## 6.1 INTRODUCTION

### GENERAL CEQA REQUIREMENTS

The purpose of the EIR alternatives analysis is to describe a range of reasonable alternatives to the proposed project that could feasibly obtain most of the basic objectives of the project and to evaluate the comparative merits of the alternatives (State CEQA Guidelines, Section 15126.6[a]). An EIR need not consider every conceivable alternative to a project, nor is it required to consider alternatives that are infeasible. The discussion will focus on those alternatives that are capable of avoiding or substantially lessening any significant effects of the project, even if they impede the attainment of the project objectives to some degree or would be more costly (CEQA Guidelines Section 15126.6[b]).

The California Environmental Quality Act (CEQA) requires an EIR to identify project alternatives and to indicate the manner in which a project's significant effects may be mitigated or avoided. However, CEQA does not mandate that the EIR itself contain an analysis of the feasibility of the various project alternatives or mitigation measures that it identifies (Public Resources Code, Sections 21002.1, subd (a): 21100 and subd (b)4). As the lead agency, the City of Pinole bears the responsibility for the decisions that have to be made before the project can go forward. These decisions include, but are not limited to, the determinations of feasibility and whether the benefits of the project outweigh its significant effects on the environment (Public Resources Code Sections 21002.1, subd (b) and (c); Section 21082).

According to the State CEQA Guidelines, an EIR need only examine in detail those alternatives that could feasibly meet most of the basic objectives of the project. When addressing feasibility, CEQA states that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to alternative sites" (State CEQA Guidelines Section 15126.6). The State CEQA Guidelines also specify that the alternatives discussion should not be remote and speculative; however, they need not be presented in the same level of detail as the assessment of the proposed project.

State CEQA Guidelines indicate that several factors need to be considered in determining the range of alternatives to be analyzed in an EIR and the level of analytical detail that should be provided for each alternative. These factors include (1) the nature of the significant impacts of the proposed project, (2) ability of alternatives to avoid or lessen the significant impacts associated with the project, (3) the ability of the alternatives to meet the objectives of the project, and (4) the feasibility of the alternatives. These factors should be unique for each project.

The significant environmental impacts of the proposed project that the alternatives will seek to eliminate or reduce were determined and based upon the findings contained within each technical section evaluated in Sections 4.1 through 4.12 of this DEIR.

## 6.2 ALTERNATIVES UNDER CONSIDERATION

### PROJECT ALTERNATIVES CONSIDERED

In accordance with the provisions of State CEQA Guidelines Section 15126.6, the following alternatives to the proposed project were evaluated. These alternatives were compared to the

proposed project and its significant environmental impacts identified in Sections 4.1 through 4.12.

- Alternative 1 – No Project Alternative
- Alternative 2 – Commercial Focus/Expanded Roadways Alternative
- Alternative 3 – Residential Focus/Expanded Transit

These alternatives constitute an adequate range of reasonable alternatives as required under State CEQA Guidelines Section 15126.6. The significant environmental effects of each of these alternatives were identified and compared with those significant environmental impacts resulting from the proposed project, that were identified in environmental issue areas in Section 4.0. **Table 6.0-4** at the end of this section provides a comparison of the environmental benefits and detriments of each alternative.

### ALTERNATIVES CONSIDERED BUT NOT SELECTED FOR ANALYSIS

#### Off-Site Alternative

Off-site alternatives are generally evaluated in an environmental document to avoid, lessen, or eliminate the significant impacts of a project by considering the proposed development in an entirely different location. To be feasible, development of off-site locations must be able to fulfill the project purpose and meet most of the project's basic objectives. Given the nature of the proposed project (update of Pinole's existing General Plan and Zoning Code and adoption of the Three Corridors Specific Plan), it would not be pertinent or possible to consider an off-site alternative as it includes a long-range plans for an existing city that cannot be relocated and since the city boundaries have been established through incorporation. Further, this alternative would not meet the basic project objectives because consideration of another location would not address issues pertinent to the establishment of land use designations and policies to regulate the orderly development of the city. For this reason, an off-site alternative is considered infeasible pursuant to State CEQA guidelines 15126.6(c) and is being rejected as a feasible project alternative.

## 6.3 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

### CHARACTERISTICS

CEQA, through case law and statutory language, requires that the "no project" alternative be evaluated; under CEQA Guidelines Section 15126.6(e)(2), "the No Project Alternative shall discuss the existing conditions at the time the notice of preparation is published . . . as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

The purpose of the No Project Alternative is to allow the lead agency to compare the impacts of the proposed project with the impacts of not approving it.

According to CEQA Guidelines Section 15126.6(e)(3)(A), "[w]hen the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the 'no project' alternative will be the continuation of the existing plan, policy or operation into the future." In the case of Alternative 1 or the No Project Alternative, the proposed project would not be approved and the existing (1995) City of Pinole General Plan and Zoning Code would continue as the primary guiding document for growth and development within the city. The existing General Plan

includes 3,488 acres of land within the city limits, 3,948 acres of water within San Pablo Bay, and 1,105 acres in the Sphere of Influence (SOI). Under Alternative 1, the city would build out consistent with the existing General Plan land use designations as shown in **Table 3.0-1** in Section 3.0, Project Description, of this DEIR. The City's existing Zoning Code would remain in place and the proposed Three Corridors Specific Plan would not be implemented. If all remaining vacant parcels within the Planning Area were to develop based on the maximum density allowed by the 1995 General Plan land use designations, buildout of Alternative 1 would result in a total of 7,166 housing units and a total population of 20,710 persons. **Table 6.0-1** compares the residential development and population potential for Alternative 1 to that of the proposed project.

**TABLE 6.0-1**
**RESIDENTIAL DEVELOPMENT/POPULATION POTENTIAL**
**NO PROJECT ALTERNATIVE VS. PROPOSED PROJECT[1]**

| | Development Potential | |
|---|---|---|
| | **Housing Units[2]** | **Population[3]** |
| San Pablo Avenue Corridor | 905 | 2,615 |
| Pinole Valley Road Corridor | 141 | 407 |
| Appian Way Corridor | 245 | 708 |
| GPU Planning Area Outside of Specific Plan Area | 5,875 | 16,979 |
| **Total No Project Alternative** | **7,166** | **20,710** |
| Proposed Project | 8,261 | 23,875 |
| **Difference** | **--1,095** | **-3,165** |

*[1] Numbers rounded.*
*[2] In order to present a "worst-case scenario," development potential is expressed as the total number of housing units and people that could be accommodated if the existing vacant land were developed to the maximum potential allowed by land use designations. As each land use designation allows for a range of densities, the actual development density will likely be less than shown here.*
*[3] Based on ABAG's 2007 estimate of 2.89 persons per household.*

## COMPARATIVE ANALYSIS

### 4.1 Land Use

Land Use Incompatibilities (Impact 4.1.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could create **potentially significant** incompatibilities between existing and future land uses within the City of Pinole. Particularly, the proposed General Plan reduces the acreage designated for open space and conservation areas in comparison to the existing General Plan and designates land uses that would concentrate new and intensified development on Pinole's primary commercial corridors by replacing commercial zoning with various mixed-use zones and through the densification of existing residential uses throughout the three commercial corridors of San Pablo Avenue, Pinole Valley Road, and Appian Way.

Alternative 1 would result in the development of fewer housing units within the Planning Area than the proposed project and would not develop land currently designated as open space and conservation areas. Therefore, Alternative 1 would result in fewer potential land use conflicts than the proposed project. In addition, under Alternative 1 the Three Corridors Specific Plan

would not be adopted and development on Pinole's primary commercial corridors would not significantly increase in density or intensity as it would under the proposed project. This too would reduce the potential for land use conflicts in comparison to the proposed project. Therefore, impacts associated with land use incompatibilities would be better under Alternative 1 than under the proposed project.

### 4.2 Population/Housing/Employment

No significant impacts.

### 4.3 Air Quality and Climate Change

Conflict with the BAAQMD 2010 Clean Air Plan (Impact 4.3.1)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in increased population and VMT that would conflict with the BAAQMD 2010 Clean Air Plan and result in a **potentially significant** impact.

Buildout of Alternative 1 would result in 1,095 fewer housing units and 3,165 fewer persons in the Planning Area than the proposed project. Therefore, in comparison to the proposed project, Alternative 1 would result in reduced vehicle trip generation that would reduce $PM_{10}$ emissions and conflicts with the BAAQMD 2010 Clean Air Plan. Conflicts with the BAAQMD 2010 Clean Air Plan would be better under Alternative 1 than under the proposed project.

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Short-Term, Construction Emissions (Impact 4.3.2)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in **potentially significant** short-term construction emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating, that could violate or substantially contribute to violations of federal and state ambient air quality standards.

Buildout of Alternative 1 would also result in short-term construction emissions from construction activities. However, the amount of emissions generated by construction activities varies by project and is dependent on the size of the development and construction activities required. Therefore, as Alternative 1 has less development potential than the proposed project, impacts would be better under Alternative 1 than under the proposed project.

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Long-Term, Operational Emissions (Impact 4.3.3)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in long-term, operational emissions that could violate or substantially contribute to violations of federal and state ambient air quality standards. This is a **significant** impact.

As shown in **Table 4.3-6** in Section 4.3, Air Quality and Climate Change, the proposed project would result in net increases of approximately 15.71 tons per year of ROG, 20.92 tons per year of $NO_X$, 24.71 tons per year of $PM_{10}$, and 4.74 tons per year of $PM_{2.5}$ over emissions projected for

buildout of the Planning Area without implementation of the proposed project (No Project Alternative). Therefore, impacts associated with long-term operational emissions would be better under Alternative 1 than under the proposed project.

