



DRAFT

ENVIRONMENTAL IMPACT REPORT

FOR THE

ENVISION CAMPBELL GENERAL PLAN AND HOUSING ELEMENT UPDATE (SCH: 2022030566)

SEPTEMBER 2022

Prepared for:

City of Campbell
City Hall 70 N. First St.
Campbell, CA 95008

Prepared by:

De Novo Planning Group
1020 Suncastr Lane, Suite 106
El Dorado Hills, CA 95762

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



DRAFT
ENVIRONMENTAL IMPACT REPORT

FOR THE
ENVISION CAMPBELL GENERAL PLAN AND HOUSING ELEMENT
UPDATE
(SCH: 2022030566)

SEPTEMBER 2022

Prepared for:

City of Campbell
City Hall 70 N. First St.
Campbell, CA 95008

Prepared by:

De Novo Planning Group
1020 Suncoast Lane, Suite 106
El Dorado Hills, CA 95762

DRAFT EIR

Chapter	Page Number
Executive Summary.....	ES-1
1.0 Introduction	1.0-1
1.1 Introduction	1.0-1
1.2 Purpose of the EIR	1.0-4
1.3 Type of EIR	1.0-4
1.4 Intended Uses of the EIR.....	1.0-5
1.5 Known Responsible and Trustee Agencies	1.0-5
1.6 Environmental Review Process.....	1.0-6
1.7 Organization and Scope	1.0-7
1.8 Comments Received on the Notice of Preparation	1.0-9
2.0 Project Description	2.0-1
2.1 Background and Overview.....	2.0-1
2.2 Project Location	2.0-6
2.3 Project Objectives.....	2.0-7
2.4 Description of Proposed General Plan Project	2.0-8
2.5 General Plan Buildout Analysis	2.0-17
2.6 Uses of the EIR and Required Agency Approvals.....	2.0-19
3.1 Aesthetics.....	3.1-1
3.1.1 Environmental Setting	3.1-3
3.1.2 Regulatory Setting	3.1-6
3.1.3 Impacts and Mitigation Measures	3.1-10
3.2 Agricultural and Forest Resources	3.2-1
3.2.1 Environmental Setting	3.2-1
3.2.2 Regulatory Setting	3.2-3
3.2.3 Impacts and Mitigation Measures	3.2-5
3.3 Air Quality	3.3-1
3.3.1 Existing Setting.....	3.3-1

TABLE OF CONTENTS

3.3.2 Regulatory Setting.....	3.3-11
3.3.3 Impacts and Mitigation Measures	3.3-19
3.4 Biological Resources.....	3.4-1
3.4.1 Environmental Setting	3.4-2
3.4.2 Regulatory Setting.....	3.4-17
3.4.3 Impacts and Mitigation Measures	3.4-24
3.5 Cultural Resources	3.5-1
3.5.1 Environmental Setting	3.5-1
3.5.2 Regulatory Setting.....	3.5-15
3.5.3 Impacts and Mitigation Measures	3.5-19
3.6 Geology and Soils.....	3.6-1
3.6.1 Environmental Setting	3.6-1
3.6.2 Regulatory Setting.....	3.6-15
3.6.3 Impacts and Mitigation Measures	3.6-18
3.7 Greenhouse Gases, Climate Change, and Energy	3.7-1
3.7.1 Environmental Setting	3.7-1
3.7.2 Regulatory Setting.....	3.7-7
3.7.3 Impacts and Mitigation Measures	3.7-21
3.8 Hazards and Hazardous Materials	3.8-1
3.8.1 Environmental Setting	3.8-1
3.8.2 Regulatory Setting.....	3.8-12
3.8.3 Impacts and Mitigation Measures	3.8-19
3.9 Hydrology and Water Quality	3.9-1
3.9.1 Environmental Setting	3.9-1
3.9.2 Regulatory Setting.....	3.9-9
3.9.3 Impacts and Mitigation Measures	3.9-20
3.10 Land Use, Population, and Housing	3.10-1
3.10.1 Environmental Setting	3.10-1
3.10.2 Regulatory Setting.....	3.10-11
3.10.3 Impacts and Mitigation Measures	3.10-16

TABLE OF CONTENTS

3.11 Mineral Resources	3.11-1
3.11.1 Environmental Setting	3.11-1
3.11.2 Regulatory Setting	3.11-3
3.11.3 Impacts and Mitigation Measures	3.11-4
3.12 Noise	3.12-1
3.12.1 Environmental Setting	3.12-1
3.12.2 Regulatory Setting	3.12-11
3.12.3 Impacts and Mitigation Measures	3.12-14
3.13 Public Services and Recreation	3.13-1
3.13.1 Environmental Setting	3.13-1
3.13.2 Regulatory Setting	3.13-13
3.13.3 Impacts and Mitigation Measures	3.13-19
3.14 Transportation and Circulation.....	3.14-1
3.14.1 Environmental Setting	3.14-1
3.14.2 Regulatory Setting	3.14-13
3.14.3 Impacts and Mitigation Measures	3.14-24
3.15 Utilities.....	3.15-1
3.15.1 Water Supplies.....	3.15-1
3.15.2 Wastewater	3.15-19
3.15.3 Stormwater Drainage.....	3.15-28
3.15.4 Solid Waste	3.15-38
3.16 Wildfire	3.16-1
3.16.1 Environmental Setting	3.16-1
3.16.2 Regulatory Setting	3.16-2
3.16.3 Impacts and Mitigation Measures	3.16-5
4.0 Other CEQA-Required Topics.....	4.0-1
4.1 Cumulative Setting and Impact Analysis.....	4.0-1
4.2 Growth-Inducing Effects	4.0-22
4.3 Significant Irreversible and Adverse Effects	4.0-24
4.4 Significant and Unavoidable Impacts.....	4.0-26

TABLE OF CONTENTS

5.0 Alternatives	5.0-1
5.1 CEQA Requirements.....	5.0-1
5.2 Alternatives Considered in this EIR.....	5.0-1
5.3 Environmental Analysis.....	5.0-10
6.0 Report Preparers.....	6.0-1
7.0 References	7.0-1

Table	Page Number
Table ES-1: Comparison of Alternatives to the Proposed Project.....	ES-3
Table ES-2: Project Impacts and Proposed Mitigation Measures	ES-5
Table 2.0-1: Acreage by Land Use Designation in the Proposed Land Use Map	2.0-16
Table 2.0-2: Growth Projections.....	2.0-17
Table 2.0-3: Potential New Growth in Planning Area Over Existing Conditions.....	2.0-18
Table 3.3-1: Common Sources of Health Effects for Criteria Air Pollutants	3.3-4
Table 3.3-2: Federal and State Ambient Air Quality Standards	3.3-7
Table 3.3-3: State and National Attainment Status.....	3.3-8
Table 3.3-4: Ambient Air Quality Monitoring Data (Santa Clara County).....	3.3-8
Table 3.3-5: Planning Area Vehicle Miles Traveled.....	3.3-23
Table 3.3-6: Odor Screening Distances for the General Plan Update.....	3.3-38
Table 3.4-1: Cover Types - California Wildlife Habitat Relationship System	3.4-3
Table 3.4-2: Special Status Plants Present or Potentially Present.....	3.4-5
Table 3.4-3: Special Status Animals Present or Potentially Present	3.4-9
Table 3.5-1: Resources Listed with the NWIC File Directory	3.5-5
Table 3.5-2: Buildings Listed on the Santa Clara County Historic Property Data File	3.5-7
Table 3.5-3: City of Campbell Potential Historic Properties Not Listed on Northwest Information Center or Historic Properties Directories	3.5-11
Table 3.5-4: City of Campbell Identified Landmarks and Historic District Properties Not Listed on Northwest Information or Historic Properties Directories	3.5-14
Table 3.6-1: Richter Magnitudes and Effects	3.6-3
Table 3.6-2: Modified Mercalli Intensities and Effects	3.6-4
Table 3.6-3: Significant Earthquakes in the Region	3.6-4
Table 3.6-4: Liquefaction Potential Based on Sediment Type and Age of Deposit	3.6-8
Table 3.6-5: Planning Area Soils.....	3.6-10

TABLE OF CONTENTS

Table 3.7-1:	Planning Area Vehicle Miles Traveled	3.7-24
Table 3.8-1:	Campbell Site Cleanup and Hazardous Facilities List (Envirostor).....	3.8-2
Table 3.8-2:	Campbell Geotracker Database LUST Sites.....	3.8-3
Table 3.8-3:	Campbell Geotracker Database UST Sites	3.8-5
Table 3.8-4:	Campbell Water Board Cleanup Sites.....	3.8-6
Table 3.8-5:	Elementary, Middle, and High Schools Serving Campbell	3.8-22
Table 3.9-1:	State of California Watershed Hierarchy Naming Convention.....	3.9-2
Table 3.9-2:	FEMA Delineated Flood Zones in Campbell.....	3.9-6
Table 3.9-3:	Santa Clara Subbasin Managed Recharge Facility Summary.....	3.9-28
Table 3.10-1:	Existing Assessed Land Uses	3.10-2
Table 3.10-2:	Population and Household Growth	3.10-9
Table 3.10-3:	Housing Units.....	3.10-10
Table 3.10-4:	Housing Units by Type (2020).....	3.10-10
Table 3.10-5:	Regional Housing Needs Allocation	3.10-12
Table 3.11-1:	Mineral Resources Classification System.....	3.11-1
Table 3.11-2:	AB 3098 List – Active Mines in Santa Clara County	3.11-2
Table 3.12-1:	Typical Noise Levels	3.12-3
Table 3.12-2:	Predicted Existing Traffic Noise Levels	3.12-6
Table 3.12-3:	Railroad Noise Measurement Results	3.12-7
Table 3.12-4:	Approximate Distances to the Railroad Noise Contours	3.12-8
Table 3.12-5:	Typical Stationary Source Noise Levels.....	3.12-9
Table 3.12-6:	Existing Continuous 24-Hour Ambient Noise Monitoring Results.....	3.12-10
Table 3.12-7:	Existing Short-Term Community Noise Monitoring Results	3.12-10
Table 3.12-8:	Significance of Changes in Noise Exposure	3.12-15
Table 3.12-9:	Effects of Vibration on People and Buildings	3.12-16
Table 3.12-10:	Vibration Source Levels for Construction Equipment	3.12-17
Table 3.12-11:	Existing vs Proposed General Plan.....	3.12-19
Table 3.12-12:	Construction Equipment Noise.....	3.12-26
Table 3.13-1:	Existing Park Facilities.....	3.13-10
Table 3.13-2:	Public Schools Serving Campbell	3.13-11
Table 3.14-1:	Roadway Classifications.....	3.14-2
Table 3.14-2:	Average Daily Traffic Volumes.....	3.14-6
Table 3.14-3:	Existing Transit Services.....	3.14-7
Table 3.14-4:	Proposed Project Land Use Summary	3.14-27
Table 3.14-5:	Service Populations.....	3.14-28

TABLE OF CONTENTS

Table 3.14-6:	External Station Adjustments at Bay Area Regional Boundary	3.14-29
Table 3.14-7:	Project Generated VMT Thresholds Based on Existing Conditions for the City of Campbell	3.14-34
Table 3.14-8:	Project’s Effect on VMT (Using Boundary VMT) Threshold Based on Cumulative (2040) Conditions for Santa Clara County	3.14-35
Table 3.14-9:	City Of Campbell Household Population And Employment Growth Forecasts	3.14-45
Table 3.14-10:	Campbell General Plan Buildout Comparison To Plan Bay Area 2040 Projections	3.14-46
Table 3.14-11:	Project Generated VMT for VMT Assessment	3.14-47
Table 3.14-12:	Project’s Effect on VMT (Using Boundary VMT) for VMT Assessment	3.14-56
Table 3.15-1:	Amount of Groundwater Pumped by SJW (AF/yr)	3.15-4
Table 3.15-2:	Basis of Water Year Data.....	3.15-9
Table 3.15-3:	Supply and Demand Comparison – Average Water Year (AF/yr) (a).....	3.15-10
Table 3.15-4:	Supply and Demand Comparison – Single-Dry Water Year (AF/yr) (a).....	3.15-10
Table 3.15-5:	Supply and Demand Comparison – Multiple-Dry Water Years (AF/yr)(a).....	3.15-11
Table 3.15-6:	2015 San Jose-Santa Clara RWF Flows and Available Capacities.....	3.15-20
Table 3.15-7:	Landfills Existing Daily Capacity and Estimates Closure Date.....	3.15-39
Table 3.15-8:	Solid Waste Generation Rates	3.15-40
Table 4.0-1:	Proposed and Existing General Plan – Acreage by Land Use Designation.....	4.0-3
Table 4.0-2:	Growth Projections - Proposed Land Use Map.....	4.0-4
Table 4.0-3:	Potential New Growth in Planning Area Over Existing Conditions	4.0-5
Table 4.0-4:	City Of Campbell Household Population And Employment Growth Forecasts	4.0-17
Table 4.0-5:	Campbell General Plan Buildout Comparison To Plan Bay Area 2040 Projections.....	4.0-17
Table 5.0-1:	Growth Projections By Alternative	5.0-4
Table 5.0-2:	Existing General Plan Alternative – Acreage by Land Use Designations	5.0-6
Table 5.0-3:	Alternative 3 – Acreage By Land Use Designation.....	5.0-9
Table 5.0-4:	Comparison of Alternatives to the Proposed Project.....	5.0-16

Figures

Note: Figures are located at the end of the chapters.

Figure 2.0-1 Project Vicinity

Figure 2.0-2 Proposed Land Use Map

Figure 3.4-1 Land Cover Types

Figure 3.4-2 California Natural Diversity Database – 1-Mile Radius Search

Figure 3.4-3 California Natural Diversity Database – 9-Quad Search

Figure 3.6-1 Faults Map

Figure 3.6-2 Liquefaction Susceptibility

Figure 3.6-3 Soils Map

Figure 3.6-4 Shrink-Swell Potential of Soils

Figure 3.6-5 Landslide Susceptibility

Figure 3.8-1 Fire Hazards Map

Figure 3.9-1 Hydrologic Areas

Figure 3.9-2 Hydrologic Units

Figure 3.9-2 FEMA Flood Zone Designations

Figure 3.9-3 Dam Inundation Areas

Figure 3.10-1 Assessed Land Uses

Figure 3.10-2 Special Planning Areas

Figure 3.12-1 Noise Measurement Locations

Figure 3.13-1 Fire Stations

Figure 3.13-1 Parks Map

Figure 3.14-1: Roadway Classification

Figure 3.14-2: Existing Transportation Network

Figure 3.14-3: Existing and Future Bikeway System Map

Figure 3.14-4: Gaps in Pedestrian Facilities

Figure 3.14-5: Measuring Vehicle Miles Traveled (VMT)

Figure 5.0-1 Existing General Plan Land Use Map

Figure 5.0-2 Alternative 3 Land Use Map

TABLE OF CONTENTS

Appendices

Appendix A – Notice of Preparation and NOP Comments

Appendix B – Noise Inputs and Results

Appendix C – Transportation Study, Modeling and Supporting Transportation Data

Appendix D – Water Supply Assessment

PURPOSE

The City of Campbell (City) as lead agency, determined that the Campbell General Plan Update (General Plan, or Project) is a "Project" within the definition of the California Environmental Quality Act (CEQA), and requires the preparation of an Environmental Impact Report (EIR). This Draft EIR has been prepared to evaluate the environmental impacts associated with implementation of the Project. This EIR is designed to fully inform decision-makers in the City, other responsible and trustee agencies, and the general public of the potential environmental consequences of approval and implementation of the General Plan. A detailed description of the proposed Project, including the components and characteristics of the Project, project objectives, and how the EIR will be used, is provided in Chapter 2.0 (Project Description).

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the Project that are known to the City, raised during the Notice of Preparation (NOP) scoping process, or were raised during preparation of the Draft EIR. This Draft EIR addresses the potentially significant impacts associated with aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, geology, greenhouse gas emissions and energy, hazards and hazardous materials, hydrology and water quality, land use planning and population/housing, mineral resources, noise, public services and recreation, transportation, utilities and service systems, wildfire, and cumulative impacts.

The City received 9 written comment letters on the NOP. Additionally, oral comments were also received during the Public Scoping Meeting held on April 12, 2022. Copies of these letters are provided in Appendix A of this Draft EIR and the comments are briefly summarized below.

- Native American Heritage Commission: The Native American Heritage Commission provided direction regarding tribal consultation in accordance with Assembly Bill 52 and Senate Bill 18.
- Santa Clara Valley Audubon Society: The Audubon Society suggested information related to bird safe design and light pollution impacts.
- California Department of Fish and Wildlife (CDFW): The CDFW offers comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.
- Office of Planning & Environmental Analysis Department of Toxic Substances Control: DTSC recommends that the following issues be evaluated: hazardous wastes/substances, contaminated soils, and demolition surveys.
- California Department of Transportation (Caltrans): Caltrans suggested information to include in the EIR traffic study and provided input with respect to content of the General Plan related to Travel Demand Analysis planning, Transportation Impact Fees, and equitable access.

- Valley Transportation Authority (VTA): VTA provided comments related to the reduction of Vehicle Miles Traveled, Transportation Network Assumptions, and equity planning.
- Sierra Club Loma Prieta Chapter: The Sierra Club provided comments related to Biotechnology developments and sitting issues in shoreline areas, identified as flood zones, and sea levels rise and 100 year flood events which can create vulnerabilities for the Bay ecology.
- San Jose Water Company (Valley Water): Valley Water Provided comments related to water supplies, groundwater recharge, storm water quality, and the future coordination to ensure that there are adequate water supplies to serve proposed and future development
- Planning Commission (PC) Scoping Meeting Notes: comments offered during the public scoping meeting included topics related to: water resources, fire, GHG, noise, air quality, traffic, public services and utilities, biological resources, and lighting standards.
- Nancy Tepperman: The commenter is concerned about maintaining community character and roadway safety. This commenter also noted that additional allowed development would necessitate the need for more parks, and current development has pressured existing parks within the city.

ALTERNATIVES TO THE PROPOSED PROJECT

The CEQA Guidelines require an EIR to describe a reasonable range of alternatives to the Project or to the location of the Project which would reduce or avoid significant impacts, and which could feasibly accomplish the basic objectives of the proposed Project. The alternatives analyzed in this EIR include the following:

- **Alternative 1: No Project Alternative.** Under Alternative 1, the City would not adopt the General Plan Update. The existing Campbell General Plan would continue to be implemented and no changes to the General Plan, including the Land Use Map, Circulation Diagram, goals, policies, or actions would occur. Subsequent projects, such as amending the Municipal Code (including the zoning map), would not occur. The Existing General Plan Land Use Map is shown on Figure 5.0-1.
- **Alternative 2: Modified Project Alternative.** Under Alternative 2, the City would adopt the updated General Plan policy document, but would retain the existing land use map. This alternative would result in the same growth as the existing General Plan Alternative 1, but would implement the updated goals, policies, and actions found in the General Plan Update. This Alternative would result in less residential growth than the proposed Project or Alternative 3.
- **Alternative 3: Corridor Enhancements:** Alternative 3 is a residential and employment growth-oriented option, which identifies the Bascom and Hamilton corridors for mixed use development, revitalization, and appropriate transitions from the more intense urban development densities located adjacent to Campbell in the City of San Jose. This alternative also promotes and encourages additional high tech and office uses within the Research and Development land use designation. This alternative would allow for more residential and

employment growth than the existing General Plan and Alternative 2. Figure 5.0-2 depicts the Land Use Map proposed for Alternative 3. This alternative was developed as part of the City's review of potential growth strategies and land use changes during development of the Preferred Land Use Map.

A comparative analysis of the proposed General Plan and each of the Project alternatives is provided in Chapter 5.0, and is shown in Table ES-1 below. The table includes a numerical scoring system, which assigns a score of 1 to 5 to each of the alternatives with respect to how each alternative compares to the proposed project in terms of the severity of the environmental topics addressed in this EIR. A score of "3" indicates that the alternative would have the same level of impact when compared to the proposed project. A score of "1" indicates that the alternative would have a better (or reduced) impact when compared to the proposed project. A Score of "2" indicates that the alternative would have a slightly better (or slightly reduced) impact when compared to the proposed project. A score of "4" indicates that the alternative would have a slightly worse (or slightly increased) impact when compared to the proposed project. A score of "5" indicates that the alternative would have a worse (or increased) impact when compared to the proposed project. The project alternative with the lowest total score is considered the environmentally superior alternative.

As shown in ES-1, the proposed Project is the environmentally superior alternative when looked at in terms of the potential to reduce significant environmental impacts identified throughout this EIR. All of the alternatives fail to reduce any significant and unavoidable impacts to a less than significant level. Throughout the preparation of the General Plan Update, the City Council, Planning Commission, and GPAC all expressed a desire and commitment to ensuring that the General Plan not only reflect the community's values and priorities, but also serve as a self-mitigating document and avoid significant environmental impacts to the greatest extent feasible. To that end, the proposed General Plan includes the fully range of feasible minimization policies and actions to reduce potential impacts to the greatest extent possible. The General Plan Update provides for high density mixed-use areas consistent with transit oriented development principles. It should be noted that other impacts that were identified as less than significant throughout the Draft EIR such as noise and aesthetics may be slightly increased when comparing the proposed Project to alternatives with less overall development potential, however this would not outweigh the overall benefit of the proposed Projects Land Use Map and updated policy guidance ability to reduce significant impacts to the greatest extent feasible when compared to all other alternatives. As such, is the environmentally superior alternative for the purposes of this EIR analysis.

TABLE ES-1: COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

<i>ENVIRONMENTAL ISSUE</i>	<i>PROPOSED PROJECT</i>	<i>ALTERNATIVE 1 (NO PROJECT)</i>	<i>ALTERNATIVE 2 (MODIFIED)</i>	<i>ALTERNATIVE 3 (CORRIDOR ENHANCEMENTS)</i>
Air Quality	3 – Same	2 – Slightly Better	1 – Better	3 – Same
Greenhouse Gases, Climate Change, and Energy	3 – Same	5 – Worse	5 – Worse	4 – Slightly Worse
Transportation and Circulation	3 – Same	5 –Worse	5 –Worse	4 – Slightly Worse
Irreversible Effects	3 – Same	2 – Slightly Better	2 – Slightly Better	2 – Slightly Better
SUMMARY	12	14	13	13

SUMMARY OF IMPACTS AND MITIGATION MEASURES

In accordance with the CEQA Guidelines, this EIR focuses on the Project's significant effects on the environment. The CEQA Guidelines defines a significant effect as a substantial adverse change in the physical conditions which exist in the area affected by the proposed Project. A less than significant effect is one in which there is no long or short-term significant adverse change in environmental conditions. Some impacts are reduced to a less than significant level with the implementation of mitigation measures and/or compliance with policies and regulations.

The environmental impacts of the proposed Project, and the level of significance are summarized in Table ES-2.

TABLE ES-2: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
AESTHETICS AND VISUAL RESOURCES			
Impact 3.1-1: General Plan implementation would not have a substantial adverse effect on a scenic vista	LS	<i>None Required</i>	LS
Impact 3.1-2: General Plan implementation would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a State scenic highway	LS	<i>None Required</i>	LS
Impact 3.1-3: General Plan implementation would not, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings, or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality	LS	<i>None Required</i>	LS
Impact 3.1-4: General Plan implementation could result in the creation of new sources of nighttime lighting and daytime glare	LS	<i>None Required</i>	LS
AGRICULTURAL AND FOREST RESOURCES			
Impact 3.2-1: General Plan implementation would result in the conversion of farmlands, including Prime Farmland and Unique Farmland, to non-agricultural use	NI	<i>None Required</i>	NI
Impact 3.2-2: General Plan implementation would not result in conflicts with existing zoning for agricultural use, or a Williamson Act contract	NI	<i>None Required</i>	NI
Impact 3.2-3: Result in the loss of forest land or conversion of forest land to non-forest use	NI	<i>None Required</i>	NI
Impact 3.2-4: General Plan implementation would not involve other changes in the existing environment which, due to their location or	NI	<i>None Required</i>	NI

*CC – cumulatively considerable**LCC – less than cumulatively considerable**LS – less than significant**PS – potentially significant**SU – significant and unavoidable**NI – No Impact*

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use			
AIR QUALITY			
Impact 3.3-1: General Plan implementation would not conflict with or obstruct implementation of the applicable air quality plan	LS	<i>None Required</i>	LS
Impact 3.3-2: General Plan implementation could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard	LS	<i>None Required</i>	LS
Impact 3.3-3: General Plan implementation would expose sensitive receptors to substantial pollutant concentrations	PS	<i>Minimized to the greatest extent feasible through General Plan Policies and Actions. No feasible mitigation is available.</i>	SU
Impact 3.3-4: General Plan implementation would not result in other emissions (such as those leading to odors adversely affecting a substantial number of people)	LS	<i>None Required</i>	LS
BIOLOGICAL RESOURCES			
Impact 3.4-1: General Plan implementation could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	LS	<i>None Required</i>	LS
Impact 3.4-2: General Plan implementation could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies,	LS	<i>None Required</i>	LS

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

PS – potentially significant

SU – significant and unavoidable

NI – No Impact

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service			
Impact 3.4-3: General Plan implementation could have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	LS	<i>None Required</i>	LS
Impact 3.4-4: General Plan implementation would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	LS	<i>None Required</i>	LS
Impact 3.4-5: The General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	LS	<i>None Required</i>	LS
Impact 3.4-6: General Plan implementation would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan	LS	<i>None Required</i>	LS
CULTURAL RESOURCES			
Impact 3.5-1: General Plan implementation could cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to Section 15064.5	LS	<i>None Required</i>	LS
Impact 3.5-2: Implementation of the General Plan could lead to the disturbance of any human remains	LS	<i>None Required</i>	LS
Impact 3.5-3: Cause a substantial adverse change in the significance of a tribal cultural resource,	LS	<i>None Required</i>	LS

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

PS – potentially significant

SU – significant and unavoidable

NI – No Impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
defined in Public Resources Code Section 21074, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or a resource determined by the lead agency			
GEOLOGY AND SOILS			
Impact 3.6-1: General Plan implementation has the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides	LS	None Required	LS
Impact 3.6-2: General Plan implementation has the potential to result in substantial soil erosion or the loss of topsoil	LS	None Required	LS
Impact 3.6-3: General Plan implementation has the potential to result in development located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse	LS	None Required	LS
Impact 3.6-4: General Plan implementation has the potential to result in development on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	LS	None Required	LS
Impact 3.6-5: General Plan implementation does not have the potential to have soils incapable of adequately supporting the use of septic tanks or	NI	None Required	NI

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

PS – potentially significant

SU – significant and unavoidable

NI – No Impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
alternative waste water disposal systems where sewers are not available for the disposal of waste water			
Impact 3.6-6: General Plan implementation has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	LS	None Required	LS
GREENHOUSE GASES, CLIMATE CHANGE AND ENERGY			
Impact 3.7-1: Project implementation could generate greenhouse gas emissions that could have a significant impact on the environment and could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	PS	Minimized to the greatest extent feasible through General Plan Policies and Actions. No feasible mitigation is available.	SU
Impact 3.7-2: Project implementation has the potential to result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency	LS	None Required	LS
HAZARDS AND HAZARDOUS MATERIALS			
Impact 3.8-1: General Plan implementation has the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	LS	None Required	LS
Impact 3.8-2: General Plan implementation has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials,	LS	None Required	LS

CC – cumulatively considerable

PS – potentially significant

LCC – less than cumulatively considerable

SU – significant and unavoidable

LS – less than significant

NI – No Impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
substances, or waste within one-quarter mile of an existing or proposed school			
Impact 3.8-3: General Plan implementation has the potential to have projects located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5	LS	None Required	LS
Impact 3.8-4: General Plan implementation is not located within an airport land use plan, two miles of a public airport or public use airport, and would not result in a safety hazard for people residing or working in the project area	LS	None Required	LS
Impact 3.8-5: General Plan implementation has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LS	None Required	LS
Impact 3.8-6: General Plan implementation has the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires	LS	None Required	LS
HYDROLOGY AND WATER QUALITY			
Impact 3.9-1: General Plan implementation could violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality or obstruct implementation of a water quality control plan	LS	None Required	LS
Impact 3.9-2: General Plan implementation could result in the depletion of groundwater supplies or interfere substantially with groundwater recharge or conflict with a groundwater management plan	LS	None Required	LS
Impact 3.9-3: General Plan implementation could alter the existing drainage pattern in a manner	LS	None Required	LS

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

PS – potentially significant

SU – significant and unavoidable

NI – No Impact

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
which would result in substantial erosion, siltation, flooding, impeded flows, or polluted runoff			
Impact 3.9-4: General Plan implementation would not release pollutants due to project inundation by flood hazard, tsunami, or seiche	LS	<i>None Required</i>	LS
LAND USE, POPULATION AND HOUSING			
Impact 3.10-1: General Plan implementation would not physically divide an established community	LS	<i>None Required</i>	LS
Impact 3.10-2: General Plan implementation would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	LS	<i>None Required</i>	LS
Impact 3.10-3: General Plan implementation would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	LS	<i>None Required</i>	LS
Impact 3.10-4: General Plan implementation would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	LS	<i>None Required</i>	LS
MINERAL RESOURCES			
Impact 3.11-1: General Plan implementation would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	NI	<i>None Required</i>	NI
Impact 3.11-2: General Plan implementation would not result in the loss of availability of a	NI	<i>None Required</i>	NI

CC – cumulatively considerable

PS – potentially significant

LCC – less than cumulatively considerable

SU – significant and unavoidable

LS – less than significant

NI – No Impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan			
NOISE			
Impact 3.12-1: General Plan implementation may result in exposure to significant traffic noise sources	LS	<i>None Required</i>	LS
Impact 3.12-2: General Plan implementation may result in exposure to excessive railroad noise sources	LS	<i>None Required</i>	LS
Impact 3.12-3: Implementation of the General Plan could result in the generation of excessive stationary noise sources	LS	<i>None Required</i>	LS
Impact 3.12-4: General Plan implementation may result in an increase in construction noise sources	LS	<i>None Required</i>	LS
Impact 3.12-5: General Plan implementation may result in construction vibration	LS	<i>None Required</i>	LS
Impact 3.12-6: General Plan implementation may result in exposure to groundborne vibration	LS	<i>None Required</i>	LS
PUBLIC SERVICES AND RECREATION			
Impact 3.13-1: General Plan implementation could result in adverse physical impacts on the environment associated with the need for new governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts and the provision of public services	LS	<i>None Required</i>	LS
Impact 3.13-2: General Plan implementation may result in adverse physical impacts associated with the deterioration of existing parks and recreation	LS	<i>None Required</i>	LS

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

PS – potentially significant

SU – significant and unavoidable

NI – No Impact

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
facilities or the construction of new parks and recreation facilities			

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

PS – potentially significant

SU – significant and unavoidable

NI – No Impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
TRANSPORTATION AND CIRCULATION			
Impact 3.14-1: General Plan implementation may conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities	PS	<i>Minimized to the greatest extent feasible through General Plan Policies and Actions. No feasible mitigation is available.</i>	SU
Impact 3.14-2: General Plan implementation would result in a significant VMT impact or be inconsistent with CEQA Guidelines section 15064.3, subdivision (a)	PS	<i>Minimized to the greatest extent feasible through General Plan Policies and Actions. No feasible mitigation is available.</i>	SU
Impact 3.14-3: General Plan implementation would not substantially increase hazards due to a geometric design feature or incompatible use	LS	<i>None Required</i>	LS
Impact 3.14-4: General Plan implementation would not result in inadequate emergency access	LS	<i>None Required</i>	LS
UTILITIES AND SERVICE SYSTEMS			
Impact 3.15-1: General Plan implementation would result in sufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years	LS	<i>None Required</i>	LS
Impact 3.15-2: General Plan implementation may require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LS	<i>None Required</i>	LS
Impact 3.15-3: General Plan implementation has the potential to result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	LS	<i>None Required</i>	LS

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

PS – potentially significant

SU – significant and unavoidable

NI – No Impact

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
Impact 3.15-4: General Plan implementation may require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects	LS	<i>None Required</i>	LS
Impact 3.15-5: General Plan implementation may require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects	LS	<i>None Required</i>	LS
Impact 3.15-6: General Plan implementation would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, and would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals	LS	<i>None Required</i>	LS
WILDFIRES			
Impact 3.16-1: General Plan implementation would not have a significant impact related to wildfire risks associated with lands in or near State Responsibility Areas or lands classified as very high fire hazard severity zones	NI	<i>None Required</i>	NI
OTHER CEQA-REQUIRED TOPICS			
Impact 4.1: Cumulative degradation of the existing visual character of the region	LCC	<i>None Required</i>	LCC
Impact 4.2: Cumulative impact to agricultural lands and resources.	LCC	<i>None Required</i>	LCC
Impact 4.3: Cumulative impact on the region's air quality	LCC	<i>None Required</i>	LCC

CC – cumulatively considerable

PS – potentially significant

LCC – less than cumulatively considerable

SU – significant and unavoidable

LS – less than significant

NI – No Impact

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
Impact 4.4: Cumulative loss of biological resources, including habitats and special status species	LCC	None Required	LCC
Impact 4.5: Cumulative impacts on known and undiscovered cultural resources	LCC	None Required	LCC
Impact 4.6: Cumulative impacts related to geology and soils	LCC	None Required	LCC
Impact 4.7: Cumulative impacts related to greenhouse gases, climate change, and energy	PS	Minimized to the greatest extent feasible through General Plan Policies and Actions. No feasible mitigation is available.	CC and SU
Impact 4.8: Cumulative impacts related to hazardous materials and human health risks	LCC	None Required	LCC
Impact 4.9: Cumulative impacts related to hydrology and water quality	LCC	None Required	LCC
Impact 4.10: Cumulative impacts related to local land use, population, and housing	LCC	None Required	LCC
Impact 4.11: Cumulative impacts related to mineral resources	LCC	None Required	LCC
Impact 4.12: Cumulative impacts related to noise	LCC	None Required	LCC
Impact 4.13: Cumulative impacts to public services and recreation	LCC	None Required	LCC
Impact 4.14: Cumulative impacts on the transportation network	PS	Minimized to the greatest extent feasible through General Plan Policies and Actions. No feasible mitigation is available.	CC and SU
Impact 4.15: Cumulative impacts related to utilities	LCC	None Required	LCC
Impact 4.16: Cumulative impact related to wildfire	LCC	None Required	LCC
Impact 4.17: Irreversible and adverse effects	LCC	None Required	LCC

CC – cumulatively considerable

PS – potentially significant

LCC – less than cumulatively considerable

SU – significant and unavoidable

LS – less than significant

NI – No Impact

1.1 INTRODUCTION

In 2016, the City of Campbell embarked on multi-year process to update the City's General Plan. The General Plan is the overarching policy document that guides land use, housing, transportation, infrastructure, community design, and other policy decisions. State law requires every city and county in California to prepare and maintain a general plan planning document. The General Plan is the City's "constitution" or "blueprint" for future development of the city, and provides the policy guidance for achieving the community's vision. In 2021, the City initiated an update to the Housing Element. The Housing Element is updated every eight years to take into account the changing needs of the community and to comply with state law. The Housing Element includes a Housing Sites Inventory that shows the locations where housing can be built and is supported by goals, policies, and strategies aimed at meeting the community's housing needs.

