and activities that are out of scale and character with the surrounding uses.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 12 (Land Use and Planning).
Policy CD1.2: Design Concept. Plan and construct development within development activity centers and neighborhood commercial centers according to an overall design concept for each center.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 12 (Land Use and Planning).
Policy CD1.3: High-Quality Design. Encourage higher-quality design through the use of well-crafted and maintained buildings and landscaping, use of higher-quality building materials, and attention to the design and	**Consistent.** See EIR chapters 3 (Project Description) and 4 (Aesthetics and Visual Resources).

Policies	Consistency Analysis
execution of building details and amenities in both public and private projects.	
Policy CD1.5: Landmarks Preservation. Inventory and designate potential sites and structures of architectural, historic, archaeological, and cultural significance.	**Consistent.** See EIR chapter 7 (Cultural and Historic Resources).
Policy CD1.6: Entrances to the City. Improve the major entrances into the city with landmark entry features, signs, and gateways to enhance the sense of community and improve the City's image.	**Consistent.** See EIR chapters 3 (Project Description) and 4 (Aesthetics).
Policy CD1.7: Views and Vistas. Preserve and enhance major views and vistas along major streets and open spaces, providing areas to stroll and benches to rest and enjoy views.	**Substantially Consistent.** See EIR chapters 3 (Project Description) and 4 (Aesthetics and Visual Resources).
Policy CD1.9: Building Design. A variety of attractive images will be achieved by encouraging a variety of building styles and designs, within a unifying context of consistent "pedestrian" scale along streets and compatibility among neighboring land uses.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use), and 16 (Transportation and Circulation).
Policy CD2.1: Street Frontages. Encourage street frontages that are safe, by allowing for surveillance of the street by people inside buildings and elsewhere, and are interesting for pedestrians. Require buildings in development centers and neighborhood commercial centers along San Pablo Avenue to be directly abutting sidewalks, with window openings and entries along the pedestrian frontage.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy CD2.2: San Pablo Avenue. Develop a design concept for San Pablo Avenue that includes street landscaping and improvements, and design guidelines that create an overall coordinated image and character of the street from north to south. Establish physical design standards for development in cooperation with Caltrans and, where required, subject to acceptance by Caltrans.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy CD2.3: Streetscape Improvements. Maintain an active program of street tree planting and improved roadway landscaping through both public and private means. Design guidelines shall describe appropriate types of trees for commercial areas--to	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 16 (Transportation and Circulation).

Policies	Consistency Analysis
enhance the shopping experience rather than detract from it.	
Policy CD2.4: Multi-Modal Transportation Network. Ensure that streets, paths, and bikeways contribute to the system of a fully connected transportation network to all major destinations in the City. The design of these streets and pathways should encourage pedestrian and bicycle uses by being spatially defined by buildings, trees, lighting, and street furniture. Pedestrian and bicycle pathways and auto routes should be compatible.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy CD2.5: Signs. Scale and orient signs to both pedestrians and drivers along the street frontage. Building signs should be designed to fit within the scale and character of buildings.	**Consistent.** See EIR chapter 4 (Aesthetics and Visual Resources).
Policy CD2.6: Parking Layout. Encourage the development of common parking areas and common access for adjoining lots.	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Policy CD2.7: Accessible Design. Site and building design must meet basic accessibility needs of the community and not be exclusively oriented to those who arrive by car.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy CD2.8: City Sidewalk and Pedestrian Walkways. City streets and pedestrian walkways should be designed to be safe, accessible, convenient, comfortable, and functionally adequate at all times, including the design of pedestrian crossings, intersection design, sidewalk widths, street tree planting, street furniture, and signal timing.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy CD3.1: Tree Preservation. Preserve existing significant trees and tree groupings where possible. Replace trees removed due to site development.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy CD3.2: Usable Open Spaces. Require the provision of usable open space in the form of ground-floor patios, upper-floor decks, and balconies, as well as common recreational facilities.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 15 (Public Services).
Policy CD3.3: Site Landscaping. Improve the appearance of the community by requiring aesthetically designed screening and landscaping on public and private sites. Ensure that public landscaping includes entry areas, street medians, parks, and schools. Require landscaping for all private sites, yard	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 15 (Public Services).

Policies	Consistency Analysis
spaces, parking lots, plazas, courtyards, and recreational areas.	
Policy CD3.5: Creek Preservation. Where possible, preserve and restore natural drainage ways as parts of the storm drainage system, coordinating with recreational and trail use.	**Consistent.** See EIR chapters 6 (Biological Resources), 11 (Hydrology and Water Quality), and 15 (Public Services).
Policy CD3.6: Cerrito Creek. Where possible, open the Cerrito Creek channel, providing access and recreational opportunities along the creek in conjunction with its flood control function.	**Consistent.** See EIR chapters 6 (Biological Resources), 11 (Hydrology and Water Quality), and 15 (Public Services).
Policy CD3.7: Landscape Maintenance. Require ongoing maintenance of landscaping on private property (except single-family residences).	**Consistent.** See EIR chapter 4 (Aesthetics and Visual Resources).
Policy CD3.8: Public Spaces. Create specialized outdoor gathering places in the three main activity centers along San Pablo Avenue--Del Norte, Midtown, and El Cerrito Plaza. Encourage the design of these public spaces to accommodate activities that encourage the presence of people at all hours of the day and evenings.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 15 (Public Services).
Policy CD3.9: Ohlone Greenway. Enhance the usability and aesthetic appeal of the Ohlone Greenway by integrating it into the fabric of the City. Design buildings with entries, yards, patios, and windows to open onto and face the Ohlone Greenway. Avoid blank walls, backs of buildings, and large parking lots adjacent to the greenway.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 6 (Biological Resources), 12 (Land Use and Planning), and 15 (Public Services).
Policy CD3.10: Greenway Spur Trails. Develop greenway spur trails for creekside access and access to the Bay for recreational use and environmental protection.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 6 (Biological Resources), 12 (Land Use and Planning), and 15 (Public Services).
Policy CD3.11: Streetscape Design. Streetscape design (street trees, lighting, and pedestrian furniture) should be used to lend character and continuity with commercial districts and residential neighborhoods.	**Consistent.** See EIR chapter 3 (Project Description).
Policy CD3.12: Landscape Species. Indigenous and drought-tolerant species that reduce water usage and are compatible with El Cerrito's climate are encouraged.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems).

Policies	Consistency Analysis
Policy CD4.1: Compatibility in Building Scale. Avoid big differences in building scale and character between developments on adjoining lots.	**Consistent.** See EIR chapters 3 (Project Description) and 4 (Aesthetics).
Policy CD4.2: Building Articulation. Ensure that buildings are well articulated. Avoid large unarticulated shapes in building design. Ensure that building designs include varied building facades, rooflines, and building heights to create more interesting and differentiated building forms and shapes. Encourage human scale detail in architectural design. Do not allow unarticulated blank walls or unbroken series of garage doors on the facades of buildings facing the street or the Ohlone Greenway.	**Consistent.** See EIR chapters 3 (Project Description) and 4 (Aesthetics).
Policy CD4.4: Natural Lighting and Ventilation. Ensure that building design takes into consideration air circulation, natural lighting, views, and shading areas to interior and exterior spaces.	**Consistent.** See EIR chapters 3 (Project Description) and 4 (Aesthetics).
Policy CD4.5: Energy and Resources. Integrate good design with the use of energy efficient techniques and equipment, and with materials and construction practices that minimize adverse environmental affects.	**Consistent.** See EIR section 19.8 (Energy Conservation).
Policy CD4.6: Sustainable Building Materials. Encourage the use of "green" and non-toxic building materials….	**Consistent.** See EIR section 19.8 (Energy Conservation).
Policy CD5.2: Planned Development. Encourage planned development projects and other techniques that cluster developments to create and preserve open spaces, views, and other amenities.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 12 (Land Use and Planning).
Policy CD5.3: Design Guidelines and Regulations. Make development and design regulations more understandable with use of illustrations, photos, drawings, diagrams, or other graphic and visually oriented regulations, such as a "form code."	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy CD6: Affordable Commerce. El Cerrito's urban form should allow site opportunities for commerce by local entrepreneurs--small business spaces in close proximity to other businesses with easy visibility from the street and close to abundant pedestrian traffic.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).

Policies	Consistency Analysis
Growth Management Element	
Policy GM2.1: Application of Standards. Strive to maintain the minimum V/C performance standard for each signalized intersection as described in Table 4-4. Level of Service Standards are considered to be met if measurement of actual conditions at the intersection indicates that operations are equal to or better than the specified minimum performance standard, or if El Cerrito's Capital Improvement Program includes projects which, when constructed, will result in performance better than or equal to the specified minimum standard.	**Substantially Consistent.** See EIR chapter 16 (Transportation and Circulation).
Policy GM2.2: Achieving Level of Service Standards. Consider amendments to the General Plan Land Use Element or Map, Zoning Ordinance, or other relevant plans and policies to alter land use intensity or vehicle trip activity so that any Basic Route signalized intersection which does not meet the minimum service level standard in Policy GM2.2 can be brought into compliance with said standard. Alternately, consider amendments to the Capital Improvement Program or other relevant programs and policies which will improve the capacity or efficiency of intersections not meeting the service standards through physical construction and improvements.	**Substantially Consistent.** See EIR chapter 16 (Transportation and Circulation).
Policy GM5.1: Local Development Mitigation Program--Services. Adopt and implement a development mitigation program requiring developers to pay the costs necessary to offset impacts of their projects on the local police, fire and park service system. Ensure that the local development review process includes consultation with contact agencies supplying domestic water, sanitary sewage and flood control service so that cost impacts are identified and appropriate mitigations included on a cooperative basis.	**Consistent.** See EIR chapters 15 (Public Services) and 17 (Utilities and Service Systems).
Growth Management Implementation #17: Intergovernmental Coordination. …[T]he following are City of El Cerrito interagency coordination positions:	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).

Policies	**Consistency Analysis**
a. As opportunities present themselves, improve freeway access to El Cerrito, particularly around the Del Norte area and at the Central Avenue interchange. b. Oppose transportation projects that would diminish access to Interstate 80 from El Cerrito. c. Oppose capacity enhancements to San Pablo Avenue except when the improvements serve local traffic and do not compromise bus, pedestrian and bicycle travel. d. Support physical enhancements to San Pablo Avenue to make it a transit and pedestrian friendly multi-modal street….	
Growth Management Implementation #24: Specific Plans. …Areas to be considered for a specific plan include the Midtown area along San Pablo Avenue, extending from south of Moeser to north of Manila Avenue, and the Del Norte BART station area. A specific plan for the El Cerrito Plaza area, including the BART station and the area along San Pablo Avenue between Fairmount and Central avenues, should be prepared to provide overall direction during the next 20 years.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Growth Management Implementation #28: Travel Demand Management (TDM). Support and promote TDM measures to reduce the percentage of person trips made by automobile and to reduce the annual vehicle miles of travel. Reduce the percentage of trips made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes. Encourage small businesses in areas of employment concentration to form cooperatives that can collectively provide effective TDM options to employees.	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Transportation and Circulation Element	
Policy T1.1: Balanced Transportation System. Create and maintain a balanced transportation system with choice of transit, bicycle, pedestrian, and private automobile modes.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).

Policies	Consistency Analysis
T1.2 Transit System. Provide safe and comfortable transit amenities and pedestrian access to transit stops/stations. Encourage transit providers to improve and increase existing transit routes, frequency, and hours of service. Encourage a public transit system that provides convenient transfers between transit services and other modes of travel.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy T1.3: Bicycle Circulation. Create a complete, interconnected bicycle circulation system. Provide a bicycle system that serves commuter as well as recreational travel. Improve bicycle routes and access to and between major destinations.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy T1.4: Pedestrian Circulation. Provide a safe, convenient, continuous and interconnected pedestrian circulation system throughout the City. Ensure safe pedestrian access to local schools.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy T1.5: Goods Movement. Maintain a transportation system that provides truck mobility to serve all land uses in El Cerrito.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy T1.6: Emergency Services. Maintain and improve critical transportation facilities for emergency vehicle access and emergency evacuation needs.	**Consistent.** See EIR chapters 10 (Hazards and Hazardous Materials) and 16 (Transportation and Circulation).
Policy T1.7: Regional Coordination. Recognize El Cerrito's role in the region and lead in regional efforts to increase transit and reduce congestion.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy T2.1: Land Use Patterns. Recognize the link between land use and transportation. Promote land use and development patterns that encourage walking, bicycling, and transit use. Emphasize high-density and mixed land use patterns that promote transit and pedestrian travel. Where feasible, emphasize the following land use measures: 1. Promote conveniently located neighborhood complexes that provide housing and commercial services near employment centers and within transit corridors. 2. Promote land use patterns that maximize trip-linking opportunities by assembling uses that allow people to take care of a variety of daily needs.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).

Policies	Consistency Analysis
3. Encourage pedestrian-oriented land use and urban design that can have a demonstrable effect on transportation choices. 4. Direct growth to occur along transit corridors. 5. Encourage retail, commercial, and office uses in ground floor space in combination with upper-floor housing along San Pablo Avenue.	
Policy T2.2: Project Design. Projects should be designed to include features that encourage walking, bicycling, and transit use.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy T3.1: Improve Circulation. Improve circulation in locations with high levels of congestion, but avoid major increases in street capacities unless necessary to remedy severe traffic congestion, and not at the expense of pedestrian circulation.	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Policy T3.2: Streets as Public Spaces. Recognize the role of streets not only as vehicle routes but also as part of an extensive system of public spaces where people live, city residents meet, and businesses reside.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy T3.3: Residential Streets. To discourage cut-through traffic on residential streets, maintain the existing system of arterial and collector streets. Where necessary, employ traffic management techniques to control the speed of vehicles traveling on residential streets, including residential portions of arterial and collector streets.	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Policy T4.1: Parking Requirements. Develop parking requirements that are consistent with the goals for increased use of alternative transportation modes, and acknowledge shared parking opportunities.	**Consistent.** See Form-Based Code sections 2.05.07 (Parking Standards) and 2.05.08 (General Parking Standards).
Policy T4.2: Underparked Areas of San Pablo Avenue. Evaluate long-term parking needs along San Pablo Avenue and promote the development of common parking facilities in areas where existing and long-term parking provisions will not satisfy latent parking demand.	**Consistent.** See Form-Based Code sections 2.05.07 (Parking Standards) and 2.05.08 (General Parking Standards).
Policy T4.3: BART Parking. Support decreasing the amount of land dedicated to parking around BART stations by using	**Consistent.** See Form-Based Code sections 2.05.07 (Parking Standards) and 2.05.08 (General Parking Standards). See EIR

Policies	Consistency Analysis
parking structures. To reduce parking demand at BART stations, encourage an improved transit feeder system to BART stations including consideration of new transit technologies. Encourage BART parking not to obstruct pedestrian access from stations to surrounding land uses.	chapters 3 (Project Description) and 12 (Land Use and Planning).
Transportation and Circulation Implementation #8: Parking Regulations. …Specify maximum and minimum parking ratios. Allow a reduction in the individual use parking requirements where two or more non-residential uses provide joint parking, and encourage developers of compatible land uses to provide joint parking facilities. Encourage developers to locate parking lots to the rear or sides of buildings, except where infeasible, to prevent lots from becoming barriers to walking.	**Consistent.** See Form-Based Code sections 2.05.07 (Parking Standards) and 2.05.08 (General Parking Standards).
Transportation and Circulation Implementation #10: Pedestrian Circulation Plan. Review existing pedestrian circulation within the City to identify constraints to walking, develop improvement plans at constrained locations (including pedestrian street crossings), and incorporate pedestrian enhancement projects into the City Capital Improvement Program (CIP). Encourage local access to BART stations by walking as an alternative to short-distance driving. Develop new sidewalk width standards consistent with the type and intensity of adjacent land use. Attention should be paid to the issue of tree damage to sidewalks and obstruction of sidewalks by signs. When constructing or modifying sidewalks: a. Maintain accessibility for all users. b. Within commercial, office, and mixed-use areas, provide or improve sidewalk pedestrian amenities, such as seating, bicycle parking, pedestrian-scale lighting, street trees, flower boxes, trash receptacles, drinking fountains, and awnings. In many cases, this may be in combination with the development of adjacent properties.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).

Policies	**Consistency Analysis**
c. Systematically inspect and maintain sidewalk facilities to clean and repair damaged surfaces and remove or relocate impediments, such as poles and newspaper racks that interfere with pedestrian flow. d. Build at sufficient width to allow at least two people to walk side-by-side. Make sidewalk widths in commercial areas more generous. e. Where possible, channel or guide pedestrian traffic along sidewalks to increase commercial opportunities….	
Transportation and Circulation Implementation #12: Streetscape Design Standards. Develop street typologies (residential street, commercial main street, boulevard, etc.) with design standards to protect the role of the street as a public space.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Transportation and Circulation Implementation #14: Transit First Policy. It is the official policy of the City of El Cerrito to encourage and promote the use of public transit among El Cerrito residents and visitors, and expedite the movement of transit vehicles. The City has directed the Planning Commission, the Design Review Board and the Community Development Department to consider and incorporate various methods of expediting transit service and encouraging greater use of transit….	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Transportation and Circulation Implementation #15: Transportation System Performance Measures. …In order to maintain consistency with the Congestion Management Plan, LOS E is the worst level of service standard that could be adopted for San Pablo Avenue.	**Substantially Consistent.** See EIR chapter 16 (Transportation and Circulation).
Transportation and Circulation Implementation #17: Travel Demand Management (TDM). Support and promote TDM measures to reduce the percentage of person trips made by automobile and to reduce the annual vehicle miles of travel. Reduce the percentage of trips made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes. Encourage small businesses in	**Consistent.** See EIR chapter 16 (Transportation and Circulation).

Policies	**Consistency Analysis**
areas of employment concentration to form cooperatives that can collectively provide effective TDM options to employees.	
Public Facilities and Services Element	
Policy PR1.3: Level of Service Standard. Use a level of service standard of five acres of publicly owned parkland per 1,000 residents as the minimum requirement for recreation and open space land. Additional requirements for publicly owned recreation and open space land may be imposed by the City on development approvals, dependent upon the characteristics of the project, including its proximity to existing recreation and open space facilities. This requirement is independent of any requirements for project-scale open space addressed by Policy CD3.2.	**Consistent.** See EIR chapter 15 (Public Services).
Policy PR1.12: New Residential Development. Require that all new multi-family residential projects provide on-site open space and recreational facilities for residents or provide a combination of park in-lieu fees and on-site facilities.	**Consistent.** See EIR chapter 15 (Public Services).
Policy PR1.13: People with Special Needs. Ensure that public access points to open space areas and design features for all recreational facilities provide equal opportunity for people with special needs.	**Consistent.** See EIR chapter 3 (Project Description).
Policy PR1.14: Bicycles. Implement bicycle route improvements, including signing, striping, paving, and providing bicycle racks.	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Policy PR1.15: Development Impacts. Development should not be allowed to denigrate or interfere with the use or enjoyment of City-owned park, recreational, and open space facilities.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 12 (Land Use and Planning).
Policy PR1.17: Buffer Zones. Encourage the creation of native plant buffer zones between natural areas and residences.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy PR2.2: Development Suitability. Encourage urban growth in those areas where the natural characteristics of the land are most suited to such development, and to protect the public from risks to life and property.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy PR2.6: Existing Open Space Preservation. Except where extraordinary circumstances indicate otherwise, ensure that	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).

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development decisions protect existing open space areas.	
Policy PR3.3: Creek Restoration. Integrate recreational amenities with creek restoration efforts in a way that protects riparian values, including natural habitats.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy PS1.1: Development Review. Prior to approval of new development, the Police Department shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.	**Consistent.** See EIR chapter 15 (Public Services).
Policy PS1.2: Development Design. Development design should address public safety issues--encourage use of technology to support defensible design, encourage neighborhood social interaction, maintain eyes on the street, and support a clean and orderly public appearance.	**Consistent.** See EIR chapter 15 (Public Services).
Policy PS1.3: Service Level. Maintain the current service level of 1.26 officers per 1,000 daytime population, provided adequate financial resources are available.	**Consistent.** See EIR chapter 15 (Public Services).
Policy PS2.1: Development Review. Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, and conveyance facilities, and access for fire protection either are or will be provided concurrent with development. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.	**Consistent.** See EIR chapter 15 (Public Services).
Policy PS2.2: Response Time. Maintain an average emergency response time for the first fire engine of less than six minutes for 95 percent of all emergency calls for service,	**Consistent.** See EIR chapter 15 (Public Services).