Exposure of Sensitive Receptors to Substantial Concentrations of Mobile-Source Carbon Monoxide (Impact 4.3.4)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in increased population and employment that would increase traffic volumes on area roadways. This could result in elevated carbon monoxide emissions from motor vehicle congestion that could expose sensitive receptors to elevated carbon monoxide concentrations. As a result, this is considered to be a **significant** impact.

Buildout of Alternative 1 would result in 1,095 fewer housing units and 3,165 fewer persons in the Planning Area than the proposed project. Therefore, in comparison to the proposed project, Alternative 1 would result in reduced traffic volumes and thus reduced concentration of carbon monoxide emissions from motor vehicle congestion. Impacts would be better under Alternative 1 than under the proposed project.

Create Objectionable Odors Affecting a Substantial Number of People (Impact 4.3.6)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could include sources that could create **potentially significant** objectionable odors affecting a substantial number of people or expose new residents to existing sources of odor.

Implementation of Alternative 1 could also expose people to odor sources. However, Alternative 1 would result in reduced development potential and a reduced population that could be exposed to odors in comparison to the proposed project. Therefore, this impact would be better under Alternative 1 than under the proposed project.

Result in a Cumulatively Considerable Net Increase of Nonattainment Criteria Pollutants and Precursors (Impact 4.3.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), in combination with cumulative development in the SFBAAB, would result in a **cumulatively considerable** net increase of VMT and thus ozone and coarse and fine particulate matter.

As discussed above, Alternative 1 would result in reduced traffic volumes and thus reduced emissions of ozone and coarse and fine particulate matter in comparison to the proposed project. Alternative 1 would contribute to cumulative impacts to a lesser degree than the proposed project, and impacts would be better under Alternative 1 than under the proposed project.

## 4.4 Traffic and Circulation

Impacts to Freeway Mainline (Impact 4.4.1)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in a **significant** increase in freeway mainline volumes during the AM and PM peak hours.

As discussed under Impact 4.4.1 in Section 4.4, Traffic and Circulation, the study freeway segments would operate at substandard LOS F conditions under buildout of the Planning Area without implementation of the proposed project (No Project Alternative). Therefore, impacts to freeway mainlines would be significant under both alternatives. However, Alternative 1 would result in reduced development potential and population in comparison to the proposed project. Therefore, Alternative 1 would result in reduced traffic volumes and overall impacts to freeway mainlines would be better under Alternative 1 than under the proposed project.

Conflicts with Acceptable v/c Ratios (Impact 4.4.2)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in a **significant** increase in v/c and decrease in LOS on study intersections during the AM and PM peak hours.

The forecasted intersection traffic volume for buildout of the Planning Area without implementation of the proposed project (No Project Alternative) are shown **Table 4.4-10** in Section 4.4, Traffic and Circulation. As shown, buildout of Alternative 1 would result in four intersections operating at an LOS that does not meet current standards. However, the proposed project would result in increased traffic volumes in comparison to Alternative 1 and would result in five intersections operating at an LOS that does not meet current standards at buildout. Therefore, impacts would be better under Alternative 1 than under the proposed project.

Project and Cumulative Conflicts with an Applicable Congestion Management Plan (Impacts 4.4.3 and 4.4.8)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would conflict with the multimodal transportation service objectives (MTSOs) identified in the West County Action Plan. This is considered a **significant** and **cumulatively considerable** impact.

As discussed under Impact 4.4.3 in Section 4.4, Traffic and Circulation, the West County Action Plan dictates that all signalized intersections along San Pablo Avenue shall maintain LOS E or better. Likewise the West County Action Plan calls for maintaining LOS D or better along Appian Way. As shown in **Table 4.4-10**, buildout of Alternative 1 would also result in intersection LOS exceeding the MTSOs. Therefore, both Alternative 1 and the proposed project would conflict with the MTSOs established by the West County Action Plan, and impacts would be similar under both alternatives.

Cumulative Transportation Impacts (Impact 4.4.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would have **cumulatively considerable** contributions to cumulative impacts to local and regional transportation facilities.

Alternative 1 would result in reduced development potential and population in comparison to the proposed project. Therefore, Alternative 1 would result in reduced traffic volumes, and cumulative impacts to local and regional transportation facilities would be better under Alternative 1 than under the proposed project.

## 4.5 Noise

Exposure to Construction Noise (Impact 4.5.2)

Construction activities associated with the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in a **potentially significant** substantial temporary or periodic increase in ambient noise levels during construction activities and could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies.

Future development under Alternative 1 would also result in temporary and/or periodic increases in ambient noise levels during construction activities. However, as Alternative 1 would result in 1,095 fewer housing units and 3,165 fewer persons in the Planning Area than the proposed project, construction noise impacts would be better under Alternative 1 than under the proposed project.

Project and Cumulative Exposure to Surface Transportation Noise (Impacts 4.5.3 and 4.5.7)

The proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in a **potentially significant** and **cumulatively considerable** permanent increase in ambient noise levels in the project vicinity above levels existing without the project and could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan, as a result of increased traffic on the roadway network. In addition, future development of noise-sensitive land uses could be exposed to roadway and/or railroad noise levels in excess of the City's noise standards.

Alternative 1 would result in reduced development potential and population in comparison to the proposed project. Therefore, Alternative 1 would result in reduced traffic volumes, and project and cumulative impacts associated with transportation noise impacts would be better under Alternative 1 than under the proposed project.

Exposure to Stationary Noise (Impact 4.5.5)

Subsequent development associated with the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in new noise-sensitive land uses encroaching upon existing or proposed stationary noise sources or new stationary noise sources encroaching upon existing or proposed noise-sensitive land uses. This could result in a substantial permanent increase in ambient noise levels in the project vicinity above existing levels or could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies. As a result, this impact is considered **potentially significant**.

Alternative 1 would result in 1,095 fewer housing units and 3,165 fewer persons in the Planning Area than the proposed project and would preserve more land designated as open space and conservation areas. Therefore, impacts associated with stationary noise would be better under Alternative 1 than under the proposed project.

Exposure to Groundborne Vibration (Impact 4.5.6)

The proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in exposure of persons to or generation of excessive groundborne vibration

levels from railroad operations and/or construction activities. In particular, development of future land uses could occur within the projected 60 dBA CNEL noise contours of San Pablo Avenue, Pinole Valley Road, and Appian Way, resulting in **potentially significant** exposure of persons to railroad vibration or noise levels in excess of standards established in the local general plan.

Under Alternative 1, the Three Corridors Specific Plan would not be adopted and development on the city's primary commercial corridors would not significantly increase in density or intensity as it would under the proposed project. This would reduce the potential exposure of persons to railroad vibration and noise levels in comparison to the proposed project. Therefore, impacts would be better under Alternative 1 than under the proposed project.

### 4.6 Human Health/Risk of Upset

No significant impacts.

### 4.7 Biological Resources

Impacts to Sensitive Biological Communities (Impact 4.7.2)

Implementation of the proposed project would result in **potentially significant** disturbance, degradation, and removal of riparian habitat, coastal oak woodland, and wetland habitats.

As discussed above, the proposed project would result in more population, as well as denser neighborhoods and greater intensity of nonresidential uses than Alternative 1, which preserves more land for open space or conservation areas than the proposed project. Therefore, impacts to sensitive biological communities would be better under Alternative 1 than under the proposed project.

Impacts to Migratory Corridors (Impact 4.7.4)

Implementation of the proposed project could interfere substantially with the movement of native resident or migratory fish or wildlife species via habitat degradation due to additional traffic, increased human presence, and degradation of the water quality. This would be a **potentially significant** impact.

Alternative 1 would result less human presence and less traffic than the proposed project, as well as better impacts associated with water quality (see 4.9, Hydrology and Water Quality, below). Therefore impacts would be better under Alternative 1 than under the proposed project.

Cumulative Impacts to Special-Status Species (Impact 4.7.6)

Implementation of the proposed General Plan and associated project components (Three Corridors Specific Plan and Zoning Code Update), together with past, present, and probable future projects in the Planning Area and larger regional context, would result in a **cumulatively considerable** loss of biological resources in the region.

Although buildout of Alternative 1 would contribute to direct and indirect loss of biological resources via development of the remaining vacant parcels in the city, the proposed project would result in more population, as well as denser neighborhoods and greater intensity of nonresidential uses, than Alternative 1. In addition, Alternative 1 preserves more land for open space or conservation areas than the proposed project. Therefore, cumulative impacts to special-status species would be better under Alternative 1 than under the proposed project.

## 4.8 Geology and Soils

Seismic Hazards (Impact 4.8.1)

Damage to buildings and utilities in Pinole resulting from a seismic event is likely to be greatest on those sites underlain by deep, loose, compressible deposits of bay mud, non-engineered fill, and marginally stable hillside areas. Areas within the GPU Planning Area that are highly susceptible to damages resulting from ground shaking are located between San Pablo Avenue and the San Pablo Bay shoreline, in the western portions of the city, especially in the Tara Hills Mobile Home Park. This impact is **potentially significant**.

Both Alternative 1 and the proposed project would result in development in these areas as several of the city's currently undeveloped parcels are located in the western portion of the city. Furthermore, the City has adopted the CBC into its building standards for all development within the city limits. Future development under both Alternative 1 and the proposed project would be subject to CBC standards that address foundation design, shear wall strength, and other structural-related conditions. Compliance with CBC regulations would ensure the adequate design and construction of building foundations to resist soil movement under both alternatives, and impacts would therefore be similar under both alternatives.