The Housing Element is a component of the General Plan. Throughout this EIR, references to the General Plan include the Housing Element.

As part of the General Plan Update process, a General Plan Existing Conditions Report was prepared to establish a baseline of existing conditions in the city. Additionally, an Issues and Opportunities Report and a Land Use Alternatives Report were prepared to identify the challenges facing the community, to provide an opportunity for citizens and policymakers to come together in a process of developing a common vision for the future, and to identify a range of land use options available to the City as the General Plan Land Use Map was modified and updated.

The updated Campbell General Plan includes a framework of goals, policies, and actions that will guide the community toward its common vision, and is supported by an updated General Plan Land Use Map.

CAMPBELL GENERAL PLAN UPDATE

General Plan Policy Document

The Policy Document contains the goals, policies, and strategies related to various elements of the General Plan. The General Plan must address at least seven elements - or issue categories - to the extent that they are relevant locally. These state-mandated elements include: land use, circulation, housing, open space, conservation, noise, and safety. The City may also address other topics of community interest in the General Plan, such as economic development, community health and wellness, utilities and services, and sustainability. The General Plan sets out the goals, policies, and action items in each of these areas and serves as a policy guide for how the City will make key planning decisions in the future. It also identifies how the City will interact with Santa Clara County, adjacent and nearby cities, and other local, regional, State, and Federal agencies.

The Policy Document contains the goals and policies that will guide future decisions within the city. It also identifies action programs that will ensure the goals and policies in the General Plan are carried out. As part of the General Plan Update, the City and the consultant team also prepared

several supporting documents that serve as the building blocks for the Policy Document. A description of these reports is as follows:

Existing Conditions Report

As part of the General Plan Update process, the Existing Conditions Report establishes a baseline of existing conditions in the city. To prepare a meaningful General Plan, existing conditions must be understood and documented. The Existing Conditions Report identifies development patterns, natural resources, socioeconomic conditions, and environmental constraints in the city, and identifies the regulatory environment for each topic. This report is a resource for the City Council, Planning Commission, public, General Plan Advisory Committee (GPAC), City staff, and the consultant team for the General Plan Update and Environmental Impact Report (EIR). The Existing Conditions Report makes extensive use of maps and graphics to help make it accessible to the general public. The Existing Conditions Report provides background data and serves as a technical framework, while the General Plan will focus on goals, policies, and action programs. The Existing Conditions Report is available online at:

Document Center:

<https://campbell.generalplan.org/content/documents-maps>

Direct Link:

https://static1.squarespace.com/static/5727860527d4bd23efdf96db/t/58a5e104ebbd1a8a00f65f3/1487266085475/Campbell_Existing_Conditions+Report_final.pdf

Campbell Community Profile

To prepare a meaningful General Plan, existing conditions must be understood and documented. This Community Profile (pdf) summarizes key aspects of the existing conditions report into a user friendly format that summarizes key development patterns, natural resources, socioeconomic conditions, and environmental constraints in the city that must be considered when charting the course for Campbell's future.

Document Center:

<https://campbell.generalplan.org/content/documents-maps>

Direct Link:

https://static1.squarespace.com/static/5727860527d4bd23efdf96db/t/591f73fc1e5b6ca6060332a2/1495233542128/FinalDraft_ERC_Summary042717_Web.pdf

Issues and Opportunities Report

Based on public input from community surveys, information contained in the Existing Conditions Report, General Plan Advisory Committee meetings, and initial input provided by the City Council, the Issues and Opportunities Report identifies key issues and opportunities to be addressed in the

General Plan and summarizes input provided by stakeholders. The Issues and Opportunities Report provides the public, the General Plan Advisory Committee, the Planning Commission, and the City Council with tools and information for the development of the General Plan Policy Document and associated Land Use and Circulation Maps. The Issues and Opportunities Report is available online at:

Document Center:

<https://campbell.generalplan.org/content/documents-maps>

Direct Link:

https://static1.squarespace.com/static/5727860527d4bd23efdf96db/t/596551bbb8a79b8a44c7a457/1499812290895/Campbell_IOR_Final.pdf

Land Use Alternatives Report

This report presents several different Land Use Map alternatives. An analysis of the land use, circulation, fiscal viability, economic development, and public services and infrastructure effects relative to each alternative is provided. The Alternatives Report is available online at:

Document Center:

<https://campbell.generalplan.org/content/documents-maps>

Direct Link:

https://static1.squarespace.com/static/5727860527d4bd23efdf96db/t/5ae151c60e2e72a55658ac72/1524715993516/Campbell LUA_Final.pdf

Environmental Impact Report

An EIR responds to the requirements of the California Environmental Quality Act (CEQA) as set forth in Sections 15126, 15175, and 15176 of the CEQA Guidelines. The Planning Commission and City Council will use the EIR during the General Plan Update process in order to understand the potential environmental implications associated with implementing the General Plan. This EIR was prepared concurrently with the General Plan in order to facilitate the development of a General Plan that minimizes or reduces potential environmental impacts. In other words, as environmental impacts associated with the new General Plan, including the Land Use Map, were identified; policies and actions were incorporated into the General Plan policy document, in order to reduce or avoid potential environmental impacts, where feasible.

1.2 PURPOSE OF THE EIR

The City of Campbell, as lead agency, determined that the Campbell General Plan Update is a "Project" within the meaning of CEQA. CEQA requires the preparation of an EIR prior to approving any project that may have a significant impact on the environment. For the purposes of CEQA, the term "Project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

This Draft EIR has been prepared according to CEQA requirements to evaluate the potential environmental impacts associated with the implementation of the Campbell General Plan. Copies of the Public Draft General Plan and Housing Element are located on the Campbell General Plan Update website, at www.campbell.generalplan.org. The Draft EIR also discusses alternatives to the General Plan, and identifies policies and actions that will offset, minimize, or otherwise avoid potentially significant environmental impacts. This Draft EIR has been prepared in accordance with CEQA, California Resources Code Section 21000 et seq.; the Guidelines for the California Environmental Quality Act (California Code of Regulations, Title 14, Chapter 3); and the rules, regulations, and procedures for implementing CEQA as adopted by the City of Campbell.

An EIR must disclose the expected direct and indirect environmental impacts associated with a Project, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed Project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize significant environmental impacts of proposed development.

1.3 TYPE OF EIR

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a Program EIR pursuant to CEQA Guidelines Section 15168. Section 15168 states:

“A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

- 1) Geographically;
- 2) As logical parts in the chain of contemplated actions;
- 3) In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program; or
- 4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.”

The program-level analysis considers the broad environmental effects of the proposed Project. This EIR may be used to evaluate subsequent projects and activities under the proposed Project. This EIR is intended to provide the information and environmental analysis necessary to assist public agency

decision-makers in considering approval of the proposed Project, but not necessarily to the level of detail to consider approval of subsequent development projects that may occur after adoption of the General Plan.

Additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's consistency with the General Plan and the analysis in this EIR, as required under CEQA. It may be determined that some future projects or infrastructure improvements may not require any further environmental review. When individual subsequent projects or activities under the General Plan are proposed, the lead agency that would approve and/or implement the individual project will examine the projects or activities to determine whether their effects were adequately analyzed in this program EIR (CEQA Guidelines Section 15168). If the projects or activities would have no effects beyond those disclosed in this EIR, no further CEQA compliance would be required.

1.4 INTENDED USES OF THE EIR

The City of Campbell, as the lead agency, has prepared this EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption of the Campbell General Plan, including the Housing Element, and subsequent implementation of projects consistent with the General Plan. The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the General Plan. Subsequent actions that may be associated with the General Plan are identified in Chapter 2.0, Project Description. This EIR may also be used by other local regional agencies.

1.5 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

The term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the project or an aspect of the project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386). While no Responsible Agencies or Trustee Agencies are responsible for approvals associated with adoption of the Campbell General Plan, implementation of future projects within Campbell may require permits and approvals from such agencies, which may include the following:

- California Department of Fish and Wildlife (CDFW);
- California Department of Transportation (Caltrans);
- Regional Water Quality Control Board (RWQCB);

- U.S. Army Corps of Engineers (ACOE);
- U.S. Fish and Wildlife Service (USFWS);
- Santa Clara County Local Agency Formation Commission (LAFCO);
- Bay Area Air Quality Management District (BAAQMD);

1.6 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION

The City of Campbell circulated a Notice of Preparation (NOP) of an EIR for the proposed project on March 23, 2022 to trustee and responsible agencies, the State Clearinghouse, and the public. A scoping meeting was held on April 12, 2022 at the City of Campbell City Hall. Public comments on the NOP related to the EIR were presented or submitted during the scoping meeting. During the 30-day public review period for the NOP, which ended on April 25, 2022, 9 written comment letters were received on the NOP. A summary of the NOP commenters is provided later in this chapter. The NOP and all comments received on the NOP are presented in Appendix A.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the project, description of the environmental setting, identification of the project's direct and indirect impacts on the environment and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. Upon completion of the Draft EIR, the City of Campbell will file the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period.

PUBLIC NOTICE/PUBLIC REVIEW

Concurrent with the NOC, the City of Campbell will provide a public notice of availability for the Draft EIR, and invite comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA requirements, the review period for this Draft EIR is forty-five (45) days. Public comment on the Draft EIR will be accepted in written form to the address below or by email. All comments or questions regarding the Draft EIR should be addressed to:

Stephen Rose, Senior Planner
City Hall
70 N. First St., Campbell, CA 95008
Email: stephenr@campbellca.gov

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to both oral and written comments received during the public review period and include any modifications to the EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City of Campbell City Council will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete," the City Council may certify the Final EIR in accordance with CEQA. As set forth by CEQA Guidelines Section 15151, the standards of adequacy require an EIR to provide a sufficient degree of analysis to allow decisions to be made regarding the proposed project that intelligently take account of environmental consequences.

Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or deny the project. If the EIR determines that the project would result in significant adverse impacts to the environment that cannot be mitigated to less than significant levels, the City Council would be required to adopt a statement of overriding considerations as well as written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. If additional mitigation measures are required (beyond the General Plan policies and actions that reduce potentially significant impacts, as identified throughout this EIR), a Mitigation Monitoring and Reporting Program (MMRP) would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. The MMRP would be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

1.7 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures for any significant impacts, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The EIR prepared reviews environmental and planning documentation developed for the project, environmental and planning documentation prepared for recent projects located within the city of Campbell, and responses to the Notice of Preparation (NOP).

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the proposed project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the proposed project.

CHAPTER 1.0 - INTRODUCTION

Chapter 1.0 briefly describes the proposed project, the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, identifies the scope and organization of the Draft EIR, and briefly summarizes comments received on the NOP.

CHAPTER 2.0 - PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the proposed Project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, subsequent projects and activities, and a list of related agency action requirements.

CHAPTER 3.0 - ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the project.

Impacts and Mitigation Measures. Identification of the thresholds of significance by which impacts are determined, a description of project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact. The following environmental topics are addressed in this section:

- Aesthetic Resources
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology, Soils, and Mineral Resources
- Greenhouse Gases, Climate Change, and Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Utilities/Service Systems
- Wildfire
- Mandatory Findings of Significance/Cumulative Impacts

CHAPTER 4.0 - OTHER CEQA-REQUIRED TOPICS

Chapter 4.0 evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, cumulative impacts, and significant and unavoidable environmental effects.

CHAPTER 5.0 - ALTERNATIVES

Chapter 5.0 provides a comparative analysis between the merits of the proposed project and the selected alternatives. State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the project.

CHAPTER 6.0 - REPORT PREPARERS

Chapter 6.0 lists all authors and agencies that assisted in the preparation of the Draft EIR, by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the Draft EIR, as well as technical material prepared to support the analysis.

1.8 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received 9 written comment letters on the NOP. Additionally, oral comments were also received during the Public Scoping Meeting held on April 12, 2022. Copies of these letters are provided in Appendix A of this Draft EIR and the comments are briefly summarized below.

- Native American Heritage Commission: The Native American Heritage Commission provided direction regarding tribal consultation in accordance with Assembly Bill 52 and Senate Bill 18.
- Santa Clara Valley Audubon Society: The Audubon Society suggested information related to bird safe design and light pollution impacts.
- California Department of Fish and Wildlife (CDFW): The CDFW offers comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.
- Office of Planning & Environmental Analysis Department of Toxic Substances Control: DTSC recommends that the following issues be evaluated: hazardous wastes/substances, contaminated soils, and demolition surveys.
- California Department of Transportation (Caltrans): Caltrans suggested information to include in the EIR traffic study and provided input with respect to content of the General Plan related to Travel Demand Analysis planning, Transportation Impact Fees, and equitable access.

- Valley Transportation Authority (VTA): VTA provided comments related to the reduction of Vehicle Miles Traveled, Transportation Network Assumptions, and equity planning.
- Sierra Club Loma Prieta Chapter: The Sierra Club provided comments related to Biotechnology developments and sitting issues in shoreline areas, identified as flood zones, and sea levels rise and 100 year flood events which can create vulnerabilities for the Bay ecology.
- San Jose Water Company (Valley Water): Valley Water Provided comments related to water supplies, groundwater recharge, storm water quality, and the future coordination to ensure that there are adequate water supplies to serve proposed and future development
- Planning Commission (PC) Scoping Meeting Notes: comments offered during the public scoping meeting included topics related to: water resources, fire, GHG, noise, air quality, traffic, public services and utilities, biological resources, and lighting standards.
- Nancy Tepperman: The commenter is concerned about maintaining community character and roadway safety. This commenter also noted that additional allowed development would necessitate the need for more parks, and current development has pressured existing parks within the city.

2.1 BACKGROUND AND OVERVIEW

CALIFORNIA GENERAL PLAN LAW

California Government Code Section 65300 et seq. requires all counties and cities to prepare and maintain a general plan for the long-term growth, development, and management of the land within the jurisdiction's planning boundaries. The general plan acts as a "constitution" for development, and is the jurisdiction's lead legal document in relation to growth, development, and resource management issues. Development regulations (e.g., zoning and subdivision standards) are required by law to be consistent with the general plan.

General plans must address a broad range of topics, including, at a minimum, the following mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. General Plans must also address the topics of environmental justice and climate change and resiliency planning, either as separate elements or as part of other required elements. At the discretion of each jurisdiction, the general plan may combine these elements and may add optional elements relevant to the physical features of the jurisdiction.

The California Government Code also requires that a general plan be comprehensive, internally consistent, and plan for the long term. The general plan should be clearly written, easy to administer, and available to all those concerned with the community's development.

State planning and zoning law (California Government Code Section 65000 et seq.) establishes that zoning ordinances are required to be consistent with the general plan and any applicable specific plans, area plans, master plans, and other related planning documents. When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure consistency between the revised land use designations in the general plan (if any) and the permitted uses or development standards of the zoning ordinance (Gov. Code Section 65860, subd. [c]).

GENERAL PLAN UPDATE PROCESS AND OVERVIEW

In 2016, the City of Campbell embarked on multi-year process to update the City's General Plan. The General Plan is the overarching policy document that guides land use, housing, transportation, infrastructure, community design, and other policy decisions. State law requires every city and county in California to prepare and maintain a general plan planning document. The General Plan is the City's "constitution" or "blueprint" for future development of the city, and provides the policy guidance for achieving the community's vision.

The City's existing General Plan was adopted November 6, 2001. Subsequent amendments to the General Plan include updates to the Land Use and Transportation Element (Adopted August 19, 2014), and the Housing Element (Adopted February 17, 2015). Land uses in Campbell have been developed based on the Land Use Map, along with the goals, policies, and strategies established by the City of Campbell General Plan. The City's General Plan includes goals policies and strategies that guide land use and planning decisions within the city.

General Plan Policy Document

The Policy Document contains the goals, policies, and strategies related to various elements of the General Plan. The General Plan must address at least seven elements - or issue categories - to the extent that they are relevant locally. These state-mandated elements include: land use, circulation, housing, open space, conservation, noise, and safety. The City may also address other topics of community interest in the General Plan, such as economic development, community health and wellness, utilities and services, and sustainability. The General Plan sets out the goals, policies, and action items in each of these areas and serves as a policy guide for how the City will make key planning decisions in the future. It also identifies how the City will interact with Santa Clara County, adjacent and nearby cities, and other local, regional, State, and Federal agencies.

The Policy Document contains the goals and policies that will guide future decisions within the city. It also identifies action programs that will ensure the goals and policies in the General Plan are carried out. As part of the General Plan Update, the City and the consultant team also prepared several supporting documents that serve as the building blocks for the Policy Document. A description of these reports is provided in Chapter 1.0, Introduction, of this Draft EIR.

Community Outreach Objectives

Objectives established for the comprehensive outreach program are to:

- Educate the public on the City's history, existing conditions, socioeconomic trends, and fiscal health
- Develop a long-term vision for Campbell
- Engage a broad spectrum of the City's community members
- Establish a greater connection to current planning issues

In late 2016, the General Plan Update team held the first General Plan Advisory Committee (GPAC) meeting to help kick-off the General Plan Update process. During this meeting GPAC members were asked offer their thoughts on what they value about their community and the city, and to offer insight on community assets, challenges and to identify a community vision.

Feedback from initial GPAC meetings and online surveying allowed the General Plan Update Team to identify important issues based on the recurring themes that were provided by GPAC members and the community during the initial stages of the process.

Online Surveying

City staff and the consultant team developed an online survey to gather information from the public related to the General Plan Update, and to help guide in the development of a vision for the city. The online survey was developed through Peak Democracy and was available through the General Plan Update website, and the City's Envision Campbell Forum. The Survey was developed to pose questions, and to gather details regarding City service levels, service needs, employment, and socioeconomic community priorities. From September 8, 2016 to November 30, 2016 the survey was completed or partially completed by 161 people. Online surveying was conducted to provide a forum for public input, and to provide the planning team with policy direction and discussion topics.

The survey was not intended to meet scientific surveying standards for statistical significance, thus may not represent communitywide opinions.

A summary of the online surveying and the results of the community input related to community visioning questions posed during the survey are available for review in Chapter 2 of the Issues and Opportunities Report which is available from the following links.

Document Center:

<https://campbell.generalplan.org/content/documents-maps>

Direct Link:

https://static1.squarespace.com/static/5727860527d4bd23efdf96db/t/596551bbb8a79b8a44c7a457/1499812290895/Campbell_IOR_Final.pdf

Further, as part of the Housing Element update, between September 2021 and April 2022, the City distributed an online housing survey to gain a better understanding of the community's housing needs and preferences regarding future housing development in Campbell. A summary of the Housing Element survey and results is captured in Appendix III-C – Survey Results of the Housing Element.

Community Workshops

As part of the City's ongoing General Plan update efforts, the City Council directed that a concerted effort be made to engage members of the community throughout the update process in order to continue to gather public input and direction regarding key issues related to Campbell's future growth patterns and community priorities. As a result of this Council direction, the project team conducted five public workshops (conducted from January 22, 2018 through March 22, 2018), where participants offered input individually through focused surveys, and the identification of community challenges, assets, and visions, and participated in small group discussions relating to several land use concepts, and mapping activities.

Workshops were distributed geographically throughout the community in five areas of the city, and included the following workshop locations:

- Workshop #1: January 22, 6:30 pm - Campbell Christian School 1075 W. Campbell Ave., Campbell "Oak Room"
- Workshop #2: January 29, 6:30 pm - Home Church of Campbell 1711 Winchester Blvd., Campbell "Koffee House Room"
- Workshop #3: February 5, 6:30 pm - Campbell Community Center 1 W. Campbell Ave., Campbell "Orchard City Banquet Hall"
- Workshop #4: February 12, 6:30 pm - Canyon Heights Academy 775 Waldo Rd., Campbell "Cafeteria"
- Workshop #5: March 5, 6:30 pm - San Jose Christian School 1300 Sheffield Ave., Campbell "Cafeteria"

In addition to the Community Workshops, an interactive online survey and Story Map was created to provide additional opportunities for input on key project issues and potential land use alternatives identified in the Land Use Alternatives Report. Input received during the community workshops and associated online surveying is memorialized in the Community Workshops Summary Report.

This [report](#) (pdf) summarizes the public participation and input received during the General Plan Update outreach activities conducted from January 22, 2018 through March 22, 2018.

The following appendices provide the detailed data, maps, and survey responses collected as part of this outreach effort.

Appendix A- "Raw Data" responses from the Vision, Assets, and Challenges activity conducted during the five Community Workshops. [Download](#) (pdf)

Appendix B- "Raw Data" response forms from the Land Use Mapping Concepts activity conducted during the five Community Workshops. [Download](#) (pdf)

Appendix C- "Raw Data" base maps completed by workshop participants during the five Community Workshops. [Download](#) (pdf)

Appendix D- Detailed results and responses collected from the Online Survey and "Story Map." [Download](#) (pdf)

Further, as part of the Housing Element update, between August 2021 and March 2022, the City held a total of six community meetings (one in collaboration with the Santa Clara County Housing Collaborative, and five Community Focus Group Meetings) as summarized in Section III – Preparation of Campbell’s Plan for Housing in the Housing Element.

General Plan Advisory Committee

The General Plan Advisory Committee (GPAC) is an ad hoc committee established by the Campbell City Council for purposes of the General Plan update. The GPAC has served as one of the primary channels for the community to make recommendations to the City Council regarding goals and policies that should be included in the updated Campbell General Plan.

The General Plan Advisory Committee (GPAC), which consisted of residents, homeowners association representatives, business leaders, among others, collaborated with City staff and the General Plan Update team throughout the development of the General Plan. The Advisory Committee met 19 times between July 2016 and July 2020 to identify key issues and challenges that Campbell faces over the next 20 years, refine the city’s Land Use Map, and to develop the comprehensive set of goals and policies contained in the General Plan. Each General Plan Advisory Group meeting was open to the public. All meeting materials are available on the project website at: <https://campbell.generalplan.org/content/meetings-and-events>

City Council Input

The City Council received periodic briefings from City staff and the consultant team to review input and receive information relevant to the specific topics addressed at the General Plan Advisory Committee group meetings, and provide specific direction and guidance to staff and the consultant team regarding the land use opportunity areas, and development of the preferred land use

map/plan, which is analyzed in this Environmental Impact Report. The City Council also conducted numerous special study sessions to help craft goals, policies and actions for the General Plan and Housing Element, and to provide direction on the Land Use Map included in the Draft General Plan. The City Council also received regular written project status updates throughout the process.

Other Outreach Opportunities and Tools

The City engaged in a widespread social media and mailing campaign. Outreach efforts included posting under the “What’s New” section on the City’s homepage, publishing a color ad in the Campbell Express, and providing detailed information and materials on the Envision Campbell website and Envision Campbell application. Staff also engaged residents on Nextdoor and Facebook by responding to questions and encouraging public participation. At City Hall, staff distributed flyers at the City Clerk, Planning, and Finance Department counters as well as posting in the public bulletin board. Over thirteen thousand postcards and letters were mailed, with the aim of reaching every tenant and property owner of commercial and residential property in the City. Individuals expressing interest in the General Plan update, as well as the Downtown Campbell Business Association, Chamber of Commerce, San Tomas Area Community Coalition, and other boards, committees and outside agencies and tribal groups were emailed and provided a link to City’s Envision Campbell Forum.

For all public workshops and meetings, the City conducted extensive outreach, using a wide variety of methods and tools, to inform and encourage the community to participate in the General Plan Update process. The following is a list of methods and tools used to inform the public of meetings, workshops, and the status of the General Plan Update work efforts.

- **General Plan Website:** The City maintains a website (www.campbell.generalplan.org) devoted to informing the public about, and encouraging participation in, the General Plan Update process. The website includes notices, all workshop materials, presentations given to the GPAC and City Council, background materials, draft policy documents, and draft versions of the General Plan Land Use Map.
- **E-mail distribution lists:** This list was developed and maintained over time, and includes agencies, organizations, stakeholders, and individuals who requested to receive notice on General Plan Update activities.
- **Social Media:** The City posts meeting notices and project updates to its social media platforms, including NextDoor, and Facebook.
- **Flyers:** Flyers were posted at City Hall and at key locations throughout the community advertising the Visioning Workshops and online survey.

Additional outreach efforts, conducted as part of the Housing Element update, are summarized Section III – Preparation of Campbell’s Plan for Housing in the Housing Element.

USING THE GENERAL PLAN

The General Plan is used by the City Council, Planning Commission, and City staff on a regular basis to make decisions with direct and indirect land use implications. It also provides a framework for inter-jurisdictional coordination of planning efforts among officials and staff of the City and other government agencies such as the County and State and Federal agencies.

The General Plan is the basis for a variety of regulatory mechanisms and administrative procedures. California planning law requires consistency between the General Plan and its implementation programs. Implementation programs and regulatory systems of the General Plan include zoning and subdivision ordinances, capital improvement programs, specific plans, environmental impact procedures, and building and housing codes.

Over time, the city's population will change, its goals will be redefined, and the physical environment in which its residents live and work will be altered. In order for the General Plan to be a useful document, it must be monitored and periodically revised to respond to and reflect changing conditions and needs. As such, a general plan should be comprehensively updated approximately every 10-20 years to reflect current conditions and emerging trends.

The City's General Plan should also be user-friendly. To this end, the Campbell General Plan Update has been divided into two primary documents: the Existing Conditions Report and the Goals and Policies Document.

This Existing Conditions Report provides a summary of a range of conditions in Campbell as they existed in 2016, and provides the baseline framework for the development of the General Plan's goals, policies, and implementation programs.

The Goals and Policies Document is the essence of the General Plan. It contains the goals and policies that will guide future decisions within the city. It also identifies a full set of implementation actions that will ensure the goals and policies in the General Plan are carried out.

2.2 PROJECT LOCATION

REGIONAL SETTING

Campbell officially incorporated in 1952. Since then, the City has transitioned from a small farm community to a progressive community with a population of just over 40,000 that is now surrounded by residential developments and high tech industries that the technology focus of the Silicon Valley has brought. Located south of the San Francisco Bay and within the Silicon Valley the City has a rich startup employment base with a diverse population, quality schools, conveniently-located neighborhood parks, and a variety of retail options and entertainment options in its historic and vibrant Downtown. Figure 2.0-1 shows Campbell's regional location. The City is served by Valley Transportation Authority (VTA) light rail stations (Hamilton, Campbell, and Winchester stations in Campbell, and the Bascom station immediately northeast of city limits) with another planned station along its transit corridor.

As described previously, the City's existing General Plan was adopted November 6, 2001. Amendments to the General Plan include updates to the Land Use and Transportation Element (Adopted August 19, 2014), and the Housing Element (Adopted February 17, 2015).

ENVIRONMENTAL IMPACT REPORT STUDY AREA

There are several key boundaries addressed by the General Plan, which make up the study area for the General Plan Environmental Impact Report (EIR). These include the city limits, the Sphere of Influence (SOI), and the Planning Area, as shown on the proposed Land Use Map Figure 2.0-2 and described below.

City Limits: The City Limits includes the area within the city's corporate boundary, over which the City exercises land use authority and provides public services.

Sphere of Influence: A Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO). A SOI may include both incorporated and unincorporated areas within which a city or special district will have primary responsibility for the provision of public facilities and services. Campbell's SOI and City Limits are coterminous.

Planning Area: For the purposes of the Campbell General Plan Update, the Planning Area is defined as the area within the City Limits of Campbell that is included in the analysis and planning for the approximate 20-year horizon of the City's General Plan Update.

2.3 PROJECT OBJECTIVES

The Campbell General Plan is intended to reflect the desires and vision of Campbell residents, businesses, the General Plan Advisory Committee, and City Council.

The following objectives were identified for the proposed update to the General Plan:

- Reflect the current goals and vision expressed by city residents, businesses, decision-makers, and other stakeholders;
- Address issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders;
- Capitalize on Campbell's location within the Silicon Valley to provide high tech jobs that enable Campbell to be a live/work community while maintaining Campbell's small town community identity;
- Protect and enhance Campbell community character, and sense of community;
- Ensure Campbell remains a safe, vibrant, and family-friendly community;
- Proactively plan for and accommodate local and regional growth in a balanced and sustainable manner, with an emphasis on maintaining Campbell's unique character;
- Provide a range of high-quality housing options, including housing resources and programs that comply with State Planning Law;
- Attract and retain businesses and industries that provide high-quality and high-paying jobs;
- Continue to maintain and improve multimodal transportation opportunities;

2.0 PROJECT DESCRIPTION

- Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
- Support and enhance Campbell’s small business community to sustain a vibrant city with a strong downtown core and community identity;
- Emphasize sustainability and environmental stewardship in future planning decisions
- Address new requirements of State law;
- Address emerging transportation, housing, and employment trends;
- Promote alternative transportation and community connectivity; and
- Encourage mixed use corridors that promote vibrant commercial and residential areas.

2.4 DESCRIPTION OF PROPOSED GENERAL PLAN PROJECT

The City of Campbell is preparing a comprehensive update to its existing General Plan, which was last comprehensively updated in 2001.

The overall purpose of the Campbell General Plan is to create a policy framework that articulates a vision for the city’s long-term physical form and development, while preserving and enhancing the quality of life for residents, and increasing opportunities for high-quality local job growth and housing options. The key components of the General Plan will include broad goals for the future of Campbell, and specific policies, and actions that will help implement the stated goals.

GENERAL PLAN ELEMENTS

The Campbell General Plan includes a comprehensive set of goals, policies, and actions (implementation measures), as well as a revised Land Use Map (Figure 2.0-2). The State requires that the General Plan contain seven mandatory elements: Land Use, Circulation, Housing, Open Space, Noise, Safety, and Conservation, as well as address issues related to climate change, resiliency planning, and environmental justice, either as separate Elements or as components of the required Element framework. The Campbell General Plan includes all of the State-mandated elements, as well as optional elements and issue areas, including Community Design, Public Facilities, Economic and Fiscal Sustainability, Community Health and Wellness, and Sustainability.

- The **Land Use Element** designates the general distribution and intensity of residential, commercial, industrial, mixed-use, open space, public/semi-public, and other categories of public and private land uses. The Land Use Element includes the Land Use Map, which identifies land use designations for each parcel in the city limits and Planning Area (Figure 2.0-2).
- The **Community Design Element** identifies high-level community design objectives for the City of Campbell, including the relationship between the public and private realm, streetscapes, best site planning practices, and placemaking strategies.
- The **Transportation Element** correlates closely with the Land Use Element, and identifies the general locations and extent of existing and proposed major thoroughfares, transportation routes, and alternative transportation facilities necessary to support a multi-modal transportation system. This element is intended to facilitate mobility of people and

goods throughout Campbell by a variety of transportation modes, including bicycle, pedestrian, and transit opportunities.

- The **Housing Element** plans for housing to meet the needs of all segments of the community and addresses state requirements. The current revision to the Housing Element covers the 2023-2031 planning period.
- The **Conservation and Open Space Element** addresses conservation topics including: development and use of natural resources, open space, parks and recreational facilities, riparian environments, native plant and animal species, soils, cultural/historical resources, air quality, and alternative energy. It also details objectives and measures for preserving open space for natural resources and the managed production of resources.
- The **Economic and Fiscal Sustainability Elements** Provide tools and strategies to strengthen and diversify the local economy and ensures the City maintains adequate revenues to provide quality public services. These elements seek to sustain and diversify the city's economy, recognizing the importance of supporting existing and local businesses while broadening and expanding the employment base and economic opportunities within the city.
- The **Safety Element** addresses a variety of natural and human-related hazards such as fires, geologic hazards, as well as hazardous materials, and contains goals and policies aimed at reducing risk associated with these hazards.
- The **Noise Element** addresses noise-generating and noise-sensitive uses such as residences and schools. This element also addresses the required topics related to noise, including standards and policies to protect the community from the harmful and annoying effects of exposure to excessive noise levels. This element includes strategies to reduce land use conflicts that may result in exposure to unacceptable noise levels.
- The **Community Services and Facilities Element** establishes policies and programs that address the following public services and facilities: police services; fire protection services; schools; civic, library, and other community facilities; water supplies, sewer services, storm drainage infrastructure, and solid waste disposal. While not specifically required by State law for inclusion in the General Plan, the Community Services and Facilities Element is a critical component in meeting the infrastructure and utility services needs of businesses and residents.
- The **Community Health and Wellness Element** acknowledges the profound effects of the built environment on travel choices, access to food, levels of physical activity, and exposure to risk from accidents or pollution. The Element addresses the topics of active living, healthy lifestyles, environmental justice, and community building.
- The **Sustainability Element** Provides measures that balance resource supply and consumption to develop in harmony with the environment to ensure current residents and future generations to have continued access to resources. The General Plan's policies and

2.0 PROJECT DESCRIPTION

actions support the principle of sustainability. Creating and maintaining a sustainable community requires integrating sustainable principles into the City's everyday actions and future policy decisions, while adapting to changing environmental conditions, new technologies, and staying informed of innovations and current best practices.