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provided adequate financial resources are available.	
Policy PS2.3: Fire Protection Rating. Maintain or improve the City's existing ISO fire protection rating of 3.	**Consistent.** See EIR chapter 15 (Public Services).
Policy PS2.4: Vegetation Management. Continue to maintain the Fire Hazard Reduction Program.	**Consistent.** See EIR chapter 15 (Public Services).
Policy PS2.8: Water Supply and Pressure. Monitor and improve water supply and pressure for fire fighting, with particular attention to the wildland interface.	**Consistent.** See EIR chapters 15 (Public Services) and 17 (Utilities and Service Systems).
Policy PS3.1: Development Approval. Approve new development only if the capacity of public infrastructure is in place or can be reasonably provided.	**Consistent.** See EIR chapters 15 (Public Services) and 17 (Utilities and Service Systems).
Policy PS3.3: Upgrading Infrastructure. Upgrade public infrastructure that experiences deterioration or obsolescence.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems).
Policy PS4.1: Monitoring Storm Drain Needs. Monitor and assess the need for storm drain system improvements at regular intervals to ensure adequate system capacity and proper long-term functioning.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems).
Resources and Hazards Element	
Policy R1.1: Habitat Protection. Preserve oak/woodland, riparian vegetation, creeks, native grasslands, wildlife corridors and other important wildlife habitats. Loss of these habitats should be fully offset through creation of habitat of equal value. Compensation rate for habitat re-creation shall be determined by a qualified biologist.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy R1.2: Rare and Endangered Species. Limit development in areas that support rare and endangered species. If development of these areas must occur, any loss of habitat should be fully compensated on-site. If off-site mitigation is necessary, it should occur within the El Cerrito planning area whenever possible, and must be accompanied by plans and a monitoring program prepared by a qualified biologist.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy R1.3: Potential Environmental Impacts. Encourage development patterns	**Consistent.** See EIR chapters 4 (Aesthetics and Visual Resources), 6

Policies	Consistency Analysis
that minimize impacts on the City's biological, visual and cultural resources, and integrate development with open space areas.	(Biological Resources), and 7 (Cultural and Historic Resources).
Policy R1.4: Air Quality. Strive to achieve federal and state air quality standards by managing locally generated pollutants, coordinating with other jurisdictions and implementing measures to limit the increase of automobile trips in El Cerrito and the region.	**Consistent.** See EIR chapter 5 (Air Quality).
Policy R1.6: Runoff Water Quality. Maintain, at a minimum, the water quality levels established by the Environmental Protection Agency (EPA), implement Clean Water Program and NPDES requirements, and achieve the highest possible level of water quality reasonable for an urban environment in City creeks.	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).
Policy R1.7: Creek Protection. Preserve riparian vegetation, protect owners and buyers of property from erosion and flooding, and increase public access to the creeks. Lands adjacent to riparian areas should be protected as public or private permanent open space through dedication or easements.	**Consistent.** See EIR chapters 6 (Biological Resources) and 11 (Hydrology and Water Quality).
Policy R1.8: Creek Improvements. Accomplish design and improvements along creeks (Cerrito Creek, Baxter Creek, etc.) in consultation and cooperation with creek restoration and design professionals.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy R1.9: Development Near Creeks. For development adjacent to creeks and major drainages, provide adequate building setbacks from creek banks, provision of access easements for creek maintenance purposes and for public access to creekside amenities, and creek improvements such as bank stabilization. Also protect riparian vegetation outside the setback.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy R1.10: Cerrito Creek and Baxter Creek. In implementing improvements to Cerrito Creek, follow design objectives established in 1996 by the City Council. Similarly, establish a set of design objectives that are specific to Baxter Creek.	**Consistent.** See EIR chapter 6 (Biological Resources).
Policy R1.11: Native Plant Communities. Encourage use of native plant species for landscaping in hillside areas, preserve unique	**Consistent.** See EIR chapter 6 (Biological Resources).

Policies	Consistency Analysis
plant communities, and use fire-preventive landscaping techniques.	
Policy R1.13: View Protection and Vista Points. Preserve prominent views of visual resources and the bay, and consider visual access and view corridors when reviewing development proposals. Require assessment of critical public views, ridgelines, scenic overlooks, Bay vista points, significant knolls, stands of trees, rock outcrops, and major visual features as part of the project review process to assure that projects protect natural resources through proper site planning, building design and landscaping, and that public access is provided if possible to vista points.	**Substantially Consistent.** See EIR chapter 4 (Aesthetics and Visual Resources).
Policy R2.1: Historic Preservation. Ensure that the remodeling and renovation of historic structures respects the character of the structure and its setting.	**Consistent.** See EIR chapter 7 (Cultural and Historic Resources).
Policy R2.2: Development Approvals. Ensure that all local, state, and federal laws pertaining to such resources are observed in the granting of development approvals.	**Consistent.** See EIR chapter 7 (Cultural and Historic Resources).
Policy R2.3: Vegetation. Include significant trees and other plant materials in the definition of significance.	**Consistent.** See EIR chapter 7 (Cultural and Historic Resources).
Policy H1.1: Location of Future Development. Permit development only in those areas where potential danger to the health, safety, and welfare of the residents of the community can be adequately mitigated.	**Substantially Consistent.** See EIR chapters 8 (Geology and Soils), 10 (Hazards and Hazardous Materials), 11 (Hydrology and Water Quality), 13 (Noise), and 15 (Public Services).
Policy H1.2: Development Review. Require appropriate studies to assess identified hazards and assure that impacts are adequately mitigated.	**Substantially Consistent.** See EIR chapters 8 (Geology and Soils), 10 (Hazards and Hazardous Materials), 11 (Hydrology and Water Quality), 13 (Noise), and 15 (Public Services).
Policy H1.3: Geotechnical Review. Require geotechnical studies for development proposals in potentially hazardous areas; such studies should determine the actual extent of geotechnical hazards, optimum location for structures, the advisability of special structural requirements, and the feasibility and desirability of a proposed facility in a specified location.	**Consistent.** See EIR chapter 8 (Geology and Soils).
Policy H1.4: Soils and Geologic Review. Require soils and geologic review of	**Consistent.** See EIR chapter 8 (Geology and Soils).

Policies	Consistency Analysis
development proposals as mapped in accordance with City procedures to assess potential seismic hazards, liquefaction, landsliding, mudsliding, erosion, sedimentation and settlement in order to determine if these hazards can be adequately mitigated.	
Policy H1.5: Erosion Control. Provide appropriate control measures in conjunction with proposed development in areas susceptible to erosion, including an erosion control plan and revegetation plan as part of grading permits, and ensure that mineral production be planned and carried out to avoid destruction or degradation of the environment.	**Consistent.** See EIR chapter 8 (Geology and Soils).
Policy H1.7: Geological Hazards Mitigation. Require all geologic hazards be adequately addressed and mitigated through project development. Development proposed within areas of potential geological hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties.	**Consistent.** See EIR chapter 8 (Geology and Soils).
Policy H1.8: Seismic Safety. Assure existing and new structures are designed to contemporary standards for seismic safety. Review, amend, and update, at regular intervals, all relevant City codes and ordinances to incorporate the most current knowledge and highest standards of seismic safety.	**Consistent.** See EIR chapter 8 (Geology and Soils).
Policy H1.9: Potential Hazardous Soils Conditions. Evaluate new development on sites that may have involved hazardous materials (such as older fill sites, historical auto service uses, industrial uses, or areas where hazardous materials may have been used) prior to development approvals.	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).
Policy H1.10: Hazardous Materials Storage and Disposal. Require proper storage and disposal of hazardous materials in accordance with all State, Federal and local laws and regulations to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal.	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).
Policy H1.11: Hazardous Waste Management. Support measures to	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).

Policies	Consistency Analysis
responsibly manage hazardous waste to protect public health, safety and the environment, and support state and federal safety legislation to strengthen requirements for hazardous materials transport.	
Policy H1.12: Hazardous Materials Usage. Minimize the use of toxic and hazardous materials. Encourage the use of safer alternative materials and practices, and advise builders on applying for any programs for non-toxic building materials incentives.	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).
Policy H1.15: Flood Hazards. Assure existing and new structures are designed to protect people and property from the threat of potential flooding. New development shall be designed to provide protection from potential impacts of flooding during the "1% chance" or "100-year" flood.	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).
Policy H1.16: Maintenance for the City's Storm Drainage Facilities. In order to maintain unobstructed drainage courses, existing laws prohibiting the dumping of debris, fill or other waste materials into creeks and channels, and the littering of garbage should be strictly enforced. The City will also continue to maintain a high level of maintenance for its storm drainage facilities. New developments will be carefully reviewed to insure that adequate storm drain facilities are available both on and off the site.	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).
Policy H1.17: Storm Drainage Capacity. Ensure storm drainage capacity to be available to carry runoff generated by new developments, and implement the City's Storm Water Master Plan.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems).
Policy H1.21: Fire Retardant Landscaping. Encourage the use of fire-retardant vegetation for landscaping, especially in high fire hazard areas.	**Consistent.** See EIR chapter 15 (Public Services).
Policy H3.1: Noise Levels in New Residential Projects. New residential development projects shall meet acceptable exterior noise level standards. The "normally acceptable" noise standards for new land uses are established in Table 7-1, Land Use Compatibility for Community Exterior Noise Environments, which shall be modified by Policies H3.2 through H3.12, below.	**Consistent.** See EIR chapter 13 (Noise).

Policies	Consistency Analysis
Policy H3.2: Outdoor Noise Levels. The goal for maximum outdoor noise levels in residential areas is an Ldn of 60 dB. This level is a requirement to guide the design and location of future development and is a goal for the reduction of noise in existing development. However, 60 Ldn is a goal that cannot necessarily be reached in all residential areas within the realm of economic or aesthetic feasibility. This goal will be applied where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). The outdoor standard will not normally be applied to the small decks associated with apartments and condominiums but these will be evaluated on a case-by-case basis. Where the city determines that providing an Ldn of 60 dB or lower outdoors is not feasible, the outdoor goal may be increased to an Ldn of 65 dB at the discretion of the Planning Commission.	**Consistent.** See EIR chapter 13 (Noise).
Policy H3.3: Indoor Noise Levels. The indoor noise level as required by the State of California Noise Insulation Standards must not exceed an Ldn of 45 dB in new housing units.	**Consistent.** See EIR chapter 13 (Noise).
Policy H3.4: Indoor Instantaneous Noise Levels. Interior noise levels in new single-family and multi-family residential units exposed to an Ldn of 60 dB or greater should be limited to a maximum instantaneous noise level in the bedrooms of 50 dBA. Maximum instantaneous noise levels in other rooms should not exceed 55 dB. The typical repetitive maximum instantaneous noise level at each site would be determined by monitor. Examples would include truck passbys on busy streets, BART passbys and train warning whistles.	**Substantially Consistent.** See EIR chapter 13 (Noise). Significant unavoidable construction-related noise and vibration would occur intermittently over time.
Policy H3.5: Impacts of BART Noise. If the noise source is BART, then the outdoor noise exposure criterion should be 70 Ldn for future development, recognizing that BART noise is characterized by relatively few loud events.	**Consistent.** See EIR chapter 13 (Noise).
Policy H3.6: New Commercial, Industrial and Office Noise Standards. Appropriate	**Consistent.** See EIR chapter 13 (Noise).

Policies	Consistency Analysis
interior noise levels in commercial, industrial, and office buildings are a function of the use of space and shall be evaluated on a case-by-case basis. Interior noise levels in offices generally should be maintained at 45 Leq (hourly average) or less.	
Policy H3.7: Areas Below Desired Noise Standards. These guidelines are not intended to be applied reciprocally. In other words, if an area currently is below the desired noise standards, an increase in noise up to the maximum should not necessarily be allowed. The impact of a proposed project on an existing land use should be evaluated in terms of the increase in existing noise levels and potential for adverse community impact.	**Consistent.** See EIR chapter 13 (Noise).
Policy H3.9: Noise Environment in Existing Residential Areas. Protect the noise environment in existing residential areas. In general, the City will require the evaluation of mitigation measures for projects under the following circumstances: 1. The project would cause the Ldn to increase 3 dB(A) or more. 2. Any increase would result in an Ldn greater than 60 dB(A). 3. The Ldn already exceeds 60 dB(A). 4. The project has the potential to generate significant adverse community response.	**Consistent.** See EIR chapter 13 (Noise).
Policy H3.10: Mitigating the Effects of Noise on Adjacent Properties. Require proposals to reduce noise impacts on adjacent properties by incorporating appropriate measures into the project.	**Substantially Consistent.** See EIR chapter 13 (Noise). Significant unavoidable construction-related noise and vibration would occur intermittently over time.
Policy H3.11: Commercial or Industrial Source Noise. Noise created by commercial or industrial sources associated with new projects or developments shall be controlled so as not to exceed the noise level standards set forth in the table below (Maximum Allowable Noise Exposure for Stationary Noise Sources), as measured at any affected residential land use.	**Consistent.** See EIR chapter 13 (Noise).

Policies	Consistency Analysis
Policy H3.12: New Noise Reducing Technologies. Support and employ new noise reducing technologies in the development and maintenance of local and regional infrastructure.	**Consistent.** See EIR chapter 13 (Noise).
Resources and Hazards Implementation #1: Air Quality Strategies. Implement trip reduction and energy conservation measures for jobs/housing balance, Transportation Demand Management (TDM) and transit, as identified in the Community Design and Development, and Housing Elements, and coordinate with regional and state agencies and other West County jurisdictions in enhancing air quality.	**Consistent.** See EIR chapters 5 (Air Quality) and 16 (Transportation and Circulation).
Resources and Hazards Implementation #3: Archaeological Resources. Where possible, archaeological sites or fragile historic sites will be placed within open space areas as defined during the specific project review process.	**Consistent.** See EIR chapter 7 (Cultural and Historic Resources).
Resources and Hazards Implementation #5: Building Code Update. Update the Building and other codes as necessary to address earthquake, fire and other hazards and support programs for the identification, abatement or mitigation of existing hazardous structures.	**Consistent.** See EIR chapters 8 (Geology and Soils) and 15 (Public Services).
Resources and Hazards Implementation #7: City Council Resolution 96-103. The following objectives were adopted by City Council Resolution 96-103, and are summarized below: a. Create a strong relationship between the creek and adjacent land by integrating retail, housing and civic uses with the creek, and improving the creek as an amenity. b. Create a continuous pedestrian/bicycle corridor along the creek, linking this segment to creek alignments to the west and east. c. Link a creekside pedestrian/bicycle corridor along Cerrito Creek to the Bay Trail. d. Provide opportunities for visual and physical linkages between Albany and El Cerrito.	**Consistent.** See EIR chapters 6 (Biological Resources) and 15 (Public Services).

Policies	Consistency Analysis
e. Create an open natural channel along its entire length within the Plaza area. f. Restore the creek channel as a natural riparian corridor with habitat enhancement. g. Provide variety of uses and diversity of experiences along the creek alignment. h. Extend the open creek channel to San Pablo Avenue and investigate the potential to realign the creek north of the Wells Fargo building, and to make a visible connection across San Pablo Avenue. i. Provide for physical access by pedestrians to the creek channel.	
Resources and Hazards Implementation #19: Hazardous Materials Storage Tanks. A comprehensive investigation of hazardous materials storage tanks should be undertaken for specific sites when development is proposed. The potential hazard of any tanks or former tank sites found should then be evaluated using California EPA and local regulatory guidelines, and remedied.	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).
Resources and Hazards Implementation #20: Hazardous Soils. Sites within El Cerrito that are contaminated with hazardous substances should be remediated in compliance with all applicable local, state, and federal laws and regulations. If it is not feasible to fully remediate soils, land uses may be restricted to protect public health and safety.	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).
Resources and Hazards Implementation #29: Noise Standards Review. Review development proposals to assure consistency with noise standards. The City will require the following and other means, as appropriate, to mitigate noise impacts on adjacent properties: a. Screen and control noise sources such as parking, outdoor activities and mechanical equipment. b. Increase setbacks for noise sources from adjacent dwellings.	**Consistent.** See EIR chapter 13 (Noise).

Policies	**Consistency Analysis**
c. Wherever possible do not remove fences, walls or landscaping that serve as noise buffers, although design, safety and other impacts must be addressed. d. Use soundproofing materials and double glazed windows. e. Control hours of operation, including deliveries and trash pickup to minimize noise impacts. The City will use the Future Noise Contours data to determine if additional noise studies are needed for proposed development.	
Resources and Hazards Implementation #33: State Noise Insulation Standards. Use the adopted Health and Safety Element as a guideline for compliance with the State's noise insulation standards by providing noise contour information around all major sources in support of the sound transmission control standards (Chapter 2-35, Part 2, Title 24, California Administrative Code).	**Consistent.** See EIR chapter 13 (Noise).
Resources and Hazards Implementation #38: Water Quality Strategies. Implement habitat protection programs and evaluate proposed projects for potential water quality impacts that may require sediment basins as part of grading activities, grease/oil traps where concentrations of such pollutants are anticipated, or other measures. In coordination with Contra Costa County, continue to implement measures consistent with the City's NPDES Stormwater Permit.	**Consistent.** See EIR chapters 6 (Biological Resources) and 11 (Hydrology and Water Quality).
Housing Element	
Policy HE-1: Encourage neighborhood preservation and housing rehabilitation of viable older housing to preserve neighborhood character and, where possible, retain a supply of very low-, low-, and moderate-income units.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-1.4: Continue to permit new housing units and housing rehabilitation in mixed use and commercial zoning districts subject to Zoning Ordinance requirements so that housing and commercial uses can complement and support one another.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).

Policies	Consistency Analysis
Policy HE-2: Discourage Conversion of Residential Uses to Non-Residential Uses. Discourage the conversion of residential uses to non-residential uses, unless there is a finding of clear public benefit and equivalent housing can be provided for those who would be displaced by the proposed conversion.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-2.1: Retain existing residential zoning and discourage non-residential uses in these zones…	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-3: Maintain housing supply and reduce the loss of life and property caused by earthquakes by encouraging structural strengthening and hazard mitigation in all housing types.	**Consistent.** See EIR chapter 8 (Geology and Soils).
Policy HE-4: Provide adequate residential sites for the production of new for-sale and rental residential units for existing and future residents	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-5: Encourage the development of multi-family residential uses in mixed-use project…and near transit-oriented facilities to help meet ABAG's Regional Housing Needs Allocation for El Cerrito and so that housing and commercial uses can complement and support one another. The City will encourage the construction of transit-oriented developments that seek to maximize opportunities for the use of public transit and transportation corridors through high-density residential and mixed-use projects along those corridors in accordance with the City's Incentives Program (Chapter 19.23 of the El Cerrito Zoning Ordinance)	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-5.1: Maintain General Plan designations for mixed use and high-density residential housing and the Transit Oriented Mixed Use districts in the development nodes of the City. Promote such development through the use of the following zoning tools that are incorporated in the City's Zoning Ordinance: -Incentives Program -Density Bonus -PD and PA process -Parking reduction ¼ mile from Transit -Economic Development efforts to market vacant and underutilized sites	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).

Policies	Consistency Analysis
Policy HE-8: Identify and evaluate the reuse of underutilized or deteriorated sites in commercial areas with potential under the City's zoning requirements for conversion or redevelopment to mixed use housing, retail, and commercial uses that can support and complement one another.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-9: Encourage innovative housing approaches in design and ownership of units to increase the availability of affordable housing.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-9.1: Encourage the use of the planned development process included in the Zoning Ordinance to allow innovative approaches aimed at increasing affordable rental and for-sale housing opportunities…	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-10: Encourage diversity of unit size and number of bedrooms within multi-family housing developments and strive to provide family housing of 3 to 4 bedroom units within projects	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-11: Provide regulatory and/or financial incentives where appropriate to offset or reduce the costs of affordable housing development, including density bonuses and flexibility in site development standards	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-12: Periodically review the City's regulations, ordinances and development fees to ensure they do not unduly constrain the production, maintenance and improvement of housing	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-13: Provide for streamlined processing of residential projects to minimize the time and costs in order to encourage housing production.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-14: Based on the land-use strategy developed in the General Plan and Zoning Ordinance, direct growth into compact patterns of development to promote infill and intensity land uses.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-15: Encourage the provision of housing for special needs groups.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-15.2: Continue to enforce Federal and State Handicapped Accessibility and Adaptability Standards.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).