Landslide/Slope Instability (Impact 4.8.3)

**Potentially significant** seismically induced landslides are likely to occur along the steep to intermediate hillside areas of the Planning Area. Additionally, areas within the Planning Area prone to slope instability include areas with pronounced and steeper slopes located along the East Bay Hills, areas where previous land sliding or soil creeping has occurred, areas where non-engineered grading and uncontrolled drainage on slopes has occurred, and areas with deep colluvial deposits.

As mentioned above, future development under both Alternative 1 and the proposed project would be subject to CBC standards, which would require all new development projects to conduct a seismic evaluation and to incorporate particular seismic design criteria to reduce ground shaking effects. Impacts would therefore be similar under both alternatives.

Location on Expansive and Unstable Soils (Impact 4.8.4)

Implementation of the proposed (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would expose buildings, pavements, and utilities to significant damage as a result of underlying expansive or unstable soil properties. This is considered a **potentially significant** impact.

Future development under Alternative 1 would also expose buildings, pavements, and utilities to significant damage as a result of underlying expansive or unstable soil properties. However, Alternative 1 has less development and population potential and would therefore expose fewer buildings and persons to such hazards. Impacts would therefore be better under Alternative 1.

## 4.9 Hydrology and Water Quality

Degrade Surface Water Quality (Impact 4.9.1)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in the discharge of polluted runoff during construction

and operation of future urban development, potentially violating water quality standards or otherwise substantially degrading surface water quality. This impact is **potentially significant**.

Future development under Alternative 1 also has the potential to discharge polluted runoff during construction and operation of future urban development. However, the proposed project would result in denser neighborhoods and greater intensity of nonresidential uses than Alternative 1. Also, Alternative 1 preserves more land for open space or conservation areas than the proposed project. As Alternative 1 would include less impervious surface and fewer sources of polluted runoff, impacts under Alternative 1 would be better than under the proposed project.

Project and Cumulative Flooding Hazards (Impacts 4.9.6 and 4.9.8)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could expose additional people and/or structures to flooding, dam failure inundation, and/or sea level rise. This impact is considered to be **potentially significant**. In addition, the proposed project could increase impervious surfaces and alter drainage conditions and rates in the Planning Area, which could contribute to cumulative flood conditions in the Pinole Creek watershed and San Pablo Bay. This impact is considered **cumulatively considerable**.

Buildout of Alternative 1 would result in 1,095 fewer housing units and 3,165 fewer persons in the Planning Area than the proposed project and would thus expose fewer people and/or structures to flooding, dam failure inundation, and/or sea level rise. In addition, Alternative 1 would include less impervious surface than the proposed project. Therefore, impacts under Alternative 1 would be better than under the proposed project.

Cumulative Water Quality Impacts (Impact 4.9.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), in combination with other development activities within the watershed, would contribute to a **potentially cumulatively considerable** degradation of water quality from construction activities and increased urban runoff.

As discussed above, the proposed project would result in denser neighborhoods and greater intensity of nonresidential uses than Alternative 1 and Alternative 1 preserves more land for open space or conservation areas than the proposed project. Therefore, cumulative impacts under Alternative 1 would be better than under the proposed project.

### 4.10 Cultural Resources

Project and Cumulative Impacts to Prehistoric Resources, Historic Resources, and Human Remains (Impacts 4.10.1 and 4.10.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), along with foreseeable development in the region, could result in the potential disturbance of cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) and human remains. This would be a **potentially significant** project-level impact and a **cumulatively considerable** cumulative impact.

Future development under Alternative 1 also has the potential to disturb cultural resources. However, the City currently does not require cultural resources studies (i.e., archaeological and

historical investigations) for all discretionary projects. The proposed General Plan Update includes new policies to require such studies, which would protect currently unknown cultural resources from development activities. As the existing General Plan, which would apply under Alternative 1, contains no such policy, impacts under Alternative 1 would be worse than under the proposed project.

Undiscovered Paleontological Resources (Impacts 4.10.2 and 4.10.4)

Adoption of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in the potential damage or destruction of undiscovered paleontological resources. This is considered a **potentially significant** impact.

Future development under Alternative 1 also has the potential to damage or destroy undiscovered paleontological resources. The proposed General Plan includes a new policy that requires project proponents to implement any mitigation necessary for the protection of paleontological resources discovered during construction activities. As the existing General Plan, which would apply under Alternative 1, contains no such policy, impacts under Alternative 1 would be worse than under the proposed project.

### 4.11 Visual Resources/Light and Glare

Daytime Glare and Nighttime Illumination (Impact 4.11.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in the intensification of land uses within the GPU Planning Area, which could create **potentially significant** new sources of daytime glare and nighttime illumination.

Buildout of Alternative 1 would result in 1,095 fewer housing units and 3,165 fewer persons in the Planning Area than the proposed project. Therefore, as Alternative 1 would result in less intense land uses, new sources of daytime glare and nighttime illumination would be reduced in comparison to the proposed project. Impacts would be better under Alternative 1 than under the proposed project.

### 4.12 Public Services and Utilities

Cumulative Water Supply and Water Supply Infrastructure Impacts (Impact 4.12.6.2)

Implementation of the proposed General Plan Update and its associated project components would result in a **cumulatively considerable** contribution to the cumulative demand for water supply and associated infrastructure in EBMUD's service area.

Buildout of Alternative 1 would result in 1,095 fewer housing units and 3,165 fewer persons in the Planning Area than the proposed project. Therefore, Alternative 1 would have a lesser contribution to the cumulative demand for water supply and would have better impacts in comparison to the proposed project.

Increased Demand for Wastewater Service (Impact 4.12.7.1)

Implementation of the General Plan Update, Three Corridors Specific Plan, and Zoning Code Update would increase wastewater flows and demand for sanitary sewer facilities. Increased flows could exceed the capacity of the wastewater conveyance, treatment, and disposal

systems of the City of Pinole Public Works Department and the West County Wastewater District. This is a **significant** impact.

Buildout of Alternative 1 would result in 1,095 fewer housing units and 3,165 fewer persons in the Planning Area than the proposed project. Therefore, Alternative 1 would have a lesser impact on the demand for wastewater service and would have better impacts in comparison to the proposed project.

## 6.4 ALTERNATIVE 2 – COMMERCIAL FOCUS/EXPANDED ROADWAYS

### CHARACTERISTICS

The Commercial Focus/Expanded Roadways Alternative would replace proposed residential and industrial land uses with commercial land uses on the San Pablo Avenue, Pinole Valley Road, and Appian Way corridors (see **Figure 6.0-1**). This redistribution would result in the residential development and population potential shown in **Table 6.0-2**. This alternative would reduce the amount of land available for industrial use and would increase the commercial development potential along all three Specific Plan corridors. Residential development potential would decrease by 1,077 housing units in comparison to the proposed project. This increased residential development potential would occur outside of the Specific Plan areas because residential development within the Specific Plan areas would not change from existing conditions under Alternative 2.

In addition, the circulation plan for this alternative would expand San Pablo Avenue and Appian Way to six travel lanes, except in Old Town where the roadways would remain four-lane arterials. To accommodate the additional travel lanes, no bicycle lanes would be installed in these corridors.

**TABLE 6.0-2**
**RESIDENTIAL DEVELOPMENT/POPULATION POTENTIAL**
**ALTERNATIVE 2 VS. PROPOSED PROJECT[1]**

| | Development Potential | |
|---|---|---|
| | **Housing Units** | **Population[2]** |
| San Pablo Avenue Corridor | 885 | 2,558 |
| Pinole Valley Road Corridor | 141 | 407 |
| Appian Way Corridor | 244 | 705 |
| GPU Planning Area Outside of Specific Plan Area | 5,914 | 17,091 |
| **Total Alternative 2** | **7,184** | **20,762** |
| Proposed Project | 8,261 | 23,875 |
| **Difference** | **-1,077** | **-3,113** |

[1] *Numbers rounded.*
[2] *BASED ON ABAG'S 2007 ESTIMATE OF 2.89 PERSONS PER HOUSEHOLD.*