GOALS, POLICIES, AND ACTIONS

Each element of the Campbell General Plan contains a series of goals, policies, and actions. The goals, policies, and actions provide guidance to the City on how to direct change, manage growth, and manage resources over the approximate 20-year life of the General Plan. The following provides a description of each and explains the relationship of each:

- A **goal** is a description of the general desired result that the City seeks to create through the implementation of the General Plan.
- A **policy** is a specific statement that guides decision-making as the City to achieve its goals. Once adopted, policies represent statements of City regulations. The General Plan's policies set out the standards that will be used by City staff, the Planning Commission, and the City Council in their review of land development projects, resource protection activities, infrastructure improvements, and other City actions. Policies are on-going and require no specific action on behalf of the City.
- An **action** is an implementation measure, procedure, technique, or specific program to be undertaken by the City to help achieve a specified goal or implement an adopted policy. The City must take additional steps to implement each action in the General Plan. An action is something that can and will be completed.

GENERAL PLAN LAND USE MAP

The General Plan Land Use Map identifies land use designations for each parcel within the City's Planning Area. The proposed General Plan Land Use Map is shown on Figures 2.0-2.

PROPOSED GENERAL PLAN LAND USE DESIGNATIONS

The majority of the existing General Plan land use designations included in the Proposed General Plan are consistent with the existing adopted land use designations of the existing General Plan, as listed above. The exceptions, include consolidated land uses to streamline redundant uses, as well as changes to building intensities within the R&D land use as well as residential density increases within the high density residential land uses. A brief summary of the key differences between the existing and proposed land use designations is included below.

1. Residential Density Increases: Increase max to 75 du/ac.
2. Allowed FAR would increase up to 1.0 for most designations.
3. Elimination of the Commercial High/Med Residential Land Use Designation.

4. Creation of additional mixed-use land use designations to fulfill housing needs including: Commercial-Corridor Mixed-Use (CC-MU); High Density Mixed-Use (HD-MU); Medium-High Density Mixed-Use (MHDR-MU); Neighborhood Mixed-Use (N-MU); and Transit-Oriented Mixed-Use (TO-MU).
5. A Future Precise Plan Overlay is identified for several properties west of SR-17 along Hamilton Avenue. A future precise plan in this area would address connectivity and access to the VTA station east of SR 17, address infrastructure financing strategies and requirements, design and land use. All uses within these areas would continue to be governed by underlying General Plan Land Use Designation until such time that a Precise Plan is subsequently adopted.

The following describes the proposed land use designations for the Proposed General Plan Land Use Map (Figure 2.0-2.).

Residential Land Use Designations:

Low-Density Residential (LDR 4.5): This designation generally consists of single-family homes and accessory dwelling units, and uses in support of, and comparable to, such land uses.

Allowable Density: Less than 4.5 units per gross acre.

Low-Density Residential (LDR 5.5): This designation generally consists of single-family homes and accessory dwelling units, in support of, and comparable to, such land uses.

Allowable Density: Less than 5.5 dwelling units per gross acre.

Low-Density Residential (LDR 7.5): This designation generally consists of single-family homes and accessory dwelling units and uses in support of, and comparable to, such land uses.

Allowable Density: Less than 7.5 dwelling units per gross acre.

Low-Medium Density Residential (LMDR): This designation generally consists of duplexes, apartment buildings, and uses in support of, and comparable to, such land uses.

Allowable Density: 8 to 16 dwelling units per gross acre.

Medium Density Residential (MDR): This designation generally consists of duplexes, apartment buildings, and uses in support of, and comparable to, such land uses. This designation is typically applied to transition areas between lower-density neighborhoods and higher-density developments or commercial areas.

Allowable Density: 18 to 25 dwelling units per gross acre.

Medium-High Density Residential (MHDR): This designation generally consists of duplexes, apartment buildings, and uses in support of, and comparable to, such land uses. This designation is typically applied to areas away from major commercial intersections.

2.0 PROJECT DESCRIPTION

Allowable Density: 26 to 33 dwelling units per gross acre.

High Density Residential (HDR): This designation generally consists of apartment buildings, and uses in support of, and comparable to, such land uses. This designation is typically applied to sites along Class I, or Class II arterial roadways that abut lower-density neighborhoods.

Allowable Density: Up to 45 dwelling units per gross acre.

Mobile Home Park (MHP): This designation generally consists of mobile homes, modular homes, and uses in support of, and comparable to, such land uses. The MHP designation discourages the conversion of existing mobile home parks to other uses.

Allowable Density: 8 to 16 dwelling units per gross acre.

Commercial/Office Designations:

Neighborhood Commercial (NC): This designation generally consists of small-scale, lower intensity commercial and office uses that are compatible with surrounding neighborhoods. This land use is intended to encourage the location of commercial uses at major intersections in residential areas which are designed to encourage convenient pedestrian and bicycle travel to and from surrounding neighborhoods. The architecture of the buildings should be compatible to the neighborhood.

Allowable FAR: 1.0.

General Commercial (GC): This designation generally consists of commercial uses that need exposure to high volumes of automobile traffic or access to transit corridors. Most of the land in Campbell with a General Commercial land use designation is located along both sides of Bascom and Hamilton Avenues and parts of Winchester Boulevard. Commercial development in these areas is highly visible, hence the placement and scale of buildings is especially important to the community image.

Allowable FAR: 1.0.

Professional Office (PO): This designation generally consists of administrative, professional, and research office uses and instruction for personal and/or professional enrichment.

Allowable FAR: 1.0.

Industrial Designations:

Light Industrial (LI): This designation generally consists of wide range of light manufacturing, industrial processing, general service, warehousing, storage and distribution uses. This designation is intended to provide for, and protect, industrial uses in the community. Nuisance-causing industries, such as those producing substantial amounts of hazardous waste, odor, dust, other pollutants, or excessive noise levels are not permitted. Ancillary uses that support light industrial developments including, cafés, office supply retailers, service commercial uses, etc., may be conditionally allowed onsite as a minor use associated with a primary light industrial use.

Allowable FAR: 1.0.

Research and Development (R&D): This designation generally consists of campus-like environments for corporate headquarters, research and development facilities and offices. The R&D designation also accommodates uses such as incubator-research facilities, testing, packaging, publishing and printing. The designation aims to attract new firms and high quality local jobs and enables existing firms to grow and expand operations within Campbell.

Allowable FAR: 1.0.

Mixed-Use Designations:

Central Commercial (CC): This designation generally consists of shopping, service, and entertainment uses within a pedestrian oriented urban environment. Building forms should edge the street and should include pedestrian-oriented commercial uses on the ground floor with either office or residential uses on upper floors. Residential units within this land use designation are restricted to upper floors and residential-only projects are not permitted within this land use designation.

Allowable Density: 26 to 33 dwelling units per gross acre. Allowable FAR: 1.25.

Commercial/ Light Industrial (C/LI): This designation generally consists of commercial uses as provided for by the General Commercial (GC) land use designation and industrial uses as provided for by the Light Industrial (LI) land use designation.

Allowable FAR: 1.0.

Office/Low-Medium Density Residential (LMDR/O): This designation generally consists of office uses as provided for by the Professional Office (P-O) land use designation and/or residential uses as provided for by the Low-Medium Density Residential (LMDR) land use designation. This designation is intended to serve as a transitional buffer between the more intense uses located in Downtown, and the surrounding low density residential uses.

Allowable Density: 8 to 16 dwelling units per gross acre.

Allowable FAR: 1.0.

Residential/Commercial/Prof. Office (RCPO): This designation generally consists of residential land uses as provided for by the Medium-High Density Residential (MHDR) land use designation, commercial uses as provided for by the General Commercial (GC) land use designation, and office uses as provided for by the Professional Office (P-O) land use designation. Mixed-use residential projects are encouraged within this designation but not required.

Allowable Density: 26 to 33 dwelling units per gross acre.

Allowable FAR: 1.0.

2.0 PROJECT DESCRIPTION

Neighborhood Mixed-Use (N-MU): This designation generally consists of commercial land uses as provided for by the Neighborhood Commercial (NC) land use designation and residential uses as provided for by the Medium Density Residential (MDR) land use designation. Mixed-use residential projects are encouraged within this designation but not required.

Allowable Density: 18 to 25 dwelling units per gross acre.

Allowable FAR: 1.0.

Medium-High Density Mixed Use (MHDR-MU): This designation generally consists of residential uses as provided for by the Medium-High Density Residential (MHDR) land use designation and commercial uses as provided for by the General Commercial (GC) land use designation. Mixed-use residential projects are encouraged within this designation but not required.

Allowable Density: 26 to 33 dwelling units per gross acre.

Allowable FAR: 1.0.

High-Density Mixed-Use (HD-MU): This designation generally consists of residential uses as provided for by the High Density Residential (HDR) land use designation and commercial uses as provided for by the General Commercial (GC) land use designation. Mixed-use residential projects are encouraged within this designation but not required.

Allowable Density: Up to 45 dwelling units per gross acre.

Allowable FAR: 1.0.

Commercial-Corridor Mixed-Use (CC-MU): This designation generally consists of higher-density residential, and mixed-use development that is generally located along Class I and Class II Arterial Roadways, such as Bascom Avenue, Hamilton Avenue, Winchester Boulevard, and parts of Campbell Avenue. Mixed-use residential projects are strongly encouraged within this designation but are not required.

Allowable Density: Up to 60 dwelling units per gross acre.

Allowable FAR: 1.0.

Transit-Oriented Mixed-Use (TO-MU): This designation generally consists of very high density commercial, residential, and mixed-use development within walking distance of high quality transit service such as light rail. Mixed-use residential projects are strongly encouraged within this designation but are not required.

Allowable Density: Up to 75 dwelling units per gross acre.

Allowable FAR: 1.0.

Public/Recreational Designations:

Institutional (I): This designation generally consists of civic, social service, educational, cultural or charitable uses operated by a government or private agency serving the public. Institutional uses can include facilities owned or operated by a private organization, such as a private school or religious organization, as well as facilities owned or operated by a public entity, such as public buildings and grounds, public schools, and government offices.

Open Space (OS): This designation generally consists of public parks and identifies areas for waterways, sensitive habitat, groundwater recharge areas, creek corridors, and trails. Development in these areas shall be limited to such buildings and structures that support the uses described above. Examples of acceptable buildings and structures may include park facilities, restrooms, trails, signage, and utilities infrastructure.

2.0 PROJECT DESCRIPTION

Table 2.0-1 below summarizes and compares land use designations under the Existing and Proposed General Plan Land Use Map.

Table 2.0-1: Proposed and Existing General Plan – Acreage by Land Use Designation

General Plan Land Use	Proposed GP (Acres)	Existing GP (Acres)	Change (Acres)
Commercial, Office, and Industrial			
Commercial/Light Industrial (C/LI)	24.42	24.42	0.00
Central Commercial (CC)	37.53	59.46	-21.93
General Commercial (GC)	98.08	195.57	-97.49
Neighborhood Commercial (NC)	49.30	34.30	15.00
Light Industrial (LI)	104.86	104.86	0.00
Professional Office (P-O)	33.55	36.05	-2.50
Research and Development (R&D)	85.49	102.89	-17.39
Residential			
Low Density Residential <4.5 (LDR 4.5) ¹	142.40	144.00	-1.60
Low Density Residential <5.5 (LDR 5.5) ²	211.25	211.25	0.00
Low Density Residential <7.5 (LDR 7.5) ³	1039.87	1042.27	-2.41
Low-Medium Density Residential (LMDR)	161.99	162.95	-0.95
Medium Density Residential (MDR)	191.28	184.48	6.80
High Density Residential (HDR)	170.54	177.75	-7.21
Mobile Home Park (MHP)	29.66	29.66	0.00
Mixed-Use			
Office/Low-Medium Density Residential (LMDR/O)	4.16	4.16	0.00
Commercial/Medium-High Density Residential (MHDR/C)	0.00	16.37	-16.37
Commercial/Prof. Office/Residential (RCPO)	57.11	54.96	2.15
Commercial-Corridor Mixed-Use (CC-MU)	60.03	0.00	60.03
High Density Mixed-Use (HD-MU)	20.58	0.00	20.58
Medium-High Density Mixed-Use (MHDR-MU)	27.20	0.00	27.20
Neighborhood Mixed-Use (N-MU)	8.12	0.00	8.12
Transit-Oriented Mixed-Use (TO-MU)	44.75	0.00	44.75
Limited Development Public/Quasi Public and ROW Uses			
Institutional (I)	155.66	166.57	-10.91
Open Space (OS)	263.61	269.48	-5.87
Right-of-Way Parcels	39.22	39.22	0.00
Total Acres	3,060.65	3,060.65	0

SOURCE: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP 2022.

1. THE EXISTING GENERAL PLAN IDENTIFIED THIS LAND USE DESIGNATION AS LDR <3.5
2. THE EXISTING GENERAL PLAN IDENTIFIED THIS LAND USE DESIGNATION AS LDR <4.5
3. THE EXISTING GENERAL PLAN IDENTIFIED THIS LAND USE DESIGNATION AS LDR <6

2.5 GENERAL PLAN BUILDOUT ANALYSIS

While no specific development projects are proposed as part of the Campbell General Plan Update, the General Plan will accommodate future growth in Campbell, including new businesses, expansion of existing businesses, and new residential uses. The buildout analysis assumes an approximate 20-year horizon, and 2040 is assumed to be the buildout year of the General Plan.

Table 2.0-2 below summarizes the range of new growth, including residential units, and non-residential square footage that could occur upon full buildout of the proposed General Plan. It is noted that there are very few vacant parcels in Campbell. As such, most of the new growth projected through General Plan buildout would occur as existing developed parcels redevelop with new or modified uses over time. The projections shown in the table below represent good-faith estimates of growth that could potentially occur following adoption of the General Plan.

Consistent with the Proposed General Plan Land Use Map (Figure 2.0-2), future growth would largely be focused near transit stations, transit corridors, in existing and proposed areas of multifamily and mixed-use development, and in existing business-serving areas. As shown in Table 2.0-2, buildout of the General Plan could yield a total of up to 26,224 housing units, a population of 64,929 people, 12,724,055 square feet of non-residential building square footage, and 36,908 jobs within the Planning Area. As shown in Table 2.0-2, this represents development growth over existing conditions of up to 8,824 new dwelling units, 22,203 people, 2,633,721 square feet of new non-residential building square footage and 6,194 new jobs.

Table 2.0-2: Growth Projections

	Population	Dwelling Units	Non-Residential Square Feet	Jobs	Jobs per Housing Unit
Existing Conditions					
	42,726	17,400	10,090,334	30,568	1.76
New Growth Potential					
Existing General Plan	4,123	1,640	2,098,014	4,633	2.83
Proposed General Plan	22,203	8,824*	2,633,721	6,194	0.70
Total Growth: Existing Plus New Growth Potential					
Existing General Plan	46,849	19,040	12,188,348	35,199	1.85
Proposed General Plan	64,929	26,224	12,724,055	36,762	1.40

SOURCES: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP 2022. Santa Clara County Assessor 2017; California Department of Finance 2017; U.S Census ONTHEMAP; ESRI 2017,

*NOTE: APPROXIMATELY 6,644 NEW DWELLING UNITS ARE ASSUMED TO BE ACCOMMODATED UNDER THE PROPOSED HOUSING ELEMENT OPPORTUNITY SITES, AND THE ADDITIONAL 2,180 NEW DWELLING UNITS ARE ASSUMED TO OCCUR AS NEW DEVELOPMENT AND REDEVELOPMENT THROUGHOUT THE BALANCE OF THE CITY.

Growth projections should not be considered a prediction for growth, as the actual amount of development that will occur throughout the planning horizon of the General Plan is based on many factors outside of the City's control. Actual future development would depend on future real estate and labor market conditions, property owner preferences and decisions, site-specific constraints, land turnover, and other factors. Additionally, new development and growth are largely dictated by existing development conditions. Very few communities in California actually develop to the full potential allowed in their respective General Plans during the planning horizon.

Tables 2.0-3 provides detailed growth under the Proposed General Plan (broken down by land use type) in terms additional new growth potential including housing units, population growth, non-residential building square footage, and additional jobs estimates at buildout.

TABLE 2.0-3: POTENTIAL NEW GROWTH IN PLANNING AREA OVER EXISTING CONDITIONS

LAND USES	NEW NON-RESIDENTIAL SQUARE FOOTAGE AT BUILDOUT	NEW JOBS AT BUILDOUT	NEW HOUSING UNITS AT BUILDOUT	NEW POPULATION GROWTH AT BUILDOUT
Commercial, Office, Industrial, and Mixed-Use				
Commercial/ Light Industrial - (C/LI); (LI)	264,516	369	-	-
Mixed Use / Commercial Uses - (GC); (NC); (CC); (MHDR/C); (RCPO); (CC-MU); (HD-MU); (MHDR-MU); (N-MU); (TO-MU)	1,561,181	3,159	7,823	19,682
Office/ R&D - (R&D); (P-O)	808,024	2,666	-	-
Residential Only				
Single Family Residential - (LDR 4.5), (LDR 5.5), (LDR 7.5), (LMDR)	-	-	89	223
Multifamily Residential - (MDR); (HDR)	-	-	913	2,298
Totals				
	2,633,721	6,194	8,824	22,203

SOURCE: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP 2022. SANTA CLARA COUNTY ASSESSOR 2017.

2.6 USES OF THE EIR AND REQUIRED AGENCY APPROVALS

This EIR may be used for the following direct and indirect approvals and permits associated with adoption and implementation of the proposed project.

CITY OF CAMPBELL

The City of Campbell is the lead agency for the proposed project. The updated Campbell General Plan will be presented to the Planning Commission for review and recommendation and to the City Council for comment, review, and consideration for adoption. The City Council has the sole discretionary authority to approve and adopt the Campbell General Plan. In order to approve the proposed project, the City Council would consider the following actions:

- Certification of the General Plan EIR;
- Adoption of required CEQA findings for the above action;
- Adoption of a Mitigation Monitoring and Reporting Program; and
- Approval and adoption of the General Plan Update, including adoption of the Housing Element.

SUBSEQUENT USE OF THE EIR

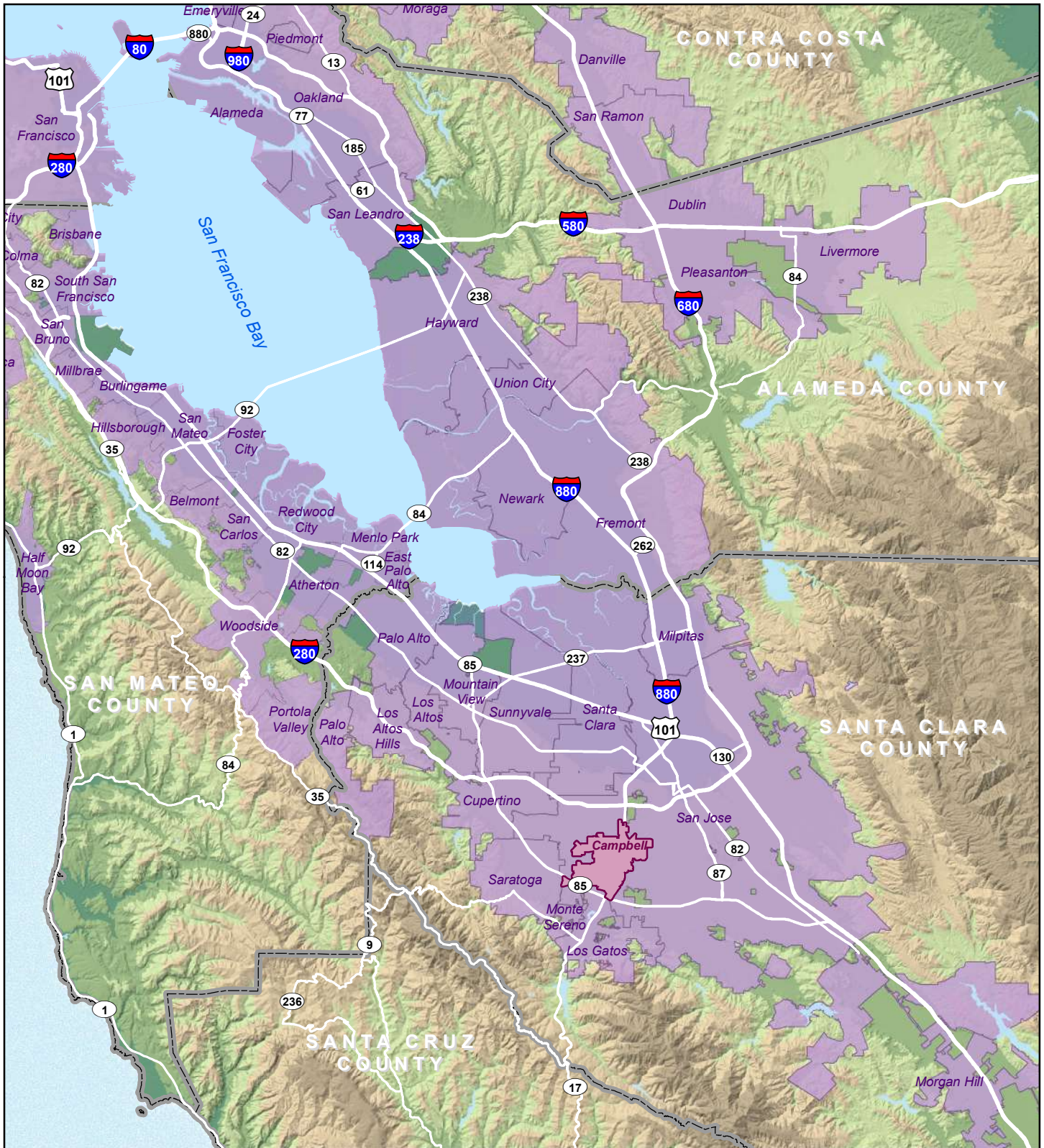
This EIR provides a review of environmental effects associated with implementation of the proposed General Plan. When considering approval of subsequent activities under the proposed General Plan, the City of Campbell would utilize this EIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent activity. Projects or activities successive to this EIR may include, but are not limited to, the following:

- Approval and funding of major projects and capital improvements;
- Future Precise Plan, Planned Unit Development, or Master Plan approvals;
- Revision to the Campbell Zoning Ordinance;
- Development plan approvals, such as tentative subdivision maps, variances, conditional use permits, and other land use permits;
- Development Agreements;
- Property rezoning consistent with the General Plan;
- Permit issuances and other approvals necessary for public and private development projects; and
- Issuance of permits and other approvals necessary for implementation of the General Plan.




OTHER GOVERNMENTAL AGENCY APPROVALS

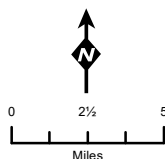
City approval of the proposed Project would not require any actions or approvals by other public agencies. Subsequent projects and other actions to support implementation of the proposed Project may require actions, including permits and approvals, by other public agencies that may include, but are not necessarily limited to:

- California Department of Transportation (Caltrans) approval of projects and encroachment permits for projects affecting State highway facilities.
- Regional Water Quality Control Board (RWQCB) approval for National Pollution Discharge Elimination System compliance, including permits and Storm Water Pollution Prevention Plan approval and monitoring.
- California Department of Fish and Wildlife (CDFW) approval of potential future streambed alteration agreements, pursuant to Fish and Game Code. Approval of any future potential take of State-listed wildlife and plant species covered under the California Endangered Species Act.
- U.S. Fish and Wildlife Service (USFWS) approvals involving any future potential take of Federally listed wildlife and plant species and their habitats, pursuant to the Federal Endangered Species Act.
- Santa Clara Valley Water District (Valley Water) approval of future water supply and infrastructure projects.
- Santa Clara Valley Transportation Authority (VTA) approval of public transit services, congestion management projects, and specific highway improvement projects.



Legend

-  County Boundary
-  City Area
-  City of Campbell



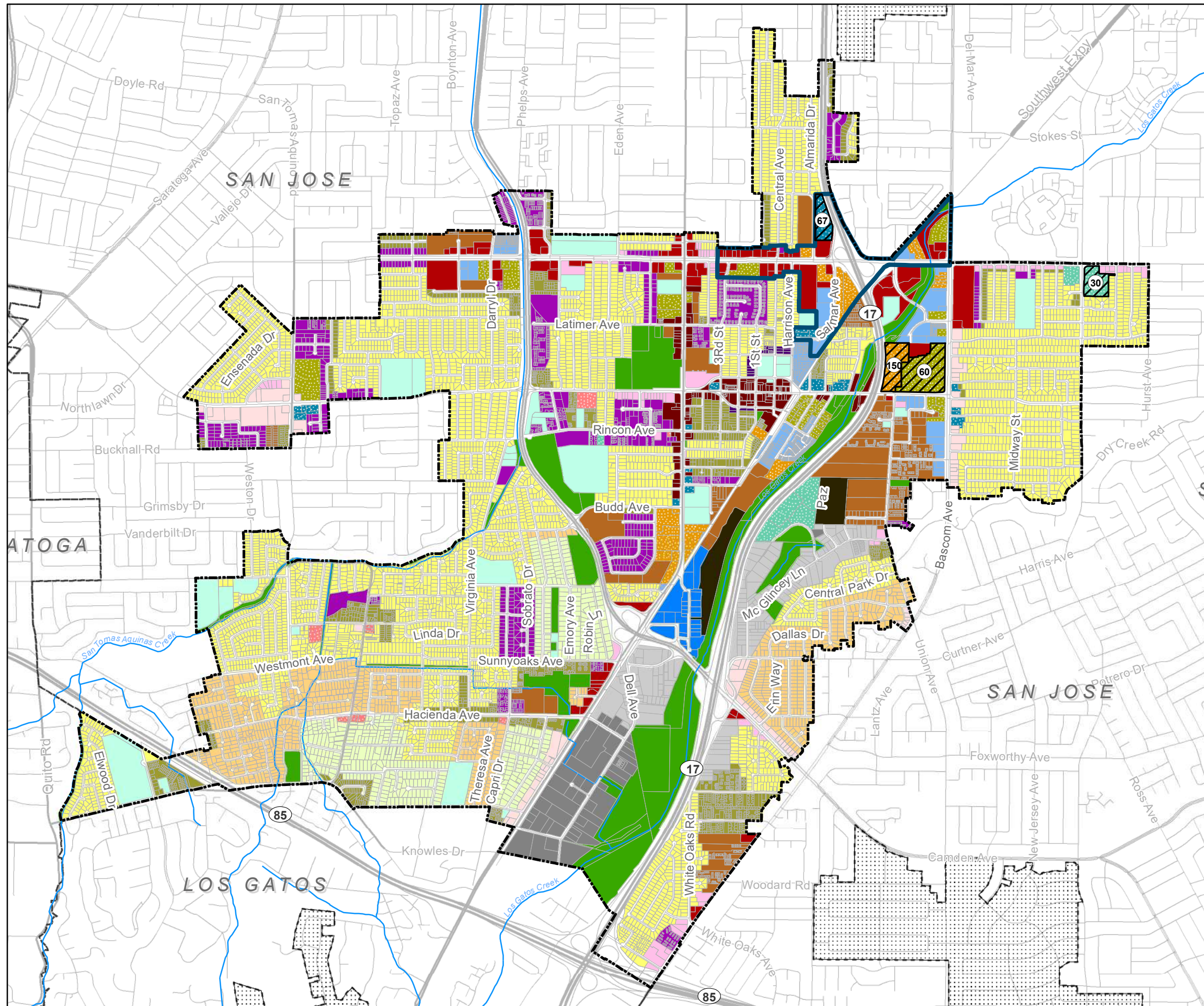
CITY OF CAMPBELL GENERAL PLAN UPDATE

Figure 2.0-1. Project Vicinity Map

Sources: CalAtlas; Santa Clara County; Santa Cruz County; Alameda County; Contra Costa County. Map date: March 9, 2020.

This page left intentionally blank.

Figure 2.0-2.
Proposed Land Use Map



Planning Areas

- City of Campbell
- Other Incorporated Areas
- Unincorporated Santa Clara County

Planning Overlays

- Maximum Unit Count Site-Specific Overlay
- Hamilton Avenue Precise Plan Overlay

Residential Uses

- Low Density Residential (4.5)
- Low Density Residential (5.5)
- Low Density Residential (7.5)
- Low-Medium Density Residential
- Medium Density Residential
- Mobile Home Park
- High Density Residential

Mixed Uses

- Central Commercial
- Commercial/Light Industrial
- Office/Low-Medium Density Residential
- Residential/Commercial/Professional Office
- Neighborhood Mixed Use
- Medium-High Density Mixed Use
- High Density Mixed Use
- Commercial Corridor Mixed Use
- Transit-Oriented Mixed Use

Commercial/Office Uses

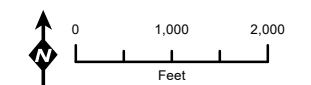
- Neighborhood Commercial
- General Commercial
- Professional Office

Industrial Uses

- Light Industrial
- Research and Development

Public/Recreational Uses

- Institutional
- Open Space



Sources: City of Campbell; Santa Clara County. Map date: March 15, 2022.

This page left intentionally blank.

The City of Campbell and the surrounding areas possess numerous visual resources that contribute to Campbell's community image. Many scenic resources are found in the natural areas within the unincorporated areas of Santa Clara County, while within Campbell visual resources include natural parks and trails, creek corridors, as well as defining visual elements within the city including trees, landscaping, and structures. These resources enhance the quality of life for Campbell residents, and provide for outdoor recreational, and tourist-generating uses. Landscapes can be defined as a combination of four visual elements: landforms, water, vegetation, and man-made structures. Visual resource quality is an assessment of the uniqueness or desirability of a visual element. This section reviews and summarizes Campbell's key visual resources.

This section was prepared based on existing reports and literature for Campbell. Additional sources of information included the California Department of Transportation's (Caltrans) Designated Scenic Route map for Santa Clara County. A reconnaissance-level visual resource survey of the City was conducted in the fall of 2016.

This section provides a background discussion of the scenic highways and corridors, and natural scenic resources such as creeks, wildlife areas, and prominent visual features found in the Campbell Planning Area. This section is organized with an existing setting, regulatory setting, and impact analysis.

Comments received during the NOP comment period related to this environmental topic included comments related to light and glare impacts. All comments received during the NOP comment period are included in Appendix A of this EIR.

CONCEPTS AND TERMINOLOGY

The aesthetic value of an area is a measure of its visual character and quality, combined with the viewer response to the area. Scenic quality can best be described as the overall impression that an individual viewer retains after driving through, walking through, or flying over an area. Viewer response is a combination of viewer exposure and viewer sensitivity. Viewer exposure is a function of the number of viewers, number of views seen, distance of the viewers, and viewing duration. Viewer sensitivity relates to the extent of the public's concern for a particular viewshed. These terms and criteria are described in detail below.

Visual Character. Natural and artificial landscape features contribute to the visual character of an area or view. Visual character is influenced by geologic, hydrologic, botanical, wildlife, recreational, and urban features. Urban features include those associated with landscape settlements and development, including roads, utilities, structures, earthworks, and the results of other human activities. The perception of visual character can vary significantly seasonally, even hourly, as weather, light, shadow, and elements that compose the viewshed change. The basic components used to describe visual character for most visual assessments are the elements of form, line, color, and texture of the landscape features. The appearance of the landscape is described in terms of the dominance of each of these components.

3.1 AESTHETICS AND VISUAL RESOURCES

Visual Quality. Visual quality is evaluated using the well-established approach to visual analysis adopted by the Federal Highway Administration, employing the concepts of vividness, intactness, and unity, which are described below.

- Vividness is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
- Intactness is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements; this factor can be present in well-kept urban and rural landscapes, and in natural settings.
- Unity is the visual coherence and compositional harmony of the landscape considered as a whole; it frequently attests to the careful design of individual components in the landscape.

Visual quality is evaluated based on the relative degree of vividness, intactness, and unity, as modified by visual sensitivity. High-quality views are highly vivid, relatively intact, and exhibit a high degree of visual unity. Low-quality views lack vividness, are not visually intact, and possess a low degree of visual unity.

Viewer Exposure and Sensitivity. The measure of the quality of a view must be tempered by the overall sensitivity of the viewer. Viewer sensitivity or concern is based on the visibility of resources in the landscape, proximity of viewers to the visual resource, elevation of viewers relative to the visual resource, frequency and duration of views, number of viewers, and type and expectations of individuals and viewer groups.

The importance of a view is related, in part, to the position of the viewer to the resource; therefore, visibility and visual dominance of landscape elements depend on their placement within the viewshed. A viewshed is defined as all of the surface area visible from a particular location (e.g., an overlook) or sequence of locations (e.g., a roadway or trail). To identify the importance of views of a resource, a viewshed must be broken into distance zones of foreground, middle ground, and background. Generally, the closer a resource is to the viewer, the more dominant it is and the greater its importance to the viewer. Although distance zones in a viewshed may vary between different geographic region or types of terrain, the standard foreground zone is 0.25–0.5 mile from the viewer, the middle ground zone is from the foreground zone to 3–5 miles from the viewer, and the background zone is from the middle ground to infinity.