Policies	Consistency Analysis
Program HE-15.3: Continue to fast track the planning and building inspection processes for housing units with three or more bedrooms for large families, housing for seniors, and other special needs housing for extremely low-, very low-, low- and moderate-income households.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-15.4: Continue to encourage and support development of senior housing that offers a wide range of housing choices that offer a wide range of community services including healthcare, nutrition, transportation and other amenities.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-15.5: Facilitate the provision of housing that supports "aging in place" for the City's senior population.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-15.6: Transitional and supportive housing, as defined under Health and Safety Code Sections 50675.2 and 50675.14, will be allowed as a permitted use subject to only the same restrictions on residential uses contained in the same type of structure.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-16: Provide housing opportunities for very low-, low- and moderate-income households.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-17: Support efforts to provide temporary and permanent shelter and transitional housing for the homeless.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-17.1: Continue to allow emergency and transitional housing facilities as a permitted use within the CC zone. [Under the FBC, former CC zone is TOHIMU and TOMIMU).]	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy HE-19: Promote fair housing opportunities for all people.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-19.2: Reasonable Accommodation Procedures. To accommodate the needs of persons with disabilities and provide a streamlined permit review process, the City will continue to implement reasonable accommodation procedures…	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program HE-19.4: To comply with Senate Bill 2 the City will continue to maintain land uses permitting emergency shelters, transitional housing and supportive housing by right in the	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).

Policies	**Consistency Analysis**
CC (Community Commercial) zone. [Note: The Specific Plan TOHIMU and TOMIMU transect zones overlay the pre-existing CC zone.]	
Policy HE-20: Promote residential energy conservation programs which provide assistance for energy conservation improvements.	**Consistent.** See EIR chapter 9 (Greenhouse Gas Emissions and Global Climate Change) and section 19.6 (Energy Conservation).
Policy HE-21: Encourage the incorporation of energy conservation design features in existing and future residential development	**Consistent.** See EIR chapter 9 (Greenhouse Gas Emissions and Global Climate Change) and section 19.6 (Energy Conservation).
Policy HE-22: Encourage the use of sustainable and green building design in new and existing housing in compliance with the legislation in AB32 and SB375.	**Consistent.** See EIR chapter 9 (Greenhouse Gas Emissions and Global Climate Change) and section 19.6 (Energy Conservation).
Program HE-22.1: Develop policies consistent with AB32 and SB375 to reduce greenhouse gas emissions and work with other agencies in the region to establish common thresholds for Green Building….	**Consistent.** See EIR chapter 9 (Greenhouse Gas Emissions and Global Climate Change) and section 19.6 (Energy Conservation).
Policy HE-23: Encourage the location of multi-family housing near transit centers where living and/or working environments are within walkable distances in order to reduce auto trip to work, roadway expansion and air pollution.	**Consistent.** See EIR chapters 3 (Project Description), 5 (Air Quality), 12 (Land Use and Planning), and 16 (Transportation and Circulation).

Table 18.2
PROJECT CONSISTENCY WITH RICHMOND GENERAL PLAN[1]

Policies	**Consistency Analysis**
Economic Development Element	
Policy ED1.3: Toxic and Contaminated Sites. Continue to work with the appropriate local, state, and federal agencies to promote the clean-up and reuse of contaminated sites to protect human and environmental health. Work with property owners and regional agencies to prevent, reduce or eliminate soil and water contamination from industrial operations, the Port and other activities that use, produce or dispose of hazardous or toxic substances. Implement appropriate mitigation measures and clean-up of sites that are known to contain toxic materials as a condition of reuse…. *(same as or similar to CN6.1, LU 4.4, H-2.6, and HW9.2)*	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).
Policy ED1.4: Air Quality. Support regional policies and efforts that improve air quality to protect human and environmental health and minimize disproportionate impacts on sensitive population groups. Work with businesses and industry, residents and regulatory agencies to reduce the impact of direct, indirect and cumulative impacts of stationary and non-stationary sources of pollution such as industry, the Port, railroads, diesel trucks and busy roadways. Fully utilize Richmond's police power to regulate industrial and commercial emissions. Ensure that sensitive uses such as schools, childcare centers, parks and playgrounds, housing and community gathering places are protected from adverse impacts of emissions. Continue to work with stakeholders to reduce impacts associated with air quality on disadvantaged neighborhoods and continue to participate in regional planning efforts with nearby jurisdictions and the Bay Area Air Quality Management District to meet or exceed air quality standards. Support regional, state and federal efforts to enforce existing pollution control laws and strengthen regulations.	**Consistent.** See EIR chapter 5 (Air Quality).

[1]Substantially similar policies not duplicated.

Policies	Consistency Analysis
(same as or similar to CN4.1, HW9.1, and EC5.3)	
Policy ED1.5: A Range of Housing Types. Continue to require developers to provide a range of housing types and residential densities to meet the needs of all age groups, income levels, and household sizes…. The local housing stock should continue to include condominiums, single-family homes, apartments, townhouses, lofts and other products to provide a range of options.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Action ED1.A: Public Safety Design Guidelines. Develop and adopt design guidelines that deter criminal activity in neighborhoods, streets and public areas. Include guidelines for the design of play areas, parks, sports facilities, streets and sidewalks, plazas and urban pocket parks, and housing and commercial sites, among others. Require the early integration of crime prevention strategies such as community policing in new development and redevelopment projects including the involvement of the Police Department in the review of major projects in high-crime areas of the City. Include guidelines for parks and recreation facilities with particular focus on the following five areas: design and orientation of buildings, restrooms and parking areas; defensible space with no hidden areas or structures that block visibility and natural surveillance; ownership and control over public space; cameras and other technologies; lighting; and signage. *(same as or similar to PR2.C, SN2.A, LU2.C and HW1.H)*	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), 15 (Public Services), and 16 (Transportation and Circulation).
Action ED1.C: Façade Improvement Program. Continue to implement the City's Facade Improvement Program to support storefront rehabilitation along key commercial corridors….	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 12 (Land Use and Planning).
Action ED1.F: Site Remediation. Require property owners to comply with and pay for state and federal requirements for site remediation as a condition for approving redevelopment on contaminated sites…. *(same as or similar to CN6.A, HW9.J, H-2.6.1, and LU4.D)*	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).

Policies	Consistency Analysis
Policy ED2.1: Local Employment Base. …Support local businesses and entrepreneurs by providing a range of locations and flexible space opportunities including retail space along commercial corridors and office and light industrial space close to regional transportation infrastructure. Provide infrastructure improvements and incentives to support residents and businesses in establishing and expanding local enterprises in Richmond…. *(same as or similar to HW6.1 and LU3.2)*	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy ED2.3: A Range of Retail Opportunities. Promote a range of retail options including regional, neighborhood-serving and street-front retail and grocery stores in mixed-use settings….	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy ED2.5: Local Small Businesses. Promote and support locally owned and cooperative enterprises and businesses, particularly along major corridors, to maximize economic and community benefits for Richmond residents…. *(same as or similar to HW6.3)*	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy ED2.7: High Job Density. Develop strategies to attract high-density employers and actively pursue employers that maximize the number of jobs located on a site….	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Action ED2.I: Culturally-Based Retail. Encourage culturally-based retail establishments and eateries that reflect Richmond's diversity…. *(same as or similar to AC2.A)*	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy ED5.2: Safe and Walkable Streets. Promote a safe and comfortable walking environment along key commercial corridors and neighborhood streets. Encourage land uses, design guidelines, landscaping and infrastructure that supports active use of public areas….	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy ED5.3: Inter-Jurisdictional Collaboration. Collaborate with neighboring jurisdictions to plan improvements along key corridors. Engage the jurisdictions in establishing development regulations to maintain a consistent and attractive streetscape along the 23rd Street Corridor and	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).

Policies	**Consistency Analysis**
San Pablo Avenue which extend into the Cities of Richmond, San Pablo and El Cerrito.	
Action ED5.A: San Pablo Avenue Specific Plan. Collaborate with the City of El Cerrito to adopt and implement the San Pablo Avenue Specific Plan, which includes the corridor between Macdonald Avenue and El Cerrito Plaza. The San Pablo Avenue Specific Plan will help revitalize a neighborhood that remains largely isolated from the rest of Richmond. New residential and commercial development along this stretch of San Pablo Avenue will set various density levels in identified segments of the corridor as well as urban design and land use standards that can be replicated along the rest of the corridor as it continues north into Richmond.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Education and Human Services Element	
Action EH3.C: Community Access and Mobility Criteria. Develop access and mobility criteria for capital improvement projects and new development to enhance physical access to community facilities, schools, parks, shoreline open spaces, historical destinations, commercial and employment centers and transit hubs. The criteria should address access by walking, bicycling and public transit as well as vehicular access. The community access and mobility criteria should: ▪ Ensure safe connections to large and small open spaces, community facilities such as schools, community centers, recreational facilities, cultural and enrichment centers, historical destinations, transit hubs and commercial and employment centers; ▪ Address travel routes, infrastructure improvement needs and barriers such as roads, railroad lines, freeways, fences and natural features; and ▪ Provide bicycle and pedestrian-friendly routes including completion of major trails and pathways like the San Francisco Bay Trail and Richmond Greenway.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).

Policies	**Consistency Analysis**
(same as or similar to CR2.A, PR1.A, HW4.A, and CN2.F)	
Land Use and Urban Design Element	
Policy LU1.1: Higher-Density and Infill Mixed-Use Development. Provide higher-density and infill mixed-use development affordable to all incomes on vacant and underutilized parcels throughout the City. Ensure efficient use of land and existing circulation infrastructure by: ▪ Promoting higher-density, transit-oriented and pedestrian-friendly development along key commercial corridors, at key intersections (community nodes and gateways); and ▪ Supporting local-serving commercial activities in residential areas to provide needed services and amenities close to where people live and work. *(same as or similar to ED4.1, ED5.1, ED6.1, and HW7.1)*	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy LU1.3: A Range of High-Quality Community Facilities and Infrastructure. Maintain high-quality facilities and infrastructure to serve diverse community needs. Upgrade, maintain and expand infrastructure to meet current and future needs and provide an effective and consistent level of services and utilities in all neighborhoods. *(same as or similar to CF1.1 and GM2.1)*	**Consistent.** See EIR chapters 15 (Public Services) and 17 (Utilities and Service Systems).
Policy LU1.4: Active Streets and Safe Public Spaces. Promote active use of public spaces in neighborhoods and commercial areas at all times of day to provide "eyes-on-the-street." Provide an appropriate mix of uses, high-quality design and appropriate programming of uses to facilitate natural surveillance in public spaces. Improve the sense of safety for potential users by providing and maintaining amenities and services such as restrooms, street furniture, bus shelters, street lighting, trees for shade, public art and secure bicycle parking and by restricting or prohibiting uses that are incompatible with community needs and priorities including, but	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), 15 (Public Services), and 16 (Transportation and Circulation).

Policies	Consistency Analysis
not limited to liquor stores and smoke shops. *(same as or similar to HW8.2)*	
Action LU1.A: Infill Development Incentives. Promote infill development throughout the City, especially in the targeted redevelopment areas of Central Richmond and avoid the displacement of existing residents. Promote new development and redevelopment projects to provide community amenities and uses that serve priority community needs and retain the existing urban limit lines. *(same as or similar to EC4.D)*	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Action LU1.B: Corridor Improvement Plans. Develop plans for key commercial corridors in the City to guide redevelopment of these areas into mixed-use, pedestrian and transit-oriented corridors and nodes. Collaborate with regional agencies, neighboring jurisdictions and the County to develop the plans. Include development standards and urban design guidelines. *(same as or similar to EC4.6)*	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy LU2.1: Mixed-Income and Integrated Neighborhoods. Promote mixed-income development and inclusion of affordable housing units in all neighborhoods. Encourage the integration of market rate housing with affordable units at the project level as well as at the neighborhood level. Affordable housing units should be located close to community and retail amenities such as parks, full-service grocery stores, local public transit stops, retail and public services. *(same as or similar to HW5.3)*	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Policy LU2.2: Compact Walkable Neighborhoods and Livable Streets. Promote safe and walkable neighborhoods and inter-connected streets through the design of streetscapes, public gathering places and all types of physical development. Provide pedestrian amenities such as sidewalks and street trees, transit and bike improvements, lighting and landscaping and appropriate traffic calming measures to ensure a safe pedestrian environment…. *(same as or similar to EC4.2)*	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Action LU2.B: Streetscape Improvements. Continue to implement streetscape	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual

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improvements to enhance access, lighting, safety and experience for pedestrians, bicyclists, transit users, and motorists…. Provide universal accessibility improvements, pedestrian-scale lighting and landscaping in streetscape improvements. …Explore the potential for incorporating green street elements into streetscape design such as bioswales, rain gardens, planter strips and permeable pavement. *(same as or similar to CF1.H, CR2.C, and HW4.K)*	Resources), 11 (Hydrology and Water Quality), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy LU4.3: Habitat and Biological Resources Protection and Restoration. …Protect resources to maximize the efficacy of natural systems and encourage sustainable development practices and conservation measures to ensure a healthy natural environment…. Protect and restore creek corridors and riparian areas to ensure they function as healthy wildlife habitat and biological areas. Protect and restore creek corridors and riparian areas by restoring riparian habitat with appropriate vegetation and channel design; removing culverts and hardened channels where appropriate; improving creek access; avoiding future culverting or channelization of creeks; and ensuring appropriate and ongoing maintenance. At a minimum, require mitigation of impacts to sensitive species ensuring that a project does not contribute to the decline of the affected species populations in the region…. *(same as or similar to HW9.7, EC6.1, and CN1.1)*	**Consistent.** See EIR chapter 6 (Biological Resources).
Action LU4.B: Open Space Plan. Develop and implement an open space plan to enhance public open space in the City. Include strategies for open space in the hills, along creeks and the shoreline, and in the urban core….	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 15 (Public Services).
Policy LU5.3: Land Use Compatibility. …All new development must avoid or mitigate to the greatest extent feasible potential	**Consistent.** See EIR chapters 5 (Air Quality), 7 (Cultural and Historic Resources), and 13 (Noise).

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negative impacts such as noise, odors, and pollution…. New development should complement the character and scale of existing neighborhoods, cultural resources, historic structures and landscapes. *(same as or similar to ED7.2, ED8.2, and SN4.2)*	
Policy LU6.1: Pedestrian and Transit-Oriented Urban Environment. Promote walkability and public transit by encouraging mixed-use, higher-density development close to community amenities…. Support increased residential density, commercial intensity and reduced parking requirements in areas well served by transit while protecting and increasing land dedicated to parks and open space. Support complete and balanced streets and an expanded multimodal circulation system. Locate medium and high-density housing and mixed-use development along corridors where improvements to multimodal systems are planned. Require new development and improvements to include amenities for pedestrians, bicycles and transit users. Encourage location of new public facilities near primary user groups and existing public transit infrastructure. Encourage new residential uses near existing schools and community facilities. *(same as or similar to GM1.1)*	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy LU6.2: Complete Streets. Promote mixed-use urban streets that balance public transit, walking and bicycling with other modes of travel. Support pedestrian and bicycle connectivity by restoring and reinforcing Richmond's grid-based network of streets with landscaping and amenities for transit, bicycles, pedestrians, and people with disabilities. Establish a process for modifying streets to support various modes of travel. Prohibit future construction of projects with long block lengths, cul-de-sacs and gated streets. *(same as or similar to HW4.5 and CR2.2)*	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy LU6.4: Long-Term Environmental Sustainability. Promote development standards and land use patterns that encourage long-term sustainability. Support the restoration of natural features such as	**Consistent.** See EIR chapters 3 (Project Description), 6 (Biological Resources), 11 (Hydrology and Water Quality), 12 (Land Use and Planning), 16 (Transportation and Planning), 17 (Utilities and Service Systems),

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creeks and wetlands in urban areas and existing neighborhoods as a means of connecting residents with nature and reversing damage to natural systems. Promote landscaping that incorporates native, drought-tolerant plants and sustainable maintenance practices and standards. Provide trees on residential and mixed-use streets and green infrastructure to reduce stormwater runoff. Encourage compact development close to amenities and green buildings to reduce energy use.	and section 19.6 (Energy Conservation). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Policy LU6.5: High-Quality Design, Planning and Construction. Promote high-quality design, planning, construction and maintenance of development and infrastructure projects. Require higher standards for affordable housing, streetscape improvements and development proximate to local and regional transit, the shoreline and industrial uses. Provide guidance regarding green building standards, seismic requirements, and pedestrian friendly design by implementing the Green Building Ordinance. Promote best practices for crime prevention.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 8 (Geology and Soils), 12 (Land Use and Planning), 15 (Public Services), 16 (Transportation and Circulation), and section 19.6 (Energy Conservation).
Circulation Element	
Policy CR1.1: Balanced Modes of Travel and Equitable Access. Encourage multiple circulation options in the City and work with transit operators to ensure equitable access for all members of the community. Create streets and corridors that support a variety of travel modes including transit, pedestrians, bicycles and goods movement as well as automobiles. Provide affordable circulation options which meet the needs of low-income populations, seniors, youth and persons with disabilities to ensure equitable access.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation). See Complete Streets Plan section 3.05.02.05 (ADA Accessibility Standards).
Policy CR1.2: An Interconnected Street System. Promote an interconnected system of streets that adequately serves current and future travel needs. By promoting an interconnected system for streets along with pedestrian, bicycle and transit facilities, the City can support streets that are compatible with surrounding land uses, street function and community character.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).

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Policy CR1.3: Local and Regional Transportation Linkages. Enhance circulation linkages within the City and region…. Collaborate with regional, state and federal transportation agencies and neighboring jurisdictions to support a high level of service for all users including pedestrians, bicyclists, and automobile drivers.	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy CR1.4: Expanded and Affordable Public Transit. …All housing units and employment centers in Richmond should have access to a local and regional public transit stop. Ensure that all transit stations and routes to and from these stations are safe. As many residents and visitors rely on regional passenger rail and air travel, support efforts to create efficient public transit connections to train stations and regional airports. Support efforts to expand service at night and on weekends and to make transit affordable and accessible to people of all abilities, seniors, youth and low-income households. *(same as or similar to EC2.3 and HW4.1)*	**Consistent.** See EIR chapters 3 (Project Description), 15 (Public Services), and 16 (Transportation and Circulation).
Policy CR1.5: Safe and Convenient Walking and Bicycling. Promote walking and bicycling as a safe and convenient mode of transportation. Improve pedestrian and bicycle amenities to serve the recreation and travel needs of residents and visitors in all parts of Richmond. Where feasible, the City will: connect major destinations such as parks, open spaces, civic facilities, employment centers, retail and recreation areas with pedestrian and bicycle infrastructure; promote shared roadways in residential streets; require new development and redevelopment projects to provide pedestrian and bicycle amenities, streetscape improvements and linkages to planned and completed City and regional multi-use trails; and develop safe routes to schools and out-of-school programs that allow access by bicycle and pedestrian paths or reliable and safe transit…. *(same as or similar to EC2.4 and HW4.3)*	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy CR1.6: Comprehensive Network of Multi-Use Trails. Develop a comprehensive network of multi-use trails including to enhance bicycle and pedestrian connectivity	**Consistent.** See EIR chapters 3 (Project Description), 15 (Public Services), and 16 (Transportation and Circulation).