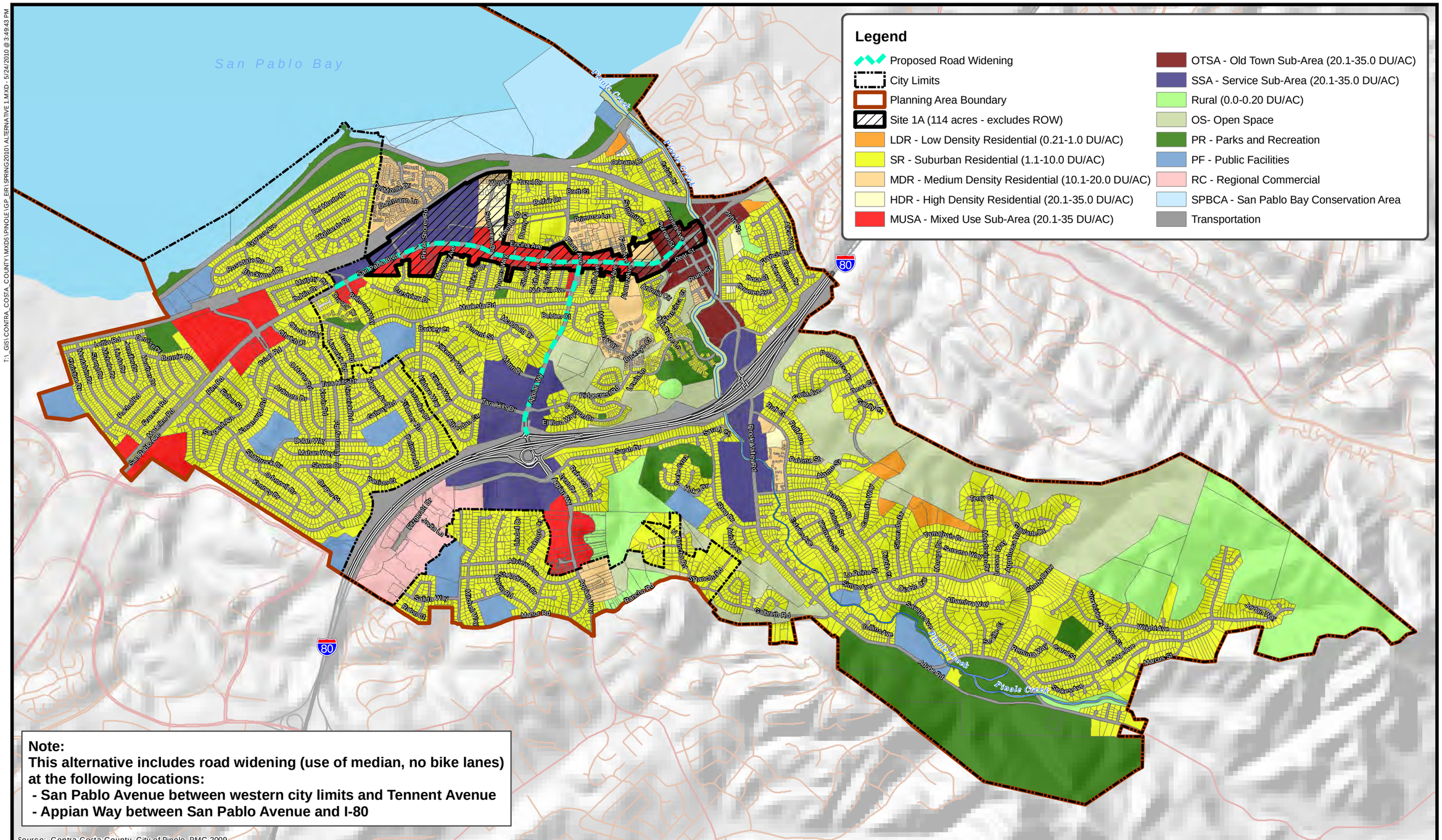



Figure 6.0-1
Commercial Focus/Expanded Roadways Alternative

PMC

COMPARATIVE ANALYSIS

## 4.1 Land Use

Land Use Incompatibilities (Impact 4.1.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could create **potentially significant** incompatibilities between existing and future land uses within the City of Pinole. Particularly, the proposed General Plan reduces the acreage designated for open space and conservation areas in comparison to the existing General Plan and designates land uses that would concentrate new and intensified development on Pinole's primary commercial corridors by replacing commercial zoning with various mixed-use zones and through the densification of existing neighborhoods throughout the three commercial corridors of San Pablo Avenue, Pinole Valley Road, and Appian Way.

Alternative 2 would result in the development of 1,077 fewer housing units within the Planning Area than the proposed project. And while Alternative 2 would increase the commercial development potential along all three Specific Plan corridors, it would not result in the densification of existing neighborhoods throughout these commercial corridors. Therefore, Alternative 2 would result in fewer potential land use conflicts than the proposed project, and impacts associated with land use incompatibilities would be better under Alternative 2 than under the proposed project.

## 4.2 Population/Housing/Employment

No significant impacts.

## 4.3 Air Quality and Climate Change

Conflict with the BAAQMD 2010 Clean Air Plan (Impact 4.3.1)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in increased population and VMT that would conflict with the BAAQMD 2010 Clean Air Plan and result in a **potentially significant** impact.

Buildout of the Alternative 2 would result in 1,077 fewer housing units and 3,113 fewer persons in the Planning Area than the proposed project. Therefore, in comparison to the proposed project, Alternative 2 would result in reduced vehicle trip generation that would reduce $PM_{10}$ emissions and conflicts with the BAAQMD 2010 Clean Air Plan. Conflicts with the BAAQMD 2010 Clean Air Plan would be better under Alternative 2 than under the proposed project.

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Short-Term, Construction Emissions (Impact 4.3.2)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in **potentially significant** short-term construction emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating, that could violate or substantially contribute to violations of federal and state ambient air quality standards.

Buildout of Alternative 2 would also result in short-term construction emissions from construction activities. Even though Alternative 2 has less residential development potential than the proposed project, commercial development potential would be increased. Therefore, Alternative 2 would result in similar impacts associated with construction emissions.

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Long-Term, Operational Emissions (Impact 4.3.3)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in long-term, operational emissions that could violate or substantially contribute to violations of federal and state ambient air quality standards. This is a **significant** impact.

Buildout of Alternative 2 would also result long-term, operational emissions that could violate or substantially contribute to violations of federal and state ambient air quality standards. Even though Alternative 2 has less residential development potential than the proposed project, commercial development potential would be increased. Therefore, impacts associated with long-term operational emissions would be similar to the proposed project under Alternative 2.

Exposure of Sensitive Receptors to Substantial Concentrations of Mobile-Source Carbon Monoxide (Impact 4.3.4)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in increased population and employment that would increase traffic volumes on area roadways. This could result in elevated carbon monoxide emissions from motor vehicle congestion that could expose sensitive receptors to elevated carbon monoxide concentrations. As a result, this is considered to be a **significant** impact.

Buildout of Alternative 2 would result in 1,077 fewer housing units and 3,113 fewer persons in the Planning Area than the proposed project. Therefore, in comparison to the proposed project, Alternative 2 would result in reduced traffic volumes and thus reduced concentration of carbon monoxide emissions from motor vehicle congestion. Impacts would be better under Alternative 2 than under the proposed project.

Create Objectionable Odors Affecting a Substantial Number of People (Impact 4.3.6)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could include sources that could create **potentially significant** objectionable odors affecting a substantial number of people or expose new residents to existing sources of odor.

Implementation of Alternative 2 could also expose people to objectionable odors. However, Alternative 2 would result in reduced development potential and a reduced population that could be exposed to odors in comparison to the proposed project. Therefore this impact would be better under Alternative 2 than under the proposed project.

Result in a Cumulatively Considerable Net Increase of Nonattainment Criteria Pollutants and Precursors (Impact 4.3.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), in combination with cumulative development in the SFBAAB, would

result in a **cumulatively considerable** net increase of VMT and thus ozone and coarse and fine particulate matter.

As discussed above, Alternative 2 would result in reduced traffic volumes and thus reduced emissions of ozone and coarse and fine particulate matter in comparison to the proposed project. Alternative 2 would contribute to cumulative impacts to a lesser degree than the proposed project, and impacts would be better under Alternative 2 than under the proposed project.

### 4.4 Traffic and Circulation

Impacts to Freeway Mainline (Impact 4.4.1)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in a **significant** increase in freeway mainline volumes during the AM and PM peak hours.

Alternative 2 would result in reduced residential development potential and population in comparison to the proposed project. Therefore, Alternative 2 would result in reduced traffic volumes and overall impacts to freeway mainlines would be better under Alternative 2 than under the proposed project.

Conflicts with Acceptable v/c Ratios (Impact 4.4.2)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in a **significant** increase in v/c and decrease in LOS on study intersections during the AM and PM peak hours.

As discussed above, Alternative 2 would result in reduced residential development potential and population in comparison to the proposed project. Therefore, Alternative 2 would result in reduced traffic volumes and impacts would be better under Alternative 2 than under the proposed project.

Project and Cumulative Conflicts with an Applicable Congestion Management Plan (Impacts 4.4.3 and 4.4.8)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would conflict with the multimodal transportation service objectives (MTSOs) identified in the West County Action Plan. This is considered a **significant** and **cumulatively considerable** impact.

As discussed under **Impact 4.4.3** in Section 4.4, Traffic and Circulation, the West County Action Plan dictates that all signalized intersections along San Pablo Avenue shall maintain LOS E or better. Likewise the West County Action Plan calls for maintaining LOS D or better along Appian Way. It is anticipated that, buildout of Alternative 2 would also result in intersection LOS exceeding the MTSOs. Therefore, both Alternative 2 and the proposed project would conflicts with the MTSOs established by the West County Action Plan and impacts would be similar under both alternatives.

Cumulative Transportation Impacts (Impact 4.4.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would have **cumulatively considerable** contributions to cumulative impacts to local and regional transportation facilities.

Alternative 2 would result in reduced residential development potential and population in comparison to the proposed project. Therefore, Alternative 2 would result in reduced traffic volumes and cumulative impacts to local and regional transportation facilities would be better under Alternative 2 than under the proposed project.

### 4.5 Noise

Exposure to Construction Noise (Impact 4.5.2)

Construction activities associated with the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in a **potentially significant** substantial temporary or periodic increase in ambient noise levels during construction activities and could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies.

Future development under Alternative 2 would also result in generation of noise levels in excess of standards during construction activities. Although Alternative 2 would result in fewer housing units and persons in the Planning Area than the proposed project, commercial development potential would be increased in comparison to the proposed project. Therefore, construction noise impacts would be similar under Alternative 2 and the proposed project.