Visual sensitivity depends on the number and type of viewers and the frequency and duration of views. Visual sensitivity is also modified by viewer activity, awareness, and visual expectations in relation to the number of viewers and viewing duration. For example, visual sensitivity is generally higher for views seen by people who are driving for pleasure, people engaging in recreational activities such as hiking, biking, or camping, and homeowners. Sensitivity tends to be lower for views seen by people driving to and from work or as part of their work. Commuters and non-recreational travelers have generally fleeting views and tend to focus on commute traffic, not on surrounding scenery; therefore, they are generally considered to have low visual sensitivity. Residential viewers typically have extended viewing periods and are concerned about changes in the views from their

homes; therefore, they are generally considered to have high visual sensitivity. Viewers using recreation trails and areas, scenic highways, and scenic overlooks are usually assessed as having high visual sensitivity.

Judgments of visual quality and viewer response must be made based on a regional frame of reference. The same landform or visual resource appearing in different geographic areas could have a different degree of visual quality and sensitivity in each setting. For example, a small hill may be a significant visual element on a flat landscape but have very little significance in mountainous terrain.

Scenic Highway Corridor. The area outside of a highway right-of-way that is generally visible to persons traveling on the highway.

Scenic Highway/Scenic Route. A highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and human-made scenic resources and access or direct views to areas or scenes of exceptional beauty (including those of historic or cultural interest). The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising. Until the mid-1980's, general plans in California were required to include a Scenic Highways Element.

View Corridor. A view corridor is a highway, road, trail, or other linear feature that offers travelers a vista of scenic areas within a city or county.

3.1.1 ENVIRONMENTAL SETTING

BUILT ENVIRONMENT

Campbell is predominantly a built-out community, with a traditional Downtown in the heart of the city, a natural creekside trail used by pedestrians and bicyclists both recreationally and for commuting, a beautiful collection of parks, a community center on a historic campus, a mix of housing types and a variety of shopping facilities that are accessible to neighborhoods and employment centers. Campbell's attractive living environment is enhanced by its central location in the Bay Area, and extensive regional transportation network including the Vasona Light Rail. Regional mobility is important because Campbell's location affords residents, visitors and employers convenient access to all parts of the Silicon Valley and the San Francisco and Monterey Bay Areas. Several freeways serve Campbell for regional mobility including: Highway 17 (which is the southern extension of Interstate 880), Highway 85 to the south and Interstate 280 to the north. These highways provide excellent north-south and east-west regional automobile access. Campbell has only a few arterials throughout the City to handle peak hour traffic. Difficulties arise as some commuters use residential streets during peak commuter periods in efforts to bypass freeway or arterial traffic.

Campbell's arterial streets and freeways include Hamilton Avenue, Bascom Avenue, Camden Avenue, Winchester Boulevard, Campbell Avenue, Pollard Road, Highway 17, and San Tomas Expressway. Public improvements include streets, sidewalks, bike lanes, medians, parkways, drainage and flood control facilities, street trees, street lighting and traffic signals. Examples of public utilities include telephone services and electrical transformers. Consistent and attractive

3.1 AESTHETICS AND VISUAL RESOURCES

street improvements, landscape treatments, screening or undergrounding of public utilities enhance the appearance and function of streets.

Campbell contains many community assets and activity areas that enhance the City's distinctive character and sense of place. These elements, such as commercial corridors, residential neighborhoods, natural and historical resources, and public improvements, provide opportunities for community pride and an enhanced quality of life. Campbell's central position in the Santa Clara Valley provides both excellent accessibility and beautiful views of the surrounding hillsides.

NATURAL ENVIRONMENT

The city's open space, parks and public facilities, especially multi-use pathways and trails, are major contributors to the physical connection of Campbell and provide linkages between residences, schools and commercial and employment centers. They are a focal point for community involvement and are well-known landmarks that provide a sense of community identity and pride. These parks and facilities increase the attractiveness of the city's residential neighborhoods and business districts with their well-maintained landscaping, modern play equipment and recreation facilities and comfortable outdoor furniture. These facilities contribute to the city's friendly, small town atmosphere by providing a destination where local residents can meet, visit and enjoy a wide variety of activities together.

Scenic vistas are generally interpreted as long-range views of a specific scenic feature, such as open space lands, mountain ridges, or bodies of water. The Planning Area is located in the southwestern Santa Clara Valley, and potential scenic features in its viewsheds include the Santa Cruz Mountain Range to the west, the percolation ponds, Los Gatos Creek County Park, and the Los Gatos Creek and trail to the South.

Existing sources of nighttime light in the Planning Area include those common to urban areas, such as street lights, parking lot lights, building lighting, vehicle headlamps, and interior lighting visible through windows.

SCENIC HIGHWAYS AND CORRIDORS

According to the California Scenic Highway Mapping System, administered by Caltrans, there are no officially designated State Scenic Highways in the vicinity of the City of Campbell. There is one officially designated scenic highway corridor in Santa Clara County: State Route 9 from the Santa Cruz County line to the Los Gatos city limits. This officially designated scenic highway corridor does not provide views of Campbell or the immediate surrounding areas.

There are three Eligible State Scenic Highway Corridors within Santa Clara County that have not yet been officially designated. However, none of the Eligible State Scenic Highway Corridors provide views of Campbell or the immediate surrounding areas. Additionally, the City's General Plan has not established official scenic vistas in the city or required protecting such views.

LIGHT AND GLARE

During the day, sunlight reflecting from structures is a primary source of glare, while nighttime light and glare can be divided into both stationary and mobile sources. Stationary sources of nighttime light include structure illumination, interior lighting, decorative landscape lighting, security lighting, and streetlights. The principal mobile source of nighttime light and glare is vehicle headlamp illumination. This ambient light environment can be accentuated during periods of low clouds or fog.

The variety of urban land uses in the Planning Area are the main source of daytime and nighttime light and glare. They are typified by single and multi-family residences, commercial structures, industrial areas, and streetlights. These areas and their associated human activities (inclusive of vehicular traffic) characterize the existing light and glare environment present during daytime and nighttime hours in the urbanized portions of the Planning Area. Areas of open space and along creek corridors are characterized primarily by non-urban uses and open space uses and lower intensity residential development, and generally have lower levels of ambient nighttime lighting and daytime glare.

Sources of glare in urbanized portions of the Planning Area come from light reflecting off surfaces, including glass, and certain siding and paving materials, as well as metal siding/roofing. The urbanized areas of Campbell contain sidewalks and paved parking areas which reflect street and vehicle lights. The existing light environment found in the project area is generally considered typical of developed areas.

Sky glow is the effect created by light reflecting into the night sky. Sky glow is of particular concern in areas surrounding observatories, where darker night sky conditions are necessary, but is also of concern in more rural or natural areas where a darker night sky is either the norm or is important to wildlife. Due to the urban nature within the city limits, a number of existing light sources illuminate the night sky. Isolating impacts of particular sources of light or glare is therefore not appropriate or feasible for the Project.

3.1.2 REGULATORY SETTING

FEDERAL

There are no Federal regulations that apply to the proposed project related to visual resources in the study area.

STATE

California Department of Transportation – California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change, which would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq.

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the Streets and Highways Code. A list of California's scenic highways and map showing their locations may be obtained from the Caltrans Scenic Highway Coordinators.

If a route is not included on a list of highways eligible for scenic highway designation in the Streets and Highways Code Section 263 et seq., it must be added before it can be considered for official designation. A highway may be designated scenic depending on the extent of the natural landscape that can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

When a local jurisdiction nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. A scenic corridor is the land generally adjacent to and visible from the highway. A scenic highway designation protects the scenic values of an area. Jurisdictional boundaries of the nominating agency are also considered, and the agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program.

To receive official designation, the local jurisdiction must follow the same process required for official designation of State Scenic Highways. The minimum requirements for scenic corridor protection include:

- Regulation of land use and density of development;
- Detailed land and site planning;
- Control of outdoor advertising (including a ban on billboards);
- Careful attention to and control of earthmoving and landscaping; and
- Careful attention to design and appearance of structures and equipment.

LOCAL

Downtown Campbell Development Plan and Standards

The Downtown Campbell Development Plan and Standards, adopted October 3, 2006, applies to any development within the downtown study area. The study area includes parcels along Campbell Avenue in the downtown area, which includes the Pruneyard Shopping Center, the Civic Center, the Heritage Theatre, the Community Center, and the parcels between these destinations. The purpose of the document is to provide a vision for Downtown Campbell and a framework for the physical development, business development and preservation of the Historic Downtown. Since the first Development Plan was adopted over 28 years ago, a number of identified revitalization projects have been completed under the guidance of the Redevelopment Agency and the City. These major projects include:

- Underground Utilities
- Streetscape Improvements
- Ainsley House Relocation
- Traffic Enhancements
- Public Parking
- Light rail service
- Mixed Use Developments
- Storefront Improvement Program

The vision for Downtown Campbell is to continue to reinforce its place as the center for community activity, cultural and civic events, and as a vibrant central business district. It is intended that the Downtown be an active, walkable central business district that attracts local residents and visitors to experience a variety of retail businesses and restaurants.

City of Campbell Design Guidelines for Historic Residential Buildings

The City of Campbell Design Guidelines for Historic Residential Buildings, adopted May 2006, are intended to assist property owners in the rehabilitation and preservation of homes identified on the City of Campbell's Historic Resources Inventory. These guidelines parallel many of the recommendations found in the Secretary of the Interior's Standards for Rehabilitation published by the U.S. Department of the Interior National Park Service, and are also used as a resource by the Historic Preservation Board and the city's staff.

The sensitive rehabilitation approaches found in the design guidelines will ensure that Campbell's residential neighborhoods, and particularly the older neighborhoods, will maintain their distinctive character and preserve the investments made by their owners. The Historic Design Guidelines apply to any change in the exterior appearance of a building through alteration or the construction of any

structure within a Historic District; designated a City Landmark; or properties on the City's Historic Resources Inventory.

City of Campbell Streetscape Standards

The City of Campbell adopted Streetscape Standards on August 3, 1993 and included them in the City's General Plan as Appendix A2. The Streetscape Standards include design standards, implementation guides, and technical requirements for sidewalks and landscaping that apply to Hamilton Avenue, Bascom Avenue, Winchester Boulevard, and a portion of West Campbell Avenue. These standards are intended to be used in tandem with Chapter 21.26 of the Municipal Code. The street cross-section drawing for Winchester Boulevard calls for a 10-foot wide sidewalk with a 4-foot tree well adjacent to a curb, as well as a 5 to 8-foot landscaping strip behind the sidewalk at a minimum. It also requires street trees to be planted every 30 feet in the tree well. The Streetscape Standards require Chinese Pistache (*Pistacia chinensis*) as street trees for the section of Winchester Boulevard within the Plan Area.

City of Campbell Objective Design and Development Standards (ODDS)

Campbell Municipal Code Chapter 21.04, Establishment of Zoning Districts, and Chapter 21.07, Objective Design and Development Standards (ODDS), to be adopted with the General Plan, reference new City-wide standards for the development of small-lot single-family, multi-family, and mixed-use residential development projects.

City of Campbell Municipal Code, Chapter 21.18: Site Development Standards

Chapter 21.18 of the City's Municipal Code provides standards for site planning and the provision of specific components of development that are intended to minimize the adverse effects and operational characteristics of land uses. Some of the standards included in this chapter are related to lighting design, bicycle and pedestrian access, fences, walls, lattice, and screens, front yard paving, and screening and buffering.

City of Campbell Municipal Code, Chapter 21.26: Landscaping Requirements

Chapter 21.26 of the City's Municipal Code chapter provides standards for the provision of landscaping with development to achieve the following objectives:

- A. Enhance the aesthetic appearance of development throughout the city by providing standards related to the quality and functional aspects of landscaping;
- B. Increase compatibility between abutting land uses and public rights-of-way by providing landscape screening and buffers;
- C. Provide for the conservation of water resources through the efficient use of irrigation, appropriate plant materials, and regular maintenance of landscaped areas; and

- D. Protect public health, safety, and welfare by preserving and enhancing the positive visual experience of the built environment, providing appropriate transition between different land uses, preserving neighborhood character, and enhancing pedestrian and vehicular traffic and safety.

The chapter contains general landscaping requirements for all zoning districts, specific landscaping requirements for individual zoning districts, and landscape maintenance requirements.

City of Campbell Municipal Code Chapter 21.32: Tree Protection Regulations

Chapter 21.32 of the Municipal Code contains standards to protect and manage trees on private property and to enhance Campbell's small town quality and visual character.

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on aesthetics if it will:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality;
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: General Plan implementation would not have a substantial adverse effect on a scenic vista (Less than Significant)

While the Planning Area is substantially developed and within an urban area, some areas of the city may contain areas and viewsheds with relatively high scenic value, however there are no officially designated scenic vista points in the Planning Area. Additionally, as described above, there are no officially designated scenic highways located in the vicinity of Campbell. Significant visual resources in the Planning Area include prominent waterways, including Los Gatos Creek. Other prominent visual features throughout the Planning area may include views of ridgelines and Santa Cruz Mountain Range to the west.

There are very few areas within the city that are designated for urban land uses which are not already developed. Existing areas within the city that are undeveloped and in a naturalized condition are generally designated for open space uses by both the existing and proposed General Plan Land Use Maps. The proposed Land Use Map does not convert any open space lands to urban uses.

However, as noted in greater detail in the Project Description (Chapter 2.0), implementation of the proposed General Plan could lead to new and expanded urban development including increased densities throughout the city. This new development may result in changes to the skyline throughout the Planning Area, which may obstruct or interfere with views of visual features surrounding the Planning Area.

Future development would be required to be consistent with the proposed General Plan. A central theme of the General Plan is to preserve and protect the City's natural resources and scenic resources, including designating open space lands along the Los Gatos Creek corridor. Other General Plan policies promote open space within the Planning Area, maintenance of the existing

open space within the City, and visually-appropriate on-site design and amenities, such as design and maintenance standards for City amenities. Moreover, other policies promote the installation of specific visual features, such as context planning and design integration. Other policies are directed more generally at integrating land uses and visual quality between land uses, such as major corridors, walkability, massing, and connectivity.

The Campbell General Plan has been developed to preserve areas of open space and to ensure that new development is located in and around existing and planned urbanized areas, thus ensuring that new development is primarily an extension of the existing urban landscape, and minimizes interruption of views of nearby visual features.

Additionally, the General Plan includes polices that seek to ensure that new development fits within the existing community setting and is compatible with surrounding uses, supports the preservation and protection of the City's existing neighborhoods, maintain homes, structures, and property at high standards, and promote the City visually through design and physical features.

The implementation of the policies and actions contained in the General Plan listed below would ensure open space uses are preserved consistent with the General Plan Land Use Map, that new development in the Planning Area is compatible with adjacent uses and other open space resources. Additionally, the implementation of the policies and actions contained in the Land Use and Community Design Elements would further ensure that new development is designed in a way that enhances the visual quality of the community, and compliments the visual character of the City. Additionally, as described previously there are no designated scenic vistas or viewpoint within the city. Therefore, the impact on scenic vistas would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-1.1 Provide a range of open spaces, parks, trails and recreation facilities to meet the active and passive recreational needs of all Campbell residents, employees, and visitors, regardless of age, ability, or income.

COS-1.5 Maintain and enhance existing open space and recreation facilities to improve their usefulness, safety, and appearance and better address traditional and non-traditional recreation needs, including active and passive recreation, wellness, historical and cultural arts/heritage, environmental education, conservation, accessibility, inclusion, diversity, and new technology.

COS-1.6 Uphold design, construction, implementation, and maintenance standards to ensure safe high-quality facilities, programs, and services that cater to a variety of ages and address the needs of all members of the community.

COS-1.7 Continue to work with regional agencies and neighboring jurisdictions to ensure that regional open space amenities located in Campbell—the Los Gatos Creek Trail, the Santa Clara County Parklands, Santa Clara Valley Water District groundwater recharge facilities, and lands

3.1 AESTHETICS AND VISUAL RESOURCES

owned by the Santa Clara County Open Space Authority—remain publicly-accessible, well-maintained, and utilized.

COS-1.8 Support efforts to enhance, enlarge, and provide public access to regional open space, parks, and recreation facilities using a variety of techniques such as facilities improvement, joint maintenance, and/or use agreements.

COS-1.9 Utilize the City’s Naylor Act rights and other funding mechanisms to acquire and/or lease surplus school land and other appropriately located surplus public agency lands for open space, parks, and recreation facilities as they become available.

CD-2.2 Maintain and enhance access and views to and from the Los Gatos Creek corridor.

COS-7.2 Preserve and enhance the aesthetic and habitat value of riparian corridors including the Los Gatos and San Tomas Aquino Creeks.

LAND USE ELEMENT POLICIES

LU-2.1 Promote high quality, creative design and site planning that is compatible with surrounding development, public spaces, and natural resources.

LU-2.6 Incorporate transitional land uses as buffers between land uses which are potentially incompatible. For example, this could include office uses as a buffer between industrial and residential areas, and medium density residential uses as a buffer between high and low density residential uses.

LU-2.7 Where appropriate, use higher-density residential, office and neighborhood commercial uses as buffers between lower density residential uses and larger commercial centers and transportation and rail corridors.

LU-8.3 Ensure that new development provides visual and pedestrian and bicycle linkages with Los Gatos Creek.

COMMUNITY DESIGN ELEMENT POLICIES

CD-1.2 Maintain safe, attractive, pedestrian friendly residential neighborhoods with identifiable centers and consistent development patterns and a range of public and private services.

CD-1.3 Through implementation of the City’s design review process, encourage creative, high-quality, innovative, and distinctive architectural and site designs that help create unique, vibrant places.

CD-1.4 Continue to develop and implement design guidelines for residential, non-residential and infrastructure development, both in the private and public realms, that provide design and site planning approaches, landscaping, site grading and similar architectural and site planning criteria that will add design excellence, visual quality and interest to the community.

CD-1.6 Preserve, rehabilitate or restore the City's historic buildings, landmarks, districts and cultural resources and retain the architectural integrity of established building patterns within historic residential neighborhoods to preserve the cultural heritage of the community.

CD-2.1 Recognize, enhance, and preserve, where possible, natural features and ecosystems, and protect cultural and historic resources.

CD-2.2 Maintain and enhance access and views to and from the Los Gatos Creek corridor.

CD-2.3 Emphasize landscaping as a fundamental design component, retaining mature landscaping when appropriate, to reinforce a sense of the natural environment and to maintain an established appearance.

CD-2.4 Design retention/detention basins to be visually attractive and well-integrated with any associated project and with adjacent land uses.

CD-2.6 Encourage the expansion of the city's urban forest canopy, comprising street trees and trees located on private property and in open spaces. Emphasize the importance of placing trees in locations with significant hardscaping, such as parking areas.

CD-4.5 Minimize the visual impacts of public and private communication, service, and utility facilities by requiring the provider to incorporate sensitive site design techniques, including, but not limited to the placement of facilities in less conspicuous locations, the undergrounding of facilities wherever possible, and the screening of facilities.

CD-4.6 Minimize the visual impact of wireless telecommunication facilities by designing them as an integral architectural feature to a site or structure.

Impact 3.1-2: General Plan implementation would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (Less than Significant)

As discussed previously in the settings section, no adopted State scenic highway is located in Campbell. There is one officially designated scenic highway corridor in Santa Clara County (along State Route 9). However, this officially designated scenic highway corridor does not provide views of Campbell, or the immediate surrounding areas, and there are no sections of highway in the Campbell vicinity eligible for Scenic Highway designation.

Given that no adopted State scenic highways are located within the Planning Area, and that no scenic highways provide views of the Planning Area, State scenic highway impacts associated with General Plan implementation would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY DESIGN ELEMENT POLICIES

CD-1.6 Preserve, rehabilitate or restore the City's historic buildings, landmarks, districts and cultural resources and retain the architectural integrity of established building patterns within historic residential neighborhoods to preserve the cultural heritage of the community.

CD-2.1 Recognize, enhance, and preserve, where possible, natural features and ecosystems, and protect cultural and historic resources.

COMMUNITY DESIGN ELEMENT ACTIONS

CD-1.d Implement the Historical Design Guidelines to ensure that improvements and additions to historic buildings are compatible with existing historic architecture and conform to historically established building forms, character and setbacks of the neighborhood.

CD-1.f Promote public awareness of historic preservation through informational publications and programs.

Impact 3.1-3: General Plan implementation would not, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings, or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality (Less than Significant)

CEQA Guidelines Section 15387 defines an urbanized area as a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. The Planning Area consists of the City of Campbell, which can be understood as an urbanized area as well as Campbell's Sphere of Influence, which is contiguous with its City limits. Zoning and other regulations governing scenic quality applicable to the City include Historical Design Guidelines, Single Family Homes Design Guidelines, SFR Additions Design Guidelines, and Low-Medium Density Residential Design Guidelines and Street Design Standards.

Policies and actions in the proposed General Plan are intended to complement and further the intent of these provisions regulating scenic quality and resources, and any development occurring under the proposed General Plan would be subject to compliance with these guidelines, as well as the applicable regulations set forth in the Campbell Municipal Code. The proposed General Plan would therefore not substantially degrade the existing visual character or quality of public views of the city and its surroundings. Scenic quality-related impacts associated with the General Plan implementation would thus be **less than significant**. In order to further ensure that future development allowed under the General Plan would not degrade the existing visual character of the environment the city has included policies and actions as listed previously under Impact 3.1-1. In addition to ensure that the General Plan does not conflict with an applicable regulation governing scenic quality the City has included the following actions in the General Plan that call for the consistency between planning tools governing design quality.

GENERAL PLAN MINIMIZATION MEASURES

See policies and actions listed above under Impact 3.1-1.

Impact 3.1-4: General Plan implementation could result in the creation of new sources of nighttime lighting and daytime glare (Less than Significant)

The primary sources of daytime glare are generally sunlight reflecting from structures and other reflective surfaces and windows. Implementation of the proposed General Plan would introduce new sources of daytime glare into previously developed areas of the Planning Area and increase the amount of daytime glare in existing urbanized areas. The General Plan Land Use Map identifies areas for the future development of residential, commercial, light industrial, recreational, and public uses. Such uses may utilize materials that produce glare. Daytime glare impacts would be most severe in the limited areas of the city that have not been previously disturbed, including areas along Los Gatos Creek

The primary sources of nighttime lighting are generally from exterior building lights, street lights, and vehicle headlights. Exterior lighting around commercial and industrial areas may be present throughout the night to facilitate extended employee work hours, ensure worker safety, and to provide security lighting around structures and facilities. Nighttime lighting impacts would be most severe in areas that do not currently experience high levels of nighttime lighting. Increased nighttime lighting can reduce visibility of the night sky, resulting in fewer stars being visible and generally detracting from the quality of life in Campbell.

Future development would be required to be consistent with the General Plan, as well as lighting and design requirements in the Campbell Municipal Code. The proposed General Plan contains policies and actions related to the regulation and reduction of daytime glare and nighttime lighting. For example, Policy CD-2.7 calls for the City to reduce the use of highly-reflective and/or transparent building materials in order to reduce the potential for bird strikes and other harm to wildlife. Policy CD-2.8 calls for reduced lighting and transparent, reflective, and/or other elements hazardous to birds in non-building structures such as art, bridges, fencing and sound barriers, and antennae. Policy CD-2.9 requires that lighting and fixtures be integrated with the design and layout of a project and that they provide a desirable level of security and illumination without creating glare and overflow on adjacent properties or excessive artificial light at night (light pollution). Additionally, Action COS-7.h calls on the City to coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara County Water District, and local watershed protection groups to identify standards to reduce impacts between urban development and riparian corridors, including lighting restrictions. Action COS-7.k considers the preparation and adoption of an ordinance that establishes regulations to reduce bird mortality from windows, other specific glass features, and certain lighting elements that are known to increase the risk of bird collisions.

Through the implementation of these policies and actions during the development review process, the City can ensure that impacts associated with daytime glare and nighttime lighting are **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES**COMMUNITY DESIGN ELEMENT POLICIES**

CD-2.7 Reduce the use of highly-reflective and/or transparent building materials in order to reduce the potential for bird strikes and other harm to wildlife.

CD-2.8 Reduce the use of lighting and transparent, reflective, and/or other elements hazardous to birds in non-building structures such as art, bridges, fencing and sound barriers, and antennae.

CD-2.9 Require that lighting and fixtures be integrated with the design and layout of a project and that they provide a desirable level of security and illumination without creating glare and overflow on adjacent properties or excessive artificial light at night (light pollution).

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-7.h Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara County Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Campbell and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat.

COS-7.k Consider the preparation and adoption of an ordinance that establishes regulations to reduce bird mortality from windows, other specific glass features, and certain lighting elements that are known to increase the risk of bird collisions.

This page left intentionally blank

This section provides a background discussion of agricultural lands, agricultural resources, and forest/timber resources. This section is organized with an environmental setting, regulatory setting, and impact analysis.

No comments on this environmental topic were received during the NOP comment period.

3.2.1 ENVIRONMENTAL SETTING

AGRICULTURAL RESOURCES

There are no lands within the Planning Area that are designated for agricultural use on the existing or proposed Campbell General Plan Land Use Map.

There are no agricultural lands identified by the CA Department Conservation's Farmland Mapping and Monitoring Program within the Campbell Planning Area.

Important Farmlands

The California Department of Conservation (DOC), as part of its Farmland Mapping and Monitoring Program (FMMP), prepares Important Farmland Maps indicating the potential value of land for agricultural production. The Santa Clara County Important Farmland Map identifies five agriculture-related categories and three non-agricultural categories:

Prime Farmland: Prime farmland is land with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Farmland of Statewide Importance: Farmland of statewide importance is farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. The land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Unique Farmland: Unique farmland is farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

Farmland of Local Importance: Farmland of local importance is considered land important to the local agricultural economy but does not meet the criteria of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

Grazing Land: Grazing land is land on which the existing vegetation is suitable for the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for this category is 40 acres.

Urban and Built-up Land: This category consists of non-agricultural land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel.

3.2 AGRICULTURAL AND FOREST RESOURCES

This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

Other Land: Other land is non-agricultural land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

Water Area: This category consists of bodies of water.

IMPORTANT FARMLANDS IN PLANNING AREA

There are no agricultural lands identified by the CA Department Conservation's Farmland Mapping and Monitoring Program within the Campbell Planning Area. All lands within Campbell are identified as Urban and Built-up Land by the CA Department Conservation.

Farmland Preservation

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 to encourage the preservation of the state's agricultural lands and to prevent their premature conversion to urban uses. The Williamson Act is described in greater detail under the Regulatory Setting section of this chapter.

There are no lands within the Campbell Planning Area that are currently under a Williamson Act contract.

FOREST RESOURCES

Forest land is defined by Public Resources Code Section 12220(g), and includes *"land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."*

Timber land is defined by Public Resources Code Section 4526, and means *"land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis."*

There are no forest lands or timber lands located within the Campbell Planning Area.

3.2.2 REGULATORY SETTING

FEDERAL

Farmland Protection Policy Act

The Natural Resources Conservation Service (NRCS), an agency within the U.S. Department of Agriculture, is responsible for implementation of the Farmland Protection Policy Act (FPPA). The purpose of the FPPA is to minimize Federal programs' contribution to the conversion of farmland to non-agricultural uses by ensuring that Federal programs are administered in a manner that is compatible with state, local, and private programs designed to protect farmland. The NRCS provides technical assistance to Federal agencies, state and local governments, tribes, and nonprofit organizations that desire to develop farmland protection programs and policies. The NRCS summarizes FPPA implementation in an annual report to Congress.

Farm and Ranch Lands Protection Program

The NRCS administers the Farm and Ranch Lands Protection Program (FRPP), a voluntary program aimed at keeping productive farmland in agricultural uses. Under the FRPP, the NRCS provides matching funds to state, local, or tribal government entities and nonprofit organizations with existing farmland protection programs to purchase conservation easements. According to the 1996 Farm Bill, the goal of the program is to protect between 170,000 and 340,000 acres of farmland per year. Participating landowners agree not to convert the land to non-agricultural use and retain all rights to use the property for agriculture. A conservation plan must be developed for all lands enrolled based upon the standards contained in the NRCS Field Office Technical Guide. A minimum of 30 years is required for conservation easements and priority is given to applications with perpetual easements. The NRCS provides up to 50 percent of the fair market value of the easement being conserved (NRCS, 2004). To qualify for a conservation easement, farm or ranch land must meet several criteria. The land must be:

- Prime, Unique, or other productive soil, as defined by NRCS based on factors such as water moisture regimes, available water capacity, developed irrigation water supply, soil temperature range, acid-alkali balance, water table, soil sodium content, potential for flooding, erodibility, permeability rate, rock fragment content, and soil rooting depth;
- Included in a pending offer to be managed by a nonprofit organization, state, tribal, or local farmland protection program;
- Privately owned;
- Placed under a conservation plan;
- Large enough to sustain agricultural production;
- Accessible to markets for the crop that the land produces; and
- Surrounded by parcels of land that can support long-term agricultural production.

STATE

California Department of Conservation

The DOC administers and supports a number of programs, including the Williamson Act, the California Farmland Conservancy Program (CFCP), the Williamson Act Easement Exchange Program (WAEEP), and the Farmland Mapping and Monitoring Program (FMMP). These programs are designed to preserve agricultural land and provide data on conversion of agricultural land to urban use. The DOC has authority for the approval of agreements entered into under the WAEEP. Key DOC tools available for land conservation planning are conservation grants, tax incentives to keep land in agriculture or open space, and farmland mapping and monitoring.

Williamson Act

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 to encourage the preservation of the state's agricultural lands and to prevent their premature conversion to urban uses. In order to preserve these uses, the Act established an agricultural preserve contract procedure by which any county or city taxes landowners at a lower rate, using a scale based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. In return, the owners guarantee that these properties remain under agricultural production for a 10-year period. The contract is self-renewing; however, the landowner may notify the county or city at any time of the intent to withdraw the land from its preserve status. There are two means by which the landowner may withdraw the land from its contract preserve status. First, the landowner may seek to cancel the contract. This takes the land out of the contract quickly with a minimal waiting period but the landowner pays a statutory penalty to the State. Second, the landowner may notice a non-renewal or seek a partial non-renewal of the contract. Land withdrawal through the non-renewal process involves a 9- or 10-year period (depending on the timing of the notice) of tax adjustment to full market value before protected open space can be converted to urban uses.

Williamson Act subvention payments to local governments have been suspended since the fiscal year 2009-10 due to the State's fiscal constraints. The Williamson Act contracts between landowners and local governments remain in force, regardless of the availability of subvention payments.

Farmland Security Zones

A Farmland Security Zone is an area created within an agricultural preserve by a board of supervisors (board) or city council (council) upon request by a landowner or group of landowners. An agricultural preserve defines the boundary of an area within which a city or county will enter into contracts with landowners. The boundary is designated by resolution of the board or council having jurisdiction. Agricultural preserves must generally be at least 100 acres in size. Farmland Security Zone contracts offer landowners greater property tax reduction. Land restricted by a Farmland Security Zone contract is valued for property assessment purposes at 65% of its Williamson Act valuation or 65% of its Proposition 13 valuation, whichever is lower.

Forest Practices Rules

The California Department of Forestry and Fire Protection (CalFire) implements the laws that regulate timber harvesting on privately-owned lands. These laws are contained in the Z'berg-Nejedly Forest Practice Act of 1973 which established a set of rules known as the Forest Practice Rules (FPRs) to be applied to forest management related activities (i.e., timber harvests, timberland conversions, fire hazard removal, etc.). They are intended to ensure that timber harvesting is conducted in a manner that will preserve and protect fish, wildlife, forests, and streams. Under the Forest Practice Act, a Timber Harvesting Plan (THP) is submitted to CalFire by the landowner outlining what timber is proposed to be harvested, harvesting method, and the steps that will be taken to prevent damage to the environment. If the landowner intends to convert timberland to non-timberland uses, such as a winery or vineyard, a Timberland Conversion Permit (TCP) is required in addition to the THP. It is CalFire's intent that a THP will not be approved which fails to adopt feasible mitigation measures or alternatives from the range of measures set out or provided for in the Forest Practice Rules, which would substantially lessen or avoid significant adverse environmental impacts resulting from timber harvest activities. THPs are required to be prepared by Registered Professional Foresters (RPFs) who are licensed to prepare these plans (CalFire, 2007). For projects involving TCPs, CalFire acts as lead agency under CEQA, and the county or city acts as a responsible agency.

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on agricultural and forest resources if it will:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526);
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: General Plan implementation would result in the conversion of farmlands, including Prime Farmland and Unique Farmland, to non-agricultural use (No Impact)

There are no lands within the Planning Area that are designated for agricultural use on the existing or proposed Campbell Land Use Map. There are no agricultural lands identified by the CA Department Conservation's Farmland Mapping and Monitoring Program within the Campbell Planning Area. Therefore, General Plan implementation would result in **no impact** relative to this topic and no mitigation is required.

Impact 3.2-2: General Plan implementation would not result in conflicts with existing zoning for agricultural use, or a Williamson Act contract (No Impact)

There are no lands within the Campbell Planning Area that are currently under a Williamson Act contract, and there are no lands within the Campbell Planning Area that are currently zoned for agriculture use. As such, General Plan implementation would result in **no impact** to Williamson Act contracts or conflicts with zoning for agricultural uses and no mitigation is required.

Impact 3.2-3: Result in the loss of forest land or conversion of forest land to non-forest use (No Impact)

There are no forest lands or timber lands located within the Campbell Planning Area. Therefore, General Plan implementation would result in **no impact** relative to this topic and no mitigation is required.