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throughout the City and the region…. Connecting the Richmond Greenway with the Ohlone Greenway and the Bay Trail, and linking Richmond with Marin County with a bicycle trail across the Richmond-San Rafael Bridge will help create a comprehensive network of multi-use trails.	
Policy CR1.9: Place-Based Circulation Classification System and Multi-Modal Level of Service Standards. Classify all streets in the City to conform to the Place-Based Circulation Classification System discussed in the Circulation Element of the General Plan and adopt multi-modal level of service (MMLOS) standards that are consistent with each street type's intended function and character.	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Policy CR1.10: Vehicular Level of Service Standards for West County Routes of Regional Significance. Maintain vehicular level of service (LOS) standards for signalized intersections consistent with the Contra Costa Transportation Authority's (CCTA) West County Action Plan for Routes of Regional Significance. Require a traffic impact study for projects that would generate more than 100 net new peak-hour vehicular trips. Require traffic impact studies to be prepared by professional transportation consultants selected and hired by the City and require the studies to be fully paid for by the project applicant. Traffic impact studies shall be prepared according to CCTA's travel demand model and technical procedures. Approve projects only if they are found to be consistent with the CCTA's West County Action Plan for Routes of Regional Significance. Projects found to be inconsistent with the CCTA's West County Action Plan for Routes of Regional Significance may be approved if findings of special circumstances, including appropriate mitigation measures, are adopted by the City.	**Consistent.** See EIR chapter 16 (Transportation and Circulation). Under project and cumulative conditions, all study intersections would maintain the CCTA LOS standard of E and meet the additional, applicable CCTA objectives of the West County Action Plan.
Action CR1.B: Public Transit and Paratransit Service Improvements. …Expand outreach and information programs to promote transit use. *(same as or similar to EC2.C and HW4.C)*	**Consistent.** See EIR chapter 16 (Transportation and Circulation).

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Action CR1.C: Bicycle and Pedestrian Plans. Develop and implement citywide bicycle and pedestrian plans to make Richmond a more pedestrian and bicycle-friendly City. Identify gaps in the network, major travel routes and priority safety improvements. Designate a network of multi-use trails and off-street paths. Include connections to open space amenities such as Point Isabel, San Francisco Bay Trail, Point San Pablo, Point Pinole and the Richmond Greenway…. *(same as or similar to HW4.D and EC2.E)*	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Action CR1.D: Bicycle, Pedestrian, and Trail Standards. Develop standards for bicycle, pedestrian, and trail improvements and amenities in new development and redevelopment projects. Include requirements for adequate, safe and accessible bicycle parking, drinking fountains, public restrooms, benches, landscaping and lighting. Require new development and redevelopment projects to be pedestrian and bicycle-friendly, and to provide adequate connections to the existing and proposed bicycle and pedestrian network. Require all new commercial, industrial and residential development to provide access for construction and operation of a trail where a local or regional trail is designated or planned…. *(same as or similar to HW4.E)*	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), 15 (Public Services), and 16 (Transportation and Circulation).
Action CR1.H: Street Capacity and Infrastructure Improvements. Maintain adequate street capacity and reduce congestion for all modes of transportation on the street and freeway system. Address congestion along corridors by enhancing the public transportation system, promoting mixed-use development patterns to reduce vehicle miles traveled and by implementing transportation demand management strategies to increase mobility options. *(same as or similar to CF1.I)*	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Action CR1.L: Parking Requirements and Parking Strategies Toolbox. Revise parking requirements to support mixed-use urban environments and transit-oriented development along major commercial	**Consistent.** See Form-Based Code sections 2.05.07 (Parking Standards) and 2.05.08 (General Parking Standards).

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corridors, the Downtown and major transit stations such as BART and the proposed ferry terminal….	
Policy CR2.1: Neighborhood Connectivity. Improve access and connectivity within neighborhoods and to major destinations in the City….	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Policy CR2.3: Integrated Bicycle and Pedestrian System. Plan, construct and maintain a safe, comprehensive and integrated bicycle and pedestrian system….	**Consistent.** See EIR chapters 3 (Project Description) and 16 (Transportation and Circulation).
Action CR2.E: Signage and Wayfinding. Install comprehensive signage and wayfinding elements that address all modes of travel including transit, trucks, bicycles, multiuse trails and cars. Include gateway elements at key locations such as Downtown and at major entry points to the City. Ensure consistency with signage and wayfinding elements for historic resources, recreation destinations and the Bay Trail.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 16 (Transportation and Circulation).
Policy CR3.1: Safety and Accessibility. Enhance safety and accessibility for pedestrians, bicyclists and public transit riders. Promote walking, bicycling and transit use by improving key intersections and streets to reduce pedestrian and bicycle collisions. Support improvements at transit stations and stops to reduce crime and vandalism. Continue to work toward the elimination of at-grade railroad crossings to minimize traffic conflicts and increase connectivity and streetscape design to address traffic speeds and pollution. *(same as or similar to HW4.4)*	**Consistent.** See EIR chapters 15 (Public Services) and 16 (Transportation and Circulation).
Policy CR3.3: Concurrent Infrastructure Development. Require concurrent infrastructure development for new and redevelopment projects that may have a significant impact on the existing circulation system including streets, trails, sidewalks, bicycle paths and public transit.	**Consistent.** See EIR chapters 16 (Transportation and Circulation) and 17 (Utilities and Service Systems).
Policy CR5.1: Transportation Demand Management. Promote transportation demand management strategies among residents and businesses to reduce reliance on automobiles. Encouraging major employers to develop and implement transportation	**Consistent.** See EIR chapters 5 (Air Quality) and 16 (Transportation and Circulation).

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demand management (TDM) for employees will address peak commute traffic, congestion and air quality. Encourage and support development and transportation projects that emphasize design elements for bicycle and pedestrian access.	
Policy CR5.2: Renewable Energy and Clean Technology. Promote the use of renewable energy, including non-fossil fuels, and clean technology for transportation including public transit and goods movement.	**Consistent.** See EIR section 19.6 (Energy Conservation).
Policy CR5.3: Green Streets. Promote the development of street design elements that incorporate natural stormwater drainage and landscaping in new and retrofitted streets.	**Consistent.** See EIR chapters 11 (Hydrology and Water Quality) and 17 (Utilities and Service Systems).
Action CR5.A: Transportation Demand Management Program. Develop a transportation demand management (TDM) program that encourages use of public transit, bicycling and walking. TDM programs may include transit subsidies, car-share service, parking cash-out programs, bicycle-share programs, bicycle amenities and facility enhancements, among others. Include an incentive program to promote TDM in the City. Program elements may include reduction in transportation impact fees for new or redevelopment projects that demonstrate commitment to TDM strategies and reductions in parking requirements for mixed-use development and for projects that provide TDM programs and/or shared parking. Explore the feasibility of developing citywide TDM program that would be funded by annual fees or assessment on new development. *(same as or similar to GM1.C)*	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Action CR5.F: Green Streets Program. Expand the green streets program to support a sustainable approach to stormwater drainage, groundwater recharge and landscaping. Incorporate green streets standards and guidelines in all streetscape improvement projects in the City. *(same as or similar to CF3.B, EC4.F, and HW4.L)*	**Consistent.** See EIR chapters 11 (Hydrology and Water Quality) and 17 (Utilities and Service Systems). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).

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Housing Element	
Program H-1.2.2: No Net Loss of Residential Capacity. Approve only those projects and general plan and zoning map amendments that do not result in an overall loss of the City's capacity to meet its Regional Housing Needs Allocation (RHNA) numbers for the current planning period.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program H-1.2.3: Residential Sites Inventory. …Continue to identify additional sites for housing development, especially for extremely low, very low, and low-income households.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy H-1.3: Supply of Affordable Housing. Promote the development of homes that are affordable to extremely low, very low, low, and moderate-income households in all new residential developments as well as in existing single-family neighborhoods.	**Consistent.** See EIR chapters 3 (Project Description) and 14 (Population and Housing).
Program H-1.3.6: Affordable Housing Incentives. Provide incentives for affordable housing developments that greatly exceed the City's Inclusionary Housing Ordinance requirements for very low, low and moderate-income households. Potential incentives include financial assistance, density bonuses, increased height limits, reduced parking requirements, development impact fee waivers or deferrals, and expedited review.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 14 (Population and Housing).
Policy H-1.4: Variety of Housing Choices. Promote a variety of housing types that meet the different lifestyle and life cycle needs of residents including young adults, young couples and single professionals, small and large families, empty-nesters, and older couples.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Program H-1.4.1: Variety of Housing Types. As part of the Form-Based Code (FBC) for Macdonald Avenue, 23rd Street, and portions of San Pablo Avenue and the surrounding areas, facilitate and provide incentives for mixed-use housing over retail development and a variety of other housing types and products such as duplexes, triplexes, large apartment buildings, second dwelling units, courtyard housing, live-work units, condominiums, cooperative housing, single-room occupancy units (SROs),	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 14 (Population and Housing).

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retirement/assisted living communities, and manufactured or modular housing. Potential incentives include financial assistance, fee deferrals, density bonuses, reduced parking requirements, and expedited review. The City will ensure that the FBC that is adopted will not result in the loss of capacity of sites identified to meet its Regional Housing Needs Allocation (RHNA) for the current planning period.	
Program H-1.4.4: Garage Conversions. As part of the Form-Based Code (FBC) for Macdonald Avenue, 23rd Street, and portions of San Pablo Avenue and the surrounding areas, consider reducing covered parking requirements and establishing design guidelines to facilitate garage conversions. Ensure that conversions do not deteriorate the architectural character of heritage homes in Richmond's older residential neighborhoods.	**Consistent.** See EIR chapters 4 (Aesthetics and Visual Resources). See Form-Based Code sections 2.05.07 (Parking Standards) and 2.05.08 (General Parking Standards).
Policy H-2.1: High-Quality Living Environments. Promote high-quality living environments by requiring exceptional architectural, urban, landscape, and green building design and by focusing residential development in areas that are within walking and biking distance of jobs, shopping, schools, recreation, entertainment, public transportation, and other community amenities.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Program H-2.1.2: Design Guidelines for Quality Housing. As part of the Form-Based Code (FBC) for Macdonald Avenue, 23rd Street, and portions of San Pablo Avenue and the surrounding areas, establish design guidelines and development standards to ensure that near and long-term development and capital improvement projects substantially improve the quality of life for Richmond residents.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 12 (Land Use and Planning), and 17 (Utilities and Service Systems).
Program H-2.1.5: Historic Structures Code. Protect Richmond's historic resources and districts by continuing to implement the City's Historic Structures Code. The Code requires that exterior modifications and demolitions of historic resources be evaluated for consistency with the US Secretary of the Interior's Standards for the Treatment of	**Consistent.** See EIR chapter 7 (Cultural and Historic Resources).

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Historic Properties. …Ensure that demolitions do not result in a new source of neighborhood blight.	
Policy H-2.2: Green Building Measures and Practices. Promote the incorporation of green building measures and practices in new residential development projects and existing residential structures.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems) and section 19.6 (Energy Conservation). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Policy H-3.1: Senior Housing Development. Actively seek to expand the development of affordable housing for extremely low, very low, low and moderate-income seniors.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 14 (Population and Housing).
Policy H-3.2: Accessible Housing Opportunities. Actively seek to expand housing opportunities for persons with disabilities in new and existing single-family and multifamily developments.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), and 16 (Transportation and Circulation).
Community Facilities and Infrastructure Element	
Policy CF1.3: Impacts on Neighborhoods. Protect the quality of life for residents, businesses and visitors. Consider health, safety and aesthetic impacts of siting new or existing infrastructure and utilities and ensure that impacts and benefits are not disproportionately distributed to any parts of the City.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 5 (Air Quality), 10 (Hazards and Hazardous Materials), 13 (Noise), (15) Public Services, and 17 (Utilities and Service Systems).
Policy CF1.5: Universal Access. Develop and support strategies and programs that will provide universal access to facilities, amenities and infrastructure. Encourage and incorporate new technologies in all City-owned and operated facilities and infrastructure projects. New technologies include: fiber optic lines and wireless networks; physically accessible facilities for users of all ages and abilities; safe and well-lighted streets; seismically sound structures; and non-toxic materials that comply with green building codes and sustainable practices.	**Consistent.** See EIR chapters 3 (Project Description), 4 (Aesthetics and Visual Resources), 9 (Geology and Soils), 10 (Hazards and Hazardous Materials), 15 (Public Services), and 17 (Utilities and Service Systems). See Complete Streets Plan section 3.05.02.05 (ADA Accessibility Standards).
Action CF1.D: Storm Water Drainage. Provide storm drainage in accordance with best management practices and guidelines. Assess the system's ability to accommodate current and future users, sea level rises, and include all necessary improvements in	**Consistent.** See EIR chapters 11 (Hydrology and Water Quality) and 17 (Utilities and Service Systems).

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development plans. Reduce runoff into creeks and the Bay, and address groundwater recharge through the use of pervious materials, retention basins, bio-swales and other methods. *(same as or similar to EC6.D)*	
Policy CF3.1: Green Facilities. Promote green and sustainable practices and approaches in planning, design, construction, renovation and maintenance of public facilities.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems) and section 19.8 (Energy Conservation). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Policy CF3.2: Green Infrastructure and Landscape. Promote ecologically-sensitive approaches in landscaping, stormwater drainage, groundwater recharge and flood control. Work with EBMUD and local nurseries to promote "waterwise" landscaping. Continue to gather and distribute new information that will assist residents and businesses to establish planted areas that require fewer chemicals or pesticides and help to filter stormwater and recharge groundwater aquifers.	**Consistent.** See EIR chapters 11 (Hydrology and Water Quality), 17 (Utilities and Service Systems), and section 19.8 (Energy Conservation). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Conservation, Natural Resources and Open Space Element	
Policy CN1.2: Local Native Plant Species. Promote the use of locally propagated native plant and tree species and remove and control the spread of invasive exotic plant species. Promote and protect native plant species in natural areas as well as in public landscaping of parks, schools, medians and planter strips. Work closely with landowners, landscapers and nurseries to remove and prevent the spread of invasive exotic plant species.	**Consistent.** See EIR chapter 6 (Biological Resources). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Policy CN1.3: Urban Creek Restoration. Encourage the restoration of urban creeks and coordinate with property owners and local interest groups in the restoration efforts. Daylighting of creeks that are currently in culverts or hardened channels shall be pursued where feasible in new and redevelopment projects. *(same as or similar to HW9.5)*	**Consistent.** See EIR chapters 6 (Biological Resources) and 15 (Public Services).
Action CN1.C: Creek Access Easement. Identify and create access easements, where	**Consistent.** See EIR chapters 6 (Biological Resources) and 15 (Public Services).

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practical, for creek maintenance and public access to creekside amenities. Establish standards that allow public access in the floodplain and buffers along creek corridors without compromising the integrity of sensitive habitats.	
Action CN1.D: Creek Corridor Performance Standards. Establish performance standards for creek corridors that accomplish the following: ▪ Offer sufficient width in and/or adjacent to preserves to allow for existing and created wildlife habitat, species sensitive to human disturbance, vegetative filtration for water quality, corridors for wildlife habitat linkage, protection from runoff, and other impacts of adjacent urban uses; ▪ Allow for sufficient width adjacent to natural resource preserves to allow for trails and greenbelts; and ▪ Discourage the use of herbicides and provide sufficient width for a mowed firebreak (where necessary), adjacent passive recreation uses and access for channel maintenance and flood control. ▪ In areas of creek restoration, implement design specifications and modeled flow conditions to ensure that creek channel configuration and vegetation would withstand storm flows, that conveyance capacity is not impeded, and that the system is stabilized following construction. Design shall be conducted by a certified professional in stream restoration and fluvial geomorphology processes. ▪ Implement construction best management practices to reduce erosion potential including, but not limited to, construction scheduled for dry season work; high flow bypass until the system is stabilized; temporary and permanent erosion and sediment controls; prevention of run-off during construction.	**Consistent.** See EIR chapters 6 (Biological Resources), 11 (Hydrology and Water Quality), and 15 (Public Services).

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▪ Implement monitoring, inspection, and maintenance programs and plans to ensure long-term continued function.	
Action CN1.G: Landscape Design Guidelines. ▪ Update and implement the City's Landscape Design and Development Guidelines to conform to bay friendly landscape standards. ▪ Use appropriate tree species and densities in buffer areas. ▪ Ensure that medians include native plants and trees and are wide enough to support their long-term viability with the least demand for irrigation and maintenance. ▪ Prioritize the use of locally propagated native drought-tolerant vegetation and discourage the use of invasive non-native species in home landscaping. ▪ Tree and other plant selections for public landscaping should be made in conformance with the "City of Richmond Urban Forest Management/Master Plan Reforestation Supplement" (Chapter 10.08 of the Richmond Municipal Code). ▪ Plants should be grouped together as per their water demand listed in the Water Use Classifications for the Landscape Species or "WUCOLS III," or successor document by the University of California Cooperative Extension for the California Department of Water Resource. *(same as or similar to EC4.G)*	**Consistent.** See EIR chapter 17 (Utilities and Service Systems) and Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Action CN1.H: Urban Creek Restoration. Where feasible, restore creek corridors in urban areas. Creeks currently diverted in culverts or hardened channels should be restored to their natural state. Adopt regional guidelines for channel creation or modification to ensure that channels meander, have a naturalized side slope and a varied channel	**Consistent.** See EIR chapter 6 (Biological Resources). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).

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bottom elevation. Include improvement standards for soft bottom channels. *(same as or similar to EC6.C, PR3.C, and HW9.N)*	
Policy CN2.4: Agricultural Lands. …Encourage local organic food production such as microfarming in community gardens and private yards. Protect viable topsoils to ensure working landscapes.	**Consistent.** See Form-Based Code section 2.05.06.03 (Urban Farming).
Policy CN2.6: Protect Soil and Reduce Erosion. Minimize soil depletion and erosion. Prevent erosion caused by construction activities. Retain natural vegetation and topography and minimize grading of hillsides.	**Consistent.** See EIR chapters 9 (Geology and Soils) and 11 (Hydrology and Water Quality).
Policy CN2.7: Parkland Preservation. Maintain high quality parklands and play areas to serve current and future residents. Require new development and redevelopment projects to provide additional parkland or funding to purchase and maintain parklands.	**Consistent.** See EIR chapter 15 (Public Services).
Action CN2.B: Open Space Easements. Consider opportunities for establishing open space easements where natural resources may be protected or accessed on private property….	**Consistent.** See EIR chapter 6 (Biological Resources) and 15 (Public Services).
Action CN2.C: Parkland Dedication Ordinance. …Prioritize park dedication over impact fees…. Require at least a 1:1 replacement if there is any loss of public open space or parkland due to redevelopment. *(same as or similar to PR1.G and HW1.B)*	**Consistent.** See EIR chapter 15 (Public Services).
Goal CN3: Improved Water Quality. Pursue a multi-jurisdictional approach to protecting, maintaining and improving water quality and the overall health of the watershed. A comprehensive, integrated approach will ensure compliance with federal and state standards, and address a range of interconnected priorities including: water quality and runoff; stormwater capture, storage and flood management techniques that focus on natural drainage; natural filtration and groundwater recharge through green infrastructure and habitat restoration; and water recycling and conservation.	**Consistent.** See EIR chapters 6 (Biological Resources) and 11 (Hydrology and Water Quality). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Policy CN3.1: Stormwater Management. Develop strategies to promote stormwater management techniques that minimize surface	**Consistent.** See EIR chapters 11 (Hydrology and Water Quality) and 17 (Utilities and Service Systems).

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water runoff in public and private developments. Utilize low-impact development techniques to best manage stormwater through conservation, on-site filtration and water recycling.	
Policy CN3.2: Water Quality. Work with public and private property owners to reduce stormwater runoff in urban areas to protect water quality in creeks, marshlands and water bodies and the bays. Promote the use of sustainable and green infrastructure design, construction and maintenance techniques on public and private lands to protect natural resources. Incorporate integrated watershed management techniques and to improve surface water and groundwater quality, protect habitat and improve public health by coordinating infrastructure and neighborhood planning and establishing best practices for reducing non-point runoff. *(same as or similar to HW9.3)*	**Consistent.** See EIR chapters 11 (Hydrology and Water Quality) and 17 (Utilities and Service Systems). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Policy CN3.3: Flood Management. Minimize the flood hazard risks to people, property and the environment. Address potential damage from a 100-year flood, tsunami, sea level rise and seiche, and implement and maintain flood management measures in all creeks and in all watersheds. *(same as or similar to SN1.2)*	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).
Policy CN3.4: Water Conservation. Promote water conservation. Encourage residents, public facilities, businesses and industry to conserve water especially during drought years. Work with East Bay Municipal Utility District to advance water recycling programs including using treated wastewater to irrigate parks, golf courses and roadway landscaping and by encouraging rainwater catchment and graywater usage techniques in buildings.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Action CN3.A: NPDES Compliance and Permit. Continue to comply with the City's National Pollutant Discharge Elimination System (NPDES) Permit and continue to implement the following action steps: ▪ Maintain municipal infrastructure (sewer systems, roads, corporation yards,	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).