Project and Cumulative Exposure to Surface Transportation Noise (Impacts 4.5.3 and 4.5.7)

The proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in a **potentially significant** and **cumulatively considerable** permanent increase in ambient noise levels in the project vicinity above levels existing without the project and could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan, as a result of increased traffic on the roadway network. In addition, future development of noise-sensitive land uses could be exposed to roadway and/or railroad noise levels in excess of the City's noise standards.

Alternative 2 would result in reduced residential development potential and population in comparison to the proposed project. Therefore, Alternative 2 would result in reduced traffic volumes, and project and cumulative impacts associated with transportation noise impacts would be better under Alternative 2 than under the proposed project.

Exposure to Stationary Noise (Impact 4.5.5)

Subsequent development associated with the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in new noise-sensitive land uses encroaching upon existing or proposed stationary noise sources or new stationary noise sources encroaching upon existing or proposed noise-sensitive land uses. This could result in a substantial permanent increase in ambient noise levels in the project vicinity above existing levels or could result in exposure of persons to or generation of noise levels in excess of standards established in

the local general plan or noise ordinance or of applicable standards of other agencies. As a result, this impact is considered **potentially significant**.

Although Alternative 2 would result in fewer housing units and persons in the Planning Area than the proposed project, commercial development potential would be increased in comparison to the proposed project. Therefore, stationary noise impacts would be similar under Alternative 2 and the proposed project.

Exposure to Groundborne Vibration (Impact 4.5.6)

The proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in exposure of persons to or generation of excessive groundborne vibration levels from railroad operations and/or construction activities. In particular, development of future land uses could occur within the projected 60 dBA CNEL noise contours of San Pablo Avenue, Pinole Valley Road, and Appian Way, resulting in potentially **significant** exposure of persons to railroad vibration or noise levels in excess of standards established in the local general plan.

Under Alternative 2, residential density in the Three Corridors Specific Plan would not be increased, thus reducing the potential exposure of persons to railroad vibration and noise levels in comparison to the proposed project. Therefore, impacts would be better under Alternative 2 than under the proposed project.

### 4.6 Human Health/Risk of Upset

No significant impacts.

### 4.7 Biological Resources

Impacts to Sensitive Biological Communities (Impact 4.7.2)

Implementation of the proposed project would result in **potentially significant** disturbance, degradation, and removal of riparian habitat, coastal oak woodland, and wetland habitats.

Although Alternative 2 would result in fewer housing units and persons in the Planning Area than the proposed project, commercial development potential would be increased in comparison to the proposed project. Therefore, buildout of Alternative 2 would result in impacts to riparian habitat, coastal oak woodland, and wetland habitats similar to the proposed project.

Impacts to Migratory Corridors (Impact 4.7.4)

Implementation of the proposed project could interfere substantially with the movement of native resident or migratory fish or wildlife species via habitat degradation due to additional traffic, increased human presence, and degradation of the water quality. This would be a **potentially significant** impact.

Alternative 2 would result less human presence and less traffic than the proposed project, as well as similar impacts associated with water quality (see 4.9, Hydrology and Water Quality, below). Overall, impacts would be better under Alternative 2 than under the proposed project.

Cumulative Impacts to Special-Status Species (Impact 4.7.6)

Implementation of the proposed General Plan and associated project components (Three Corridors Specific Plan and Zoning Code Update), together with past, present, and probable future projects in the Planning Area and larger regional context, would result in a **cumulatively considerable** loss of biological resources in the region.

Although Alternative 2 would result in fewer housing units and persons in the Planning Area than the proposed project, commercial development potential would be increased in comparison to the proposed project. Therefore, buildout of Alternative 2 would contribute to cumulative direct and indirect loss of biological resources similar to the proposed project.

## 4.8 Geology and Soils

Seismic Hazards (Impact 4.8.1)

Damage to buildings and utilities in Pinole resulting from a seismic event is likely to be greatest on those sites underlain by deep, loose, compressible deposits of bay mud, non-engineered fill, and marginally stable hillside areas. Areas within the GPU Planning Area that are highly susceptible to damages resulting from ground shaking are located between San Pablo Avenue and the San Pablo Bay shoreline, in the western portions of the city, especially in the Tara Hills Mobile Home Park. This impact is **potentially significant**.

Both Alternative 2 and the proposed project would result in development in these areas. Furthermore, the City has adopted the CBC into its building standards for all development within the city limits. Future development under both Alternative 2 and the proposed project would be subject to CBC standards that address foundation design, shear wall strength, and other structural-related conditions. Compliance with CBC regulations would ensure the adequate design and construction of building foundations to resist soil movement under both alternatives, and impacts would therefore be similar under both alternatives.

Landslide/Slope Instability (Impact 4.8.3)

**Potentially significant** seismically induced landslides are likely to occur along the steep to intermediate hillside areas of the Planning Area. Additionally, areas within the Planning Area prone to slope instability include areas with pronounced and steeper slopes located along the East Bay Hills, areas where previous land sliding or soil creeping has occurred, areas where non-engineered grading and uncontrolled drainage on slopes has occurred, and areas with deep colluvial deposits.

As mentioned above, future development under both Alternative 2 and the proposed project would be subject to CBC standards, which would require all new development projects to conduct a seismic evaluation and to incorporate particular seismic design criteria to reduce ground shaking effects. Impacts would therefore be similar under both alternatives.

Location on Expansive and Unstable Soils (Impact 4.8.4)

Implementation of the proposed (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would expose buildings, pavements, and utilities to significant damage as a result of underlying expansive or unstable soil properties. This is considered a **potentially significant** impact.

Future development under Alternative 2 would also expose buildings, pavements, and utilities to significant damage as a result of underlying expansive or unstable soil properties. Although Alternative 2 would result in fewer housing units and persons in the Planning Area than the proposed project, commercial development potential would be increased in comparison to the proposed project. Therefore, impacts would be similar under Alternative 2 and the proposed project.

## 4.9 Hydrology and Water Quality

Degrade Surface Water Quality (Impact 4.9.1)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in the discharge of polluted runoff during construction and operation of future urban development potentially violating water quality standards or otherwise substantially degrading surface water quality. This impact is **potentially significant**.

Future development under Alternative 2 also has the potential to discharge polluted runoff during construction and operation of future urban development. As Alternative 2 would result in fewer housing units and persons in the Planning Area but more commercial development, Alternative 2 would include similar amounts of impervious surface and sources of polluted runoff to the proposed project. Impacts under Alternative 2 would be similar to those under the proposed project.

Project and Cumulative Flooding Hazards (Impacts 4.9.6 and 4.9.8)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could expose additional people and/or structures to flooding, dam failure inundation, and/or sea level rise. This impact is considered to be **potentially significant**. In addition, the proposed project could increase impervious surfaces and alter drainage conditions and rates in the Planning Area, which could contribute to cumulative flood conditions in the Pinole Creek watershed and San Pablo Bay. This impact is considered **cumulatively considerable**.

Buildout of Alternative 2 would result in 1,077 fewer housing units and 3,113 fewer persons in the Planning Area than the proposed project and would thus expose fewer people to flooding, dam failure inundation, and/or sea level rise. Therefore, impacts under Alternative 2 would be better than under the proposed project.

Cumulative Water Quality Impacts (Impact 4.9.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), in combination with other development activities within the watershed, would contribute to a **potentially cumulatively considerable** degradation of water quality from construction activities and increased urban runoff.

As discussed above, Alternative 2 would result in fewer housing units and persons in the Planning Area but more commercial development, thus resulting in similar amounts of impervious surface and sources of polluted runoff to the proposed project. Therefore, cumulative impacts under Alternative 2 would be similar to those under the proposed project.

## 4.10 Cultural Resources

Project and Cumulative Impacts to Prehistoric Resources, Historic Resources, and Human Remains (Impacts 4.10.1 and 4.10.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), along with foreseeable development in the region, could result in the potential disturbance of cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) and human remains. This would be a **potentially significant** project-level impact and a **cumulatively considerable** cumulative impact.

Future development under Alternative 2 also has the potential to disturb cultural resources and would be subject to the proposed General Plan policy that requires cultural resources studies (i.e., archaeological and historical investigations) for all discretionary projects. Therefore, impacts under Alternative 2 would be similar to those under the proposed project.

Undiscovered Paleontological Resources (Impacts 4.10.2 and 4.10.4)

Adoption of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in the potential damage or destruction of undiscovered paleontological resources. This is considered a **potentially significant** impact.

Future development under Alternative 2 also has the potential to damage or destroy undiscovered paleontological resources and would be subject to the proposed General Plan policy that requires project proponents to implement any mitigation necessary for the protection of paleontological resources discovered during construction activities. Therefore, impacts under Alternative 2 would be similar to those under the proposed project.

## 4.11 Visual Resources/Light and Glare

Daytime Glare and Nighttime Illumination (Impact 4.11.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in the intensification of land uses within the GPU Planning Area, which could create **potentially significant** new sources of daytime glare and nighttime illumination.

Buildout of Alternative 2 would result in 1,077 fewer housing units and 3,113 fewer persons in the Planning Area than the proposed project. However, commercial development potential would be increased under Alternative 2. Therefore, new sources of daytime glare and nighttime illumination would be similar in comparison to the proposed project.

## 4.12 Public Services and Utilities

Cumulative Water Supply and Water Supply Infrastructure Impacts (Impact 4.12.6.2)

Implementation of the proposed General Plan Update and its associated project components would result in a **cumulatively considerable** contribution to the cumulative demand for water supply and associated infrastructure in EBMUD's service area.