Impact 3.2-4: General Plan implementation would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use (No impact)

As described previously, there are no lands within the Planning Area that are designated for agricultural uses, and there are no forest lands or timber lands located within the Campbell Planning Area. General Plan implementation would result in **no impact** relative to this topic and no mitigation is required.

This section describes the regional air quality, current attainment status of the applicable air basin, local sensitive receptors, emission sources, and impacts that are likely to result from proposed project implementation.

No comments were received during the NOP comment period regarding this environmental topic.

3.3.1 EXISTING SETTING

SAN FRANCISCO BAY AREA AIR BASIN

Campbell is located within the San Francisco Bay Area Air Basin (SFBAAB), which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma County, and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

Climate, Topography, and Air Pollution Potential

The San Francisco Bay Area region has a Mediterranean climate characterized by wet winters and dry summers. Rainfall totals can vary widely over a short distance, with windward coastal mountain areas receiving over 40 inches of rain, while leeward areas receive about 15 inches. During rainy periods, horizontal and vertical air movements ensure rapid pollutant dispersal. Rain can also wash out particulates and other pollutants.

Typically, air temperatures decrease with increasing elevations. Sometimes this pattern is inverted, with warmer air aloft and cool air trapped near the earth's surface. This phenomenon occurs in all seasons. Especially in summer, when wind speeds are very low, a strong inversion will trap air emissions, and high levels of ozone smog can occur. In winter, a strong inversion can trap emissions of particulates and carbon monoxide near the surface, resulting in unhealthy air quality. Particulate matter (PM) pollution is anticipated to increase because of climate change, which can lead to worsening asthma symptoms, chronic obstructive pulmonary disease, and respiratory infections associated to premature mortality. Increasing temperatures related to climate change are also anticipated to lead to an increase in wildfires across California. Wildfires are a significant source of smoke and PM exposure. PM can also be carried over long distances by wind and then settle on ground or water. Depending on chemical composition, the effects of PM settling may include: making lakes and streams acidic, changing the nutrient balance in coastal waters and large river basins, depleting the nutrients in soil, damaging sensitive forests and farm crops and affecting the diversity of ecosystems, contributing to acid rain effects.

The SFBAAB topography is complex, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Pacific Ocean bounds the area to the west with warmer inland valleys to the south and east. The only major break in California's Coast Ranges occurs at San Francisco Bay. The gap on the western side is called the Golden Gate and on the eastern side, it is called the Carquinez Strait. These gaps allow air to pass between the Central Valley and the Pacific

3.3 AIR QUALITY

Ocean. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, and offshore winds (ABAG 2021).

During the summer, winds flowing from the northwest are drawn inland through the Golden Gate and over the lower portions of the San Francisco Peninsula. Immediately south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more directly from the west as they stream through the Golden Gate. This channeling of wind through the Golden Gate produces a jet that sweeps eastward and splits off to the northwest toward Richmond and to the southwest toward San Jose when it meets the East Bay hills.

Wind speeds may be strong locally in areas where air is channeled through a narrow opening, such as the Carquinez Strait, the Golden Gate or the San Bruno gap. For example, the average wind speed at San Francisco International Airport in July is about 17 knots (from 3 to 4 PM), compared with only 7 knots at San Jose and less than 6 knots at the Farallon Islands.

The air flowing in from the coast to the Central Valley, called the sea breeze, begins developing at or near ground level along the coast in late morning or early afternoon. As the day progresses, the sea breeze layer deepens and increases in velocity while spreading inland. The depth of the sea breeze depends in large part upon the height and strength of the inversion. If the inversion is low and strong, and hence stable, the flow of the sea breeze will be inhibited and stagnant conditions are likely to result.

In the winter, the SFBAAB frequently experiences stormy conditions with moderate to strong winds, as well as periods of stagnation with very light winds. Winter stagnation episodes are characterized by nighttime drainage flows in coastal valleys. Drainage is a reversal of the usual daytime air-flow patterns; air moves from the Central Valley toward the coast and back down toward the Bay from the smaller valleys within the SFBAAB.

Summertime temperatures in the SFBAAB are determined in large part by the effect of differential heating between land and water surfaces. Because land tends to heat up and cool off more quickly than water, a large-scale gradient (differential) in temperature is often created between the coast and the Central Valley, and small-scale local gradients are often produced along the shorelines of the ocean and bays. The temperature gradient near the ocean is also exaggerated, especially in summer, because of the upwelling of cold ocean bottom water along the coast. On summer afternoons the temperatures at the coast can be 35°F cooler than temperatures 15 to 20 miles inland. At night this contrast usually decreases to less than 10°F.

In the winter, the relationship of minimum and maximum temperatures is reversed. During the daytime the temperature contrast between the coast and inland areas is small, whereas at night the variation in temperature is large.

The potential for high pollutant concentrations developing at a given location depends upon the quantity of pollutants emitted into the atmosphere in the surrounding area or upwind, and the ability of the atmosphere to disperse the contaminated air. The topographic and climatological

factors discussed above influence the atmospheric pollution potential of an area. Atmospheric pollution potential, as the term is used here, is independent of the location of emission sources and is instead a function of factors described below.

Although air pollution potential is strongly influenced by climate and topography, the air pollution that occurs in a location also depends upon the amount of air pollutant emissions in the surrounding area or transported from more distant places. Air pollutant emissions generally are highest in areas that have high population densities, high motor vehicle use and/or industrialization. These contaminants created by photochemical processes in the atmosphere, such as ozone, may result in high concentrations many miles downwind from the sources of their precursor chemicals.

Santa Clara Valley Climatological Subregion

There are 11 climatological subregions within the SFBAAB. Campbell is located within the Santa Clara Valley subregion. The Santa Clara Valley is bounded by the Bay to the north and by mountains to the east, south and west. Temperatures are warm on summer days and cool on summer nights, and winter temperatures are fairly mild. At the northern end of the valley, mean maximum temperatures are in the low-80's during the summer and the high-50's during the winter, and mean minimum temperatures range from the high-50's in the summer to the low-40's in the winter. Further inland, where the moderating effect of the Bay is not as strong, temperature extremes are greater. For example, in San Martin, located 27 miles south of the San Jose Airport, temperatures can be more than 10 degrees warmer on summer afternoons and more than 10 degrees cooler on winter nights.

Winds in the valley are greatly influenced by the terrain, resulting in a prevailing flow that roughly parallels the valley's northwest-southeast axis. A north-northwesterly sea breeze flows through the valley during the afternoon and early evening, and a light south-southeasterly drainage flow occurs during the late evening and early morning. In the summer the southern end of the valley sometimes becomes a "convergence zone," when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing northwesterly winds.

Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with the occasional winter storm.

The air pollution potential of the Santa Clara Valley is high. High summer temperatures, stable air and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from San Francisco, San Mateo and Alameda Counties are carried by prevailing winds to the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low level inversions, ozone can be recirculated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterlies in the afternoon. A similar recirculation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly.

3.3 AIR QUALITY

Pollution sources are plentiful and complex in this subregion. The Santa Clara Valley has a high concentration of industry at the northern end, in the Silicon Valley. Some of these industries are sources of air toxics as well as criteria air pollutants. In addition, Santa Clara Valley's large population and many work-site destinations generate the highest mobile source emissions of any subregion in the SFBAAB.

EXISTING AMBIENT AIR QUALITY: CRITERIA AIR POLLUTANTS

The California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA) currently focus on the following air pollutants as indicators of ambient air quality: ozone, particulate matter (PM), nitrogen dioxide (NO₂), CO, sulfur dioxide (SO₂), and lead. Because these are the most prevalent air pollutants known to be harmful to human health, they are commonly referred to as "criteria air pollutants." Sources and health effects of the criteria air pollutants are summarized in Table 3.3-1.

TABLE 3.3-1: COMMON SOURCES OF HEALTH EFFECTS FOR CRITERIA AIR POLLUTANTS

POLLUTANTS	SOURCES	HEALTH EFFECTS
Ozone	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	Aggravation of respiratory and cardiovascular diseases; reduced lung function; increased cough and chest discomfort; heart attacks; premature mortality
Fine Particulate Matter (PM ₁₀ and PM _{2.5})	Stationary combustion of solid fuels; construction activities; industrial processes; atmospheric chemical reactions	Reduced lung function; aggravation of respiratory and cardiovascular diseases; increased blood pressure; premature mortality
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust; high temperature stationary combustion; atmospheric reactions	Aggravation of respiratory illness
Carbon Monoxide (CO)	Incomplete combustion of fuels and other carbon-containing substances, such as motor vehicle exhaust; natural events, such as decomposition of organic matter	Aggravation of some heart diseases; reduced tolerance for exercise; impairment of mental function; birth defects; death at high levels of exposure
Sulfur Dioxide (SO ₂)	Combination of sulfur-containing fossil fuels; smelting of sulfur-bearing metal ore; industrial processes	Aggravation of respiratory diseases; reduced lung function
Lead	Contaminated soil	Behavioral and hearing disabilities in children; nervous system impairment

SOURCE: BAY AREA AIR QUALITY MANAGEMENT DISTRICT (2017)

Ozone, or smog, is not emitted directly into the environment, but is formed in the atmosphere by complex chemical reactions between reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. Exposure to ozone can damage the lungs and aggravate respiratory conditions such as asthma, bronchitis, and emphysema. Motor vehicles and industrial sources are the largest sources of ozone precursors in the Bay Area. Emissions of ozone precursors have been greatly reduced in recent decades. As a result, Bay Area ozone levels and population exposure to harmful levels of smog have decreased substantially. Despite this progress, the Bay Area has not yet

fully attained State and federal ozone standards. This is primarily due to the progressively tightened federal ozone standard, but also to the amount of population and economic growth occurring within the Bay Area.

Particulate Matter refers to a wide range of solid or liquid particles in the atmosphere, including smoke, dust, aerosols, and metallic oxides. Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM₁₀. PM₁₀ is primarily composed of large particles from sources such as road dust, residential wood burning, construction/demolition activities, and emissions from on- and off-road engines. PM_{2.5} includes a subgroup of finer particles that have an aerodynamic diameter of 2.5 micrometers or less. Some particulate matter, such as pollen, is naturally occurring. In the SFBAAB most particulate matter is caused by combustion, factories, construction, grading, demolition, agricultural activities, and motor vehicles. Extended exposure to particulate matter can increase the risk of chronic respiratory disease. PM₁₀ is of concern because it bypasses the body's natural filtration system more easily than larger particles, and can lodge deep in the lungs. PM_{2.5} poses an increased health risk because the particles can deposit deep in the lungs and contain substances that are particularly harmful to human health. Motor vehicles are currently responsible for about half of particulates in the SFBAAB. Wood burning in fireplaces and stoves is another large source of fine particulates.

Nitrogen Dioxide (NO₂) is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Aside from its contribution to ozone formation, nitrogen dioxide can increase the risk of acute and chronic respiratory disease and reduce visibility. NO₂ may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels. Most of the Bay Area's NO₂ comes from on-road motor vehicles. Since the year 2010, the Bay Area has had three exceedances of the national NO₂ standard in 2012, 2015, and 2017 (ABAG, 2021).

Carbon Monoxide (CO) is an odorless, colorless gas. It is formed by the incomplete combustion of fuels. The single largest source of CO in the SFBAAB is motor vehicles. Emissions are highest during cold starts, hard acceleration, stop-and-go driving, and when a vehicle is moving at low speeds. Findings indicate that CO emissions per mile are lowest at about 45 mph for the average light-duty motor vehicle and begin to increase again at higher speeds. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia, as well as fetuses. Even healthy people exposed to high CO concentrations can experience headaches, dizziness, fatigue, unconsciousness, and even death.

Sulfur Dioxide (SO₂) is a colorless acid gas with a pungent odor. It has potential to damage materials and it can have health effects at high concentrations. It is produced by the combustion of sulfur-containing fuels, such as oil, coal, and diesel. SO₂ can irritate lung tissue and increase the risk of acute and chronic respiratory disease. Most of the Bay Area's SO₂ comes from petroleum refineries. Despite these major sources, the overall concentration of SO₂ in the region is low. Over the past 10 years, the Bay Area has not experienced any exceedances of either the national or the State SO₂ standard (ABAG 2021).

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

In the early 1970s, the EPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The EPA banned the use of leaded gasoline in highway vehicles in December 1995. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from mobile sources decreased 89 percent between 1980 and 2010. In the Bay Area, aircraft exhaust and manufacturing are the major sources of lead emissions. Contact with lead-based paint in older buildings and demolition activities are also a health concern in the region (ABAG 2021).

Ambient Air Quality Standards and Designations

Both the EPA and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and California state ambient air quality standards are summarized in Table 3.3-2 for important pollutants. The federal and state ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone, PM_{2.5}, and PM₁₀.

The U.S. Environmental Protection Agency established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The 1-hour ozone standard was phased out and replaced by an 8-hour standard of 0.075 PPM. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the U.S. Supreme Court in a decision issued in February of 2001. In April 2005, the Air Resources Board approved a new eight-hour standard of 0.070 ppm and retained the one-hour ozone standard of 0.09 after an extensive review of the scientific literature. The EPA signed a final rule for the Federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, and was effective as of December 28, 2015.

The current federal and State ambient air quality standards and attainment standards are presented in Table 3.3-2.

TABLE 3.3-2: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	AVERAGING TIME	FEDERAL PRIMARY STANDARD	STATE STANDARD
Ozone	1-Hour	--	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.03 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM ₁₀	Annual	--	20 ug/m ³
	24-Hour	150 ug/m ³	50 ug/m ³
PM _{2.5}	Annual	12 ug/m ³	12 ug/m ³
	24-Hour	35 ug/m ³	--
Lead	30-Day Avg.	--	1.5 ug/m ³
	3-Month Avg.	0.15 ug/m ³	--

NOTES: PPM = PARTS PER MILLION, µG/M³ = MICROGRAMS PER CUBIC METER

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2022A.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An “attainment” designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A “nonattainment” designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An “unclassified” designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The EPA designates areas for ozone, CO, and NO₂ as “does not meet the primary standards,” “cannot be classified,” or “better than national standards.” For SO₂, areas are designated as “does not meet the primary standards,” “does not meet the secondary standards,” “cannot be classified,” or “better than national standards.” However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Santa Clara County has a state designation of Nonattainment for Ozone, PM₁₀, and PM_{2.5} and is either Unclassified or Attainment for all other criteria pollutants. The County has a national designation of Nonattainment for ozone and PM_{2.5}. The County is designated either attainment or unclassified for the remaining national standards. Table 3.3-3 presents the state and national attainment statuses for Santa Clara County.

3.3 AIR QUALITY

TABLE 3.3-3: STATE AND NATIONAL ATTAINMENT STATUS

POLLUTANT	STATE DESIGNATION	NATIONAL DESIGNATION
Ozone	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Unclassified
PM _{2.5}	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Sulfates	Attainment	--
Lead	Attainment	--
Hydrogen Sulfide	Unclassified	--
Visibility Reducing Particles	Unclassified	--

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2022C

Monitoring Data

The BAAQMD operates a regional air quality monitoring network that regularly measures the concentrations of the five major criteria air pollutants. Air quality conditions in the SFBAAB have improved significantly since the BAAQMD was created in 1955. Ambient concentrations and the number of days on which the region exceeds standards have declined dramatically. Neither Federal nor State ambient air quality standards have been violated in recent decades for nitrogen dioxide, sulfur dioxide, sulfates, lead, hydrogen sulfide, and vinyl chloride.

The CARB maintains air quality monitoring stations throughout California. Table 3.3-4 provides the aggregated statistics obtained from the monitoring sites in Santa Clara County between 2018 and 2020 for ozone (1-hour and 8-hour), PM₁₀, and PM_{2.5}.

TABLE 3.3-4: AMBIENT AIR QUALITY MONITORING DATA (SANTA CLARA COUNTY)

POLLUTANT	CAL.	FED.	YEAR	DAYS EXCEEDED STATE/FED STANDARD
	PRIMARY STANDARD			
Ozone (O ₃) (1-hour)	0.09 ppm for 1 hour	NA	2020	2 / 0
			2019	1 / 0
			2018	1 / 0
Ozone (O ₃) (8-hour)	0.07 ppm for 8 hour	0.07 ppm for 8 hour	2020	5 / 5
			2019	3 / 4
			2018	1 / 1
Particulate Matter (PM ₁₀)	50 ug/m ³ for 24 hours	150 ug/m ³ for 24 hours	2020	29.9 / 0
			2019	11.8 / 0
			2018	12.2 / 0
Fine Particulate Matter (PM _{2.5})	No 24 hour State Standard	35 ug/33 for 24 hours	2020	* / 16.2
			2019	* / 0.0
			2018	* / 16.3

NOTES:

PPM = PARTS PER MILLION.

UG/M³ = MICRONS PER CUBIC METER.

NA= NOT APPLICABLE

* = THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE

SOURCE: CALIFORNIA AIR RESOURCES BOARD (ADAM) AIR POLLUTION SUMMARIES, 2022B.

NOTE: PM₁₀ DATA WAS NOT AVAILABLE UNDER COUNTY SUMMARY; PM₁₀ DATA WAS TAKEN FROM THE SAN JOSE-JACKSON STREET MONITORING SITE.

Emissions Inventory

The BAAQMD estimates emissions of criteria air pollutants from approximately nine hundred source categories. The estimates are based on BAAQMD permit information for stationary sources (e.g., manufacturing industries, refineries, dry-cleaning operations), plus more generalized estimates for area sources (e.g., space heating, landscaping activities, use of consumer products) and mobile sources (e.g., trains, ships and planes, as well as on-road and off-road motor vehicles).

EXISTING AMBIENT AIR QUALITY: TOXIC AIR CONTAMINANTS

In addition to the criteria air pollutants listed above, another group of pollutants, commonly referred to as toxic air contaminants (TACs) or hazardous air pollutants can result in health effects that can be quite severe. Many TACs are confirmed or suspected carcinogens or are known or suspected to cause birth defects or neurological damage. Additionally, many TACs can be toxic at very low concentrations. For some chemicals, such as carcinogens, there are no thresholds below which exposure can be considered risk-free.

Industrial facilities and mobile sources are significant sources of TACs; however, there are additional sources of TACs beyond these sources. Various common urban facilities also produce TAC emissions, such as gasoline stations (benzene), hospitals (ethylene oxide), and dry cleaners (perchloroethylene). Automobile exhaust also contains TACs such as benzene and 1,3-butadiene. Diesel particulate matter (PM) has also been identified as a TAC by CARB. Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. BAAQMD research indicates that mobile-source emissions of diesel PM, benzene, and 1,3-butadiene represent a substantial portion of the ambient background risk from TACs in the SFBAAB.

Sensitive receptors, which include children, the sick, and the elderly, may be especially impacted by TACs. Health risks from diesel PM are highest in areas of concentrated emissions, such as near ports, rail yards, freeways, or warehouse distribution centers. According to CARB, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Those most vulnerable are children, whose lungs are still developing, and the elderly, who may have other serious health problems. Based on numerous studies, CARB has also stated that diesel PM is a contributing factor for premature death from heart and/or lung diseases. In addition, diesel PM reduces visibility and is a strong absorber of solar radiation that contributes to global warming.

According to CARB, levels of toxic air pollutants have decreased significantly with the adoption of airborne toxic control measures, stringent vehicle standards, requirements for low-emission vehicles, and cleaner fuels. As a result of these measures, more than 30,000 facilities in California have reduced their toxic emissions. This has led to the reduction of ambient cancer risk in California by about 80 percent since 1990. Several communities also have established community emission reduction plans that outline actions that stationary facilities and mobile sources can take to further reduce harmful air pollutants.

BAAQMD's Community Air Risk Evaluation (CARE) Program, initiated in 2004, works extensively with local governments, communities, and businesses to reduce air pollution and adverse health

outcomes in disproportionately affected areas within the Bay Area. Periodically, the CARE Program identifies affected areas by overlaying maps that combine emissions, estimated cancer risks, predicted PM_{2.5} concentrations, and health outcome data.

The CARE program has brought together government, communities, and business in an effort to understand and address localized areas of elevated air pollution and adverse health impacts. While improvements in air quality continues to occur throughout the Bay Area, levels of air pollution and their impacts vary from location to location. Air pollution levels of many pollutants are highest in close proximity to pollution sources, such as near freeways, busy roadways, busy distribution centers, and large industrial sources. Communities where these types of sources are concentrated often have areas within them where air pollution is relatively high and corresponding health impacts are greater.

In addition to tracking regional criteria pollution levels as measured at central monitoring sites, and in addition to tracking TAC pollution levels from individual permitted facilities, BAAQMD tracks the cumulative impacts of exposures to multiple pollutants and multiple sources in the neighborhoods where people live. With the shift toward more consideration of cumulative air pollution exposures, BAAQMD's staff continues to evaluate the health status of Bay Area residents and how health status affects vulnerability to air pollution. This gradual shift will continue to require closer collaboration between BAAQMD and the region's health departments and health professionals and researchers. By exploring the links between air pollution exposures and community health status, the CARE Program will continue to help focus BAAQMD's resources to achieve the greatest health benefits (ABAG 2021).

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For

example, a person may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, a sensitive receptor would be a location where a sensitive individual could remain for 24-hours or longer, such as residences, hospitals, and schools (etc.).

As a planning document, the General Plan Update identifies Land Use Designations within the Planning Area, which specify the type of allowed uses associated with each designation. However, site-specific development is not proposed. Campbell has numerous sensitive land uses, in particular, residential communities. These sensitive land uses would continue to exist and new sensitive land uses are anticipated to occur within implementation of the General Plan Update. As a conservative estimate of impacts, sensitive receptors are anticipated to be located directly adjacent to new development.

3.3.2 REGULATORY SETTING

Air quality with respect to criteria air pollutants and toxic air contaminants (TACs) within the San Francisco Bay Area Air Basin (SFBAAB) is regulated by such agencies as the BAAQMD, CARB, and Federal EPA. Each of these agencies develops rules, regulations, policies, and/or goals to attain the goals or directives imposed through legislation. Although the EPA regulations may not be superseded, both State and local regulations may be more stringent.

FEDERAL AIR QUALITY REGULATIONS

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS

3.3 AIR QUALITY

were established: primary standards, which protect public health (with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases), and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

NAAQS standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the ozone and PM_{2.5} ambient air quality standards indicate that certain individuals exposed to these pollutants may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

NAAQS standards have been designed to accurately reflect the latest scientific knowledge and are reviewed every five years by a Clean Air Scientific Advisory Committee (CASAC), consisting of seven members appointed by the EPA administrator. Reviewing NAAQS is a lengthy undertaking and includes the following major phases: Planning, Integrated Science Assessment (ISA), Risk/Exposure Assessment (REA), Policy Assessment (PA), and Rulemaking. The process starts with a comprehensive review of the relevant scientific literature. The literature is summarized and conclusions are presented in the ISA. Based on the ISA, EPA staff perform a risk and exposure assessment, which is summarized in the REA document. The third document, the PA, integrates the findings and conclusions of the ISA and REA into a policy context, and provides lines of reasoning that could be used to support retention or revision of the existing NAAQS, as well as several alternative standards that could be supported by the review findings. Each of these three documents is released for public comment and public peer review by CASAC. Members of CASAC are appointed by the EPA Administrator for their expertise in one or more of the subject areas covered in the ISA. The committee's role is to peer review the NAAQS documents, ensure that they reflect the thinking of the scientific community, and advise the Administrator on the technical and scientific aspects of standard setting. Each document goes through two to three drafts before CASAC deems it to be final.

Although there is some variability among the health effects of the NAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations, and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. NAAQS standards were last revised for each of the six criteria pollutants as listed below, with detail on what aspects of NAAQS changed during the most recent update:

- Ozone: On October 1, 2015, the EPA lowered the national eight-hour standard from 0.075 ppm to 0.070 ppm, providing for a more stringent standard consistent with the current California state standard.
- CO: In 2011, the primary standards were retained from the original 1971 level, without revision. The secondary standards were revoked in 1985.
- NO₂: The national NO₂ standard was most recently revised in 2010 following an exhaustive review of new literature pointed to evidence for adverse effects in asthmatics at lower NO₂ concentrations than the existing national standard.

- SO₂: On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb.
- PM: the national annual average PM_{2.5} standard was most recently revised in 2012 following an exhaustive review of new literature pointed to evidence for increased risk of premature mortality at lower PM_{2.5} concentrations than the existing standard.
- Lead: The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. In 2016, the primary and secondary standards were retained.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc., are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. The CARB is the state agency that is responsible for preparing and implementing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the EPA adopted implementing regulations in 1997. See Section 176 of the FCAA (42 U.S.C. Section 7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas (maintenance areas are those areas that were in nonattainment that have been redesignated to attainment, under the FCCA). Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to

single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE AIR QUALITY REGULATIONS

California Clean Air Act

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [Section 39606(b)], which are similar to the federal standards.

California Air Quality Standards

Although NAAQS are determined by the EPA, states have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards. Federal and State ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM₁₀), and lead. In addition, California has created standards for pollutants that are not covered by federal standards. Although there is some variability among the health effects of the CAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations, and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. The existing State and federal primary standards for major pollutants are shown in Table 3.3-2.

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. The Office of Environmental Health Hazard Assessment (OEHHA) uses the review of health literature to develop a recommendation for the standard. The recommendation can be for no change, or can recommend a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and also for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee provides written comments on the draft ISOR. CARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board at a regularly scheduled Board hearing.

In June of 2002, CARB adopted revisions to the PM₁₀ standard and established a new PM_{2.5} annual standard. The new standards became effective in June 2003. Subsequently, staff reviewed the published scientific literature on ground-level ozone and nitrogen dioxide and CARB adopted revisions to the standards for these two pollutants. Revised standards for ozone and nitrogen

dioxide went into effect on May 17, 2006 and March 20, 2008, respectively. These revisions reflect the most recent changes to the CAAQS.

CARB Mobile-Source Regulations

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

CARB Air Quality and Land Use Handbook

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities. The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate [I] 405 and I-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day."

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology (BACT) to minimize emissions.

AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, CARB adopted a new public-transit bus-fleet rule and emission

standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Other recent milestones include the low-sulfur diesel-fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide.

REGIONAL AND LOCAL AIR QUALITY REGULATIONS

Bay Area Air Quality Management District (BAAQMD)

The BAAQMD attains and maintains air quality conditions in the SFBAAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the BAAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The BAAQMD also inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the FCAA and the CCAA. For State air quality purposes, the Bay Area is classified as a serious nonattainment area of the 1-hour ozone standard. The “serious” classification triggers various plan submittal requirements and transportation performance standards. One such requirement is that the Bay Area update the Clean Air Plan every three years to reflect progress in meeting the air quality standards and to incorporate new information regarding the feasibility of control measures and new emission inventory data.

The *2017 Clean Air Plan: Spare the Air, Cool the Climate* (2017 Clean Air Plan) was adopted on April 19, 2019 by BAAQMD in cooperation with the Metropolitan Transportation Commission, the San Francisco Bay Conservation and Development Commission, and the Associate of Bay Area Governments (ABAG). The 2017 Clean Air Plan describes a multi-pollutant strategy to simultaneously reduce emissions and ambient concentrations of ozone, fine particulate matter, toxic air contaminants, as well as greenhouse gases that contribute to climate change. The 2017 Clean Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the 2017 Clean Plan describes how BAAQMD will continue progress toward attaining all State and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other “super-GHGs” that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

BAAQMD adopts rules and regulations and all projects are subject to BAAQMD's rules and regulations in effect at the time of construction. Specific rules applicable to site-specific project construction and operation may include, but are not limited to:

- Regulation 2, Rule 1, General Permit requirements. This rule includes criteria for issuance or denial of permits, exemptions, appeals against decisions of the air pollution control officer, and BAAQMD actions on applications.
- Regulation 2, Rule 2, New Source Review. This rule applies to new or modified sources and contains requirements for best available control technology (BACT) and emission offsets. Rule 2 implements federal New Source Review and Prevention of Significant Deterioration requirements.
- Regulation 6, Rule 1, General Requirements. Regulation 6 limits the quantity of PM in the atmosphere by controlling emission rates, concentration, visible emissions, and opacity.
- Regulation 7, Odorous Substances. Regulation 7 places general limitation on certain odorous compounds.
- Regulation 8, Rule 3, Architectural Coatings. This rule limits the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within BAAQMD's jurisdiction.

BAAQMD CEQA Guidelines

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

The thresholds were challenged in court. Following litigation in the trial court, the court of appeal, and the California Supreme Court, all of the thresholds were upheld. However, in an opinion issued on December 17, 2015, the California Supreme Court held that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards unless the project would exacerbate existing environmental hazards. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA.

In view of the Supreme Court's opinion, local agencies may rely on thresholds designed to reflect the impact of locating development near areas of toxic air contamination where such an analysis is required by CEQA or where the agency has determined that such an analysis would assist in making

a decision about the project. However, the thresholds are not mandatory and agencies should apply them only after determining that they reflect an appropriate measure of a project's impacts.

The Guidelines for implementation of the thresholds are for information purposes only to assist local agencies. Recommendations in the Guidelines are advisory and should be followed by local governments at their own discretion. These Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or the Air District to any specific course of regulatory action.

The Air District published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion.

Association of Bay Area Governments and Metropolitan Transportation Commission Plan Bay Area 2050

Plan Bay Area 2050 was jointly adopted by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) in October 2021 and is the region's Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS). Plan Bay Area 2050 is a long-range regional plan for the nine-county San Francisco Bay Area, encompassing housing, economic, transportation, and environmental strategies designed to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges.

Plan Bay Area 2050 is composed of 35 integrated strategies across the four elements that provide a blueprint for how the Bay Area can accommodate future growth and make the region more equitable and resilient in the face of unexpected challenges and achieve regional GHG emissions reduction targets established by CARB, pursuant to SB 375.

In summary, Plan Bay Area 2050:

- Details housing and economic strategies ("land use") to invest \$702 billion in expected revenues to accommodate 2.7 million new persons, 1.4 million new households, 1.5 million new forecasted housing units, and 1.4 million new jobs between 2015 and 2050;
- Details transportation strategies to invest \$579 billion in expected revenues from federal, State, regional, and local sources over the next 30 years;
- Details environmental strategies to invest \$102 billion in expected revenues to protect the region from at least two feet of future permanent sea level rise inundation, reduce climate emissions, and maintain and expand the region's parks and open space system; and
- Complies with Senate Bill (SB) 375, the State's SCS law, which requires integration of land use and transportation planning to reduce per-capita passenger vehicle GHG emissions by 2035 and provide adequate housing for the region's forecast of 2.7 million new persons and 1.4 million new households.

3.3.3 IMPACTS AND MITIGATION MEASURES

Long range plans (e.g., general plans) present unique challenges for assessing impacts because they contain development strategies for 20-year, or longer, time horizons. Due to the SFBAAB's nonattainment status for ozone and PM, and the cumulative impacts of growth on air quality, these plans almost always have significant, unavoidable adverse air quality impacts. CEQA requires the lead agency to evaluate individual as well as cumulative impacts of general plans, and all feasible mitigation measures must be incorporated within the proposed plan to reduce significant air quality impacts.

The BAAQMD CEQA Guidelines provide guidance on how to evaluate air quality impacts associated with implementation of long-range plans prepared within the SFBAAB pursuant to CEQA. Air quality impacts from future development pursuant to general plans can be divided into construction-related impacts and operational-related impacts. Construction-related impacts are associated with construction activities likely to occur in conjunction with future development allocated by the plan. Operational-related impacts are associated with continued and future operation of developed land uses, including increased vehicle trips and energy use.

THRESHOLDS OF SIGNIFICANCE

Per Appendix G of the CEQA Guidelines and BAAQMD recommendations, air quality impacts are considered significant if implementation of the General Plan Update would:

- Conflict with or obstruct implementation of an applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: General Plan implementation would not conflict with or obstruct implementation of the applicable air quality plan (Less than Significant)

The BAAQMD is the regional agency responsible for overseeing compliance with State and federal laws, regulations, and programs within the SFBAAB. The BAAQMD, with assistance from ABAG and MTC, has prepared and implements specific plans to meet the applicable laws, regulations, and programs. The most recent and comprehensive of which is the Bay Area 2017 Clean Air Plan. The BAAQMD has also developed CEQA guidelines to assist lead agencies in evaluating the significance of air quality impacts. In formulating compliance strategies, BAAQMD relies on planned land uses established by local general plans. Land use planning affects vehicle travel, which in turn affects region-wide emissions of air pollutants and GHG.

CEQA requires lead agencies to determine whether a project is consistent with all applicable air quality plans. The BAAQMD's most current plan is the 2017 Clean Air Plan. The BAAQMD CEQA Guidelines recommend that lead agencies consider the following questions relative to this consistency determination:

1. Does the project support the primary goals of the of the 2017 Clean Air Plan?
2. Does the project include applicable control measures from the 2017 Clean Air Plan?
3. Does the project disrupt or hinder implementation of the 2017 Clean Air Plan control measures?

The primary goals of the 2017 Clean Air Plan are to protect public health and the climate. The 2017 Clean Air Plan contains 85 individual control measures that describe specific actions to reduce emissions of air and climate pollutants from the full range of emission sources. The control measures are categorized based upon the economic sector framework used by the Air Resources Board for the AB 32 Scoping Plan Update. These sectors include:

- Stationary (Industrial) Sources
- Transportation
- Energy
- Buildings
- Agriculture
- Natural and Working Lands
- Waste Management
- Water
- Super-GHG Pollutants

The proposed General Plan Update proposes a land use plan and policy framework that are specifically aimed at improving air quality. The General Plan Land Use, Transportation, Community Design, and Conservation & Open Space Elements contain policies and actions that would reduce criteria pollutant emissions, odors, health risks, and other emissions, consistent with the issues

recommended in the 2017 Clean Air Plan, as described further below. Subsequent development projects proposed within the Planning Area would be subject to all relevant General Plan Update policies and actions that provide protections for air quality.