Policies	Consistency Analysis
buildings) to reduce pollutants that flow into water courses; ▪ Require development to comply with the Contra Costa Clean Water Program Stormwater Guidebook; ▪ Work with developers to ensure compliance with the City's minimum standards and NPDES requirements; ▪ Encourage all projects to use pervious pavements, cluster structures, disconnect downspouts, minimize land disturbance and utilize micro-detention such as low impact development (LID); ▪ Require adequate source control measures to limit pollution generation in businesses including draining non-stormwater discharges such as swimming pools, trash and food compactor racks, vehicle outdoor storage, fire sprinkler test water and equipment washing; ▪ Require businesses that may be susceptible to polluting stormwater to implement best management practices (BMPs) including covering drains and storage precautions for outdoor material storage, loading docks, repair and maintenance bays and fueling areas; … *(same as or similar to HW9.L)*	
Action CN3.B: Water Recycling. …Require water recycling and rainwater catchment in new development as appropriate to recycle water. Evaluate the use of recycled water in new and existing buildings and landscapes. *(same as or similar to EC3.G and HW10.H)*	**Consistent.** See EIR chapter 17 (Utilities and Service Systems).
Action CN3.D: Flood Control Requirements. Require new development to install and maintain flood control measures on all creeks and watersheds in coordination with the Contra Costa County Flood Control and Water Conservation District. Include flood prevention mitigation measures for any developments within the 100-year floodplain.	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).

Policies	**Consistency Analysis**
Require new development to install flood control measures to address sea level rise as appropriate. Improve groundwater recharge and minimize stormwater runoff to better accommodate floodwaters.	
Action CN3.E: Water Conservation. Implement water conservation efforts for households, businesses, industries and public infrastructure. Include measures such as the following: ▪ Require low-flow appliances and fixtures in all new development in accordance with EBMUD Water Service Regulations (Section 31)…. ▪ Require new development and landscaped public areas to utilize state-of-the-art irrigation systems that reduce water consumption including graywater systems and rainwater catchment; ▪ Encourage use of drought-tolerant and native vegetation; ▪ Require new plantings be grouped by hydrozones of water needs listed in the WUCOL III developed by the Department of Water Resources and the University of California Cooperative Extension (or successor document); and ▪ Require development project approvals to include a finding that all feasible and cost-effective options for conservation and water reuse are incorporated into project design including graywater systems. *(same as or similar to EC3.F and HW10.G)*	**Consistent.** See EIR chapter 17 (Utilities and Service Systems). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Goal CN4: Improved Air Quality. Take steps to improve and maintain air quality for the benefit the health and vitality of residents and the local economy. In alignment with state emission reduction goals and in cooperation with the Bay Area Air Quality Management District, pursue regional collaboration to reduce emissions from all sources.	**Consistent.** See EIR chapter 5 (Air Quality).

Policies	Consistency Analysis
Action CN4.B: Air Pollution Reduction Strategy. Support local and regional efforts to develop strategies that reduce air pollution, reduce auto use, expand transit and non-motorized transportation options and reduce congestion and idling time including programs to reduce air pollution from stationary sources such as power plants, oil refineries and commercial and residential buildings. Work with regional agencies as they monitor air quality impacts and establish best practices for reducing emissions. *(same as or similar to HW9.B)*	**Consistent.** See EIR chapter 5 (Air Quality).
Goal CN5: Environmental Sustainability. Reduce the City's carbon footprint and manage resources wisely to meet the needs of a growing population and economy. Base community planning decisions on sustainable practices that reduce environmental pollutants, conserve resources and minimize waste. Lead the Bay Area in reducing dependence on fossil fuels by encouraging design of energy efficient buildings, using renewable energy and promoting alternative methods of transportation.	**Consistent.** See EIR chapters 9 (Greenhouse Gas Emissions and Global Climate Change), 16 (Transportation and Circulation), 17 (Utilities and Service Systems), and section 19.6 (Energy Conservation). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Policy CN5.1: Energy Efficiency and Conservation. Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure and equipment. Collaborate with partner agencies, utilities and businesses to support a range of energy efficiency, conservation and waste reduction measures, including development and retrofitting of green buildings and infrastructure; installation of energy-efficient appliances and equipment in homes and offices; and heightened awareness of energy and conservation issues.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems) and section 19.6 (Energy Conservation).
Policy CN5.2: Sustainable Development Standards and Practices. Promote environmentally sustainable development principles for buildings, neighborhoods and infrastructure. Encourage construction and building development practices that reduce resource expenditures throughout the life-cycle of a structure.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems) and section 19.6 (Energy Conservation).

Policies	Consistency Analysis
Policy CN5.3: Solid Waste Reduction and Recycling. Promote waste reduction and recycling to minimize materials that are processed in landfills. Encourage residents and businesses to reduce waste and minimize consumption of goods that require higher energy use for shipping and packaging. Encourage composting to reduce food and yard waste and provide mulch for gardening…. *(same as or similar to EC3.3 and HW10.6)*	**Consistent.** See EIR chapter 17 (Utilities and Infrastructure).
Action CN5.F: Construction and Demolition Ordinance. …Encourage preservation and readaptation of existing structures over replacement and deconstruction and reuse of building materials over demolition. *(same as or similar to EC3.E and HW10.F)*	**Consistent.** See EIR chapter 17 (Utilities and Infrastructure).
Policy CN6.2: Protection and Expansion of Tree Resources. Protect and expand tree resources within Richmond. Protect native trees, heritage trees and oak woodlands; expand and maintain street tree planning; use zoning and building requirements to ensure that trees are included in new developments; and engage the community to undertake planting campaigns. Furthermore, promote trees as economic and environmental resources for the use, education and enjoyment of current and future generations. *(same as or similar to HW9.4)*	**Consistent.** See EIR chapters 6 (Biological Resources) and 15 (Public Services). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Action CN6.B: Hazardous Substance Management. Implement standards dealing with the safe management of hazardous substances in close coordination with the City Fire Department and the Department of Toxic Substance Control. The standards should require soil testing at development sites where contamination is suspected, address safe household hazardous and universal waste disposal and ensure compliance with hazardous substance regulations and safe transport of hazardous materials. Use of the latest technologies available should be considered when conducting remediation in order to expedite the cleansing process and do the least harm to the environment. *(same as or similar to HW9.K)*	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).

Policies	Consistency Analysis
Action CN6.C: Pollution Prevention Program. Continue to implement the City's pollution prevention program for residents, businesses and industry to provide information on pollution prevention, disposal of hazardous waste and chemicals, liability and clean-up. The program could educate the community on laws governing the proper handling of hazardous materials, especially those laws which pertain to discharging materials into creeks and storm drains.	**Consistent.** See EIR chapter 10 (Hazards and Hazardous Materials).
Action CN6.D: Public and Private Tree Preservation Ordinance. Continue to implement the Public and Private Tree Preservation Ordinance that identifies and protects native trees and trees with historical importance.	**Consistent.** See EIR chapters 6 (Biological Resources) and 15 (Public Services). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Energy and Climate Change Element	
Policy EC2.1: Climate-Friendly Vehicles and Equipment. Encourage the use of available climate-friendlier vehicles and equipment to reduce energy use and carbon emissions and support the use of low-emission or renewable fuel vehicles by residents and businesses, public agencies and City government. *(same as or similar to HW10.8)*	**Consistent.** See EIR chapter 9 (Greenhouse Gas Emissions and Global Climate Change).
Policy EC2.6: Private Automobile Use. Work toward creation of an urban landscape that will reduce reliance on private automobiles through land use planning and by providing amenities and infrastructure that encourage safe and convenient use of public transit, walking and bicycling.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Action EC2.F: Promote Bicycle Use. Encourage safe and convenient bicycle use by residents, employees and visitors. Consider strategies that expand bicycling as a viable mode of transportation for people of all ages and abilities. Encourage businesses to provide bicycle amenities such as secured bicycle parking, showers and lockers for employees who bike to work.	**Consistent.** See EIR chapter 16 (Transportation and Circulation).
Goal EC3: Sustainable and Efficient Energy Systems. Reduce the City's consumption of energy by encouraging energy conservation, and supporting the consumption of energy produced by climate-friendly	**Consistent.** See EIR chapter 17 (Utilities and Service Systems) and section 19.6 (Energy Conservation).

Policies	Consistency Analysis
technologies. Reduce the City's overall waste stream by reducing the City's consumption of goods and materials, and by adopting a zero-waste philosophy.	
Policy EC3.1: Renewable Energy. Promote the generation, transmission and use of a range of renewable energy sources such as solar, wind power and waste energy to meet current and future demand and encourage new development and redevelopment projects to generate a portion of their energy needs through renewable sources. *(same as or similar to HW10.4)*	**Consistent.** See EIR section 19.6 (Energy Conservation).
Policy EC3.4: Water Conservation and Reuse. Promote water conservation and recycled water use. Reduce energy consumed for treatment and transportation of water and discharge of wastewater by: encouraging installation of low-flow fixtures; using native planting for landscaping in all City-owned and operated facilities; promoting best practices and technologies for water conservation; considering water use in evaluating and approving development projects; supporting the use of graywater and water catchment systems in residential, commercial and industrial uses; and encouraging new development and redevelopment projects to meet a portion of their water needs through the use of recycled water. *(same as or similar to HW10.7)*	**Consistent.** See EIR chapter 17 (Utilities and Service Systems).
Policy EC4.1: Mixed-Use and Infill Development. Promote mixed-use infill development on vacant and underutilized parcels along commercial corridors, in the Downtown area, at the planned ferry terminal and in the Hilltop area. Support local-serving mixed-use in residential areas to provide needed services and amenities close to where people live and work. Protect existing affordable housing and develop strategies to prevent the displacement of renters and low-income residents. Require property owners to comply with and pay for state and federal requirements for site remediation as a condition for approving development on contaminated sites.	**Consistent.** See EIR chapters 3 (Project Description), 10 (Hazards and Hazardous Materials), 12 (Land Use and Planning), and 14 (Population and Housing).

Policies	Consistency Analysis
Policy EC4.3: Green Buildings and Landscaping. Require energy and resource efficient buildings and landscaping in all public and private development projects. Encourage the use of green and sustainable development standards and practices in planning, design, construction and renovation of facilities; promote the use of green streets that incorporate extensive landscaping, pervious surfaces and native planting; encourage new development and redevelopment projects to be LEED-certified green buildings; and promote ecologically-sensitive approaches to landscaping…. *(same as or similar to HW10.2)*	**Consistent.** See EIR chapter 17 (Utilities and Service Systems) and section 19.6 (Energy Conservation). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Action EC4.E: Street Design Standards. Update the City's street design standards so that they support public transit, bicycles and walking on all streets. The updated standards should be consistent with and tailored to street or trail function and adjacent land use type. Pedestrian-friendly designs should address maximum lane widths, maximum curb radii, sidewalk width, curb ramps and Americans with Disabilities Act (ADA) requirements. Bicycle-friendly design should address lane widths, street and intersection crossings and parking areas. Include guidelines for transit access. Identify priority thoroughfares for developing green streets in the City to implement a natural systems approach for stormwater management and to expand urban greenery. Evaluate the feasibility of reducing the number or width of travel lanes on key mixed-use streets that may have excess capacity and using the capacity and/or regained width for wider sidewalks and bicycle lanes. *(same as or similar to CR2.D and HW4.N)*	**Consistent.** See EIR chapter 16 (Transportation and Circulation). See Complete Streets Plan section 3.05.02.05 (ADA Accessibility Standards).
Action EC4.H: Green Building Ordinances. Require that newly constructed or renovated City-owned and private buildings and structures comply with the City's adopted Green Building Ordinances…. *(same as or similar to CN5.C, CF3.A, H-2.2.1, and HW10.B)*	**Consistent.** See EIR section 19.6 (Energy Conservation).
Policy EC6.2: Low-Lying Areas in Richmond. Protect and manage low-lying	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).

Policies	**Consistency Analysis**
areas that are likely to be affected by sea level rise and storm surges. Encourage development patterns, infrastructure and flood management practices that can adapt to potential climate change impacts in these low-lying areas.	
Policy EC6.3: Adapting to Climate Change. …Protect neighborhoods, infrastructure and facilities, the shoreline and natural resources from the impacts of climate change. Require new developments to include an evaluation of climate change impacts in the project review process…. Design elements shall include providing adequate setbacks to allow for future elevation increases of at least three feet from the existing elevation along the shoreline.	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).
Action EC6.F: Disaster Preparedness and Recovery Plan. Require that all development and redevelopment projects comply with the City's Disaster Preparedness and Recovery Plan. Regularly review and update the plan and expand public training and information. *(same as or similar to SN3.A, HW3.D, and CF2.D)*	**Consistent.** See EIR chapters 8 (Geology and Soils) and 10 (Hazards and Hazardous Materials).
Growth Management Element	
Policy GM1.4: Diverse Range of Housing Opportunities. … Promote the development of senior and multifamily housing options in close proximity to major job centers, public transit and community amenities such as schools, parks, shopping and community centers.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Goal GM2: Improved Infrastructure and Facilities. Improve public services and infrastructure to meet the demands of new development.	**Consistent.** See EIR sections 15 (Public Services) and 17 (Utilities and Service Systems).
Policy GM2.2: Community Amenities for New Development. Require new development to pay costs attributable to that development including impacts on: local streets; local and regional transportation systems; and public facilities such as parks and recreation, schools and emergency services.	**Consistent.** See EIR chapters 15 (Public Services) and 16 (Transportation and Circulation).

Policies	Consistency Analysis
Parks and Recreation Element	
Policy PR1.2: Multimodal Connections to Parks, Open Space and Recreational Facilities. Improve connections to parks, open space and recreational facilities through an interconnected network of pedestrian-friendly green streets, multimodal corridors and trails. Enhance trails and greenways to provide recreational opportunities for residents, connect neighborhoods and community uses, improve access to natural resources and the shoreline and promote walking and bicycling. On-street connections should be pedestrian and bicycle-friendly and incorporate green infrastructure where possible. Transit links along key corridors will allow residents and visitors to access parks, recreation facilities and open space areas….	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation).
Policy PR1.3: Equitable Distribution of Park and Recreation Facilities. Expand park and recreation opportunities in all neighborhoods and ensure that they are offered within comfortable walking distance of homes, schools and businesses in order to encourage more physically and socially active lifestyles. … In established neighborhoods where land availability for new large parks is limited, prioritize improvement and maintenance of compact parks, play lots and plazas to increase access to recreation opportunities for residents. Encourage developers to meet the City's park development standard within their proposed development projects. *(same as or similar to HW1.9)*	**Consistent.** See EIR chapters 3 (Project Description) and 15 (Public Services).
Action PR1.D: Parkland Acquisition Plan. …Prioritize park development along corridors where pedestrian and bicycle improvements are planned and target underserved areas and potential infill areas with space for new parks. Consider innovative and alternative strategies to provide park recreation space such as soccer fields and gardens over parking structures. Include policies that promote community ownership and use of left-over spaces in the City that may be blighted or unsafe. Support residents in their efforts to	**Consistent.** See EIR chapters 3 (Project Description), 6 (Biological Resources), 12 (Land Use and Planning), and 15 (Public Services).

Policies	**Consistency Analysis**
develop community gardens which will help promote a local food program…. Confirm a range of acquisition strategies including easements, donations, land purchases and park set-asides, parkland dedication or in-lieu fees for new or redevelopment projects. …Include considerations for trail and greenway expansion. New trails and greenways may be developed to connect parks, community facilities and other City destinations such as commercial centers and neighborhoods. Additional preliminary strategies include: … ▪ Collaborating with developers, landowners and business owners to integrate small transit-oriented pocket parks or plazas into redevelopment projects on commercial corridors; and ▪ Prioritizing park development along corridors where pedestrian and bicycle improvements are planned and acquiring parcels in residential areas as land becomes available to develop neighborhood or compact parks.	
Policy PR2.3: Active Use and Natural Surveillance. Provide a comprehensive range of programs to aid in natural surveillance. A robust schedule of programs, activities and services that serve community needs will encourage active use of facilities throughout the day, providing natural surveillance. Likewise, creating safe environments will encourage social gatherings and interaction in community facilities. Provide oversight by trained park stewards and law enforcement officers.	**Consistent.** See EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 15 (Public Services).
Policy PR3.1: Efficient and Sustainable Design and Maintenance Practices. Promote conservation and energy efficiency in the design, construction and maintenance of parks, recreation facilities, landscaped areas and trails. Enhance the long-term fiscal and environmental sustainability of the City's infrastructure by promoting green buildings, infrastructure and operations.	**Consistent.** See EIR section 19.6 (Energy Conservation). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).

Policies	Consistency Analysis
Action PR3.D: Water Conservation Program. Continue to plan for and install state-of-the-art master irrigation controller systems in all new and existing parks and landscapes. Provide for other irrigation components that further enhance water conservation. Plan for and replace plant materials for better water conservation consistent with the Water Use Classification of Landscape Species (WUCOL) project plant lists developed by the State of California Department of Water Resources and University of California.	**Consistent.** See EIR chapter 17 (Utilities and Service Systems). See Form-Based Code sections 2.05.06 (Sustainable and Environmentally Friendly Elements) and 2.05.07 (Landscaping, Fencing and Screening Standards).
Policy PR4.4: Urban Green Space. Increase opportunities to incorporate green space as part of the urban environment. Urban green space contributes broad public health benefits for both adults and children and improves quality of life and property values.	**Consistent.** See EIR chapters 6 (Biological Resources) and 15 (Public Services).
Action PR4.A: Urban Greening Initiative. Support and encourage citywide initiatives to increase opportunities for contact with nature. The initiative should: ▪ Improve access to urban parks, green spaces and natural environments; ▪ Protect and restore natural landscapes and habitat; ▪ Develop smaller, flexible, close-to-home facilities that include informal natural play areas, community gardens, restored creeks, landscaping with trees, shrubs and flowers; ▪ Plant street trees, well-landscaped urban environments, green streets and trails; ▪ Incorporate unstructured natural settings in public play areas, schools and other learning environments; … ▪ Utilize park performance standards including design guidelines and criteria to ensure that natural features are included in designs; … *(same as or similar to HW1.I)*	**Consistent.** See EIR chapters 3 (Project Description), 6 (Biological Resources), and 15 (Public Services).

Policies	Consistency Analysis
Community Health and Wellness Element	
Policy HW9.8: Noise Levels. …Reduce or mitigate objectionable noise sources and require new noise sources to comply with noise standards. Regulate both indoor and outdoor noise levels to protect health and safety. Use a combination of noise standards and existing noise levels to determine impacts and mitigation measures. *(same as or similar to SN4.1)*	**Substantially Consistent.** See EIR chapter 13 (Noise). Significant unavoidable construction-related noise and vibration would occur intermittently over time.
Policy HW9.9: Transportation-Related Noise. …Support traffic and freeway improvements that will reduce noise impacts of vehicles. Alternatives to sound walls should be considered where possible. *(same as or similar to SN4.3)*	**Consistent.** See EIR chapter 13 (Noise).
Action HW9.R: Noise Ordinance. …Where feasible, limit the impact of noise sources on noise-sensitive uses and consider noise and vibration impacts in land use planning decisions. Require mitigation of potential noise impacts on adjacent properties. Enforce the Land Use Compatibility Standards presented in the State of California's General Plan Guidelines when siting new uses in existing noise environments. Require new residential development and other noise sensitive uses near railroad crossings or other sources of brief loud noise to be analyzed for noise compatibility using standards based on both 24-hour averages and maximum instantaneous interior noise levels to determine the noise effects on sleep disturbance and other essential human functions. Encourage projects to use site planning and building orientation principles as well as state-of-the-art noise-abating materials, technology and construction standards to minimize noise…. *(same as or similar to SN4.C)*	**Substantially Consistent.** See EIR chapter 13 (Noise). Significant unavoidable construction-related noise and vibration would occur intermittently over time.
Public Safety and Noise Element	
Goal SN1: Risk Management of Natural and Human-Caused Disasters. Minimize the risk of injury, loss of life, property damage and environmental degradation from seismic activity, geologic hazards, flooding and fire and the storage, use and transport of hazardous materials and operations. Promote	**Consistent.** See EIR chapters 8 (Geology and Soils), 10 (Hazards and Hazardous Materials), 11 (Hydrology and Water Quality), and 15 (Public Services).