Buildout of Alternative 2 would result in 1,077 fewer housing units and 3,113 fewer persons in the Planning Area than the proposed project. Therefore, Alternative 2 would have a lesser

contribution to the cumulative demand for water supply and would have better impacts in comparison to the proposed project.

Increased Demand for Wastewater Service (Impact 4.12.7.1)

Implementation of the General Plan Update, Three Corridors Specific Plan, and Zoning Code Update would increase wastewater flows and demand for sanitary sewer facilities. Increased flows could exceed the capacity of the wastewater conveyance, treatment, and disposal systems of the City of Pinole Public Works Department and the West County Wastewater District. This is a **significant** impact.

Buildout of Alternative 2 would result in 1,077 fewer housing units and 3,113 fewer persons in the Planning Area than the proposed project. Therefore, Alternative 2 would have a lesser impact on the demand for wastewater service and would have better impacts in comparison to the proposed project.

## 6.5 ALTERNATIVE 3 – RESIDENTIAL FOCUS/EXPANDED TRANSIT

### CHARACTERISTICS

The Residential Focus/Expanded Transit Alternative would increase residential development at primary intersections on the San Pablo Avenue, Appian Way, and Pinole Valley Road corridors to create high-density nodes that could be served by transit (see **Figure 6.0-2**). This increase in residential development would result in the residential development and population potential shown in **Table 6.0-3**. In addition, the circulation plan for this alternative would be enhanced by a transit loop connecting higher-density residential nodes on the Specific Plan corridors. This alternative would include bicycle lanes on all corridors and pedestrian enhancements. At buildout, this alternative would result in less commercial growth in comparison to the proposed project; however, residential development and population potential would exceed that of the proposed project by 675 housing units and 1,950 persons.

**TABLE 6.0-3**
**RESIDENTIAL DEVELOPMENT/POPULATION POTENTIAL**
**ALTERNATIVE 3 VS. PROPOSED PROJECT[1]**

| | Development Potential | |
|---|---|---|
| | Housing Units | Population[2] |
| San Pablo Avenue Corridor | 2,277 | 2,558 |
| Pinole Valley Road Corridor | 141 | 407 |
| Appian Way Corridor | 603 | 705 |
| GPU Planning Area Outside of Specific Plan Area | 5915 | 17,091 |
| **Total Alternative 3** | **8,936** | **25,825** |
| Proposed Project | 8,261 | 23,875 |
| **Difference** | **675** | **1,950** |

*1 Numbers rounded.*
*2 Based on ABAG's 2007 estimate of 2.89 persons per household.*

## COMPARATIVE ANALYSIS

### 4.1 Land Use

Land Use Incompatibilities (Impact 4.1.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could create **potentially significant** incompatibilities between existing and future land uses within the City of Pinole. Particularly, the proposed General Plan reduces the acreage designated for Open Space and conservation areas in comparison to the existing General Plan and designates land uses that would concentrate new and intensified development on Pinole's primary commercial corridors by replacing commercial zoning with various mixed-use zones and through the densification of existing neighborhoods throughout the three commercial corridors of San Pablo Avenue, Pinole Valley Road, and Appian Way.

Alternative 3 would result in the development of 675 more housing units within the Planning Area than the proposed project. This densification would occur throughout the three commercial corridors in the city. Therefore, Alternative 3 would result in more potential land use conflicts than the proposed project, and impacts associated with land use incompatibilities would be worse under Alternative 3 than under the proposed project.

### 4.2 Population/Housing/Employment

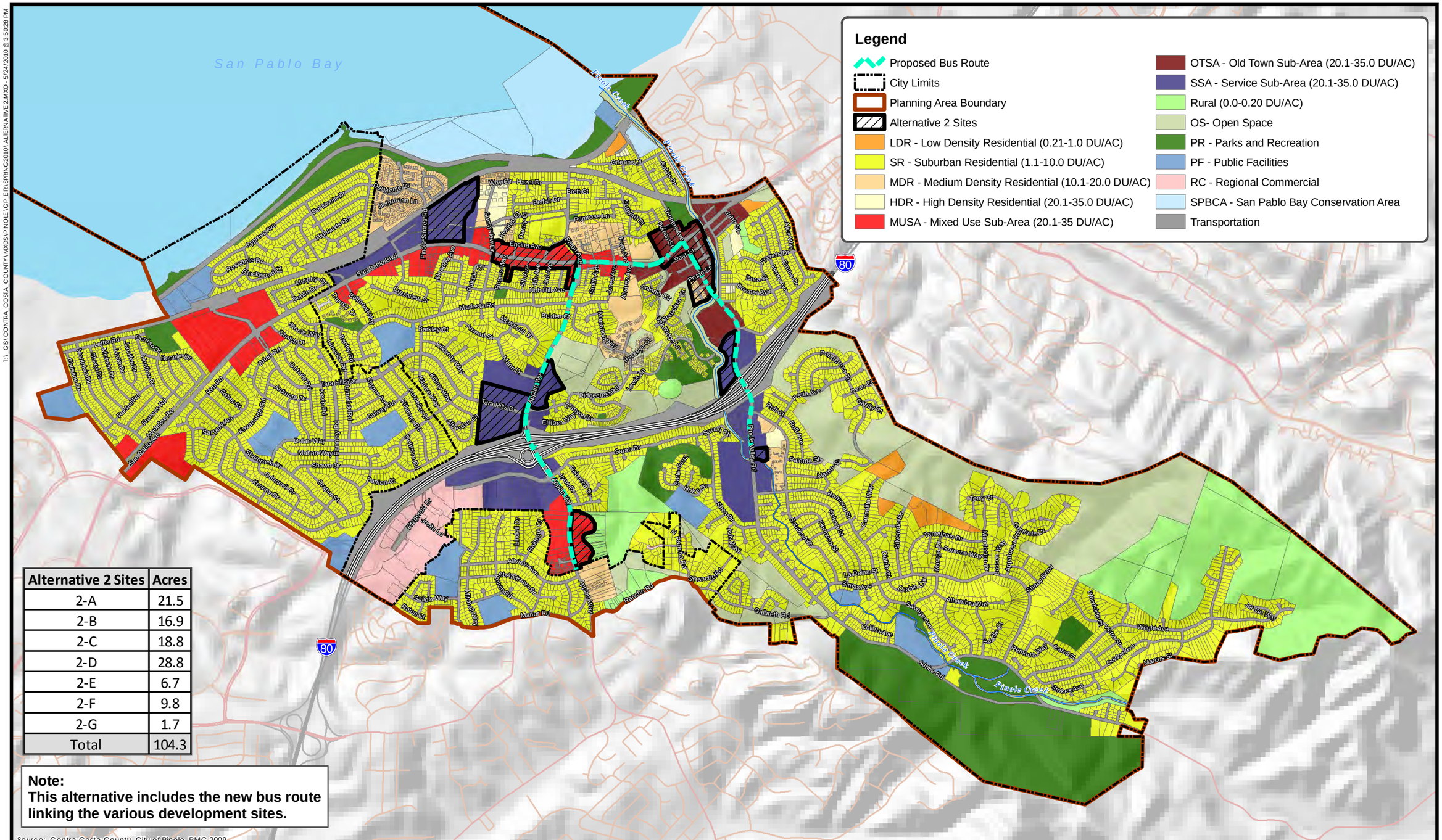
No significant impacts.

### 4.3 Air Quality and Climate Change

Conflict with the BAAQMD 2010 Clean Air Plan (Impact 4.3.1)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in increased population and VMT that would conflict with the BAAQMD 2010 Clean Air Plan and result in a **potentially significant** impact.

Buildout of Alternative 3 would result in 675 more housing units and 1,950 more persons in the Planning Area than the proposed project. Therefore, in comparison to the proposed project, Alternative 3 would result in increased vehicle trip generation that would increase $PM_{10}$ emissions and conflicts with the BAAQMD 2010 Clean Air Plan. Conflicts with the BAAQMD 2010 Clean Air Plan would be worse under Alternative 3 than under the proposed project.




| Alternative 2 Sites | Acres |
|---|---|
| 2-A | 21.5 |
| 2-B | 16.9 |
| 2-C | 18.8 |
| 2-D | 28.8 |
| 2-E | 6.7 |
| 2-F | 9.8 |
| 2-G | 1.7 |
| Total | 104.3 |

Figure 6.0-2
Commercial Focus/Expanded Roadways Alternative

PMC

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Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Short-Term, Construction Emissions (Impact 4.3.2)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), could result in **potentially significant** short-term construction emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating, that could violate or substantially contribute to violations of federal and state ambient air quality standards.

Buildout of Alternative 3 would also result in short-term construction emissions from construction activities. Even though Alternative 3 has more residential development potential than the proposed project, commercial development potential would be decreased. Therefore, Alternative 3 would result in similar impacts associated with construction emissions.

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Long-Term, Operational Emissions (Impact 4.3.3)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in long-term, operational emissions that could violate or substantially contribute to violations of federal and state ambient air quality standards. This is a **significant** impact.

Buildout of Alternative 3 would also result long-term, operational emissions that could violate or substantially contribute to violations of federal and state ambient air quality standards. Even though Alternative 3 has more residential development potential than the proposed project, commercial development potential would be decreased. Therefore, impacts associated with long-term operational emissions would be similar to the proposed project under Alternative 3.

Exposure of Sensitive Receptors to Substantial Concentrations of Mobile-Source Carbon Monoxide (Impact 4.3.4)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in increased population and employment that would increase traffic volumes on area roadways. This could result in elevated carbon monoxide emissions from motor vehicle congestion that could expose sensitive receptors to elevated carbon monoxide concentrations. As a result, this is considered to be a **significant** impact.