Proposed policies and actions are consistent with the intent of the control measures by promoting a compact urban development form, emphasizing infill development, and ensuring that land use patterns do not expose sensitive receptors to pollutant concentrations. Proposed General Plan Update Land Use Element Policy LU-1.1 requires the provision of a broad range of land uses located in proximity to transit opportunities. LU-4.2 supports the continued development and intensification of employment centers throughout all non-residential areas. LU-4.6 encourages the location of high quality, professional office campuses, business parks, and industrial parks along with related mixed-use development. LU-6.5 promotes transit-oriented and mixed-use development throughout Downtown Campbell. Additionally, future non-residential developments would be evaluated through the CEQA process or BAAQMD permit process to ensure they do not cause a significant health risk. Sites would be required to be designed to locate away from pollution sources and trees and/or vegetation would be required as a buffer between sensitive receptors and pollution sources.

Additionally, the Transportation Element includes a wide range of policies and actions that would effectively reduce vehicle miles traveled per service population throughout the Planning Area, through the use of complete streets and multi-modal transportation systems. These applicable policies and actions are described in greater detail in Section 3.14 (Transportation and Circulation). For example, Proposed General Plan Update Transportation Element Policy T-1.1 requires the development and implementation of a connected multi-modal transportation network that balances transportation modes, encourages non-automobile travel, and reduces greenhouse gas emissions, while promoting healthier travel alternatives for all users and respecting context. Policy T-1.2 requires implementation of best practices to improve the pedestrian and bicycle environment. Policy T-1.3 ensures that the City's circulation network is improved over time to support buildout of the General Plan. Policy T-2.1 requires participation in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell's local transportation system for local users. Policy T-3.2 requires implementation of VMT reduction measures, such as Transportation Demand Management (TDM) measures, and other strategies to reduce VMT in Campbell. Additionally, Policy T-4.1 requires new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use. Further, Policy T-6.3 requires coordinating pedestrian and bicycle facility improvements and "road diet" reconfigurations with pavement improvement projects (e.g. repaving and restriping) to the greatest extent feasible and while taking into consideration potential secondary effects or unintended impacts.

A primary goal of the 2017 Clean Air Plan is to address public health. The 2017 Clean Air Plan addresses public health through identifying control measures to maximize the reduction in population exposure to air pollutants and by including a category titled *Land Use and Local Impacts Measures* that is intended to address localized impacts of air pollution and to help local jurisdictions to pursue transit-oriented infill development in priority areas. As discussed above, the General Plan Update includes goals, policies, and actions to support transit-oriented infill development.

3.3 AIR QUALITY

Additionally, proposed goals, policies, and actions would ensure the siting of sensitive receptors with the potential for exposure to criteria pollutants and significant health risks are assessed at the project-level (i.e. Policy COS-10.3). Thus, the proposed General Plan Update would be consistent with the 2017 Clean Air Plan's primary goal to address public health.

The 2017 Clean Air Plan's primary goal of protecting the climate is to reduce greenhouse gases. Greenhouse gases and General Plan Update applicable policies and actions are discussed in greater detail in Section 3.7 (Greenhouse Gas Emissions, Climate Change & Energy). For example, Policy COS-10.2 requires the City to align the City's locate GHG reduction targets with the statewide GHG reduction targets. Thus, the proposed General Plan Update would be consistent with the 2017 Clean Air Plan's primary goal of protecting the climate to reduce greenhouse gases.

If the proposed General Plan Update would cause the disruption, delay, or otherwise hinder the implementation of any air quality plan control measure, it may be inconsistent with the 2017 Clean Air Plan. The proposed General Plan Update does not cause the disruption, delay, or otherwise hinder the implementation of any quality plan control measure; therefore, it is consistent with the 2017 Clean Air Plan. The Planning Area is surrounded by existing urbanized uses, and is bisected by some of the most heavily-traveled highway corridors in the San Francisco Bay Area. The proposed General Plan Update emphasizes pedestrian-oriented neighborhoods, appropriately-scaled commercial areas with strong pedestrian and bicycle connections, and infill development within the Downtown areas with a commitment to develop more housing along with amenities and services to meet the day-to-day needs of residents in a pedestrian-friendly environment served by transit. The Land Use Plan and policies and actions emphasize alternative transportation access and multi-modal connectivity throughout the Planning Area and into the surrounding areas. The General Plan Update's proposed land use plan and policy framework would support the 2017 Clean Air Plan and provide for development that would support placement of land uses in proximity to each other and to transit; reduce vehicle trips; and address potential health-related impacts associated with new development, amongst others. All future development and infrastructure projects within the Planning Area would be subject to the proposed General Plan Update goals, policies, and actions, which would contribute to the reduction of emissions and air quality impacts. Therefore, implementation of the proposed General Plan Update, which is consistent with all federal and state guidelines, would be consistent with the 2017 Clean Air Plan.

The BAAQMD's May 2017 CEQA Guidelines also identify thresholds of significance for criteria air pollutants and precursors for planning-level documents. As described in Section 2.7.1 of the 2017 CEQA Guidelines, proposed plans (except regional plans) must show the following over the planning period of the plan to result in a less than significant impact:

- Consistency with current air quality plan control measures.
- A proposed plan's projected vehicle miles traveled (VMT) or vehicle trips (VT) (either measure may be used) increase is less than or equal to its projected population increase.

The analysis provided above demonstrates that the proposed General Plan Update would be consistent with the current air quality plan control measures.

Annual vehicle miles traveled (VMT) for 2016 and buildout year 2040 was provided from the project traffic consultant; refer to Section 4.14 (Transportation and Circulation). Table 3.3-5 identifies the VMT and population for the General Plan Update. Using 2016 as a baseline year, City of Campbell VMT attributable to the General Plan Update is anticipated to increase approximately 41.8 percent, while the population would increase approximately 52.0 percent. As shown in Table 3.3-5, VMT per capita would decrease with implementation of the General Plan Update. As a result, the proposed General Plan Update’s projected VMT increase would be less than the projected population increase. Therefore, this impact would be less than significant under the criteria established by the BAAQMD’s May 2017 CEQA Guidelines.

TABLE 3.3-5: PLANNING AREA VEHICLE MILES TRAVELED

SCENARIO	POPULATION	CITY OF CAMPBELL VMT	VMT PER PERSON
Existing (2016)	42,730	2,446,780	57.3
Proposed General Plan (2040)	64,930	3,468,760	53.4
Proposed General Plan Difference	+22,200 (+52.0%)	+1,021,980 (+41.8%)	-3.9 (-6.7%)

SOURCE: FEHR & PEERS, 2022

Summary

The proposed General Plan Update would further the fundamental goals of the BAAQMD in reducing emissions of criteria pollutants associated with vehicle miles traveled by providing opportunities for pedestrian-oriented neighborhoods, appropriately-scaled commercial areas with strong pedestrian and bicycle connections, and infill development within the Downtown areas with a commitment to develop more housing along with amenities and services to meet the day-to-day needs of residents in a pedestrian-friendly environment served by transit. The Land Use Plan and policies and actions emphasize alternative transportation access and multi-modal connectivity throughout the Planning Area and into the surrounding areas. Implementation of the General Plan Update goals, policies, and actions would minimize criteria pollutant emissions. For the reasons described above, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan and this impact is considered **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

LU-1.1 Provide for a broad range of land uses within the City that are conveniently located in proximity to transit opportunities, and provide for commercial, public, and quasi-public uses that support and enhance the livability of residential neighborhoods and districts.

LU-4.2 Support the continued development and intensification of employment centers throughout all non-residential areas.

LU-4.6 Encourage the location of high quality, professional office campuses, business parks, and industrial parks along with related mixed-use development, where appropriate within the City.

LU-6.5 Promote transit-oriented and mixed-use development throughout Downtown Campbell.

3.3 AIR QUALITY

TRANSPORTATION ELEMENT POLICIES

- T-1.1 Develop and implement a connected multi-modal transportation network that balances transportation modes, encourages non-automobile travel, and reduces greenhouse gas emissions, while promoting healthier travel alternatives for all users and respecting context.
- T-1.2 Implement best practices to improve the pedestrian and bicycle environment.
- T-1.3 Ensure that the City’s circulation network is improved over time to support buildout of the General Plan.
- T-2.1 Participate in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell’s local transportation system for local users.
- T-2.2 Support regional transportation funding measures.
- T-3.2 Implement VMT reduction measures, such as Transportation Demand Management (TDM) measures, and other strategies to reduce VMT in Campbell.
- T-3.3 Provide infrastructure improvements to manage regional traffic and to reduce congestion on area roadways.
- T-3.4 Support programmatic Transportation Demand Management (TDM) measures to reduce traffic demand in Campbell. Examples include but are not limited to measures such as alternative work schedules, subsidized transit passes, and future measures as programs and technologies evolve.
- T-4.1 Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use
- T-4.2 Require new developments and redevelopments to use best practices in providing pedestrian and bicycle connections between the sites and existing and planned facilities, including those identified in the Bicycle Master Plan, Pedestrian Master Plan, and other relevant plans and documents.
- T-6.3 Coordinate pedestrian and bicycle facility improvements and “road diet” reconfigurations with pavement improvement projects (e.g. repaving and restriping) to the greatest extent feasible and while taking into consideration potential secondary effects or unintended impacts.

TRANSPORTATION ELEMENT ACTIONS

- T-1.a Create a complete streets implementation guide to reflect General Plan complete street policies, including sidewalk standards, bike facility standards, Americans with Disabilities Act (ADA) requirements, lighting standards, and landscaping requirements. The guide shall

- include updated streetscape standards for the City's image streets: Hamilton Avenue, Bascom Avenue, Winchester Boulevard, and parts of West Campbell Avenue
- T.1.b Design roadway space and intersections for a variety of users, including motor vehicles, transit vehicles, bicycles, pedestrians, and future travel modes, when constructing or modifying these facilities.
 - T.1.c Prepare a Bicycle Master Plan to achieve a bike network that eliminates gaps where possible and creates a safe, convenient, low-stress system that connects bicyclists of all levels and abilities to destinations throughout the City.
 - T.1.d Construct improvement projects identified in the Bicycle Master Plan.
 - T.1.e Provide adequate public bike parking facilities throughout the City, including all public facilities and trail heads.
 - T.1.f Develop and implement a Pedestrian Master Plan to provide a safe and convenient pedestrian network connecting neighborhoods with destinations throughout the City and that is consistent with the City's ADA Implementation Plan. The Pedestrian Master Plan should include Safe Routes to School policies and procedures and evaluate enhancing Downtown public alleyways for pedestrian use
 - T.1.h Improve pedestrian and bicycle access to bus and light rail stations when evaluating opportunities with new development proposals and capital improvement projects. In cooperation with VTA, evaluate transit-waiting environments to improve convenience and comfort.
 - T.1.i Prepare a multimodal improvement plan to support buildout of the General Plan, update the City's Capital Improvement Program (CIP) to include, as appropriate, the identified improvements, and create and adopt a multimodal transportation impact fee (TIF) program to provide funding for the remaining improvements.
 - T.1-j Seek opportunities to utilize light rail transit and railroad rights-of-way for enhanced bicycle and pedestrian connectivity.
 - T.1.k Provide continuing education to members of the City's Bicycle and Pedestrian Advisory Committee (BPAC) on Complete Streets best practices and policies.
 - T-2.a Participate in intergovernmental activities related to regional and sub-regional transportation planning to advance the City's interests.
 - T.2-b Support the efforts of the Santa Clara Valley Transportation Authority (VTA), the Metropolitan Transportation Commission, and other agencies to coordinate transit planning and transit services in the South Bay and the entire Bay Area.
 - T.2-c Cooperate with the VTA, surrounding communities, and other agencies to establish and maintain regional bicycle and pedestrian facilities including off-road paths and trails utilizing

3.3 AIR QUALITY

- creek, utility, and railroad rights-of-way that are safe and convenient for commuting and recreational use.
- T-2.d Participate in regional initiatives to reduce traffic demand and construct infrastructure improvements to manage regional traffic (for example High Occupancy Vehicle “HOV” lanes and express lanes and freeway information systems) to reduce congestion on Campbell roadways.
- T-3.b Incentivize high-density transit-oriented developments, consistent with the Land Use Map, near light rail stations.
- T-3e Consider implementation of traffic calming measures to ensure safe and reasonable speeds in residential neighborhoods, consistent with the City’s adopted Neighborhood Traffic Management Program (NTCP), as long as the measures do not impede emergency response, bicycle travel, or hinder the complete streets functionality of the roadway. Methods such as radar speed signs may be used to alert drivers on streets where speeding is prevalent.
- T-3.g Support and encourage effective programmatic Transportation Demand Management (TDM) measures for private developments consistent with proposed uses. These could include, but are not limited to, measures such as alternative work schedules, subsidized transit passes, and future measures as programs and technologies evolve. Encourage major employers (employers with over 100 employees) to develop shuttle services to transport employees to and from the worksite. Entities may form transportation management associations (TMAs) to pool resources to fund TDM measures.
- T-3.i Advertise ways to travel to and within Campbell via transit, biking, walking, and other modes that reduce traffic. Potential methods of advertisement may include, but are not limited to:
- Information and links on the City’s website;
 - Wayfinding signs indicating routes and travel times by mode of transit;
 - Postings and flyers at public buildings, parks facilities, and transit stops; and
 - Other methods and strategies that the City determines will be successful and cost effective.
- T-3.j Create and adopt a VMT reduction program and adopt a VMT mitigation fee program to provide funding for the improvements identified in the VMT reduction program. The VMT reduction program should include strategies targeting VMT reductions at the site level, community level, and regional level; should be based on emerging best practices; and should leverage and compliment ongoing regional efforts to reduce VMT.
- T-4.a Require developers to make public improvements related to their project to improve and enhance bicycle, pedestrian, and transit opportunities along the site’s frontage consistent with City policy.

- T-4.e Incorporate pedestrian amenities such as plazas, landscaped areas with seating, and pedestrian walkways into new developments.
- T-4.f Require new or redevelopment projects to provide logical, safe, and well-designed bicycle and pedestrian connections, with wayfinding signage, onsite between building entrances, parking areas, and walkways, and to existing or planned public right-of-way facilities that minimize public nuisance concerns as part of the Objective Standards update. Connect dead-end streets with pedestrian and bicycle paths in new developments.
- T-4.g Require new or redevelopment projects to work with adjacent neighborhoods and jurisdictions to provide logical, safe, and well-designed bicycle and pedestrian connections that minimize public nuisance concerns.
- T-4.h Maintain short-term and long-term bicycle parking standards over and above State minimum standards to provide ample bicycle parking in new developments as part of the City's efforts to facilitate multimodal transportation options and reduce vehicle miles traveled.
- T-4.k For new businesses with 100 or more full-time employees, require Transportation Demand Management (TDM) related site design measures such as showers and changing facilities, designated carpool and van pool parking, and on-site amenities (e.g. food service, fitness center, ATM). Require TDM reports per the Campbell Municipal Code.
- T-6.e Where feasible, coordinate pedestrian and bicycle facility improvements and "road diet" reconfigurations with roadway maintenance activities so that they can be implemented in a cost-effective manner.
- T-6.h Street maintenance should include upkeep and regular cleaning of bicycle routes to remove debris and repair poor pavement conditions that discourage bicycle riding.

COMMUNITY DESIGN ELEMENT POLICIES

- CD-2.5 Encourage passive solar design and energy-efficient concepts, including, but not limited to natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities.

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

- COS-8.1 Require all development projects to comply with the mandatory energy efficiency requirements of the California Green Building Standards Code (CALGreen) and Building and Energy Efficiency Standards.
- COS-8.2 Support and encourage the implementation of innovative and green building best management practices including, but not limited to, sustainable site planning, solar opportunities, LEED certification for new development, the local adoption of Reach Codes, and incorporation of net zero energy development standards in the California Code of Regulations (CCR), Title 24, if feasible.

3.3 AIR QUALITY

- COS-8.3 Promote City operations as a model for energy efficiency and green building and install, as feasible, energy-efficient lighting, appliances, and alternative-energy infrastructure in City facilities.
- COS-8.4 Pursue the use of alternative energy and fuel-efficient City vehicles and equipment that meet or surpass state emissions requirements, to the extent feasible.
- COS-8.5 Continue to participate in Silicon Valley Clean Energy (SVCE) whereby city-owned facilities, parks, and streetlights will run on 100% renewable energy sources like wind and solar, and motivate and encourage Campbell residents and businesses to participate in Silicon Valley Clean Energy (SVCE) to reduce greenhouse gas emissions and support statewide alternative energy use.
- COS-8.6 Coordinate with Pacific Gas and Electric Company (PG&E) to increase public awareness of electrical and natural gas conservation practices and programs, such as rebate programs and energy efficiency audits.
- COS-8.7 Expand water conservation, reuse, and recycling efforts throughout the City in order to meet the conservation goals established by the San Jose Water Company's adopted Urban Water Management Plan and the Campbell Climate Action Plan once adopted.
- COS-8.8 Encourage all public and private landscaping in new development and renovation projects to be designed to reduce water demand, prevent runoff, decrease flooding, and recharge groundwater through the installation of irrigation systems, the selection of appropriate plant material, and proper soil preparation.
- COS-8.9 Maintain and enhance the health of the groundwater basin by encouraging new groundwater recharge opportunities, promoting the use of permeable surface materials, providing ample areas of open space in order to decrease surface runoff and promote groundwater recharge, and through the use of other LID techniques, such bioswales, where feasible.
- COS-8.10 Support the use of on-site rainwater harvesting/catchment systems and small-scale recycled water systems for new and existing development.
- COS-8.11 Support the use and installation of on-site grey water reuse systems.
- COS-10.1 Improve air quality through continuing to require a development pattern that focuses growth in and around existing urbanized areas, locates new housing near places of employment, encourages alternative modes of transportation, supports efficient parking strategies, reduces vehicle miles traveled, and requires projects to mitigate significant air quality impacts.
- COS-10.2 Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

- COS-10.3 Minimize exposure of sensitive receptors to concentrations discretionary projects involving sensitive receptors (i.e., children, the elderly, or people with illnesses) proposed within 500 feet of State Route 17 or State Route 85, require an analysis of mobile source toxic air contaminant health risks and, if necessary, incorporate appropriate mitigation measures to reduce health risks to the greatest extent feasible.
- COS-10.4 Require projects to adhere to the requirements of the Bay Area Air Quality Management District (BAAQMD), including standards related to fireplaces, wood stoves, heaters, dust control, and abatement measures.
- COS-10.5 Reduce adverse air quality impacts of municipal operations.
- COS-10.6 Use the City's development review process and the California Environmental Quality Act (CEQA) to evaluate and mitigate the local and cumulative effects of new development on air quality.
- COS-10.7 Coordinate with the California Air Resources Board (CARB) and the Bay Area Air Quality Management District to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.
- COS-10.8 Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.
- COS-10.9 Coordinate with Santa Clara County and nearby cities to implement regional GHG reduction plans and consolidate efforts to reduce GHGs throughout the county.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

- COS-8.a Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the General Plan and the Campbell Municipal Code.
- COS-8.b Participate in regional energy management and conservation efforts and encourage the expanded use of energy efficient and alternative fuels, buses with bike racks, and other system improvements including infrastructure for alternative energy vehicles that enhance overall energy efficiency and conservation.
- COS-8.c Continue to offer reduced permit fees and expedited permit applications on solar installation projects and promote State, federal, and private rebate programs.
- COS-8.d Consider use of alternative fuel vehicles or electric vehicles for City use. If deemed appropriate, identify vehicle purchase needs in the City's Fleet Replacement Plan.
- COS-8.e Encourage a reduction in residential water usage through plumbing retrofits with ultralow-flush toilets, leak detection and repair, and other programs offered through the City's water service providers.

3.3 AIR QUALITY

COS-8.f Establish standards for onsite rainwater capture and storage. Standards should include size and placement requirements for above ground storage tanks, and requirements for underground water tank storage.

COS-8.g Consider appropriate incentives for new developments incorporating rainwater capture, and grey water re-use systems. Incentives may include:

- Permit fee reductions
- Reduced setback requirements

COS-8.h Provide public information and school education programs including “water-wise” demonstration gardens, seasonal reminders in utility bills and free literature regarding water conservation.

COS-8.i Provide a conservation page (or similar page) on the City’s website that provides links to resource agencies and provides information regarding local and regional conservation and environmental programs, to the extent that the City has readily available information, including recycling guidance for single family residences, businesses, and apartments, opportunities for reuse of materials, a description of how to compost, and a description of methods to reduce water use, such as appropriate reuse and recycling of water, water conservation measures, and xeriscaping.

COS-8.j Work with the City’s water service providers to advertise water conservation and recycling programs for residential, commercial, industrial, and institutional users.

COS-8.k Encourage efforts to reduce landscape water usage through landscape irrigation audits, water-efficient landscape awards programs, and landscape conservation programs offered through the City’s water service providers.

COS-8.l Continue to require new development and remodels to follow the City’s Water Efficient Landscaping Guidelines and Landscape Requirements as defined in Chapter 21.26 of the Municipal Code.

COS-8.m Work with the City’s water service providers to encourage the construction of additional infrastructure in the City for the use of reclaimed water for non-potable uses.

COS-8.n Coordinate with and support the Santa Clara Valley Water District’s groundwater recharge projects, and pursue mutually beneficial agreements that identify and implement groundwater recharge projects within Campbell.

COS-10a Review all new industrial and commercial development projects for potential air quality impacts to residences and other sensitive receptors. The City shall ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.

COS-10.b Review development, infrastructure, and planning projects for consistency with BAAQMD requirements during the application review and/or CEQA review process. Require project applicants to prepare air quality analyses to address BAAQMD and General Plan requirements, which includes analysis and identification of:

- Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions;
- Potential exposure of sensitive receptors to toxic air contaminants;
- Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions; and
- Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

COS-10.c Prepare a Climate Action Plan that establishes GHG reduction targets that are consistent with Statewide GHG reduction goals, and includes an implementation program to achieve the reduction targets. Periodically review and update the Plan as necessary to achieve the GHG reduction targets specified in the Plan.

COS-10.d Encourage improvements such as bus turnouts and synchronized traffic signals for new development to reduce excessive vehicle emissions caused by idling.

COS-10.e Continue implementation of the City's Municipal Code Chapter 18.70, Woodburning Appliances, in order to improve and maintain air quality conditions in the City and enhance the health and quality of life of its citizens.

COS-10.f Require adequate buffering or other mitigation of all potential air pollutant sources, including commercial and industrial emissions.

COS-10.g Assist the BAAQMD and Santa Clara County in their efforts to achieve compliance with existing air quality regulations.

COS-10.h Assess the adequacy of environmental documents for projects proposed in the City utilizing the thresholds established in the BAAQMD guidelines.

Impact 3.3-2: General Plan implementation could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (Less than Significant)

Short-Term Construction Impacts

Implementation of the General Plan Update would result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM₁₀ and PM_{2.5} emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby.

Demolition and renovation of buildings can also generate PM₁₀ and PM_{2.5} emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_x emissions, in addition to PM₁₀ and PM_{2.5} emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions. In addition, NO_x emissions during grading and soil import/export for large projects may exceed the BAAQMD NO_x emission thresholds. The BAAQMD CEQA Air Quality Guidelines do not identify plan-level thresholds that apply to construction. Without application of appropriate control measures to reduce construction dust and exhaust, construction-related impacts would be considered a potentially significant impact.

Individual projects anticipated by the proposed General Plan Update would be required to implement their own environmental review and demonstrate consistency with the General Plan, and all applicable BAAQMD construction-related programs and policies, including the incorporation of best management practices. The proposed General Plan Update goals, policies, and actions would reduce construction emissions. For example, Policy COS-10.b requires the City review projects for consistency with BAAQMD requirements during the CEQA review process. Additionally, Policy COS-10.3 would require projects to minimize exposure of sensitive receptors to concentrations discretionary projects involving sensitive receptors (i.e., children, the elderly, or people with illnesses) proposed within 500 feet of State Route 17 or State Route 85, require an analysis of mobile source toxic air contaminant health risks and, if necessary, incorporate appropriate mitigation measures to reduce health risks to the greatest extent feasible. Implementation of these and other General Plan measures, as well as compliance with all applicable BAAQMD construction emissions requirements, would ensure that short-term construction related emissions associated with future development allowed under the proposed General Plan would be **less than significant**.

Long-Term Operational Impacts

Implementation of the General Plan Update would result in long-term area and mobile source emissions from operation and use of subsequent development. Implementation of the General Plan Update could include stationary sources of pollutants that would be required to obtain permits to

operate in compliance with BAAQMD rules. These sources include, but are not limited to, gasoline stations, dry cleaners, internal combustion engines, and surface coating operations. The BAAQMD stationary source permit process ensures that these sources would be equipped with the required emission controls and that, individually, these sources would result in a less than significant impact.

As discussed above, the BAAQMD Air Quality Guidelines do not have numeric thresholds related to direct and indirect regional criteria pollutant emissions resulting from plan implementation. The BAAQMD CEQA Air Quality Guidelines only require emissions computations for project-level analysis.

As described under Impact 3.3-1, the BAAQMD's May 2017 CEQA Guidelines identify thresholds of significance for criteria air pollutants and precursors for planning-level documents. As described in Section 2.7.1 of the 2017 CEQA Guidelines, proposed plans (except regional plans) must show the following over the planning period of the plan to result in a less than significant impact:

- Consistency with current air quality plan control measures.
- A proposed plan's projected vehicle miles traveled (VMT) or vehicle trips (VT) (either measure may be used) increase is less than or equal to its projected population increase.

The analysis provided above, under Impact 3.3-1, demonstrates that the proposed General Plan Update would be consistent with the current air quality plan control measures. As further described under Impact 3.3-1, annual vehicle miles traveled (VMT) for 2016 and buildout year 2040 was provided from the project traffic consultant; refer to Section 4.14 (Transportation and Circulation). Table 3.3-5 identifies the VMT and population for the General Plan Update. Using 2016 as a baseline year, City of Campbell VMT attributable to the General Plan Update is anticipated to increase approximately 41.8 percent, while the population would increase approximately 52.0 percent. As shown in Table 3.3-5, VMT per capita would decrease with implementation of the General Plan Update. As a result, the proposed General Plan Update's projected VMT increase would be less than the projected population increase. Therefore, this impact would be less than significant under the criteria established by the BAAQMD's May 2017 CEQA Guidelines.

Implementation of the General Plan Update would result in increased short-term emissions associated with construction projects, increased emissions associated with stationary sources, and increased emissions associated with transportation and operation of future development. The specifics of future development are not known at this time. Future development under the General Plan Update would be required to comply with the AQMP, SIP, CARB and BAAQMD regulations, Title 24 energy efficiency standards, and the General Plan Update's goals, policies, and actions, as described under Impact 3.3-1. As previously described, the proposed General Plan Update includes policies and actions that would reduce long-term operational air quality impacts. For example, proposed General Plan Update Policy COS-10.b requires the City review projects for consistency with BAAQMD requirements during the development review and CEQA review process.

Implementation of the General Plan Update goals, policies, and actions described under Impact 3.3-1 and compliance with the required air quality regulatory framework would reduce potential air

quality impacts associated with future operational emissions. Therefore, this impact is considered **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

Refer to the Goals, Policies, and Implementation Measures provided under Impact 3.3-1.

Impact 3.3-3: General Plan implementation would expose sensitive receptors to substantial pollutant concentrations (Significant and Unavoidable)

Subsequent land use activities associated with implementation of the General Plan Update could potentially include short-term construction sources of TACs and long-term operational sources of TACs, including stationary and mobile sources.

Health risks associated with TACs are most pronounced in the areas adjacent to freeway segments. Under the Community Air Risk Evaluation (CARE) program, the BAAQMD has designated certain areas as “Impacted Communities” if the following occur: the areas (1) are close to or within areas of high TAC emissions; (2) have sensitive populations, defined as youth and seniors, with significant TAC exposures; and (3) have significant poverty. A portion of the City of Campbell is mapped by the BAAQMD as an Impacted Community under the CARE program (within the “2013 Cumulative Impact Areas”).¹

Regardless of the existing health risks associated with TACs, the BAAQMD CEQA Guidelines provide recommendations for all communities to ensure reduced health risks associated with TACs. The proposed General Plan Update includes goals, policies, and actions that are intended to minimize exposure of TACs to sensitive receptors (described further below).

Temporary Construction Sources

Implementation of the General Plan Update would result in the potential construction of a variety of projects. This construction would result in short-term emissions of diesel particulate matter (DPM), a TAC. Construction would result in the generation of DPM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The calculation of cancer risk associated with exposure to TACs is typically based on a 70-year period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area. Cancer risk and PM_{2.5} exposure would have to be analyzed through project-level analysis to identify the potential for significant impacts and measures to reduce those impacts to less than significant. General Plan Policy COS-10.3

¹ The “2013 Cumulative Impact Areas” are areas where toxic air contaminants, fine particulate matter, and ozone are estimated to have the greatest impacts on health.

requires discretionary projects involving sensitive receptors proposed within 500 feet of State Route 17 or State Route 85 to require an analysis of mobile source toxic air contaminant health risks and, if necessary, incorporate appropriate mitigation measures to reduce health risks to the greatest extent feasible. In addition, General Plan Policy COS-10.f requires development projects to maintain adequate buffering or other mitigation of all potential air pollutant sources, including commercial and industrial emissions. Future developments would be evaluated through the CEQA process or BAAQMD permit process to ensure they do not cause a significant health risk. Compliance with the required regulatory framework and General Plan Update goals, policies, and actions would reduce temporary construction-related TAC impacts to **less than significant**.

Long-Term Operational Sources

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

The BAAQMD CEQA Air Quality Guidelines consider exposure of sensitive receptors to air pollutant levels that result in an unacceptable cancer risk or hazard, to be significant. For cancer risk, which is a concern with diesel particulate matter and other mobile-source TACs, the BAAQMD Risk Management Policy considers an increased risk of contracting cancer that is 10 in one million chances or greater, to be significant risk for a single source. The BAAQMD CEQA Guidelines also consider exposure to annual PM_{2.5} concentrations that exceed 0.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to be significant. Non-cancer risk would be considered significant if the computed Hazard Index is greater than 1.0.² For cumulative sources, the BAAQMD CEQA Guidelines consider 100 in one million excess cancer risk, PM_{2.5} concentrations that exceed 0.8 $\mu\text{g}/\text{m}^3$, and non-cancer Hazard Index greater than 10.0 to be significant.

The General Plan Update would permit and facilitate the development of new sensitive receptors, such as new homes, in locations near arterial and collector roadways, highways, rail lines, and stationary sources of TAC emissions. Screening levels indicate that sensitive receptors within the Planning Area could be exposed to levels of TACs and or PM_{2.5} that could cause an unacceptable cancer risk or hazard near highways and stationary sources. Additionally, as previously described, a portion of the City of Campbell is mapped by the BAAQMD as an Impacted Community under the CARE program (within the “2013 Cumulative Impact Areas”).

Summary

The General Plan Update would allow growth of new residential land uses that would be sensitive receptors and new non-residential land uses that are a potential for new emissions sources. Typically, these sources would be evaluated through the BAAQMD permit process or the CEQA process to identify and mitigate any significant exposures. However, some sources that would not undergo such a review, such as truck loading docks or truck parking areas, may have the potential

² The Hazard Index is the ratio of the computed receptor exposure level to the level known to cause acute or chronic adverse health impacts, as identified by BAAQMD.

to cause significant increases in TAC exposure. This impact would be potentially significant. As previously described, there are recommended setback distances for long-term operational sources and stationary sources, including gasoline stations, dry cleaning facilities, oil refineries, emergency back-up generators, highways and roadways, and railroads. Additionally, implementation of the proposed General Plan Update goals, policies, and actions would reduce the exposure to sensitive receptors to pollutant concentrations. As previously described, General Plan Policy COS-10.3 requires discretionary projects involving sensitive receptors proposed within 500 feet of State Route 17 or State Route 85 to require an analysis of mobile source toxic air contaminant health risks and, if necessary, incorporate appropriate mitigation measures to reduce health risks to the greatest extent feasible. In addition, General Plan Policy COS-10.f requires development projects to maintain adequate buffering or other mitigation of all potential air pollutant sources, including commercial and industrial emissions. Additionally, future non-residential developments would be evaluated through the CEQA process or BAAQMD permit process to ensure they do not cause a significant health risk. Sites would be required to be designed to locate away from pollution sources and trees and/or vegetation would be required as a buffer between sensitive receptors and pollution sources. Nevertheless, even with implementation of proposed General Plan Update goals, policies, and actions, individual projects could have an impact that could exceed the applicable TAC thresholds; therefore, this impact is **significant and unavoidable**.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-10.3 Minimize exposure of sensitive receptors to concentrations of air pollutant emissions and toxic air contaminants. For discretionary projects involving sensitive receptors (i.e., children, the elderly, or people with illnesses) proposed within 500 feet of State Route 17 or State Route 85, require an analysis of mobile source toxic air contaminant health risks and, if necessary, incorporate appropriate mitigation measures to reduce health risks to the greatest extent feasible.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-10a Review all new industrial and commercial development projects for potential air quality impacts to residences and other sensitive receptors. The City shall ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.

COS-10.b Review development, infrastructure, and planning projects for consistency with BAAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address BAAQMD and General Plan requirements, which includes analysis and identification of:

- Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions;

- Potential exposure of sensitive receptors to toxic air contaminants;
- Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions; and
- Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

COS-10.e Continue implementation of the City's Municipal Code Chapter 18.70, Woodburning Appliances, in order to improve and maintain air quality conditions in the City and enhance the health and quality of life of its citizens.