Policies	Consistency Analysis
a sustainable approach to reduce impacts of natural disasters such as flooding and fire.	
Policy SN1.1: Geologic and Seismic Safety. Minimize risk of injury, loss of life and property damage from seismically induced and other known geologic hazards. Regulate land use and apply development standards and construction practices to reduce the risk to humans and property in the event of an earthquake or other geological activity.	**Consistent.** See EIR chapter 8 (Geology and Soils).
Action SN1.D: Flood Hazard Zone Designation. …Require special design features to prevent damage from flooding for all new development located within the areas subject to flood hazard. Include a special designation for areas that will be impacted by rising sea levels.	**Consistent.** See EIR chapter 11 (Hydrology and Water Quality).
Action SN4.A: Noise Study Report Requirement. Require proposed commercial and industrial uses with potential noise and vibration-producing activities or new noise-sensitive uses that locate in an area with day-night average sound level (Ldn) of 55 or greater to provide noise study reports. The report should identify noise mitigation measures that limit noise to an acceptable level compared to existing conditions.	**Substantially Consistent.** See EIR chapter 13 (Noise). Significant unavoidable construction-related noise and vibration would occur intermittently over time.
Action SN4.B: Noise Study Guidelines. Regularly review and update guidelines for the analysis of noise impacts and conflicts in the community. …Use the noise analysis to review development proposals to assure consistency with noise standards. Consider the following measures for mitigating noise impacts on adjacent properties: ▪ Screen and control noise sources such as parking, outdoor activities and mechanical equipment. ▪ Use technology to reduce noise impacts in instances where setbacks cannot be increased. ▪ Use state of the art noise-abating materials technology and construction standards and double or triple glazed windows to meet noise standards.	**Substantially Consistent.** See EIR chapter 13 (Noise). Significant unavoidable construction-related noise and vibration would occur intermittently over time.

Policies	Consistency Analysis
▪ Control hours of operation, including deliveries and trash pickup to minimize noise impacts. ▪ Use the Future Noise Contours data and Municipal Codes on noise to determine if additional noise studies are needed.	
Action SN4.E: Construction Traffic Plan Guidelines. Maintain guidelines for preparing traffic plans to mitigate noise, traffic and dust during major construction activity. Continue to require construction traffic plans for all developments of ten or more homes or commercial projects larger than five acres in size to regulate vehicle speeds, dust and noise mitigation, hours of operation, phased fencing plans and safety standards. The plan should ensure the safety of the public and employees during construction of major projects.	**Consistent.** See EIR chapters 5 (Air Quality), 13 (Noise), and 16 (Transportation and Circulation).
Arts and Culture Element	
Policy AC2.1: Community Revitalization. Promote arts and culture as a key component of community revitalization. Building a foundation and context for arts and culture is an important aspect of growing arts-related activity in the area. The following types of uses may help to achieve this: a greater mix of building and public space uses; new higher density housing; live/work artists' studios; expanded entertainment opportunities Downtown and throughout the City; a diversity of venues to showcase the arts; expanded regional shopping and restaurants; and ethnically diverse eateries and marketplaces.	**Consistent.** See EIR chapters 3 (Project Description) and 12 (Land Use and Planning).
Historic Resources Element	
Policy HR1.1: Preservation of Diverse Resources. Protect, preserve and enhance the diverse range of historic, cultural and archaeological sites and resources in the City for the benefit of current and future residents and visitors.	**Substantially Consistent.** See EIR chapter 7 (Cultural and Historic Resources).
Policy HR1.2: Adaptive Reuse of Resources. Promote adaptive reuse, rehabilitation and retrofitting of historic buildings that are no longer in their original use and explore approaches to integrate	**Substantially Consistent.** See EIR chapter 7 (Cultural and Historic Resources).

Policies	**Consistency Analysis**
preservation with economic revitalization objectives.	
Policy HR1.3: Compatibility of New Development. Promote context-sensitive design that respects and celebrates the history and historical character of sites and resources while meeting contemporary needs of the community. Encourage compatibility between new development, adaptive reuse, retrofitting and rehabilitating of historic properties and areas in the City within the historical context of the resource. Maintain consistency with the National Trust for Historic Preservation's "Main Street" principles and the Secretary of the Interior's Standards for the Treatment of Historic Properties, which include guidance for buildings and cultural landscapes. …	**Substantially Consistent.** See EIR chapter 7 (Cultural and Historic Resources).

19. CEQA-MANDATED SECTIONS

19.1 CUMULATIVE IMPACTS

Section 15130(a) of the CEQA Guidelines requires that the EIR "discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable...." The CEQA Guidelines (Section 15355) define "cumulative impacts" as "...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

The quantitative cumulative growth recognized in this EIR is the regional traffic model forecasts, incorporated into the Contra Costa Transportation Authority (CCTA) countywide travel demand model (see EIR Chapter 16, Transportation and Circulation). CCTA maintains a detailed database of land use and demographics, known as the Land Use Information System (LUIS), for use in its travel demand model. CCTA developed these detailed forecasts from census-tract-level forecasts prepared by ABAG. ABAG typically prepares a new set of forecasts every other year, and the LUIS goes through extensive local review to refine the forecasts to better correspond to expected growth.[1]

Therefore, analyses of quantitative cumulative impacts in this EIR are based on the “summary of projections” method, rather than the “list of projects” method, as authorized by Section 15130(b)(1)(B) of the CEQA Guidelines.

The proposed San Pablo Avenue Specific Plan is itself a cumulative project because the Plan would be implemented across the entire Plan area incrementally and cumulatively over approximately 25 years (the horizon year of the Specific Plan is 2040). This program EIR evaluates the Specific Plan as one “project” in accordance with CEQA (see EIR Chapter 1, Introduction).

All potentially significant cumulative impacts are addressed in this chapter with the following exceptions. Cumulative transportation impacts are analyzed in Chapter 16 (Transportation and Circulation), using projections from the CCTA countywide travel demand model.

As the BAAQMD CEQA Guidelines explain, all regional air pollutant emissions impacts and climate change impacts are inherently cumulative impacts. Accordingly, the analyses of these impacts in chapters 5 (Air Quality) and 9 (Greenhouse Gas Emissions and Global Climate Change) are analyses of cumulative impacts. These analyses are based on the traffic model as well as on the projections underlying BAAQMD’s CEQA Guidelines. EIR Chapter 17 (Utilities and Service Systems) evaluates: (1) water supply sufficiency on a cumulative basis consistent with EBMUD’s Urban Water Management Plan; (2) wastewater generation, collection, and treatment capacity on a cumulative basis; and (3) utility infrastructure needs on a cumulative bases.

[1] www.ccta.net/planning, viewed May 23, 2014.

Additional cumulative effects are discussed below.

19.1.1 Cumulative Aesthetic Impacts

Impacts on aesthetics are localized impacts, and there are no identified cumulative development projects adjacent to the Specific Plan area. Potential project impacts on scenic vistas would be evaluated on a case-by-case basis as individual, site-specific projects are proposed under the Specific Plan (see Impact/Mitigation 4-1). Accordingly, the proposed project would not make a cumulatively considerable contribution to any significant cumulative impact with respect to aesthetics.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.2 Cumulative Local Odor Impacts

There are no identified cumulative development projects adjacent to the Specific Plan area. Accordingly, the proposed project would not make a cumulatively considerable contribution to any significant cumulative odor impact .

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.3 Cumulative Biological Resource Impacts

The proposed Specific Plan includes components to daylight and protect Cerrito Creek, Baxter Creek, and their tributaries. Also, the Specific Plan area is subject to various Federal, State, regional, and local regulations for protecting biological resources (see EIR Chapter 6, Biological Resources). With respect to habitat conservation plans and natural community conservation plans, no such plans apply to the Specific Plan area or its vicinity. Potential project impacts on nesting birds would be mitigated on a site-specific basis and would not make a cumulatively considerable contribution to any significant cumulative biological resource impact.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.4 Cumulative Historic Resource Impacts

In their adopted General Plans and in the proposed Specific Plan (see EIR chapters 7 and 18), the cities of El Cerrito and Richmond have committed to preserving historic resources; however, this EIR cannot speculate on the City's future decision-making regarding any particular development proposal that might affect historic resources. If, in the future, the City determines that one or more local historic resources exist on a specific, proposed development site, that proposed project's *demolition* of those resources would, even with mitigation, constitute a significant and unavoidable impact. Other potential developments in the cities of El Cerrito and Richmond could also result in impacts on local historic resources. Accordingly, if local historic resources are determined to exist on a development site, the proposed Specific Plan could result in a cumulatively considerable contribution to a potential significant cumulative impact on historic resources. The impact would be *significant and unavoidable*.

Mitigation. EIR Mitigation 7-1 would not fully mitigate the Specific Plan's contribution to the potential cumulative impact to a less-than-significant level. Therefore, if local historic resources are determined to exist on a specific, proposed development site, the Specific Plan's contribution to cumulative historic resource impacts would be *significant and unavoidable*.

19.1.5 Cumulative Archaeological/Paleontological Resources Impacts

The proposed project in combination with other future cumulative development would increase potential archaeological/paleontological resource impacts. Other development projects outside the Specific Plan area also would be required to implement mitigation measures imposing the same requirements as the proposed Specific Plan's Mitigations 7-2 and 7-3. Implementation of these measures would reduce the cumulative impact on archaeological/paleontological resources to a *less-than-significant* level.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.6 Cumulative Geology and Soils Impacts

The proposed Specific Plan's impacts with respect to geology and soils would be site-specific and would not combine with the equally site-specific geology or soils impacts of other projects. Although it might be possible for two adjacent improperly constructed projects to cumulatively affect a third facility (e.g., an underground utility line), the implementation of adopted City regulations, as described in EIR Chapter 8 (Geology and Soils), would not permit such improper construction.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.7 Cumulative Hazards and Hazardous Materials Impacts

Because of the applicable laws, standard policies, and mitigation measures described in Chapter 10 (Hazards and Hazardous Materials), the proposed Specific Plan would create very little risk from hazards and hazardous materials. For all potential exposure pathways other than transport of hazardous waste, the area of potential impact would be limited to the development site and its immediate vicinity. No cumulative projects have been identified in the immediate vicinity of the development site (and any new project would also be required to comply with applicable law), so no significant cumulative impact is anticipated.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.8 Cumulative Hydrology and Water Quality Impacts

Future cumulative development outside the Specific Plan area could cause soil erosion, contaminant spills, and long-term water quality effects, but would be subject to the same regulatory and wastewater treatment requirements as the proposed Specific Plan. Compliance with these requirements would ensure that any cumulative impacts would be less-than-significant. Also, development under the proposed Specific Plan is required to cause no

increase in off-site drainage compared to existing conditions, as discussed in Chapter 11 (Hydrology and Water Quality) of this EIR.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.9 Cumulative Land Use and Planning Impacts

The proposed Specific Plan would not make a cumulative considerable contribution to any significant cumulative land use impact, for the following reasons. First, with respect to physically dividing an established community, as described in Chapter 12, the proposed project's effect would be positive rather than negative because the project would create greater public connectivity than currently exists in the Specific Plan area. In addition, all known proposed development projects in and adjacent to the Specific Plan area have been included in the analysis, so there are no adjacent projects that might create new physical divisions in an established community. Second, with respect to consistency with adopted City of El Cerrito general Plan and Richmond General Plan land use plans and policies, both the proposed project and any cumulative projects are required by law to be consistent with those plans and policies. Because the Lead Agency could not approve projects that were inconsistent with adopted City plans and policies, no significant cumulative impact would occur. Accordingly, the proposed Specific Plan would not make a cumulatively considerable contribution to any significant cumulative land use or planning impact.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.10 Cumulative Noise Impacts

The projected cumulative traffic volume increases identified in Chapter 16 (Transportation and Circulation) of this EIR would cause increases in traffic noise along streets in and near the Specific Plan area of less than 3 dBA. This is lower than the significance threshold of 3 dBA (see Chapter 13, Noise), so the cumulative impact to which the project would contribute is considered *less-than-significant*.

Construction-related noise and vibration impacts (Impacts/Mitigations 13-3 and 13-4) are considered *significant and unavoidable*. Depending on the location and timing of future construction outside the Specific Plan area through the year 2040, these project impacts could make cumulatively considerable contributions to significant cumulative construction-related noise and vibration impacts.

Mitigation. EIR Mitigations 13-3 and 13-4 would not fully mitigate the project's contribution to potential cumulative impacts to a less-than-significant level. Therefore, depending on the location and timing of future construction, the project's contribution to cumulative construction-related noise and vibration impacts would be *significant and unavoidable*.

19.1.11 Cumulative Population and Housing Impacts

The residential development capacity assumptions for the proposed Specific Plan are greater than the ABAG projections for the San Pablo Avenue PDA, as described and evaluated in Chapter 20 (Alternatives to the Proposed Project, Alternative 2: Plan Bay Area 2040 Growth

Allocations). As explained in Chapter 14 (Population and Housing), the Specific Plan development capacity is consistent with Plan Bay Area and a more realistic forecast for the Specific Plan area. ABAG makes its projections based in part on a community's existing general plan, and future ABAG projections would be anticipated to more closely reflect the anticipated residential and population growth facilitated by the Specific Plan. With these considerations, the impacts of this residential and population growth would be less-than-significant. The proposed Specific Plan is substantially consistent with the El Cerrito General Plan and Richmond General Plan. Because the proposed project does not include any components that would involuntarily displace residents or housing, the proposed project would not contribute to any displacement impact. The proposed project would not make a cumulatively considerable contribution to a significant cumulative population or housing impact.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.12 Cumulative Fire Protection/EMS Service Demand Impacts

Development facilitated by the proposed Specific Plan, in combination with other anticipated cumulative development by the year 2040, would increase the demand for fire protection/EMS service, including additional firefighters and requisite training, support staff, equipment, or other resources in the future. However, the El Cerrito Fire Department and Richmond Fire Department have not yet identified an associated need for new or physically altered fire protection or EMS facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives (including for emergency access and response). Therefore, cumulative development would have a *less-than-significant impact* on fire protection/EMS service.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.13 Cumulative Police Service Demand Impacts

Development facilitated by the proposed Specific Plan, in combination with other cumulative development by the year 2040, would cumulatively increase the demand for police services, including additional sworn police officers and requisite training, support staff, and equipment. However, the El Cerrito Police Department and the Richmond Police Department have not yet identified an associated need for new or physically altered police facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police services (including for emergencies and evacuations). Therefore, cumulative development would have a *less-than-significant impact* on police service.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.14 Cumulative Parks and Recreational Facilities Demand Impacts

Development facilitated by the proposed Specific Plan, in combination with other anticipated cumulative development by the year 2040, would cumulatively increase the demand for parks and recreational facilities. Because the proposed Specific Plan: (1) includes provisions for new

open space, (2) would increase connections to existing open spaces, and (3) would require dedication of park land or on-site provision of open space/recreational facilities, or impose an in-lieu fee or combination of these options, the Specific Plan would not make a cumulatively considerable contribution to cumulative demands for parks and recreational facilities.

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.1.15 Cumulative Impacts on Solid Waste Disposal and Recycling

Like the proposed Specific Plan, cumulative development projects in El Cerrito and Richmond would be required to be consistent with adopted solid waste and recycling regulations, including the solid waste/recycling regulations and programs described in Chapter 17 (Utilities and Service Systems) of the EIR. The solid waste disposal and recycling facilities used by El Cerrito and Richmond have ample capacity, and required consistency with the regulations and programs would serve to avoid solid waste/recycling impacts and mitigate potentially significant cumulative solid waste/recycling impacts. The overall cumulative solid waste/recycling impact of cumulative development is therefore expected to be *less-than-significant.*

Mitigation. No cumulatively considerable contribution to a significant cumulative impact has been identified; no mitigation is required.

19.2 GROWTH-INDUCING EFFECTS

CEQA Guidelines Section 15126.2(d) requires that the EIR discuss "...the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."

Specific Plan implementation could result in a net increase in housing and population in the Specific Plan area over existing conditions, as explained in Section 3.5 (Development Capacity Assumptions) and Chapter 14 (Population and Housing) of this EIR. The net increases through the horizon year of 2040 would be approximately 1,706 residential units and 3,840 residents. This capacity forecast is based on entitled and planned projects included in the development capacity assumptions, plus the potential development of projects in the Plan area consistent with the Form-Based Code development standards. The direct increase in residential units and population could have an indirect economic “multiplier” effect, generating additional employment in the broader region.

No substantial, detrimental, growth-inducing effect is expected. Specific Plan implementation would not extend roads or infrastructure through undeveloped or low-density areas; one of the main objectives of the Specific Plan is to facilitate new development efficiently and effectively in an area where roads and infrastructure already exist (see Chapter 3, Project Description).

Any future individual development proposals outside the Plan area would require standard local review of associated development applications, including CEQA-mandated development-specific environmental review, to ensure that any adverse environmental impacts are adequately addressed. These existing requirements and procedures would be expected to avoid or reduce the potential environmental impacts of such secondary growth inducement

associated with the Specific Plan to less-than-significant levels, except where specific CEQA statements of overriding consideration are adopted.

19.3 SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires that the EIR discuss "significant environmental effects which cannot be avoided if the proposed project is implemented." The impacts listed below are identified as significant and unavoidable for one of four reasons: (1) no potentially feasible mitigation has been identified; (2) potential mitigation has been identified but may be found by the Lead Agency to be infeasible; (3) with implementation of feasible mitigation, the impact still would not, or might not, be reduced to a less-than-significant level; or (4) implementation of the mitigation measure would require approval of another jurisdictional agency, whose approval will be pursued by the Lead Agency but cannot be guaranteed as of the publication of this EIR. Because these significant unavoidable impacts “cannot be alleviated without imposing an alternative design” (CEQA Guidelines Section 15126.2[b]), Chapter 20 (Alternatives to the proposed Project) of this EIR evaluates a range of feasible alternatives that could lessen the identified significant unavoidable impacts, and evaluates the alternatives’ ability to meet the project objectives.

The following impacts have been identified in this EIR as significant and unavoidable:

- Impact 4-1: Project Impacts on Scenic Vistas (Chapter 4)
- Impact 7-1: Destruction/Degradation of Historic Resources (Chapter 7) (project and cumulative)
- Impact 13-3: Construction Noise (Chapter 13) (project and cumulative)
- Impact 13-4: Construction-Related Vibration (Chapter 13) (project and cumulative)
- Impact 16-1: Cumulative Traffic Impacts (Chapter 16)

The implications of each significant unavoidable impact identified above are described in the particular EIR chapter referenced with the impact. The Specific Plan is being proposed, notwithstanding these effects, in order to fully achieve the project objectives described in Section 3.3 of this EIR. If the City approves the project, or an alternative to the proposed project, that would result in significant unavoidable impacts, the City must adopt a “Statement of Overriding Considerations” per CEQA Guidelines Section 15093, describing why the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of the proposed project outweigh its significant unavoidable impacts.

19.4 IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126.2(c) requires that the EIR discuss "significant irreversible environmental changes which would be caused by the proposed project should it be implemented." Irreversible environmental changes caused by the proposed Specific Plan would include the following:

- As discussed in chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation) of this EIR, Specific Plan implementation would generally change the Plan area from an auto-oriented corridor to a multi-modal (auto, transit, bicycle, pedestrian) oriented community. This change would require implementation of planning and

design strategies that would result in relatively permanent physical changes to the San Pablo Avenue Specific Plan area.

- Specific Plan implementation would result in the loss of an as-yet unknown number of existing buildings, landscaping, and infrastructure, and its replacement with new development, landscaping, and infrastructure in accordance with the goals, strategies, and development standards the Specific Plan.