Buildout of Alternative 3 would result in 675 more housing units and 1,950 more persons in the Planning Area than the proposed project. Therefore, in comparison to the proposed project, Alternative 3 would result in increased traffic volumes and thus increased concentration of carbon monoxide emissions from motor vehicle congestion. Impacts would be worse under Alternative 3 than under the proposed project.

Create Objectionable Odors Affecting a Substantial Number of People (Impact 4.3.6)

Subsequent land use activities associated with implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could include sources that could create **potentially significant** objectionable odors affecting a substantial number of people or expose new residents to existing sources of odor.

Implementation of Alternative 3 could also expose people to objectionable odors. Alternative 3 would result in increased residential development potential and increased population that could be exposed to odors. Therefore this impact would be worse under Alternative 3 than under the proposed project.

Result in a Cumulatively Considerable Net Increase of Nonattainment Criteria Pollutants and Precursors (Impact 4.3.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), in combination with cumulative development in the SFBAAB, would result in a **cumulatively considerable** net increase of VMT and thus ozone and coarse and fine particulate matter.

As discussed above, Alternative 3 would result in increased traffic volumes and thus increased emissions of ozone and coarse and fine particulate matter in comparison to the proposed project. Alternative 3 would contribute to cumulative impacts to a greater degree than the proposed project, and impacts would be worse under Alternative 3 than under the proposed project.

## 4.4 Traffic and Circulation

Impacts to Freeway Mainline (Impact 4.4.1)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in a **significant** increase in freeway mainline volumes during the AM and PM peak hours.

As discussed above, Alternative 3 would result in increased residential development potential and population in comparison to the proposed project. Therefore, Alternative 3 would result in increased traffic volumes and overall impacts to freeway mainlines would be worse under Alternative 3 than under the proposed project.

Conflicts with Acceptable v/c Ratios (Impact 4.4.2)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in a significant increase in v/c and decrease in LOS on study intersections during the AM and PM peak hours.

As discussed above, Alternative 3 would result in increased residential development potential and population in comparison to the proposed project. Therefore, Alternative 3 would result in increased traffic volumes and impacts would be worse under Alternative 3 than under the proposed project.

Project and Cumulative Conflicts with an Applicable Congestion Management Plan (Impacts 4.4.3 and 4.4.8)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would conflict with the multimodal transportation service objectives (MTSOs) identified in the West County Action Plan. This is considered a **significant** and **cumulatively considerable** impact.

As discussed under **Impact 4.4.3** in Section 4.4, Traffic and Circulation, the West County Action Plan dictates that all signalized intersections along San Pablo Avenue shall maintain LOS E or better. Likewise the West County Action Plan calls for maintaining LOS D or better along Appian Way. It is anticipated that buildout of Alternative 3 would also result in intersection LOS exceeding the MTSOs. Therefore, both Alternative 3 and the proposed project would conflicts with the MTSOs established by the West County Action Plan and impacts would be similar under both alternatives.

Cumulative Transportation Impacts (Impact 4.4.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would have **cumulatively considerable** contributions to cumulative impacts to local and regional transportation facilities.

Alternative 3 would result in increased residential development potential and population in comparison to the proposed project. Therefore, Alternative 3 would result in increased traffic volumes and cumulative impacts to local and regional transportation facilities would be worse under Alternative 3 than under the proposed project.

## 4.5 Noise

Exposure to Construction Noise (Impact 4.5.2)

Construction activities associated with the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in a **potentially significant** substantial temporary or periodic increase in ambient noise levels during construction activities and could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies.

Future development under Alternative 3 would also result in generation of noise levels in excess of standards during construction activities. Although Alternative 3 would result in more housing units and persons in the Planning Area than the proposed project, commercial development potential would be decreased in comparison to the proposed project. Therefore, construction noise impacts would be similar under Alternative 3 and the proposed project.

Project and Cumulative Exposure to Surface Transportation Noise (Impacts 4.5.3 and 4.5.7)

The proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in a **potentially significant** and **cumulatively considerable** permanent increase in ambient noise levels in the project vicinity above levels existing without the project and could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan, as a result of increased traffic on the roadway network. In addition, future development of noise-sensitive land uses could be exposed to roadway and/or railroad noise levels in excess of the City's noise standards.

Alternative 3 would result in more housing units and persons in the Planning Area than the proposed project. Therefore, Alternative 3 would result in increased traffic volumes, and project and cumulative impacts associated with transportation noise impacts would be worse under Alternative 3 than under the proposed project.

Exposure to Stationary Noise (Impact 4.5.5)

Subsequent development associated with the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in new noise-sensitive land uses encroaching upon existing or proposed stationary noise sources or new stationary noise sources encroaching upon existing or proposed noise-sensitive land uses. This could result in a substantial permanent increase in ambient noise levels in the project vicinity above existing levels or could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies. As a result, this impact is considered **potentially significant**.

Although Alternative 3 would result in more housing units and persons in the Planning Area than the proposed project, commercial development potential would be decreased in comparison to the proposed project. Therefore, stationary noise impacts would be similar under Alternative 3 and the proposed project.

Exposure to Groundborne Vibration (Impact 4.5.6)

The proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in exposure of persons to or generation of excessive groundborne vibration levels from railroad operations and/or construction activities. In particular, development of future land uses could occur within the projected 60 dBA CNEL noise contours of San Pablo Avenue, Pinole Valley Road, and Appian Way, resulting in potentially **significant** exposure of persons to railroad vibration or noise levels in excess of standards established in the local general plan.

Under Alternative 3, residential density in the Three Corridors Specific Plan would be increased in comparison to the proposed project. This would increase the potential exposure of persons to railroad vibration and noise levels in comparison to the proposed project. Therefore, impacts would be worse under Alternative 3 than under the proposed project.

### 4.6 Human Health/Risk of Upset

No significant impacts.

### 4.7 Biological Resources

Impacts to Sensitive Biological Communities (Impact 4.7.2)

Implementation of the proposed project would result in **potentially significant** disturbance, degradation, and removal of riparian habitat, coastal oak woodland, and wetland habitats.

Although Alternative 3 would result in more housing units and persons in the Planning Area than the proposed project, commercial development potential would be decreased in comparison to the proposed project. Therefore, buildout of Alternative 3 would result in impacts to riparian habitat, coastal oak woodland, and wetland habitats similar to the proposed project.

Impacts to Migratory Corridors (Impact 4.7.4)

Implementation of the proposed project could interfere substantially with the movement of native resident or migratory fish or wildlife species via habitat degradation due to additional traffic, increased human presence, and degradation of the water quality. This would be a **potentially significant** impact.

Alternative 3 would result more human presence and traffic than the proposed project, as well as similar impacts associated with water quality (see 4.9, Hydrology and Water Quality, below). Overall, impacts would be worse under Alternative 3 than under the proposed project.

Cumulative Impacts to Special-Status Species (Impact 4.7.6)

Implementation of the proposed General Plan and associated project components (Three Corridors Specific Plan and Zoning Code Update), together with past, present, and probable future projects in the Planning Area and larger regional context, would result in a **cumulatively considerable** loss of biological resources in the region.

Although Alternative 3 would result in more housing units and persons in the Planning Area than the proposed project, commercial development potential would be decreased in comparison to the proposed project. Therefore, buildout of Alternative 3 would result in contributions to direct and indirect loss of biological resources similar to the proposed project.

## 4.8 Geology and Soils

Seismic Hazards (Impact 4.8.1)

Damage to buildings and utilities in Pinole resulting from a seismic event is likely to be greatest on those sites underlain by deep, loose, compressible deposits of bay mud, non-engineered fill, and marginally stable hillside areas. Areas within the GPU Planning Area that are highly susceptible to damages resulting from ground shaking are located between San Pablo Avenue and the San Pablo Bay shoreline, in the western portions of the city, especially in the Tara Hills Mobile Home Park. This impact is **potentially significant**.

Both Alternative 3 and the proposed project would result in development in these areas. Furthermore, the City has adopted the CBC into its building standards for all development within the city limits. Future development under both Alternative 3 and the proposed project would be subject to CBC standards that address foundation design, shear wall strength, and other structural-related conditions. Compliance with CBC regulations would ensure the adequate design and construction of building foundations to resist soil movement under both alternatives, and impacts would therefore be similar under both alternatives.

Landslide/Slope Instability (Impact 4.8.3)

**Potentially significant** seismically induced landslides are likely to occur along the steep to intermediate hillside areas of the Planning Area. Additionally, areas within the Planning Area prone to slope instability include areas with pronounced and steeper slopes located along the East Bay Hills, areas where previous land sliding or soil creeping has occurred, areas where non-engineered grading and uncontrolled drainage on slopes has occurred, and areas with deep colluvial deposits.

As mentioned above, future development under both Alternative 3 and the proposed project would be subject to CBC standards, which would require all new development projects to conduct a seismic evaluation and to incorporate particular seismic design criteria to reduce ground shaking effects. Impacts would therefore be similar under both alternatives.

Location on Expansive and Unstable Soils (Impact 4.8.4)

Implementation of the proposed (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would expose buildings, pavements, and utilities to significant damage as a result of underlying expansive or unstable soil properties. This is considered a **potentially significant** impact.

Future development under Alternative 3 would also expose buildings, pavements, and utilities to significant damage as a result of underlying expansive or unstable soil properties. Although Alternative 3 would result in more housing units and persons in the Planning Area than the proposed project, commercial development potential would be decreased in comparison to the proposed project. Therefore, impacts would be similar under Alternative 3 and the proposed project.