COS-10.f Require adequate buffering or other mitigation of all potential air pollutant sources, including commercial and industrial emissions.

COS-10.g Assist the BAAQMD and Santa Clara County in their efforts to achieve compliance with existing air quality regulations.

COS-10.h Assess the adequacy of environmental documents for projects proposed in the City utilizing the thresholds established in the BAAQMD guidelines.

Impact 3.3-4: General Plan implementation would not result in other emissions (such as those leading to odors adversely affecting a substantial number of people) (Less than Significant)

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

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

Significant sources of offending odors are typically identified based on complaint histories received and compiled by BAAQMD. According to the BAAQMD CEQA Guidelines, an odor source with five or more confirmed complaints per year averaged over three years is considered to have a significant impact. Typically, larger sources of odors that result in complaints are wastewater treatment facilities, landfills including composting operations, food processing facilities, and chemical plants. Other sources, such as restaurants, paint or body shops, and coffee roasters typically result in localized sources of odors. Table 3.3-6 identifies screening buffers included in the BAAQMD CEQA Air Quality Guidelines for those uses more typically associated with having the potential to be sources of odors. To avoid significant impacts, the BAAMQD CEQA Guidelines recommend that

3.3 AIR QUALITY

buffer zones to avoid adverse impacts from odors should be reflected in local plan policies, land use maps, or implementing ordinances.

TABLE 3.3-6: ODOR SCREENING DISTANCES FOR THE GENERAL PLAN UPDATE

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

SOURCE: BAY AREA AIR QUALITY MANAGEMENT DISTRICT, 2017.

The Planning Area includes potential odor sources that could affect new sensitive receptors. Most of these major existing sources are already buffered. However, it is possible that odors may be present. Responses to odors are subjective, and vary by individual and type of use. Sensitive land uses that include outdoor uses, such as residences and possibly daycare facilities, are likely to be most affected by existing odors. The General Plan Update includes policies and actions that address potential conflicts in land uses that could result in odor complaints. Proposed General Plan Update Conservation and Open Space Element Policy COS-10.8 requires development projects to comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source. Additionally, the policies and actions included as part of the General Plan Update (described above) would reduce mobile and stationary source emissions and odors associated with diesel fuel by focusing on land use patterns that improve air quality, reduce air pollution from stationary sources, and encourage/enable increased transit behavior. Thus, General Plan Update implementation would not result in other emissions (such as those leading to odors adversely affecting a substantial number of people) and impacts would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-10.8 Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.

This section describes biological resources in the Planning Area. This section provides a background discussion of the bioregions, regionally important habitat and wildlife, and special status species found in the vicinity of Campbell. This section is organized with an environmental setting, regulatory setting, and impact analysis.

Comments on this environmental topic were received during the NOP comment period. The CDFW offers comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. The Sierra Club provided comments related to the Bay ecology. The NOP and all comments received during the NOP comment period are included in Appendix A of this EIR.

KEY TERMS

The following key terms may be used throughout this section to describe biological resources and the framework that regulates them:

Hydric Soils. One of the three wetland identification parameters, according to the Federal definition of a wetland, hydric soils have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season. There are approximately 2,000 named soils in the United States that may occur in wetlands.

Hydrophytic Vegetation. Plant types that typically occur in wetland areas. Nearly 5,000 plant types in the United States may occur in wetlands. Plants are listed in regional publications of the U.S. Fish and Wildlife Service (USFWS) and include such species as cattails, bulrushes, cordgrass, sphagnum moss, bald cypress, willows, mangroves, sedges, rushes, arrowheads, and water plantains.

Sensitive Natural Community. A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to local, State, or Federal agencies. The California Environmental Quality Act (CEQA) identifies the elimination or substantial degradation of such communities as a significant impact. The California Department of Fish and Wildlife (CDFW) tracks sensitive natural communities in the California Natural Diversity Database (CNDDB).

Special-Status Species. Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by Federal, State, or other agencies. Some of these species receive specific protection that is defined by Federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this report, following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term "special status" includes those species that are:

- Federally listed or proposed for listing under the Federal Endangered Species Act (50 CFR 17.11-17.12);

3.4 BIOLOGICAL RESOURCES

- Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613);
- State listed or proposed for listing under the California Endangered Species Act (14 CCR 670.5);
- Species listed by the USFWS or the CDFW as a species of concern (USFWS), rare (CDFW), or of special concern (CDFW);
- Fully protected animals, as defined by the State of California (California Fish and Game Code Section 3511, 4700, and 5050);
- Species that meet the definition of threatened, endangered, or rare under CEQA (CEQA Guidelines Section 15380);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.); and
- Plants listed by the California Native Plant Society (CNPS) as rare, threatened, or endangered (List 1A and List 2 status plants in Skinner and Pavlik 1994).

Waters of the U.S. The Federal government defines waters of the U.S. as "lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows" [33 C.F.R. §328.3(a)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the U.S. Army Corps of Engineers (USACE) as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

Wetlands. Wetlands are ecologically complex habitats that support a variety of both plant and animal life. The Federal government defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Wetlands require wetland hydrology, hydric soils, and hydrophytic vegetation. Examples of wetlands include freshwater marsh, seasonal wetlands, and vernal pool complexes that have a hydrologic link to waters of the U.S.

3.4.1 ENVIRONMENTAL SETTING

The City of Campbell is located in Santa Clara County approximately 50 miles south of San Francisco. Campbell is situated in the central portion of Silicon Valley, located west of the Sierra Azules and northeast of the Santa Cruz Mountains.

BIOREGIONS

Campbell is located within the Bay Area/Delta bioregion. The Bay Area/Delta Bioregion extends from the Pacific Ocean to the Sacramento Valley and San Joaquin Valley bioregions to the northeast and southeast, and a short stretch of the eastern boundary joins the Sierra Bioregion at Amador and Calaveras counties. The bioregion is bounded by the Klamath/North Coast on the north and the Central Coast Bioregion to the south. The Bay Area/Delta Bioregion is one of the most populous areas of the State, encompassing the San Francisco Bay Area and the Sacramento-San Joaquin River Delta. The water that flows through the Delta supplies two-thirds of California's drinking water, irrigating farmland, and sustaining fish and wildlife and their habitat. The bioregion fans out from

San Francisco Bay in a jagged semi-circle that takes in all or part of 12 counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Joaquin, San Mateo, Santa Clara, Solano, Sonoma, and parts of Sacramento and Yolo. The habitats and vegetation of the Bay Area/Delta Bioregion are as varied as the geography.

CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM

The California Wildlife Habitat Relationship (CWHR) habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly-occurring birds, mammals, reptiles and amphibians. When first published in 1988, the classification scheme had 53 habitats. At present, there are 59 wildlife habitats in the CWHR System: 27 tree, 12 shrub, 6 herbaceous, 4 aquatic, 8 agricultural, 1 developed, and 1 non-vegetated.

According to the California Wildlife Habitat Relationship System, there are three cover types (wildlife habitat classifications) in the Planning Area out of 59 found in the State. These include: LAC – Lacustrine, MRI – Montane Riparian, and URB – Urban. Table 3.4-1 identifies the total area by acreage for each cover type (wildlife habitat classification) found in Campbell. Figure 3.4-1 illustrates the location of each cover type (wildlife habitat classification) within Campbell. A brief description of each cover type follows.

TABLE 3.4-1: COVER TYPES - CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM

COVER TYPE	TOTAL ACRES WITHIN CITY LIMITS
LAC – Lacustrine	62.01
MRI – Montane Riparian	32.25
URB – Urban	3,806.28
Total	3,900.54

SOURCE: SOURCE: CITY OF CAMPBELL; SANTA CLARA COUNTY; USGS NATIONAL HYDROGRAPHY DATASET; FRAP FVEG15_1.

Developed Cover Types

Urban habitats are not limited to any particular physical setting. Three urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. The heavily-developed downtown is usually at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover. The structure of urban vegetation varies, with five types of vegetative structure defined: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. Within the Campbell city limits, there are 3,806.28 acres of urban habitat.

Tree Dominated Cover Types

Montane Riparian habitats are found associated with montane lakes, ponds, seeps, bogs and meadows as well as rivers, streams and springs. Water may be permanent or ephemeral. The vegetation of montane riparian (MRI) zones is quite variable and often structurally diverse. Usually, the montane riparian zone occurs as a narrow, often dense grove of broad-leaved, winter deciduous

3.4 BIOLOGICAL RESOURCES

trees up to 30 meters (98 feet) tall with a sparse understory. At high mountain elevations, MRI is usually less than 15 meters (49 feet) high with more shrubs in the understory. At high elevations, MRI may not be well developed or may occur in the shrub stage only. Within the Campbell city limits, there are 32.25 acres of montane riparian habitat.

Aquatic Habitats

Lacustrine habitats are inland depressions or dammed riverine channels containing standing water. These habitats may occur in association with any terrestrial habitats, Riverine, or Fresh Emergent Wetlands. They may vary from small ponds less than one acre to large areas covering several square miles. Depth can vary from a few inches to hundreds of feet. Typical lacustrine habitats include permanently flooded lakes and reservoirs, and intermittent lakes and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent lacustrine systems support fish life; intermittent types usually do not. Within the Campbell city limits, there are 62.01 acres of lacustrine habitat.

SPECIAL-STATUS SPECIES

The following discussion is based on a background search of special-status species that are documented in the CNDDDB, the California Native Plant Survey (CNPS) Inventory of Rare and Endangered Plants, and the USFWS endangered and threatened species lists. The background search was regional in scope and focused on the documented occurrences within the 9-Quad (approximately 10 miles) region of the Planning Area. The 9-Quad region includes the following quads: Mountain View, Milpitas, Calaveras Reservoir, Cupertino, San Jose West, San Jose East, Castle Rock Ridge, Los Gatos, and Santa Teresa Hills. The Planning Area is located within the San Jose West Quad.

Special Status Plants

The search revealed documented occurrences of 42 special status plant species within 9-Quad of Campbell. Table 3.4-2 provides a list of special-status plant species that are documented within the 9-Quad (approximately 10 miles) region of the Planning Area, including the species name, their habitat, and current protective status. Figures 3.4-2 illustrate the special status species located within the 9-Quad (approximately 10 miles) region of the Planning Area. Figure 3.4-3 illustrates the special status species located within one mile of Campbell.

TABLE 3.4-2: SPECIAL STATUS PLANTS PRESENT OR POTENTIALLY PRESENT

<i>SPECIES</i>	<i>STATUS</i>	<i>HABITAT</i>
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	--/--/1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands. 1-170 M.
<i>Malacothamnus arcuatus</i> arcuate bush-mallow	--/--/1B.2	Chaparral and cismontane woodland. Threatened by alteration of fire regimes. 15-355 M.
<i>Chorizanthe pungens</i> var. <i>hartwegiana</i> Ben Lomond spineflower	--/CE/B1.1	Sandy places in lower montane coniferous forest, endemic to the Santa Cruz Mountains.
<i>Amsinckia lunaris</i> Bent-flowered fiddleneck	--/--/1B.2	Coastal bluff scrub, Cismontane woodland, and Valley and foothill grassland. 3-500 M.
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	--/--/1B.2	Chaparral, cismontane woodland, valley and foothill grassland, sometimes serpentinite. Threatened by grazing, potentially threatened by residential or recreational development, energy development and non-native plants. 90-1,555 M.
<i>Arctostaphylos silvicola</i> Bonny Doon manzanita	--/--/1B.2	Inland marine sands in closed-cone coniferous forest, chaparral, and lower montane coniferous forest.
<i>Atriplex depressa</i> <i>brittlescale</i>	--/--/1B.2	Alkaline, clay. Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools. 1-320 M.
<i>Puccinellia simplex</i> California alkali grass	--/--/1B.2	Alkaline, vernal mesic; sinks, flats, and lake margins. Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools. 2-930 M.
<i>Suaeda californica</i> California seablite	FE/--/1B.1	Marshes and swamps (coastal salt). 0-15 M.
<i>Campanula exigua</i> chaparral harebell	--/--/1B.2	Chaparral (rocky, usually serpentinite). 275-1,250 M.
<i>Senecio aphanactis</i> Chaparral ragwort	--/--/2B.2	Sometimes alkaline. Chaparral, Cismontane woodland, Coastal scrub. 15-800 M.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	--/--/1B.1	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 1-230 M.

3.4 BIOLOGICAL RESOURCES

<i>SPECIES</i>	<i>STATUS</i>	<i>HABITAT</i>
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE/--/1B.1	Valley and foothill grassland, vernal pools, cismontane woodland. Extirpated from most of its range; extremely endangered. Vernal pools, swales, low depressions, in open grassy areas. 1-445 M.
<i>Pedicularis dudleyi</i> Dudley's lousewort	--/--/1B.2	Chaparral (maritime), Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland. 60-900 M.
<i>Chlorogalum pomderidianum var. minus</i> Dwarf soaproot	--/--/1B.2	Chaparral (serpentine) 305-1,000 M.
<i>Fritillaria liliacea</i> fragrant fritillary	--/--/1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland, often serpentine. 3-410 M.
<i>Plagiobothrys glaber</i> hairless popcornflower	--/--/1A	Meadows and seeps (alkaline), marshes and swamps (coastal salt). 15-180 M.
<i>Malacothamnus hallii</i> Hall's bush-mallow	--/--/1B.2	Chaparral. Some populations on serpentine. 10-550M.
<i>Eryngium arsitulatum var. hooveri</i> Hoover's button-celery	--/--/1B.1	Meadows and seeps (alkaline), marshes and swamps (coastal salt). 15-180 M.
<i>Atriplex minuscula</i> Lesser saltscare	--/--/1B.1	Alkaline, sandy soils. Chenopod scrub, playas, valley and foothill grassland. May-October
<i>Hoita strobilina</i> Loma Prieta hoita	--/--/1B.1	Chaparral, cismontane woodland, riparian woodland. Threatened by urbanization. 30-860 M.
<i>Sidalcea malachroides</i> maple-leaved checkerbloom	--/--/4.2	Often in disturbed areas, broad-leaved upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, riparian woodland. 0-730 M.
<i>Streptanthus albidus ssp. albidus</i> Metcalf Canyon jewelflower	FE/--/1B.1	Valley and foothill grassland (serpentine). Threatened by residential development, road construction, vehicles, and non-native plants. 45-800 M.
<i>Streptanthus albidus ssp. peramoenus</i> most beautiful jewel-flower	--/--/1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Serpentine outcrops, on ridges and slopes. 120-730 M.

SPECIES	STATUS	HABITAT
<i>Cirsium fontinale</i> var. <i>campylon</i> Mt. Hamilton fountain thistle	--/--/1B.2	Serpentinite seeps, chaparral, cismontane woodland, valley and foothill grassland. Threatened by urbanization, trampling, non-native plants, and grazing. 100-890 M.
<i>Chloropyron maritimum</i> ssp. <i>palustre</i> Point Reyes salty bird's-beak	--/--/1B.2	Marshes and swamps (coastal salt). Once rather common in proper habitat; now greatly reduced by development. Also threatened by foot traffic, non-native plants, hydrological alterations, cattle grazing and trampling. 0-10 M.
<i>Navarretia prostrata</i> Prostrate vernal pool navarretia	--/--/1B.2	Mesic. Coastal Scrub, Meadows and Seeps, Valley and Foothill Grassland (alkaline), Vernal Pools.
<i>Chorizanthe robusta</i> var. <i>robusta</i> robust spineflower	FE/--/1B.1	Sandy or gravelly soil in chaparral (maritime), cismontane woodland (openings), coastal dunes, and coastal scrub. Most populations extirpated, and now known from only six extended occurrences. 3-300 M.
<i>Sanicula saxatilis</i> Rock Sanicle	--/--/1B.2	Rocky, scree, talus. Broadleafed upland forest, Chaparral, and Valley and Foothill Grassland. 620-1,175 M.
<i>Trifolium hydrophilum</i> saline clover	--/--/1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. 0-300 M.
<i>Collinsia multicolor</i> San Francisco collinsia	--/--/1B.2	Wet (mesic) areas in coast live oak forest and woodland, closed-cone coniferous forest, mixed serpentine chaparral, and northern coastal scrub/Diablan sage scrub. 30-250 M.
<i>Extriplex joaquinana</i> San Joaquin spearscale	--/--/1B.2	Alkaline. Chenopod scrub, Meadows and Seeps, Playas, Valley and foothill grassland. 1-835 M.
<i>Clarkia concinna</i> ssp. <i>automixa</i> Santa Clara red ribbons	--/--/4.3	Chaparral, cismontane woodland. 90-1,500 M.
<i>Dudleya abramsii</i> ssp. <i>setchellii</i> Santa Clara Valley dudleya	--/CE/1B.1	Serpentinite, rocky, cismontane woodland, valley and foothill grassland. Threatened by urbanization, development, vehicles, non-native plants, and grazing. 60-455 M.
<i>Trifolium buckwestiorum</i> Santa Cruz clover	--/--/1B.1	Gravelly, margins. Broadleafed upland forest. Cismontane woodland. Coastal Prairie. 105-610 M.

3.4 BIOLOGICAL RESOURCES

<i>SPECIES</i>	<i>STATUS</i>	<i>HABITAT</i>
<i>Penstemon rattanii</i> var. <i>kleei</i> Santa Cruz Mountains beardtongue	--/--/1B.2	Chaparral, Lower montane coniferous forest, North Coast coniferous forest. Blooms May through June. Elevations 400-1,100 M.
<i>Calyptridium parryi</i> var. <i>hesseae</i> Santa Cruz Mountains pussypaws	--/--/1B.1	Occurs in sandy or gravelly, openings. Chaparral and Cismontane woodland. Blooming Period May through August.
<i>Lessingia micradenia</i> var. <i>glabrata</i> smooth lessingia	--/--/1B.2	Occurs on serpentine outcrops and in rocky soils in serpentine bunchgrass grassland elevations of 120-420 meters. Prefers areas with low vegetation cover, sometimes occurring on roadcuts or at roadsides.
<i>Dirca occidentalis</i> western leatherwood	--/--/1B.2	Mesic soils in broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest and riparian woodland. Possibly threatened by road and trail maintenance. 25-425 M.
<i>Piperia candida</i> White-flowered rein orchid	--/--/1B.2	Native to western North America from Alaska to the San Francisco Bay Area, where it grows in coniferous forests and other habitat in coastal and inland mountain ranges within 150 kilometers of the coast.
<i>Pentachaeta bellidiflora</i> White-rayed pentachaeta	FE/CE/1B.1	Found in serpentine grassland and native prairies in San Mateo County as well as valley and foothill grasslands. Altitudes less than 620 meters (2,034 ft)
<i>Monolopia gracilens</i> woodland woollythreads	--/--/1B.2	Chaparral, valley and foothill grasslands (serpentine), cismontane woodland, broadleaved upland forests. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns.

SOURCE: CDFW CNDDDB DATABASE

NOTES: STATUS IS SHOWN FOR (FEDERAL/STATE/CNPS). (--) INDICATES NO LISTING STATUS.

ABBREVIATIONS:

FE FEDERAL ENDANGERED

FT FEDERAL THREATENED

CE CALIFORNIA ENDANGERED

CT CALIFORNIA THREATENED

1A PLANTS PRESUMED EXTINCT IN CALIFORNIA

1B.1 PLANTS RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE; SERIOUSLY THREATENED IN CALIFORNIA

1B.2 PLANTS RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE; FAIRLY THREATENED IN CALIFORNIA

4.2 PLANTS OF LIMITED DISTRIBUTION; FAIRLY THREATENED IN CALIFORNIA

4.3 PLANTS OF LIMITED DISTRIBUTION; NOT VERY THREATENED IN CALIFORNIA

Special Status Animals

The search revealed documented occurrences of 60 special status animal species within 9-Quad) of Campbell. This includes: five amphibians, 24 birds, three fish, 12 invertebrates, 12 mammals, and four reptile. Table 3.4-3 provides a list of the special-status animal species that are documented within the 9-Quad (approximately 10 miles) region of the Planning Area, their habitat, and current protective status. Figures 3.4-2 illustrate the special status species located within the 9-Quad (approximately 10 miles) region of the Planning Area. Figure 3.4-3 illustrates the special status species located within one mile of Campbell.

TABLE 3.4-3: SPECIAL STATUS ANIMALS PRESENT OR POTENTIALLY PRESENT

SPECIES	STATUS	HABITAT
<i>AMPHIBIANS</i>		
<i>Dicamptodon ensatus</i> California giant salamander	--/--	Larvae of this species usually inhabit clear, cold streams, but are also found in mountain lakes and ponds. Adults are found in humid forests under rocks and logs, for example, near mountain streams or rocky shores of mountain lakes. Eggs are usually laid in the headwaters of mountain streams. Breeding typically occurs in water-filled nest chambers under logs and rocks or in rock crevices.
<i>Rana draytonii</i> California red-legged frog	--/CT	Requires a variety of habitat elements with aquatic breeding areas embedded within a matrix of riparian and upland dispersal habitats. Breeds in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons.
<i>Ambystoma californiense</i> California tiger salamander	FT/CT	Restricted to grasslands and low foothills with pools or ponds. Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.
<i>Rana boylei</i> foothill yellow-legged frog	--/--	Occurs from sea level to about 6,000 feet. Prefers gravelly or sandy streams with open banks near woodlands.
<i>Aneides niger</i> Santa Cruz black salamander	--/--	Occurs in mixed deciduous woodland, coniferous forests, coastal grasslands. Found under rocks near streams, in talus, under damp logs, and other objects.
<i>BIRDS</i>		
<i>Melospiza melodia pusillula</i> Alameda song sparrow	--/--	Nests in salt marsh, primarily in marsh gumplant and cordgrass along channels.
<i>Falco peregrinus anatum</i> American peregrine falcon	--/--	coastal sage scrub communities that are associated with coastal dunes, perennial grasslands, annual grasslands, croplands, pastures, coastal hardwood forests, coastal woodlands, mixed-chaparral communities.

3.4 BIOLOGICAL RESOURCES

<i>SPECIES</i>	<i>STATUS</i>	<i>HABITAT</i>
<i>Rynchops niger</i> Black skimmer	--/--	Mostly ocean beaches, tidewater. Favors coastal waters protected from open surf, such as lagoons, estuaries, inlets, sheltered bays. Locally on inland lakes.
<i>Cypseloides niger</i> black swift	--/--	Breeding sites include sea coast cliffs, waterfalls, caves and other sites inaccessible to terrestrial predators and where shade, cool temperatures, and high humidity are found. Black Swifts are often seen foraging low over bodies of water.
<i>Nycticorax nycticorax</i> Black-crowned night heron	--/--	Marshes, shores; roosts in trees. Found in a wide variety of aquatic habitats, around both fresh and salt water, including marshes, rivers, ponds, mangrove swamps, tidal flats, canals, ricefields. Nests in groves of trees, in thickets, or on ground, usually on islands or above water, perhaps to avoid predators.
<i>Athene cuniculari</i> burrowing owl	--/--	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
<i>Laterallus jamaicensis cotrunculus</i> California black rail	--/CT	Tidal marshes and freshwater marshes in the western United States and Mexico. California black rails inhabit the drier portions of wetlands. The rails select areas with high stem densities and canopy coverage in shallow water; close to upland vegetation California black rails are also associated with plants of the upland/wetland interface, such as seep willow, arrowweed, saltgrass, and cottonwood.
<i>Sternula antillarum browni</i> California least tern	FE/CE	Along the coast. Nest on open beaches kept free of vegetation by the tide.
<i>Accipiter cooperii</i> Cooper's hawk	--/--	Breeding habitat occurs in the southern Sierra Nevada foothills, New York Mountains, Owens Valley, and other areas in southern California. Habitats used most frequently include dense stands of live oak, riparian deciduous or other forest habitats near water. Nesting and foraging usually occur near open water or riparian vegetation.
<i>Ardea herodias</i> great blue heron	--/--	Found throughout much of North America and into Central and South America. Common throughout California. Found in tall trees near a variety of wetland habitat types. Isolated areas that discourage predation and human disturbance are preferred.
<i>Andrea alba</i> Great egret	--/--	Wetlands, both inland and along the coast, including marshes, floodplains, river margins, lake shores, salt pans, estuaries, coastal swamps, mangroves and mudflats. They can also be found in more terrestrial habitats, including open fields, agricultural land, rice fields and drainage ditches.

SPECIES	STATUS	HABITAT
<i>Circus hudsonius</i> Northern harrier	--/--	Marshes, fields, prairies. Found in many kinds of open terrain, both wet and dry habitats, where there is good ground cover. Often found in marshes, especially in nesting season, but sometimes will nest in dry open fields.
<i>Pandion haliaetus</i> osprey	--/--	Occupies a wide range of habitats near water, primarily lakes, rivers, and coastal waters with adequate supplies of fish. Prefers tall snags that provide good visibility and security for nesting. Diet consists primarily of surface fish or those that frequent shallow flats and shorelines.
<i>Falco mexicanus</i> Prairie falcon	--/--	Open hills, plains, prairies, deserts. Typically found in fairly dry open country, including grassland and desert. Also in open country above treeline in high mountains. In winter, often found in farmland and around lakes and reservoirs, and may regularly winter in some western cities. Avoids forested country, and usually scarce on the immediate coast.
<i>Progne subis</i> purple martin	--/--	Nests in open and semi open areas, including savannas, cultivated lands, fields, parks, pastures, near lakes and marshes and in towns and suburbs. Inhabit open areas and prefer an open water source nearby. Martins adapt well in and around people, but are out-competed by starlings and sparrows in urban areas.
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	--/--	Resident of the fresh and saltwater marshes in the San Francisco Bay region. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.
<i>Egretta thula</i> Snowy egret	--/--	Marshes, swamps, ponds, shores. Widespread in many types of aquatic habitats, including fresh and salt water; in coastal areas, may seek sheltered bays. Inland, favors extensive marshes and other large wetlands. Sometimes forages in dry fields. Nests in colonies in trees, shrubs, mangroves, sometimes on or near the ground in marshes.
<i>Buteo swainsoni</i> Swainson's hawk	FT/--	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley. Highest nesting densities occur near Davis and Woodland, Yolo County. Nests in oaks or cottonwoods in or near riparian habitats. Forages in grasslands, irrigated pastures, and grain fields.
<i>Agelaius tricolor</i> tricolored blackbird	--/--	Highly colonial species, most numerous in central valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.
<i>Charadrius alexandrinus nivosus</i> western snowy plover	--/CT	Sandy beaches on marine and estuarine shores and salt pans on Bay saline managed ponds.

3.4 BIOLOGICAL RESOURCES

<i>SPECIES</i>	<i>STATUS</i>	<i>HABITAT</i>
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FE/CT	Uses a variety of shallow-water habitats. Cottonwood trees are an important foraging habitat in areas where the species has been studied in California. Appears to require large blocks of riparian habitat for nesting.
<i>Elanus leucurus</i> white-tailed kite	--/--	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated dense-topped trees for nesting and perching.
<i>Coturnicops noveboracensis</i> Yellow rail	--/--	Grassy marshes, meadows. In summer, favors large wet meadows or shallow marshes dominated by sedges and grasses. Typically in fresh or brackish marsh with water no more than a foot deep. In winter mostly in coastal salt marsh, especially drier areas with dense stands of spartina; also rice fields, damp meadows near coast.
<i>FISH</i>		
<i>Oncorhynchus kisutch</i> coho salmon - central California coast ESU	FE/CE	Forages in estuarine and marine waters of the Pacific Ocean; spawns in small fresh water streams with stable gravel substrates.
<i>Oncorhynchus mykiss irideus</i> steelhead – central CA Coast DPS	FT/--	Free of heavy sedimentation with adequate flow and cool, clear water. Gravel that is between 0.5 to 6.0 inches in diameter, dominated by 2 to 3 inch gravel. Escape cover such as logs, undercut banks, and deep pools for spawning adults.
<i>Spirinchus thaleichthys</i> Longfin smelt	FC/--	Prior to spawning, these fish aggregate in deepwater habitats available in the northern Delta, including, primarily, the channel habitats of Suisun Bay and the Sacramento River. Spawning occurs in fresh water on the San Joaquin River below Medford Island and on the Sacramento River below Rio Vista.
<i>INVERTEBRATES</i>		
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	--/CT	Requires serpentine soils for food source. Found from the San Francisco Bay area to San Mateo and Santa Clara counties.
<i>Bombus crotchii</i> crotch bumble bee	--/--	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.
<i>Tryonia imitator</i> California brackish water snail	--/--	Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County.

SPECIES	STATUS	HABITAT
<i>Anodonta californiensis</i> California floater	--/--	Prefers shallow habitats with sand and silt substrate in large rivers, lakes, and low gradient streams. Found mostly in pools, near channel banks, and in sedge-occupied substrates
<i>Calasellus californicus</i> freshwater isopod	--/--	Found in freshwater habitats; the known collections are from a freshwater well and two springs. Have been found in one locality each in Lake, Napa, and Santa Clara Counties.
<i>Microcina homi</i> Hom's micro-blind harvestman	--/--	Closely associated with serpentine rocks and soils in moist situations. Found under moist rocks in hilly grassland areas that have had little recent disturbance and are not subject to flooding.
<i>Bombus caliginosus</i> obscure bumble bee	--/--	Inhabits open grassy coastal prairies and Coast Range meadows. Nesting occurs underground as well as above ground in abandoned bird nests. Males patrol circuits in search of mates. Food plants include Ceanothus, Cirsium, Clarkia, Keckiella, Lathyrus, Lotus, Lupinus, Rhododendron, Rubus, Trifolium, and Vaccinium.
<i>Adela oplerella</i> Opler's longhorn moth	--/--	Shallow, serpentine-derived soils which support dwarf plantain (<i>Plantago erecta</i>) grasslands. Larvae feed on California cream cups.
<i>Speyeria adiate adiate</i> unsilvered fritillary	--/--	Inhabits openings in conifer and redwood forests, as well as oak woodlands, chaparral, and grassy slopes. Adapted to dry habitats. Violets are their only known host plants and the distribution of these plants limits the specie's available habitat.
<i>Lepidurus packardi</i> Vernal pool tadpole shrimp	FE/--	Vernal pools and ephemeral stock ponds.
<i>Bombus occidentalis</i> western bumble bee	--/--	Historically from the Pacific coast to the Colorado Rocky Mountains; severe population decline west of the Sierra-Cascade Crest. Generalist foragers; have been reported visiting a wide variety of flowering plants. Require plants that bloom and provide adequate nectar and pollen from early February to late November.
<i>Trimerotropis infantilis</i> Zayante band-winged grasshopper	--/CE	Occupies areas with widely scattered trees and shrubs, bare or sparsely vegetated ground, and loose sand in northern maritime chaparral and coastal maritime ponderosa pine forests. Endemic to the Zayante sand hills habitat in Santa Cruz County.
<i>MAMMALS</i>		
<i>Taxidea taxus</i> American badger	--/--	Badgers occur in a wide variety of open, arid habitats but are most commonly associated with grasslands, savannas, mountain meadows, and open areas of desert scrub; the principal habitat requirements for the species appear to be sufficient food (burrowing rodents), friable soils, and relatively open, uncultivated ground.
<i>Dipodomys heermanni</i> <i>berkeleyensis</i>	--/--	Occurs in a variety of habitat. Prefer the plains of the central California coast, sandy valley bottoms, and hilly knolls with shall

3.4 BIOLOGICAL RESOURCES

<i>SPECIES</i>	<i>STATUS</i>	<i>HABITAT</i>
Berkeley kangaroo rat		soils. Habitat extends from the foothills of the Sierra Nevada to the interior and coastal valets. Limited to elevations below 3,000 M.
<i>Lasiurus cinereus</i> hoary bat	--/--	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage or medium to large trees. Feeds primarily on moths. Requires open water source.
<i>Myotis evotis</i> long-eared myotis	--/--	Most commonly found in mixed coniferous forests, from humid coastal areas to montane forests. Prefers to roost in tree cavities in dense forests but have been found to roost in the stumps of clear-cut stands or in crevices of sandstone boulders.
<i>Erethizon dorastum</i> North American porcupine	--/--	Occurs in a variety of habitat, including open tundra, deciduous forests, and desert chaparral.
<i>Antrozous pallidus</i> pallid bat	--/--	Occurs in a variety of habitats from desert to coniferous forest. Most closely associated with oak, yellow pine, redwood, and giant sequoia habitats in northern California and oak woodland, grassland, and desert scrub in southern California. Relies heavily on trees for roosts.
<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	FE/CE	Only in saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.
<i>Sorex vagrans halicoetes</i> salt-marsh wandering shrew	--/--	Confined to the medium to high salt marshes of the South San Francisco Bay. Common habitat locations are characterized by plentiful amounts of driftwood among pickleweed. Threatened by habitat loss and fragmentation.
<i>Neotoma fuscipes annectens</i> San Francisco dusky-footed woodrat	--/--	Grasslands, scrub and wooded areas. Evergreen or live oaks and other thick-leaved trees and shrubs are important habitat components.
<i>Dipodomys venustus venustus</i> Santa Cruz kangaroo rat	--/--	Requires well-drained, deep soils and is often found on slopes where chaparral, or chaparral mixed with oak or pine, grow. Relies on the seeds of annual plants as their sole food source.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	FC/--	Hibernates in colonies that favor open roosting areas such as ceilings, walls, or well-ventilated sections of caves or mines. Forages over open rangeland or wooded canopies.
<i>Myotis yumanensis</i> Yuma myotis	--/--	Distribution is closely tied to bodies of water, which it uses as foraging sites and sources of drinking water. Open forests and woodlands are optimal habitat. Roosts in buildings, mines, caves, or crevices. Has also been reported roosting in abandoned swallow nests and under bridges.
<i>REPTILES</i>		

SPECIES	STATUS	HABITAT
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	FT/CT	Typically found in chaparral—northern coastal sage scrub and coastal sage. Recent telemetry data indicate that, although home ranges of Alameda whipsnakes are centered on shrub communities, they venture up to 500 feet into adjacent habitats, including grassland, oak savanna, and occasionally oak-bay woodland.
<i>Phrynosoma blainvillii</i> Coast horned lizard	--/--	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.
<i>Anniella pulchra</i> Northern California legless lizard	--/--	This lizard is common in suitable habitats in the Coast Ranges from Contra Costa County south to the Mexican border. Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.
<i>Emys marmorata</i> Western pond turtle	--/--	Requires both aquatic and terrestrial habitats. Uses permanent and seasonal aquatic habitats including rivers, sloughs, lakes, reservoirs, ponds, and irrigation canals. Nesting typically occurs within 200 M of aquatic habitat in areas with compact soil, sparse vegetation, and good solar exposure.