Implementation of the Specific Plan would result in an irreversible commitment of energy resources, primarily in the form of fossil fuels, including fuel oil, natural gas, and gasoline or diesel fuel for construction equipment and automobiles during construction and ongoing use of development sites. Because development anticipated under the Specific Plan would be required by law to comply with California Code of Regulations Title 24 and adopted City energy conservation ordinances and regulations, the project would not be expected to use energy in a wasteful, inefficient, or unnecessary manner (see Section 19.6 below). In addition, the Specific Plan would implement sustainability measures as described throughout the EIR, especially in Chapter 9 (Greenhouse Gas Emissions and Global Climate Change) and in Section 19.6.

The consumption or destruction of other non-renewable or slowly renewable resources would also result during construction, occupancy, and use of individual development sites under the Specific Plan. These resources would include, but would not be limited to, lumber, concrete, sand, gravel, asphalt, masonry, metals, and water. Specific Plan implementation would also irreversibly use water and solid waste landfill resources. However, development under the Plan would not involve a large commitment of those resources relative to supply, nor would it consume any of those resources wastefully, inefficiently, or unnecessarily, especially considering ongoing City and County conservation and recycling programs.

Specific Plan implementation would contribute both directly and indirectly to long-term increases in greenhouse gas emissions, although under the criteria established by the Bay Area Air Quality Management District (BAAQMD), the impact would be less-than-significant (see EIR Chapter 9).

For practical purposes, these environmental changes would be permanent and irreversible. Because the proposed Specific Plan would incorporate the energy conservation and sustainability measures described below, the identified irreversible commitment of resources is considered justified per CEQA Guidelines Section 15126.2(c).

19.5 EFFECTS FOUND NOT TO BE SIGNIFICANT

Section 15128 of the CEQA Guidelines requires that the EIR "contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." This EIR discusses all of the environmental topic areas and questions included in CEQA Guidelines Appendix G (Environmental Checklist Form), with the potential significance of each impact evaluated in the appropriate EIR chapter (e.g., Chapter 4—Aesthetics and Visual Resources, Chapter 12--Land Use and Planning, etc.), except for the following environmental topics:

- Agricultural Resources (Item II in CEQA Appendix G): No agricultural uses are located in the Specific Plan area. According to the Contra Cost County Important Farmlands Map, the

Specific Plan area does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No portion of the Plan area is zoned for agricultural use, nor is any portion of the area under a Williamson Act contract. Therefore, the proposed project would not result in any impact on farmland.

- Mineral Resources (Item X in CEQA Appendix G): According to the El Cerrito General Plan and Richmond General Plan, no significant mineral deposits are identified in the Specific Plan area or vicinity. Therefore, the proposed project would not result in any impact on mineral resources.

19.6 ENERGY CONSERVATION

CEQA Guidelines Appendix F (Energy Conservation) describes how energy conservation should be addressed in EIRs and states, "[CEQA] requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy." A discussion of energy use and conservation, including the City of El Cerrito Climate Action Plan and the City of Richmond Energy Climate Change General Plan element, is included in Chapter 9 (Greenhouse Gas Emissions and Global Climate Change) of this EIR.

As discussed in EIR chapters 3 (Project Description), 12 (Land Use and Planning), and 16 (Transportation and Circulation) of this EIR, Specific Plan implementation would generally change the Plan area from an auto-oriented corridor to a multi-modal (auto, transit, bicycle, pedestrian) oriented community, with related energy conservation resulting from the more efficient use of transportation, circulation, and infrastructure systems.

In addition, the Specific Plan Form–Based Code (FBC) includes the following components related to energy conservation:

2.05.06.02 Energy. The intent of this section is to "reduce energy usage and El Cerrito's carbon footprint using energy efficiency and generation technologies in support of Climate Action Plan goals." The section address passive heating and cooling techniques, Zero-Net Energy buildings, solar power, wind power, and related topics.

2.05.06.03 Urban Farming. Related to energy conservation, this section encourages saving energy by reducing food miles traveled, and mitigating the urban heat island effect, by encouraging urban farming.

Based on the discussion above, the proposed Specific Plan would not cause inefficient, wasteful, and unnecessary consumption of energy.

20. ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6 of the CEQA Guidelines requires an EIR to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The section also states that the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if those alternatives would impede to some degree the attainment of the basic project objectives, or would be more costly.

Pursuant to Section 15126.6, this chapter describes four alternatives to the San Pablo Avenue Specific Plan and compares their impacts to those of the proposed Specific Plan. Pursuant to the CEQA Guidelines, the ability of the alternatives to meet the project objectives is also described, and the "environmentally superior" alternative among the four is identified.

Significant unavoidable impacts of the proposed Specific Plan are identified in chapters 4 (Aesthetics and Visual Resources), 7 (Cultural and Historic Resources), 13 (Noise), and 16 (Transportation and Circulation). Pursuant to the CEQA Guidelines, the alternatives in this chapter attempt to avoid or substantially reduce these significant unavoidable impacts as well as other significant impacts (i.e., impacts requiring mitigation) identified in this EIR.

In accordance with CEQA Guidelines Section 15126.6(a), this EIR does not evaluate every conceivable alternative. A feasible range of alternatives that will allow decision-makers to make a reasoned choice and that meet most of the project objectives has been evaluated. Also, the Lead Agency may choose to adopt a combination of the alternatives described below.

The Specific Plan goals and strategies, as identified by the City of El Cerrito and the City of Richmond, are listed below. In this EIR, these goals and strategies are referred to collectively under the CEQA term "project objectives" (CEQA Guidelines Section 15124[b]). The goals and strategies are listed in Specific Plan Section 1.04.

Goal A: Strengthen Sense of Place.

Strategy 1: Articulate the distinctive role and identity of each focus area: Downtown, Midtown, and Uptown.

Strategy 2: Reinforce a distinguishing sense of place by responding to existing assets such as the Ohlone Greenway and key views.

Strategy 3: Optimize placemaking in all developments.

Strategy 4: Attract pedestrian activity to key nodes to foster community and identify places of interest.

Goal B: Ensure Return on Investment.

Strategy 1: Maximize TOD (transit-oriented development) potential (BART and AC Transit).

Strategy 2: Stimulate investment in vacant/underutilized sites at key focus areas.

Strategy 3: Build on recent and planned private and public investments.

Strategy 4: Leverage all investments to catalyze new investments.

Goal C: Encourage Practical and Market Friendly Development.

Strategy 1: Provide development clarity to encourage investment.

Strategy 2: Incorporate flexible development codes that respond to constrained parcels, surrounding context, and the market.

Strategy 3: Allow ground floor residential development to provide flexibility and expand the Specific Plan area's residential base.

Goal D: Enhance and Humanize the Public Realm.

Strategy 1: Design streets for living instead of just driving through reStreet placemaking principles.

Strategy 2: Make large blocks human-scale through midblock connections.

Strategy 3: Create new gathering places to serve the needs of existing and new users.

Strategy 4: Promote environmental sustainability.

Strategy 5: Celebrate and strengthen the unique natural context.

Goal E: Catalyze Mode Shift.

Strategy 1: Promote infill development through increased land use intensity close to existing transit infrastructure.

Strategy 2: Reduce parking requirements to encourage transit use, reduce reliance on the private automobile, and allow valuable land to be utilized for more intense and active uses.

Strategy 3: Strengthen pedestrian and bicycle connectivity through existing and new connections and infrastructure.

Strategy 4: Improve connectivity between the Green Belt (Wildcat Canyon Trail) and the Blue Belt (Bay Trail) through pedestrian and bicycle connections.

The following alternatives have been evaluated in comparison to the proposed San Pablo Avenue Specific Plan:

- Alternative 1: No Project--Existing El Cerrito and Richmond General Plans
- Alternative 2: Plan Bay Area 2040 Growth Allocations
- Alternative 3: Mitigation of Significant Unavoidable Impacts
- Alternative 4: Alternative Project Location

In accordance with CEQA Guidelines Section 15126.6, (1) an "environmentally superior alternative" has been chosen and (2) the discussion in this chapter of the impacts of the alternatives is less detailed than the discussions in chapters 4 through 17 (the environmental topic chapters) of the impacts of the Specific Plan. Table 20-1 at the end of this chapter summarizes impacts of the alternatives compared to impacts of the proposed Specific Plan.

20.1 ALTERNATIVE 1: NO PROJECT--EXISTING EL CERRITO AND RICHMOND GENERAL PLANS

20.1.1 Alternative 1 Characteristics

Under Alternative 1, the El Cerrito portion of the Specific Plan area would develop generally according to the policies and development capacity assumed in the adopted 1999 El Cerrito General Plan. The recently adopted Richmond General Plan anticipated adoption of the San Pablo Avenue Specific Plan, so the development capacity under both is assumed to be equal. Under the alternative, no Specific Plan would be adopted.

From a policy perspective, the proposed Specific Plan is considered substantially consistent with the adopted El Cerrito General Plan and Richmond General Plan (see EIR Chapter 18, Project Consistency With Local and Regional Plans, Tables 18.1 and 18.2).

The El Cerrito Community Development and Design Chapter of the 1999 General Plan (page 4-4) states,

"Specifically, the [General] Plan assumes 189,350 square feet of additional retail space, 166,570 square feet of additional office space, and 775 new housing units. Of these totals, the only development assumed to be someplace other than the San Pablo Avenue corridor are 90 housing units, which represent a combination of accessory units and infill of vacant lots.

"It should be noted that new retail and office space will actually be more than as indicated above because some existing retail and office space will be replaced by new development. No replacement of residential units is assumed, although some may occur.

"The balanced growth strategy calls for most of the growth to take place in three areas along San Pablo [Avenue] in order to take advantage of the two BART stations and a large area between the stations that offers an opportunity for a large-scale mixed use concept. These focal points [are the] Del Norte BART Station Area, Midtown Area, and El Cerrito Plaza Area[.]"

In addition to the text above, the 1999 El Cerrito General Plan (Figure 5, Land Use & Circulation map) designates almost the entire San Pablo Avenue corridor (when layered over the proposed Specific Plan area) as "High Density Residential (up to 35 units per acre)" and "Commercial/Mixed Use" which includes retail, office, residential, and specialty (e.g., arts and crafts) manufacturing.

Also, the El Cerrito Zoning Code (Title 19, Part II, Base District Regulations, Chapter 19.07) allows maximum building heights of 50 feet (65 feet with a Conditional Use Permit [CUP]) in the BART station areas and 35 feet (45 feet with a CUP) in the Midtown area. The zoning chapter allows additional height if adopted under design guidelines or a specific plan. Under the proposed San Pablo Avenue Specific Plan, the Form-Based Code (FBC) would allow a maximum building height of 65 feet (85 feet with bonuses and incentives) in the BART station areas, and 55 feet (65 feet with bonuses and incentives) in Midtown, in El Cerrito (see EIR chapter 4).

Conclusions that can be drawn from the above 1999 General Plan text and land use map are:

(1) Similar to the proposed Specific Plan, the 1999 El Cerrito General Plan already anticipated San Pablo Avenue as a high density mixed use corridor where almost all of El Cerrito's future growth would occur, including near the BART stations and in a "Midtown Area."

(2) Under the proposed Specific Plan, maximum allowable building heights could increase by up to 20 feet.

(3) El Cerrito did not have in 1999 (and still does not have) an abundance of land outside of the Specific Plan area to accommodate anticipated growth.

(4) The growth assumptions listed in the 1999 General Plan cannot be effectively compared to the proposed Specific Plan development capacity assumptions because (a) new development has occurred in the plan area since 1999, so the projections are not considered accurate enough to be used for a "net new growth" comparison; and (b) coordinated regional planning initiatives (e.g., Priority Development Areas, Plan Bay Area) have expanded considerably since 1999.

Relative to item (4) above, this No Project alternative uses the ABAG Projections and Priorities ***2009*** ("Projections 2009") forecasts for the San Pablo Avenue Priority Development Area (PDA) as the growth projections under the 1999 El Cerrito General Plan. This is because (a) the 2009 General Plan was in effect for those ABAG projections, (b) the projections are the most recent ABAG projections prior to the Plan Bay Area process, and (c) the conceptual framework for a specific plan in the San Pablo Avenue PDA had not yet been developed by the cities of El Cerrito and Richmond for consideration by ABAG (Plan Bay Area [adopted July 18, 2013] recognizes that a Specific Plan process is underway).

Projections 2009 (page 58) shows growth of 1,291 net new households (equated for EIR purposes with "residential units"), and population growth of 2,937, in the San Pablo Avenue Specific Plan Area between 2010 and 2035. The proposed Specific Plan forecasts 1,706 net new residential units and population growth of 3,840 between 2010 and 2040 (see EIR Chapter 14, Population and Housing). This is the most accurate data available; therefore, these numbers will be used for comparison of the No Project alternative with the proposed Specific Plan.

There is no comparable General Plan or ABAG data available for commercial floor area, so the No Project alternative assumes the same 243,112 square feet of new commercial floor area as the Specific Plan development capacity assumption. Although not directly comparable, this number is consistent with the parameters established (approximately 356,000 square feet of new commercial floor area in the corridor) under the 1999 El Cerrito General Plan.

The No Project alternative would result in 415 fewer new residential units and 903 fewer new residents than the proposed Specific Plan. Under the alternative, no Specific Plan would be adopted.

20.1.2 Comparative Impacts and Mitigating Effects

(a) Aesthetics and Visual Resources. With less overall development and lower maximum allowable heights, Alternative 1 would have reduced impacts compared to the San Pablo Avenue Specific Plan with respect to aesthetics and visual resources. However, there would be less enhanced visual character, identity, and cohesion, and less emphasis on a pedestrian-, bicycle-, and transit-friendly environment. The alternative's impacts on scenic vistas would remain significant and unavoidable.

(b) Air Quality. Alternative 1 would result in lower air pollutant emissions, and fewer sensitive receptors exposed to toxic air contaminants (TACs), $PM_{2.5,}$ and odors.

(c) Biological Resources. With less overall development under Alternative 1, there might be less disturbance of existing urban landscape habitat, less potential disturbance of nesting birds during construction, and fewer existing trees removed within the Specific Plan area.

(d) Cultural and Historic Resources. Buildout (i.e., reaching development capacity) under the existing General Plan could have *greater* physical impacts on historic resources compared to the proposed Specific Plan because the proposed Specific Plan contains components that strengthen the City's commitment to proactive historic preservation (see EIR chapter 7). The alternative's project-specific and cumulative impacts on historic resources would remain significant and unavoidable.

(e) Geology and Soils. With Alternative 1, there would be less development and fewer people exposed to potential ground shaking, liquefaction, lateral spreading, expansive soils, subsidence, and differential settlement hazards associated with geologic and soils conditions within the Specific Plan area.

(f) Greenhouse Gas Emissions and Global Climate Change. Although this alternative would result in fewer housing units and less population, buildout of the Specific Plan area under the existing General Plan could result in an *increase* in GHG emissions compared to the proposed Specific Plan because development under the existing General Plan would not be as pedestrian-, bicycle-, and transit-oriented.

(g) Hazards and Hazardous Materials. With fewer housing units and less population, buildout under the existing General Plan would result in less potential exposure of people and property to hazards and hazardous materials compared to the existing General Plan.

(h) Hydrology and Water Quality. Alternative 1 could have *greater* impacts on drainage and water quality compared to the proposed Specific Plan. From an engineering standpoint, surface runoff is determined by a parcel's impervious surface area and not by land use or density. Even with less development under the existing General Plan within the Specific Plan area, there would be limited change over existing conditions, and limited change compared to development capacity under the Specific Plan, in terms of impervious surface area, stormwater runoff generation, and pollutant loading.

However, (1) there also would be fewer infrastructure improvements, and more of the existing drainage system deficiencies would remain; and (2) proactive sustainability policies in the Specific Plan (e.g., for on-site stormwater retention and natural filtering) would not be implemented as extensively. With fewer infrastructure improvements and fewer sustainability practices, occupants and buildings within the Specific Plan area could be exposed to greater flooding risks.

(i) Land Use and Planning. The proposed Specific Plan includes numerous components to help ensure that new development would be compatible and integrated with the established land use pattern, and their implementation would be an additional benefit to land use and planning compared to the existing General Plan.

(j) Noise. Buildout under the existing General Plan would result in less noise than under the proposed Specific Plan due primarily to a reduction in the number of new vehicle trips added to local roadways, as well as a reduction in the number of sensitive receptors exposed to traffic, BART, and construction noise. The alternative's project-specific and cumulative construction-related noise and vibration impacts would remain significant and unavoidable.

(k) Population and Housing. Alternative 1 would result in smaller increases in housing and population in the Specific Plan area. However, there would also be less new housing to meet the community and regional need for market-rate housing and affordable housing.

(l) Public Services. This alternative would result in a corresponding reduction in impacts on fire protection/emergency medical service (EMS), police service, public schools, parks and recreational facilities, and other public facilities (e.g., library, senior center) compared to the proposed Specific Plan. However, with less development, fewer development fees and less tax revenue to maintain and enhance these public services would be collected. Also, the Specific Plan provisions for new open spaces (see EIR Chapter 15) would not be implemented.

(m) Transportation and Circulation. For this alternative, trip generation and traffic impacts from new development within the Specific Plan Area would be reduced compared to the proposed Specific Plan. The transportation and circulation impacts of this alternative compared to the Specific Plan are evaluated in Chapter 16 (Transportation and Circulation, Cumulative No Project scenario). However, the existing General Plan would not implement the substantial improvements proposed by the Specific Plan (especially the Complete Streets Plan) to pedestrian, bicycle, and transit circulation and connectivity. The alternative's significant unavoidable cumulative traffic impact at the San Pablo Avenue/Cutting Boulevard intersection would not occur.

(n) Utilities and Service Systems. This alternative would result in reduced water demand, wastewater generation, and solid waste compared to the proposed Specific Plan.

20.1.3 Attainment of Project Objectives

With fewer new housing units, less population growth, and less pedestrian, bicycle, and transit circulation and connectivity (i.e., no Specific Plan), the No Project alternative would be less effective in achieving the project objectives (listed at the beginning of this chapter), especially Goal A, Goal B, Goal D, and Goal E.

20.2 ALTERNATIVE 2: PLAN BAY AREA 2040 GROWTH ALLOCATIONS

20.2.1 Alternative 2 Characteristics

Under Alternative 2, the San Pablo Avenue Specific Plan would be adopted, but the net new residential development capacity assumptions for the plan area would be those listed in the Plan Bay Area "Final Forecast of Jobs, Population and Housing, Housing Growth by Jurisdiction and PDA/Investment Area, Contra Costa County" (July 2013). The boundaries of the San Pablo Avenue Corridor PDA described in Plan Bay Area match the Specific Plan area.

Plan Bay Area shows growth of 1,010 net new residential units in the San Pablo Avenue Specific Plan Area between 2010 and 2040. Plan Bay Area does not provide population estimates for the PDAs; using the 2.25 persons per unit, population growth under Plan Bay Area would be 2,273. The proposed Specific Plan forecasts 1,706 net new residential units and population growth of 3,840 between 2010 and 2040 (see EIR Chapter 14, Population and Housing).

From a policy perspective, Alternative 2 is considered substantially consistent with the adopted El Cerrito General Plan and Richmond General Plan (see EIR Chapter 18, Project Consistency With Local and Regional Plans, Tables 18.1 and 18.2).

Alternative 2 would result in 696 fewer new residential units and 1,567 fewer new residents than the proposed Specific Plan. Under the alternative, the San Pablo Avenue Specific Plan would be adopted.

20.2.2 Comparative Impacts and Mitigating Effects

(a) Aesthetics and Visual Resources. With less overall development, Alternative 2 would have reduced impacts compared to the proposed Specific Plan with respect to aesthetics and visual resources. The alternative's impact on scenic vistas would remain significant and unavoidable.

(b) Air Quality. Alternative 2 would result in lower air pollutant emissions, and fewer sensitive receptors exposed to toxic air contaminants (TACs), $PM_{2.5,}$ and odors.

(c) Biological Resources. With less overall development under Alternative 2, there might be less disturbance of existing urban landscape habitat, less potential disturbance of nesting birds during construction, and fewer existing trees removed within the Specific Plan area.

(d) Cultural and Historic Resources. Less overall development under Alternative 2 could have reduced physical impacts on historic and cultural resources compared to the proposed Specific Plan if fewer properties containing historic and cultural resources are subject to new development. The alternative's project-specific and cumulative impacts on historic resources would remain significant and unavoidable.