## 4.9 Hydrology and Water Quality

Degrade Surface Water Quality (Impact 4.9.1)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in the discharge of polluted runoff during construction and operation of future urban development potentially violating water quality standards or otherwise substantially degrading surface water quality. This impact is **potentially significant**.

Future development under Alternative 3 also has the potential to discharge polluted runoff during construction and operation of future urban development. As Alternative 3 would result in more housing units and persons in the Planning Area but less commercial development, Alternative 3 would include similar amounts of impervious surface and sources of polluted runoff to the proposed project. Impacts under Alternative 3 would be similar to those under the proposed project.

Project and Cumulative Flooding Hazards (Impacts 4.9.6 and 4.9.8)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could expose additional people and/or structures to flooding, dam failure inundation, and/or sea level rise. This impact is considered to be **potentially significant**. In addition, the proposed project could increase impervious surfaces and alter drainage conditions and rates in the Planning Area, which could contribute to cumulative flood conditions in the Pinole Creek watershed and San Pablo Bay. This impact is considered **cumulatively considerable**.

Buildout of Alternative 3 would result in 675 more housing units and 1,950 more persons in the Planning Area than the proposed project and would thus expose more people to flooding, dam failure inundation, and/or sea level rise. Therefore, impacts under Alternative 3 would be worse than under the proposed project.

Cumulative Water Quality Impacts (Impact 4.9.7)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), in combination with other development activities within the watershed, would contribute to a **potentially cumulatively considerable** degradation of water quality from construction activities and increased urban runoff.

As discussed above, Alternative 3 would result in more housing units and persons in the Planning Area but less commercial development, thus resulting in similar amounts of impervious surface and sources of polluted runoff to the proposed project. Therefore, cumulative impacts under Alternative 3 would be similar to those under the proposed project.

### 4.10 Cultural Resources

Project and Cumulative Impacts to Prehistoric Resources, Historic Resources, and Human Remains (Impacts 4.10.1 and 4.10.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), along with foreseeable development in the region, could result in the potential disturbance of cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) and human remains. This would be a **potentially significant** project-level impact and a **cumulatively considerable** cumulative impact.

Future development under Alternative 3 also has the potential to disturb cultural resources and would be subject to the proposed General Plan policy that requires cultural resources studies (i.e., archaeological and historical investigations) for all discretionary projects. Therefore, impacts under Alternative 3 would be similar to those under the proposed project.

Undiscovered Paleontological Resources (Impacts 4.10.2 and 4.10.4)

Adoption of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could result in the potential damage or destruction of undiscovered paleontological resources. This is considered a **potentially significant** impact.

Future development under Alternative 3 also has the potential to damage or destroy undiscovered paleontological resources and would be subject to the proposed General Plan policy that requires project proponents to implement any mitigation necessary for the protection of paleontological resources discovered during construction activities. Therefore, impacts under Alternative 3 would be similar to those under the proposed project.

### 4.11 Visual Resources/Light and Glare

Daytime Glare and Nighttime Illumination (Impact 4.11.3)

Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would result in the intensification of land uses within the GPU Planning Area, which could create **potentially significant** new sources of daytime glare and nighttime illumination.

Buildout of Alternative 3 would result in 675 more housing units and 1,950 more persons in the Planning Area than the proposed project. However, commercial development potential would be decreased under Alternative 3. Therefore, new sources of daytime glare and nighttime illumination would be similar in comparison to the proposed project.

### 4.12 Public Services and Utilities

Cumulative Water Supply and Water Supply Infrastructure Impacts (Impact 4.12.6.2)

Implementation of the proposed General Plan Update and its associated project components would result in a **cumulatively considerable** contribution to the cumulative demand for water supply and associated infrastructure in EBMUD's service area.

Buildout of Alternative 3 would result in 675 more housing units and 1,950 more persons in the Planning Area than the proposed project. Therefore, Alternative 3 would have a greater contribution to the cumulative demand for water supply and would have worse impacts than the proposed project.

Increased Demand for Wastewater Service (Impact 4.12.7.1)

Implementation of the General Plan Update, Three Corridors Specific Plan, and Zoning Code Update would increase wastewater flows and demand for sanitary sewer facilities. Increased flows could exceed the capacity of the wastewater conveyance, treatment, and disposal systems of the City of Pinole Public Works Department and the West County Wastewater District. This is a **significant** impact.

Buildout of Alternative 3 would result in 675 more housing units and 1,950 more persons in the Planning Area than the proposed project. Therefore, Alternative 3 would have a greater impact on the demand for wastewater service and would have worse impacts than the proposed project.

## 6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. State CEQA Guidelines Section 15126(d)(2) states that if the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

**Table 6.0-4** provides a summary of the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the proposed project. The impact significance is identified for each alternative as well as the ranking of the impact as compared to the proposed project. A "B" ranking means that the alternative would either avoid or lessen the identified environmental impacts of the proposed project, while a "W" ranking means the alternative would result in a greater impact. The "S" ranking identifies where the alternative has a similar impact as the proposed project. Based upon the evaluation described in this section, Alternative 1 would be the environmentally superior alternative. As stated above, if the environmentally superior alternative is the No Project Alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives. After the No Project Alternative (Alternative 1), Alternative 2 would be the next environmentally superior alternative.

**TABLE 6.0-4**
**SUMMARY COMPARISON OF ALTERNATIVES**

| Impact | Alternatives | | |
|---|---|---|---|
| | Alternative 1 No Project Alternative | Alternative 2 Commercial Focus/Expanded Roadways Alternative | Alternative 3 Residential Focus/Expanded Transit |
| **Land Use** | | | |
| Land Use Incompatibilities (Impact 4.1.3) | B | B | W |
| **Air Quality** | | | |
| Conflict with the BAAQMD 2010 Clean Air Plan (Impact 4.3.1) | B | B | W |
| Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Short-Term, Construction Emissions (Impact 4.3.2) | B | S | S |
| Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Long-Term, Operational Emissions (Impact 4.3.3) | B | S | S |
| Exposure of Sensitive Receptors to Substantial Concentrations of Mobile-Source Carbon Monoxide (Impact 4.3.4) | B | B | W |
| Create Objectionable Odors Affecting a Substantial Number of People (Impact 4.3.6) | B | B | W |
| Result in a Cumulatively Considerable Net Increase of Nonattainment Criteria Pollutants and Precursors (Impact 4.3.7) | B | B | W |
| **Traffic and Circulation** | | | |
| Impacts to Freeway Mainline (Impact 4.4.1) | B | B | W |
| Conflicts with Acceptable v/c Ratios (Impact 4.4.2) | B | B | W |
| Project and Cumulative Conflicts with an Applicable Congestion Management Plan (Impacts 4.4.3 and 4.4.8) | S | S | S |
| Cumulative Transportation Impacts (Impact 4.4.7) | B | B | W |
| **Noise** | | | |
| Exposure to Construction Noise (Impact 4.5.2) | B | S | S |
| Project and Cumulative Exposure to Surface Transportation Noise (Impacts 4.5.3 | B | B | W |

| Impact | Alternatives | | |
|---|---|---|---|
| | Alternative 1 No Project Alternative | Alternative 2 Commercial Focus/Expanded Roadways Alternative | Alternative 3 Residential Focus/Expanded Transit |
| and 4.5.7) | | | |
| Exposure to Stationary Noise (Impact 4.5.5) | B | S | S |
| Exposure to Groundborne Vibration (Impact 4.5.6) | B | B | W |
| **Biological Resources** | | | |
| Impacts to Sensitive Biological Communities (Impact 4.7.2) | B | S | S |
| Impacts to Migratory Corridors (Impact 4.7.4) | B | B | W |
| Cumulative Impacts to Special-Status Species (Impact 4.7.6) | B | S | S |
| **Geology and Soils** | | | |
| Seismic Hazards (Impact 4.8.1) | S | S | S |
| Landslide/Slope Instability (Impact 4.8.3) | S | S | S |
| Location on Expansive and Unstable Soils (Impact 4.8.4) | B | S | S |
| **Hydrology and Water Quality** | | | |
| Degrade Surface Water Quality (Impact 4.9.1) | B | S | S |
| Project and Cumulative Flooding Hazards (Impacts 4.9.6 and 4.9.8) | B | B | W |
| Cumulative Water Quality Impacts (Impact 4.9.7) | B | S | S |
| **Cultural Resources** | | | |
| Project and Cumulative Impacts to Prehistoric Resources, Historic Resources, and Human Remains (Impacts 4.10.1 and 4.10.3) | W | S | S |
| Undiscovered Paleontological Resources (Impacts 4.10.2 and 4.10.4) | W | S | S |
| **Visual Resources/Light and Glare** | | | |
| Daytime Glare and Nighttime Illumination (Impact 4.11.3) | B | S | S |
| **Public Services and Utilities** | | | |
| Cumulative Water Supply and Water Supply Infrastructure Impacts (Impact | B | B | W |

| Impact | Alternatives | | |
|---|---|---|---|
| | Alternative 1 No Project Alternative | Alternative 2 Commercial Focus/Expanded Roadways Alternative | Alternative 3 Residential Focus/Expanded Transit |
| 4.12.6.2) | | | |
| Increased Demand for Wastewater Service (Impact 4.12.7.1) | B | B | W |

*Notes:*
*B: Alternative would result in better conditions than the proposed project.*
*S: Alternative would result in similar conditions as the proposed project.*
*W: Alternative would result in worse impacts than the proposed project.*