(e) Geology and Soils. With Alternative 2, there would be less development and fewer people exposed to potential ground shaking, liquefaction, lateral spreading, expansive soils, subsidence, and differential settlement hazards associated with geologic and soils conditions within the Specific Plan area.

(f) Greenhouse Gas Emissions and Global Climate Change. Because this alternative would result in fewer housing units and less population, buildout of the Specific Plan area under Alternative 2 would result in a decrease in GHG emissions compared to the proposed Specific Plan.

(g) Hazards and Hazardous Materials. With fewer housing units and less population, buildout under Alternative 2 would result in less potential exposure of people and property to hazards and hazardous materials compared to the proposed Specific Plan.

(h) Hydrology and Water Quality. Alternative 2 would have similar impacts on drainage and water quality compared to the proposed Specific Plan. From an engineering standpoint, surface runoff is determined by a parcel's impervious surface area and not by land use or density. Even with less development under Alternative 2 within the Specific Plan area, there would be limited change over existing conditions, and limited change compared to development capacity under the Specific Plan, in terms of impervious surface area, stormwater runoff generation, and pollutant loading.

In addition, because the Specific Plan still would be adopted under Alternative 2, (1) the necessary infrastructure improvements would be constructed, and (2) the proactive sustainability policies in the Specific Plan (e.g., for on-site stormwater retention and natural filtering) would be implemented.

(i) Land Use and Planning. Both Alternative 2 and the proposed Specific Plan would include the numerous components to help ensure that new development would be compatible and integrated with the established land use pattern. Therefore, land use and planning impacts would be similar.

(j) Noise. Buildout under Alternative 2 would result in less noise than under the proposed Specific Plan due primarily to a reduction in the number of new vehicle trips added to local roadways, as well as a reduction in the number of sensitive receptors exposed to traffic, BART, and construction noise. The alternative's project-specific and cumulative construction-related noise and vibration impacts would remain significant and unavoidable.

(k) Population and Housing. Alternative 2 would result in smaller increases in housing and population in the Specific Plan area. However, there would also be less new housing to meet the community and regional need for market-rate housing and affordable housing.

(l) Public Services. Alternative 2 would result in a corresponding reduction in impacts on fire protection/emergency medical service (EMS), police service, public schools, parks and recreational facilities, and other public facilities (e.g., library, senior center) compared to the proposed Specific Plan. However, with less development, fewer development fees and less tax revenue to maintain and enhance these public services would be collected.

(m) Transportation and Circulation. For this alternative, trip generation and traffic impacts from new development within the Specific Plan Area would be reduced compared to the proposed Specific Plan. With an approximately 40 percent reduction in residential units under this alternative, the significant auto-related impact at the San Pablo Avenue/Cutting Boulevard intersection would be expected to be less-than-significant. The alternative's significant unavoidable cumulative traffic impact at the San Pablo Avenue/Cutting Boulevard intersection would not occur.

(n) Utilities and Service Systems. This alternative would result in reduced water demand, wastewater generation, and solid waste compared to the proposed Specific Plan.

20.2.3 Attainment of Project Objectives

With fewer new housing units and less population growth, Alternative 2 would be less effective in achieving the project objectives (listed at the beginning of this chapter) related to maximizing pedestrian- and transit-oriented development (see Goal A, Goal B, Goal D, and Goal E).

20.3 ALTERNATIVE 3: MITIGATION OF SIGNIFICANT UNAVOIDABLE IMPACTS

20.3.1 Alternative 3 Characteristics

Under Alternative 3, the San Pablo Avenue Specific Plan would be adopted, and the EIR development capacity assumptions would remain the same. However, EIR-identified significant unavoidable impacts would be reduced to less-than-significant levels. These significant unavoidable impacts are listed below; their full descriptions are in the appropriate EIR chapter (Impact 4-1 is in Chapter 4; Impact 7-1 is in Chapter 7, etc.).

- ***Impact 4-1: Project Impacts on Scenic Vistas***
- ***Impact 7-1: Destruction/Degradation of Historic Resources***
- ***Impact 13-3: Construction Noise***
- ***Impact 13-4: Construction-Related Vibration***
- ***Impact 16-1: Cumulative Traffic Impacts***

Both the proposed Specific Plan and Alternative 3 forecast 1,706 net new residential units and population growth of 3,840 between 2010 and 2040 (see EIR Chapter 14, Population and Housing).

From a policy perspective, Alternative 3 is considered substantially consistent with the adopted El Cerrito General Plan and Richmond General Plan (see EIR Chapter 18, Project Consistency With Local and Regional Plans, Tables 18.1 and 18.2).

Alternative 3 would result in revisions to the proposed Specific Plan in order to reduce the EIR-identified significant unavoidable impacts to less-than-significant levels. Under this alternative, a revised Specific Plan would be adopted.

20.3.2 Comparative Impacts and Mitigating Effects

(a) Aesthetics and Visual Resources. Under Alternative 3, the project's significant unavoidable impact on scenic vistas (Impact 4-1) would be reduced to a less-than-significant level by revising Form-Based Code (FBC) Section 2.05.03.01.03 (View Design Guidelines). The section would be revised to make those guidelines ***mandatory standards*** and not only "strongly recommended" guidelines. The revision would ***prohibit*** any new development that would interfere with scenic views of Mt. Tamalpais, the Golden Gate Bridge, the San Francisco skyline, the East Bay Hills, and Albany Hill from public rights-of-way (roadways and sidewalks), the two BART stations (El Cerrito Plaza and El Cerrito del Norte), and areas of lower elevation hillside homes located in El Cerrito and Richmond.

Other impacts on aesthetics and visual resources would remain less-than-significant as described in EIR Chapter 4.

(b) Air Quality. Compared to the proposed Specific Plan, Alternative 3 would result in reduced air pollutant emissions and toxic air contaminants (TACs) because the mandatory mode shift would reduce cumulative vehicle miles traveled (VMT) (see Transportation and Circulation below and EIR Chapter 5).

Other air quality impacts would remain less-than-significant after mitigation as described in EIR Chapter 5.

(c) Biological Resources. Alternative 3 would result in the same potential for disturbance of existing urban landscape habitat, potential for disturbance of nesting birds during construction, and number of existing trees removed within the Specific Plan area.

(d) Cultural and Historic Resources. Under Alternative 3, the project's significant unavoidable impact on historic resources (Impact 7-1) would be reduced to a less-than-significant level by ***requiring*** that no historic resource be demolished and that changes to historic resources adhere to the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*, or be moved to a new location such that the resource retains its eligibility for listing on the California Register (see Mitigation 7-1 [a and b]).

Other impacts on cultural and historic resources would remain less-than-significant after mitigation as described in EIR Chapter 7.

(e) Geology and Soils. Compared to the proposed Specific Plan, Alternative 3 would result in the same impacts related to persons exposed to potential ground shaking, liquefaction, lateral spreading, expansive soils, subsidence, and differential settlement hazards associated with geologic and soils conditions within the Specific Plan area.

(f) Greenhouse Gas Emissions and Global Climate Change. Compared to the proposed Specific Plan, Alternative 3 would result in fewer greenhouse gas emissions due to the mandatory mode shift (see Transportation and Circulation below and EIR Chapter 9).

(g) Hazards and Hazardous Materials. Alternative 3 would result in the same potential exposure of people and property to hazards and hazardous materials compared to the proposed Specific Plan.

(h) Hydrology and Water Quality. Alternative 3 would result in the same impacts on drainage and water quality compared to the proposed Specific Plan.

(i) Land Use and Planning. The Specific Plan, which would be implemented under both Alternative 3 and the proposed project, includes numerous components to help ensure that new development would be compatible and integrated with the established land use pattern.

(j) Noise. Under Alternative 3, the project's significant unavoidable construction noise and construction-related vibration impacts (Impacts 13-3 and 13-4) would be reduced to less-than-

significant levels by adjusting the cumulative construction schedules of approved projects - including their locations, activities, and time periods - so that construction noise and vibration would be reduced to what the City would codify as a less-than-significant level (e.g., the City would prepare and adopt "cumulative construction noise and vibration regulations").

Other noise and vibration impacts would remain less-than-significant after mitigation as described in EIR Chapter 13.

(k) Population and Housing. Compared to the proposed Specific Plan, Alternative 3 would result in the same increases in housing and population in the Specific Plan area.

(l) Public Services. Compared to the proposed Specific Plan, Alternative 3 would result in the same impacts on public services in the Specific Plan area.

(m) Transportation and Circulation. Under Alternative 3, the project's significant unavoidable cumulative traffic impact at the San Pablo Avenue/Cutting Boulevard intersection (Impact 16-1) would be reduced to a less-than-significant level by ***mandating the mode shift*** evaluated in Chapter 16 (Transportation and Circulation) of this EIR. This might be accomplished by requiring traffic monitoring for each future individual development, then requiring as necessary more aggressive Transportation Demand Management (TDM) strategies to meet the mode shift.

(n) Utilities and Service Systems. This alternative would result in the same water demand, wastewater generation, and solid waste compared to the proposed Specific Plan.

20.3.3 Attainment of Project Objectives

Alternative 4 would be less effective in achieving Goal B and Goal C of the project objectives (listed at the beginning of this chapter) because the **mandated** reduction of the identified significant unavoidable impacts might be considered infeasible within the particular context of a future, site-specific development proposal. Related to Goals B (Ensure Return on Investment) and C (Encourage Practical and Market Friendly Development), the City might not attract a desired potential development if an applicant considers Alternative 4 too restrictive and lacking the flexibility to formulate innovative, feasible solutions between the City and the applicant.

20.4 ALTERNATIVES CONSIDERED BUT REJECTED--ALTERNATIVE 4: ALTERNATIVE PROJECT LOCATION

Section 15126.6(a) of the CEQA Guidelines states, "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects of the project[.]" Further, section 15126.6(c) explains, "Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental effects." To help clarify the meaning of "feasibility," CEQA Guidelines section 15126.6(f)(1) (Rule of Reason/Feasibility) states, "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries...and whether the proponent can reasonably acquire, control, or

otherwise have access to the alternative site….No one of these factors establishes a fixed limit on the scope of reasonable alternatives."

El Cerrito and Richmond are incorporated cities surrounded by other communities. The 206-acre Specific Plan area is surrounded by existing development. The San Pablo Avenue corridor has been identified in several adopted plans--including the El Cerrito General Plan, Richmond General Plan, and Plan Bay Area--as an area of growth due in part to its convenient location in the Bay Area and to the infrastructure already in place (e.g., transportation network, BART, utility systems). This situation provides an opportunity to accommodate projected growth while preserving existing, adjacent, single family and other low density neighborhoods.

An alternative location for the San Pablo Avenue Specific Plan would not be feasible. In essence, implementation of the Specific Plan in an alternative location would result in a new mixed use neighborhood in another place more distant from the two El Cerrito BART stations and existing infrastructure. None of the proposed Specific Plan objectives related to enhancing the existing plan area environment--especially those pertaining to the plan area's location in, and contribution to, a regional network of communities and transportation opportunities--would be attained.

In addition, the CEQA Guidelines provide that the alternatives evaluated in an EIR should be selected based on their ability to avoid or substantially lessen the significant Impacts of the proposed project. Even if an alternative location for the project could implement the project objectives, only those locations that would avoid or substantially lessen any of the significant impacts of the project need to be considered in the EIR.

In the case of the proposed San Pablo Avenue Specific Plan, for identified significant unavoidable impacts, (1) these impacts cannot be avoided or substantially reduced by additional, feasible mitigation measures or (2) due to the programmatic EIR analysis appropriate for the long-term Specific Plan, the details of site-specific, future development proposals are not known at this time. Transferring these unavoidable and other potentially significant impacts to an alternative location would still substantially affect the environment, possibly worse than in the San Pablo Avenue Specific Plan area, where coordinated infrastructure, plans, regulations, and services are already in place to help mitigate potential environmental impacts.

Because an alternative project location would be infeasible, would not achieve the project objectives, and would not necessarily avoid or lessen the significant impacts of the project and might result in new significant impacts, an alternative that would involve a different project

location was eliminated from further detailed consideration. No further evaluation of alternative project locations is required under CEQA.[1]

20.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines (Section 15126[e][2]) stipulate, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Of all the identified alternatives, Alternative 2: Plan Bay Area Growth Allocations would result in the least adverse overall environmental impacts, and would therefore be the "environmentally superior alternative." This conclusion is based on the overall reduction in the severity of significant impacts (see Table 20.1).

[1]CEQA Guidelines section 15126.6(c) explains that alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are infeasible, or do not avoid any significant environmental effects. CEQA Guidelines Section 15126.6(f) indicates that the Lead Agency should consider site suitability, economic viability, availability of infrastructure, general plan consistency, other regulatory limitation, jurisdictional boundaries, and the proponents control over alternative sites in determining the range of alternatives to be evaluated in an EIR. With respect to alternative locations, CEQA Guidelines Section 15126.6(f) indicates that alternative locations need not be evaluated in every case. The key question in determining whether to evaluate alterative locations is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any significant effects need be evaluated in the EIR. CEQA Guidelines Section 15126(f)(2) indicates that alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, need not be considered.

Table 20.1
ALTERNATIVES COMPARISON TO THE SPECIFIC PLAN

Impact Area	Alternatives[1]		
	Alternative 1: No Project—Existing El Cerrito and Richmond General Plans	Alternative 2: Plan Bay Area 2040 Growth Allocations	Alternative 3: Mitigation of Significant Unavoidable Impacts
(a) Aesthetics and Visual Resources	Reduced less than significant, significant, and significant unavoidable impacts. Remaining significant unavoidable impact.	Reduced less than significant, significant, and significant unavoidable impacts. Remaining significant unavoidable impact.	Similar less than significant impacts. Significant impact no longer unavoidable.
(b) Air Quality	Reduced less than significant and significant impacts.	Reduced less than significant and significant impacts.	Reduced less than significant and significant impacts.
(c) Biological Resources	Reduced less than significant and significant impacts.	Reduced less than significant and significant impacts.	Similar less than significant impacts.
(d) Cultural and Historic Resources	Increased significant unavoidable impacts. Similar significant impacts.	Reduced significant unavoidable impacts. Similar significant impacts. Remaining significant unavoidable impacts.	Similar significant impacts. Significant impacts no longer unavoidable.
(e) Geology and Soils	Reduced less than significant and significant impacts.	Reduced less than significant impacts.	Similar less than significant impacts.
(f) Greenhouse Gas Emissions and Global Climate Change	Increased less than significant impacts.	Reduced less than significant impacts.	Reduced less than significant impacts.
(g) Hazards and Hazardous Materials	Reduced less than significant impacts.	Reduced less than significant impacts.	Similar less than significant impacts.
(h) Hydrology and Water Quality	Increased less than significant impacts.	Similar less than significant impacts.	Similar less than significant impacts.
(i) Land Use and Planning	Similar less than significant impacts. No additional land use and planning benefits.	Similar less than significant impacts.	Similar less than significant impacts.
(j) Noise	Reduced less than significant, significant, and significant unavoidable impacts. Remaining significant unavoidable impacts.	Reduced less than significant, significant, and significant unavoidable impacts. Remaining significant unavoidable impacts.	Reduced less than significant and significant impacts. Significant impacts no longer unavoidable.
(k) Population and Housing	Reduced less than significant impacts. Less market-rate and affordable housing.	Reduced less than significant impacts. Less market-rate and affordable housing.	Similar less than significant impacts.

Impact Area	Alternatives[1]		
	Alternative 1: No Project—Existing El Cerrito and Richmond General Plans	Alternative 2: Plan Bay Area 2040 Growth Allocations	Alternative 3: Mitigation of Significant Unavoidable Impacts
(l) Public Services	Reduced less than significant impacts. Fewer development fees and less tax revenue.	Reduced less than significant impacts. Fewer development fees and less tax revenue.	Similar less than significant impacts.
(m) Transportation and Circulation	Reduced less than significant and significant unavoidable impacts. No Complete Streets Plan. Remaining significant unavoidable impact.	Reduced less than significant impacts. Significant impact no longer unavoidable.	Reduced less than significant impacts with mode shift. Significant impact no longer unavoidable.
(n) Utilities and Service Systems	Reduced less than significant impacts.	Reduced less than significant impacts.	Similar less than significant impacts.
Attainment of Project Objectives	Less attainment.	Less attainment.	Less attainment.

SOURCE: MIG, May 2014.

[1]Alternative 4: Alternative Project Location would not achieve the project objectives, would not necessarily avoid or lessen the significant impacts of the project, may result in new significant impacts, and would be infeasible, and thus was eliminated from further consideration. See Section 20.4.

21. MITIGATION MONITORING

21.1 MITIGATION MONITORING REQUIREMENTS

CEQA Section 21081.6 of the Public Resources Code requires all public agencies to adopt reporting or monitoring programs when they approve projects subject to environmental impact reports or mitigated negative declarations. A mitigation monitoring program would therefore be required for implementation subsequent to certification of the San Pablo Avenue Specific Plan EIR. Most of the environmental mitigation needs that have been identified in this EIR would be subject to effective monitoring through each jurisdictional City's (El Cerrito or Richmond) standard development review and approval procedures, as well as during associated plan check and field inspection procedures. However, to satisfy CEQA statute Section 21081.6 and CEQA Guidelines section 15097 (Mitigation Monitoring and Reporting), a documented record of implementation will be necessary.

21.2 MITIGATION MONITORING CHECKLIST FORMAT

While adoption of a mitigation monitoring program would not occur until this EIR is certified, the mitigation monitoring framework to be followed can be described. The checklist format (similar to Table 2.1 in Chapter 2, Summary) would include individual columns for identifying the following, pursuant to CEQA Guidelines Section 15097:

21.1.1 Identified Impact

This column would include each identified significant adverse impact as it is described in the EIR summary table (Table 2.1 in Chapter 2).

21.1.2 Related Mitigation Measure (Performance Criteria)

This column would include each mitigation measure as it is described in the EIR summary table (Table 2.1 in EIR chapter 2). The description could be supplemented by applicable performance criteria (i.e., the criteria by which the success of the mitigation can be gauged).

21.1.3 Monitoring

This column would describe (1) the "implementation entity" responsible for carrying out each mitigation measure; (2) the "monitoring and verification entity" responsible for performing the monitoring of each mitigation (e.g., a City department, another public agency, or some other entity); and (3) specific implementation timing requirements (e.g., at the completion of a particular future individual project development review or construction phase, prior to individual future development project occupancy, or when some other specific threshold is reached).

21.1.4 Verification

The verification column would provide a space for the signature and date of the "monitoring and verification" entity when a monitoring milestone is reached.

22. ORGANIZATIONS AND PERSONS CONTACTED

22.1 CITY OF EL CERRITO/CITY OF RICHMOND

Emily Alter, LEED AP, City of El Cerrito, Community Planning Analyst
Noel Ibalio, City of El Cerrito, Senior Planner
Margaret Kavanaugh-Lynch, City of El Cerrito, Development Services Manager
Melanie Mintz, City of El Cerrito, Interim Community Development Director
Sean Moss, AICP, City of El Cerrito, Senior Planner
Hilde Hyall, City of El Cerrito, Housing Program Manager
Yvetteh Ortiz, City of El Cerrito, Interim Public Works Director/City Engineer
Jonelyn Whales, City of Richmond, Senior Planner

22.2 OTHERS

Mark Figone, President, East Bay Sanitary Co., Inc.
Edward Grutzmacher, Attorney, Meyers Nave
Koy C. Saechao, Customer Service Representative, Richmond Sanitary Service
Sky Woodruff, Attorney, Meyers Nave

23. EIR PREPARERS

MIG
Urban and Environmental Planners

Ray Pendro, Senior Planner and EIR Project Manager
Steve Ridone, Project Associate
Mukul Malhotra, Principal, Director of Urban Design
Christina Paul, Senior Associate
Laura Shipman, Project Associate

FEHR & PEERS, INC.
Transportation Consultants

Ellen Poling, Senior Associate

ILLINGWORTH & RODKIN, INC.
Air Quality/GHG/Noise Consultants

James Reyff, Senior Consultant & Principal
Joshua Carman, Consultant
Jared McDaniel, Staff Consultant

NV5
Infrastructure and Engineering Consultants

Jill Sylvester, PE, Associate Engineer