SOURCE: CDFW CNDDDB DATABASE

NOTES: STATUS IS SHOWN FOR (FEDERAL/STATE). (--) INDICATES NO LISTING STATUS.

ABBREVIATIONS:

- FE FEDERAL ENDANGERED
- FT FEDERAL THREATENED
- FC FEDERAL CANDIDATE
- CE CALIFORNIA ENDANGERED
- CT CALIFORNIA THREATENED

Sensitive Natural Communities

The CDFW considers sensitive natural communities to have significant biotic value, with species of plants and animals unique to each community. The CNDDDB search revealed three sensitive natural communities within the 9-Quad (approximately 10 miles) region of the Planning Area. These include Northern Coastal Salt Marsh, North Central Coast Drainage Sacramento Sucker/Roach River, and Serpentine Bunchgrass Grassland. Northern Coastal Salt Marshes occur along margins of the Bay that are sheltered from excessive wave action. They support a high amount of vegetation such as cordgrass, pickleweed, eelgrass (*Zostera marina*) and saltgrass (*Distichlis spicata*), as well as potential habitat for a plant of special concern, the Point Reyes bird's-beak (*Cordylanthus maritimus* ssp. *palustris*). North Central Coast Drainage Sacramento Sucker/Roach River is present on the San Lorenzo River and tributaries, north of the town of Santa Cruz, in Santa Cruz County. The native fish include steelhead, Coho salmon (hatchery stock), Pacific lamprey, Sacramento sucker, California roach, speckled dace, threespine stickleback, and sculpin spp. tidewater goby. There are also non-natives established in the stream. The Serpentine Bunchgrass is known to occur southeast of San Jose near Coyote Creek. Serpentine grasslands are highly infertile

3.4 BIOLOGICAL RESOURCES

because of their extremely high levels of magnesium, chromium, and nickel, low concentrations of nutrients such as calcium and nitrogen, and low waterholding capacity. Serpentine grasslands support high-quality native plant communities, including rare plants such as the federally listed Santa Clara Valley dudleya and Metcalf Canyon jewel-flower. Several invertebrate species, including the federally threatened Bay checkerspot butterfly, also depend on serpentine grasslands because their host food plants are found primarily in these habitats.

Of these two sensitive natural communities documented within 9-Quad of Campbell, the North Central Coast Drainage Sacramento Sucker/Roach River is located west of California State Route 17, outside of the city limits and SOI. The Northern Coastal Salt Marsh area is located west of Interstate 880, outside of the City limits and SOI. Serpentine Bunchgrass is located near the City of San Jose, occurring in the Silver Creek Hills at the north end of Coyote Ridge, on Communications Hill, to the west of Anderson Reservoir, to the north and west of Calero Reservoir, and in the Santa Teresa Hills in the southwest. Figure 3.4-2 illustrates the location of each sensitive natural community in the 9-quad region of the Planning Area.

3.4.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the natural resources of the State and nation including the CDFW, the USFWS, the USACE, and the National Marine Fisheries Service (NMFS). These agencies often respond to declines in the quantity of a particular habitat or plant or animal species by developing protective measures for those species or habitat type. The following is an overview of the Federal, State, and local regulations that are applicable to implementing the General Plan.

FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act, passed in 1973, defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Once a species is listed it is fully protected from a “take” unless a take permit is issued by the United States Fish and Wildlife Service. A take is defined as the harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct, including modification of its habitat (16 USC 1532, 50 CFR 17.3). Proposed endangered or threatened species are those species for which a proposed regulation, but not a final rule, has been published in the Federal Register.

Migratory Bird Treaty Act

To kill, possess, or trade a migratory bird, bird part, nest, or egg is a violation of the Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., §703, Supp. I, 1989), unless it is in accordance with the regulations that have been set forth by the Secretary of the Interior.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC Section 668) protects these birds from direct take and prohibits the take or commerce of any part of these species. The USFWS administers the act, and reviews Federal agency actions that may affect these species.

Clean Water Act – Section 404

Section 404 of the Clean Water Act (CWA) regulates all discharges of dredged or fill material into waters of the U.S. Discharges of fill material includes the placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §323.2(f)].

Waters of the U.S. include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows [33 C.F.R. §328.3(a)]. Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. §328.3(b)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the USACE as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

The USACE is the agency responsible for administering the permit process for activities that affect waters of the U.S. Executive Order 11990 is a Federal implementation policy, which is intended to result in no net loss of wetlands.

Clean Water Act – Section 401

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the Regional Water Quality Control Board. To obtain the water quality certification, the Regional Water Quality Control Board must indicate that the proposed fill would be consistent with the standards set forth by the State.

Department of Transportation Act - Section 4(f)

Section 4(f) has been part of Federal law since 1966. It was enacted as Section 4(f) of the Department of Transportation (DOT) Act of 1966 and set forth in Title 49 United States Code (U.S.C.), Section 1653(f). In January 1983, as part of an overall recodification of the DOT Act, Section 4(f) was amended and codified in 49 U.S.C. Section 303. This law established policy on Lands, Wildlife and Waterfowl Refuges, and Historic Sites as follows:

It is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation shall cooperate

3.4 BIOLOGICAL RESOURCES

and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the States, in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities. The Secretary of Transportation may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of a historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if: a) There is no prudent and feasible alternative to using that land; and b) The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act prohibits the obstruction or alteration of any navigable water of the United States. The Act requires authorization from the USACE for any excavation or deposition of materials into these waters or for any work that could affect the course, location, condition, or capacity of rivers or harbors.

STATE

Fish and Game Code §2050-2097 - California Endangered Species Act

The California Endangered Species Act (CESA) protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats.

CESA was expanded upon the original Native Plant Protection Act and enhanced legal protection for plants. To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code §1900-1913 California Native Plant Protection Act

In 1977 the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the State. The intent of the law was to preserve, protect, and enhance endangered plants. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants. The NPPA includes provisions that prohibit the taking of plants designated as "rare" from the wild, and a salvage mandate for landowners, which requires notification of the CDFW 10 days in advance of approving a building site.

Fish and Game Code §3503, 3503.5, 3800 - Predatory Birds

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called “raptors,” are protected. The law indicates that it is unlawful to take, possess, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Fish and Game Code §1601-1603 – Streambed Alteration

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project proponents must obtain a “Streambed Alteration Agreement” from CDFW prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

Public Resources Code § 21000 - California Environmental Quality Act

CEQA identifies that a species that is not listed on the Federal or State endangered species list may be considered rare or endangered if the species meets certain criteria. Under CEQA public agencies must determine if a project would adversely affect a species that is not protected by FESA or CESA. Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e., candidate or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of “Species of Special Concern,” developed by the CDFW. Additionally, the California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere. List 3 contains plants where additional information is needed. List 4 contains plants with a limited distribution.

Public Resources Code § 21083.4 - Oak Woodlands Conservation

In 2004, the California legislature enacted SB 1334, which added oak woodland conservation regulations to the Public Resources Code. This new law requires a county to determine whether a project, within its jurisdiction, may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county must require oak woodland mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands. Such mitigation alternatives include: conservation through the use of conservation easements; planting and maintaining an appropriate number of replacement trees; contribution of funds to the Oak Woodlands Conservation Fund for

the purpose of purchasing oak woodlands conservation easements; and/or other mitigation measures developed by the county.

California Oak Woodland Conservation Act

The California Legislature passed Assembly Bill 242, known as the California Oak Woodland Conservation Act, in 2001 as a result of widespread changes in land use patterns across the landscape that were fragmenting oak woodland character over extensive areas. The Act created the California Oak Woodland Conservation Program within the Wildlife Conservation Board. The legislation provides funding and incentives to ensure the future viability of California's oak woodland resources by maintaining large scale land holdings or smaller multiple holdings that are not divided into fragmented, nonfunctioning biological units. The Act acknowledged that the conservation of oak woodlands enhances the natural scenic beauty for residents and visitors, increases real property values, promotes ecological balance, provides habitat for over 300 wildlife species, moderates temperature extremes, reduces soil erosion, sustains water quality, and aids with nutrient cycling, all of which affect and improve the health, safety, and general welfare of the residents of the State.

California Wetlands Conservation Policy

In August 1993, the Governor announced the "California Wetlands Conservation Policy." The goals of the policy are to establish a framework and strategy that will:

- Ensure no overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetland acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property.
- Reduce procedural complexity in the administration of State and Federal wetland conservation programs.
- Encourage partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetland conservation and restoration.

The Governor also signed Executive Order W-59-93, which incorporates the goals and objectives contained in the new policy and directs the Resources Agency to establish an Interagency Task Force to direct and coordinate administration and implementation of the policy.

Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act provides long-term protection of species and habitats through regional, multi-species planning before the special measures of the CESA become necessary.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to regulate state water quality and protect beneficial uses.

San Francisco Bay Basin (Region 2) Water Quality Control Plan

The San Francisco Bay Region (Region) is 4,603 square miles, roughly the size of the State of Connecticut, and characterized by its dominant feature, 1,100 square miles of the 1,600 square mile San Francisco Bay Estuary (Estuary), the largest estuary on the west coast of the United States, where fresh waters from California's Central Valley mix with the saline waters of the Pacific Ocean. The Region also includes coastal portions of Marin and San Mateo counties, from Tomales Bay in the north to Pescadero and Butano Creeks in the south.

The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

LOCAL

Santa Clara Valley Habitat Plan

The Santa Clara Valley Habitat Plan (Habitat Plan) is a habitat conservation plan (HCP) and natural community conservation plan (NCCP) encompassing about 812 square miles, or approximately 62 percent of Santa Clara County, consisting mainly of the southern and central portions of the county and including much of the central, southern, and eastern parts of the metropolitan San José area. The Habitat Plan was adopted in 2012 by six co-permittees: Santa Clara County, the Santa Clara County Water District, the Santa Clara Valley Transportation Authority, and the cities of San Jose, Gilroy, and Morgan Hill. The Habitat Plan provides a framework for promoting the protection and recovery of natural resources, including endangered species, while streamlining the permitting process for planned development, infrastructure, and maintenance activities. The Plan will allow the six co-permittees to receive endangered-species permits for activities and projects they conduct and those under their jurisdiction.

3.4 BIOLOGICAL RESOURCES

The Habitat Plan identifies a “Study Area” and a “Permit Area.” The Study Area is defined as the area in which all covered activities would occur, impacts would be evaluated, and conservation activities would be implemented. The Permit Area is the area in which the permittees are requesting take authorization from the USFWS and CDFW for covered activities. The Habitat Plan Permit Area includes the Los Gatos Creek Trail in the southeastern corner of the City and the Los Gatos Creek, which runs northeasterly through the City of Campbell. However, the remaining area of Campbell is excluded from the Habitat Plan Permit Area.

The Habitat Plan covers 18 species and includes creation of a Reserve System totaling about 46,900 acres; however, no reserves are near Campbell. The Habitat Plan Permit Area includes seven natural communities—grassland, chaparral and coastal scrub, oak woodland, riparian forest and scrub, conifer woodland, wetland, and open water—in addition to two categories of nonnatural land cover—irrigated agriculture and developed.

Santa Clara Valley Water District

The Santa Clara Valley Water District (SCVWD) is a water wholesaler providing imported water from the State Water Project and the Central Valley Project to retail water purveyors in the county. The SCVWD enacted a Water Resources Protection Ordinance in 2006 governing modifications, access, and use of District-managed water resources.

The SCVWD issued Guidelines and Standards for Land Use Near Streams: A Manual of Tools, Standards, and Procedures to Protect Streams and Streamside Resources in Santa Clara County in 2007. In 2002 the SCVWD and 15 cities and towns in the county established the Water Resources Protection Collaborative, which works to clarify and streamline local permitting for streamside activities in Santa Clara County.¹⁰ The SCVWD owns the Los Gatos Creek Trail located in the southeast corner of Campbell and would be a responsible agency if any future projects would result in work within its title fee property. “Responsible agencies” are public agencies that carry out or approve a project for which a lead agency is conducting CEQA review; responsible agencies are all agencies other than the lead agency with discretionary approval power over the project. In the case of the proposed project, a permit from the SCVWD would be required for any work that occurs within the Los Gatos Creek trail corridor.

City of Campbell Municipal Code

Chapter 21.32 (Tree Protection Regulations) of the City of Campbell Municipal Code (Code) is to establish policies, regulations, and standards to protect and manage trees on private property to ensure that development is compatible with and enhances Campbell’s small town quality and character. This Chapter of the Code makes it unlawful to remove any protected tree specified in Section 21.32.050 (Protected Trees) from private property without approval of a tree removal permit.

3.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on biological resources if it will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

IMPACTS AND MITIGATION

Impact 3.4-1: General Plan implementation could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (Less than Significant)

Approval of the General Plan would not directly approve or entitle any development or infrastructure projects. However, implementation of the General Plan and Land Use Map would allow and facilitate future development in Campbell, which could result in adverse impacts to special-status plant and wildlife species, as well as sensitive natural habitat or wildlife movement corridors.

SPECIAL STATUS PLANT SPECIES

The search revealed documented occurrences of 42 special status plant species within the nine quad search area. Table 3.4-2 provides a list of special-status plant species that are documented within a nine quad search area (approximately a 10-mile radius) of Campbell, and current protective status. Figure 3.4-2 illustrates the special status species located within the nine quad search area.

3.4 BIOLOGICAL RESOURCES

Subsequent development under the proposed General Plan could result in the direct loss of habitat areas associated with these special status plant species, since suitable habitat for these species does occur in the region. Additionally, indirect impacts to special status plant species could occur with implementation of the General Plan. Indirect impacts could include habitat degradation as a result of impacts to water quality.

Special status plant species receive protection from various Federal and State laws and regulations, including FESA and CESA. These regulations generally prohibit the taking of the plant species without a special permit. Additionally, the proposed General Plan includes numerous policies and actions intended to reduce or avoid impacts to special status plant species. These policies and actions are listed below under the General Plan Minimization Measures.

SPECIAL STATUS ANIMAL SPECIES

The search revealed documented occurrences of 60 special status animal species within the nine quad search area. This includes: five amphibians, 24 birds, three fish, 12 mammals, 12 invertebrates, and four reptiles. Of the 60 special status animal species within the nine quad search areas, eight species are located within one mile of Campbell. Table 3.4-3 provides a list of the special-status animal species that are documented within the nine quad search area, and current protective status. Figure 3.4-2 illustrates the special status species located within the nine quad search area.

While most new development in Campbell that would occur under the proposed General Plan would occur in areas that have been previously developed, subsequent development under the proposed General Plan could result in the direct loss of habitat areas associated with these special status animal species, since suitable habitat for these species does occur in the region, and may occur on future development project sites within Campbell. Additionally, indirect impacts to special status animal species could occur with implementation of the General Plan. Indirect impacts could include habitat degradation as a result of impacts to water quality, increased human presence, and the loss of foraging habitat.

Special status animal species receive protection from various Federal and State laws and regulations, including FESA and CESA. These regulations generally prohibit the taking of a species or direct impact to foraging and breeding habitat without a special permit. Additionally, the proposed General Plan includes numerous policies and actions intended to reduce or avoid impacts to special status animal species. These policies and actions are listed below.

CONCLUSION

Construction and maintenance activities associated with future development projects under the proposed General Plan could result in the direct and indirect loss or indirect disturbance of special status plant or animal species or their habitats that are known to occur, or have potential to occur, in the region. Impacts to special status species or their habitat could result in a substantial reduction in local population size, lowered reproductive success, or habitat fragmentation. Significant impacts on special status species associated with individual subsequent projects could include:

- increased mortality caused by higher numbers of automobiles in new areas of development;
- direct mortality from the collapse of underground burrows, resulting from soil compaction;
- direct mortality resulting from the movement of equipment and vehicles through construction areas;
- direct mortality resulting from removal of trees with active nests;
- direct mortality or loss of suitable habitat resulting from the trimming or removal of obligate host plants;
- direct mortality resulting from fill of wetlands features;
- loss of breeding and foraging habitat resulting from the filling of seasonal or perennial wetlands;
- loss of breeding, foraging, and refuge habitat resulting from the permanent removal of riparian vegetation;
- loss of suitable habitat for vernal pool invertebrates resulting from the destruction or degradation of vernal pools or seasonal wetlands;
- abandoned eggs or young and subsequent nest failure for special status nesting birds, including raptors, and other non-special status migratory birds resulting from construction-related noises;
- loss or disturbance of rookeries and other colonial nests;
- loss of suitable foraging habitat for special status raptor species;
- loss of migration corridors resulting from the construction of permanent structures or features; and
- impacts to fisheries/species associated with waterways.

Implementation of the policies and actions listed below would assist in minimizing the impact to a less than significant level. Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of special status plants and animals, including habitat. The City of Campbell has prepared the General Plan to include numerous policies and actions intended to protect special status plants and animals, including habitat, from adverse effects associated with future development and improvement projects.

While future development has the potential to result in significant impacts to protected special status plants and animals, including habitat, the implementation of the policies and action listed below, as well as Federal and State regulations, would result in a **less than significant** impact to special status plants and animals, including habitat.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-7.1 Preserve and enhance biological communities that contribute to Campbell's and the region's biodiversity including, but not limited to, wetlands, riparian areas, and aquatic habitat.

COS-7.2 Preserve and enhance the aesthetic and habitat value of riparian corridors including the Los Gatos and San Tomas Aquino Creeks.

3.4 BIOLOGICAL RESOURCES

COS-7.3 Focus conservation efforts on high priority conservation areas that contain suitable habitat for endangered, threatened, migratory, or special-status species and that can be managed with minimal interference with nearby urban land uses.

COS-7.4 Conserve existing native trees and vegetation where possible and integrate regionally native plant species into development and infrastructure projects where appropriate.

COS-7.5 Work with Valley Water (Santa Clara Water Valley District) to preserve wetlands, riparian corridors, and buffer zones in Campbell by continuing to require that new development follow the “Guidelines and Standards for Land Use Near Streams” to protect streams and riparian habitats. Encourage the use of water quality wetlands, biofiltration swales, watershed-scale retrofits, etc., where such measures are likely to be effective and technically and economically feasible.

COS-7.6 Limit the disturbance of natural water bodies and drainage systems in Campbell by conserving natural open space areas, protecting channels, and minimizing the impacts from stormwater and urban runoff.

COS-7.7 Build upon existing streetscapes and develop an urban forest along the City’s major corridors and in residential neighborhoods to provide avian habitat, sequester carbon emissions, foster pedestrian activity, and provide shade.

COS-7.8 Reduce the use of highly-reflective and/or transparent building materials in order to reduce the potential for bird strikes and other harm to wildlife.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-7.a Cooperate with State, federal, and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the “Guidelines and Standards for Land Use Near Streams” from Valley Water (Santa Clara Valley Water District).

COS-7.b Continue to require new development and infrastructure projects to incorporate the standards and requirements contained in the Santa Clara Valley Urban Runoff Pollution Prevention Program c.3 Stormwater Handbook to ensure that Low Impact Development (LID) measures are incorporated into site designs to reduce pollutants from non-point sources, incorporate “green” infrastructure, and encourage greater use of permeable paving surfaces.

COS-7.c Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- *Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;*
- *Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and*
- *Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.*

COS-7.d Work with Valley Water (Santa Clara Valley Water District) to restrict future fencing, piping, and channelization of creeks when flood control and public safety can be achieved through measures that preserve the natural environmental and habitat of riparian corridors; in addition, evaluate opportunities to revert some existing concrete-lined channels to more natural alternatives such as levees.

COS-7.e Encourage the Santa Clara Valley Water District, County Parks Department, developers, and private property owners to plant and maintain native trees and plants and replace invasive, non-native species with native ones along creek corridors.

COS-7.f Continue to work collaboratively with the Santa Clara Valley Water District to institute ongoing programs to remove invasive plant species and harmful insects from ecologically sensitive areas, primarily by means other than application of herbicides and pesticides.

COS-7.g Develop and implement a Grading Ordinance that requires the use of erosion and sediment control measures and minimizes grading and vegetation removal near creeks to ensure that the creeks are protected from reduction in bank stability, erosion, downstream sedimentation, and flooding.

COS-7.h Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara County Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Campbell and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat.

COS-7.i Adopt an ordinance incorporating the Guidelines for Land Use Near Streams into the Zoning Code.

COS-7.j Update Section 21.18.110 (Refuse and recycling storage areas) of the Municipal Code to require new and existing (subject to specified thresholds) refuse enclosures to incorporate appropriate stormwater protection measures consistent with the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 Stormwater Handbook.

COS-7.k Consider the preparation of local CEQA thresholds for significant impacts to biological resources.

COS-7.l Consider the preparation and adoption of an ordinance that establishes regulations to reduce bird mortality from windows, other specific glass features, and certain lighting elements that are known to increase the risk of bird collisions.

Impact 3.4-2: General Plan implementation could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (Less than Significant)

The CDFW considers sensitive natural communities to have significant biotic value, with species of plants and animals unique to each community. The CNDDDB search revealed three sensitive natural communities within the nine quad search area. The sensitive natural communities within the nine quad search area include the aquatic communities of the Northern Coastal Salt Marsh and North Central Coast Drainage Sacramento Sucker/Roach River, as well as the terrestrial community of Serpentine Bunchgrass grassland. All three of these community types were once more widely distributed throughout California, but have been modified or destroyed by grazing, cultivation, and urban development. Since the remaining examples of these sensitive natural communities are under continuing threat from future development, CDFW considers them “highest inventory priorities” for future conservation. Of these three sensitive natural communities documented within the nine quad region of the Planning Area, none are located within one mile of the Campbell city limits.

While not always documented as a sensitive natural community in the CNDDDB, streams, rivers, wet meadows, and vernal pools are of high concern because they provide unique aquatic habitat for many endemic species, including special status plants, birds, invertebrates, and amphibians. The City of Campbell contains numerous aquatic habitats that qualify as sensitive habitat. The following aquatic resources are found in the Planning Area: San Tomas Aquinas Creek, Smith Creek, and Los Gatos Creek.

San Tomas Aquinas Creek is a 16.5-mile long stream that heads on El Sereno mountain in the El Sereno Open Space Preserve in Saratoga. The creek flows through the cities of Saratoga, Monte Sereno, Los Gatos, Campbell, Santa Clara, and San Jose before its confluence with the Guadalupe Slough in south San Francisco Bay. The creek enters the City limits in the northwest area of the City generally following along the San Tomas Expressway through urban development before veering to the southwest flowing along the City limits. Smith Creek is a major tributary of San Tomas Aquino Creek that branches off between Inwood Drive and Crockett Avenue flowing to the south.

The Los Gatos Creek runs 24 miles from the Santa Cruz Mountains through the Santa Clara Valley until its confluence with the Guadalupe River in downtown San Jose. Los Gatos Creek enters the Campbell in the southeast corner of the Planning Area generally flowing adjacent the Los Gatos Creek County Park and Highway 17 before exiting the City in the northeast. The Los Gatos County Park is located in the southwest corner of the City and contains multiple percolation ponds (i.e., Camden and Oka Ponds) to help clean the water before it reaches the underground storage basin.

Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of sensitive natural communities, including riparian habitat. The City of Campbell has prepared the General Plan to include numerous policies and actions intended to protect sensitive natural communities, including riparian habitat, from adverse effects associated with future development and improvement projects. While future

development has the potential to result in significant impacts to protected habitats, the implementation of the General Plan policies and action listed below, as well as Federal and State regulations, would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-7.1 Preserve and enhance biological communities that contribute to Campbell's and the region's biodiversity including, but not limited to, wetlands, riparian areas, and aquatic habitat.

COS-7.2 Preserve and enhance the aesthetic and habitat value of riparian corridors including the Los Gatos and San Tomas Aquino Creeks.

COS-7.3 Focus conservation efforts on high priority conservation areas that contain suitable habitat for endangered, threatened, migratory, or special-status species and that can be managed with minimal interference with nearby urban land uses.

COS-7.4 Conserve existing native trees and vegetation where possible and integrate regionally native plant species into development and infrastructure projects where appropriate.

COS-7.6 Limit the disturbance of natural water bodies and drainage systems in Campbell by conserving natural open space areas, protecting channels, and minimizing the impacts from stormwater and urban runoff.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-7.a Cooperate with State, federal, and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the "Guidelines and Standards for Land Use Near Streams" from Valley Water (Santa Clara Valley Water District).

COS-7.c Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- *Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;*
- *Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and*
- *Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.*

COS-7.d Work with Valley Water (Santa Clara Valley Water District) to restrict future fencing, piping, and channelization of creeks when flood control and public safety can be achieved through measures that preserve the natural environmental and habitat of riparian corridors; in addition, evaluate

3.4 BIOLOGICAL RESOURCES

opportunities to revert some existing concrete-lined channels to more natural alternatives such as levees.

COS-7.e Encourage the Santa Clara Valley Water District, County Parks Department, developers, and private property owners to plant and maintain native trees and plants and replace invasive, non-native species with native ones along creek corridors.

COS-7.f Continue to work collaboratively with the Santa Clara Valley Water District to institute ongoing programs to remove invasive plant species and harmful insects from ecologically sensitive areas, primarily by means other than application of herbicides and pesticides.

COS-7.h Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara County Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Campbell and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat.

COS-7.i Adopt an ordinance incorporating the Guidelines for Land Use Near Streams into the Zoning Code.

Impact 3.4-3: General Plan implementation could have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Less than Significant)

Streams, rivers, wet meadows, and vernal pools (wetlands and jurisdictional waters) are of high concern because they provide unique aquatic habitat (perennial and ephemeral) for many endemic species, including special status plants, birds, invertebrates, and amphibians. These aquatic habitats oftentimes qualify as protected wetlands or jurisdictional waters and are protected from disturbance through the CWA.

Campbell contains numerous aquatic habitats that qualify as Federally protected wetlands and jurisdictional waters. As noted in Impact 3.4-2, the following aquatic resources are found in the Planning Area: San Tomas Aquinas Creek, Smith Creek, and Los Gatos Creek. San Tomas Aquinas Creek generally flows along the San Tomas Expressway through urban development. Smith Creek is a major tributary of San Tomas Aquinas Creek and flows to the south through urban development generally between Harriet Avenue and South San Tomas Aquinas Road. Los Gatos Creek enters Campbell in the southeast corner of the Planning Area generally flowing adjacent to the Los Gatos Creek County Park and Highway 17 before exiting the City in the northeast flowing towards downtown San Jose.

Section 404 of the CWA requires any project that involves disturbance to a wetland or water of the U.S. to obtain a permit that authorizes the disturbance. If a wetland or jurisdictional water is determined to be present, then a permit must be obtained from the USACE to authorize a disturbance to the wetland. Although subsequent projects may disturb protected wetlands and/or

jurisdictional waters, the regulatory process that is established through Section 404 of the CWA ensures that there is “no net loss” of wetlands or jurisdictional waters. If, through the design process, it is determined that a future development project cannot avoid a wetland or jurisdictional water, then the USACE would require that there be an equal amount of wetland created elsewhere to mitigate any loss of wetland.

Construction activities associated with individual future projects could result in the disturbance or loss of waters of the United States. This includes perennial and intermittent drainages; unnamed drainages; vernal pools; freshwater marshes; and other types of seasonal and perennial wetland communities. Wetlands and other waters of the United States could be affected through direct removal, filling, hydrological interruption (including dewatering), alteration of bed and bank, and other construction-related activities.

The proposed project is a planning document that does not itself approve any specific physical changes to the to the environment, adoption of the proposed project would not directly impact the environment. However, the project could have an indirect change on the physical environment through subsequently approved projects that are consistent with the buildout that is contemplated in the General Plan. The implementation of an individual project would require a detailed and site-specific review of the site to determine the presence or absence of water features. If water features are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process.

Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of sensitive natural communities, including protected wetlands. The City of Campbell has prepared the General Plan to include numerous policies and actions intended to protect wetlands and waters of the U.S. from adverse effects associated with future development and improvement projects. The implementation of the General Plan policies and actions listed below, as well as Federal and State regulations, would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-7.1 Preserve and enhance biological communities that contribute to Campbell’s and the region’s biodiversity including, but not limited to, wetlands, riparian areas, and aquatic habitat.

COS-7.2 Preserve and enhance the aesthetic and habitat value of riparian corridors including the Los Gatos and San Tomas Aquino Creeks.

COS-7.5 Work with Valley Water (Santa Clara Water Valley District) to preserve wetlands, riparian corridors, and buffer zones in Campbell by continuing to require that new development follow the “Guidelines and Standards for Land Use Near Streams” to protect streams and riparian habitats. Encourage the use of water quality wetlands, biofiltration swales, watershed-scale retrofits, etc., where such measures are likely to be effective and technically and economically feasible.

3.4 BIOLOGICAL RESOURCES

COS-7.6 Limit the disturbance of natural water bodies and drainage systems in Campbell by conserving natural open space areas, protecting channels, and minimizing the impacts from stormwater and urban runoff.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-7.a Cooperate with State, federal, and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the “Guidelines and Standards for Land Use Near Streams” from Valley Water (Santa Clara Valley Water District).

COS-7.c Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- *Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;*
- *Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and*
- *Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.*

COS-7.d Work with Valley Water (Santa Clara Valley Water District) to restrict future fencing, piping, and channelization of creeks when flood control and public safety can be achieved through measures that preserve the natural environmental and habitat of riparian corridors; in addition, evaluate opportunities to revert some existing concrete-lined channels to more natural alternatives such as levees.

COS-7.h Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara County Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Campbell and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat.

COS-7.i Adopt an ordinance incorporating the Guidelines for Land Use Near Streams into the Zoning Code.

Impact 3.4-4: General Plan implementation would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (Less than Significant)

Habitat loss, fragmentation, and degradation resulting from land use changes or habitat conversion can alter the use and viability of wildlife movement corridors (i.e., linear habitats that naturally connect and provide passage between two or more otherwise disjunct larger habitats or habitat fragments). Wildlife habitat corridors maintain connectivity for daily movement, travel, mate-seeking, and migration; plant propagation; genetic interchange; population movement in response to environmental change or natural disaster; and recolonization of habitats subject to local extirpation or removal. The suitability of a habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question.

Species utilize movement corridors in several ways. "Passage species" are those species that use corridors as thru-ways between outlying habitats. The habitat requirements for passage species are generally less than those for corridor dwellers. Passage species use corridors for brief durations, such as for seasonal migrations or movement within a home range. As such, movement corridors do not necessarily have to meet any of the habitat requirements necessary for a passage species everyday survival. "Corridor dwellers" are those species that have limited dispersal capabilities – a category that includes most plants, insects, reptiles, amphibians, small mammals, and birds – and use corridors for a greater length of time.

Campbell contains numerous aquatic habitats that may be used for movement of wildlife. As noted in Impact 3.4-2, the following aquatic resources are found in the Planning Area: San Tomas Aquinas Creek, Smith Creek, and Los Gatos Creek. While flowing through Campbell, the San Tomas Aquinas Creek and Smith Creek are surrounded by urban development. Portions of the Los Gatos Creek extend along the east side of the Los Gatos Creek County Park, which contains riparian vegetation along the creek banks. The Los Gatos Creek and Los Gatos Creek Trail (found in the Los Gatos Creek County Park) enables wildlife movement; however, there are no large areas of native habitat along Los Gatos Creek near Campbell. The nearest large area of native habitat to the site along Los Gatos Creek is in and near the St. Joseph's Hill Open Space Preserve on the northeast foot of the Santa Cruz Mountains, approximately 4 miles south of Campbell.

As shown in the proposed General Plan Land Use Map, Open Space land uses are found adjacent to and along the complete stretch of Los Gatos Creek. In addition, the proposed Land Use Map proposes some Open Space land uses along San Tomas Aquinas Creek. The areas designated for urban uses by the proposed Land Use Map near both creeks are generally developed with urban uses currently. The Los Gatos Creek County Park and Campbell Park are both designated as Open Space. These areas would continue to be used by wildlife as movement corridors.

3.4 BIOLOGICAL RESOURCES

Because the proposed project is a planning document and thus, no physical changes will occur to the environment, adoption of the proposed project would not directly impact the environment. There is a reasonable chance that movement corridors could be impacted throughout the buildout of subsequent individual projects. The implementation of an individual project would require a detailed and site-specific review of the site to determine the presence or absence of movement corridors on a given project site. If movement corridors are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process.

Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of movement corridors. The City of Campbell has prepared the General Plan to include three policies and one action intended to protect movement corridors from adverse effects associated with future development and improvement projects. While future development has the potential to result in significant impacts to protected movement corridors, the implementation of the General Plan policies and action listed below, as well as Federal and State regulations, would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-7.1 Preserve and enhance biological communities that contribute to Campbell's and the region's biodiversity including, but not limited to, wetlands, riparian areas, and aquatic habitat.

COS-7.2 Preserve and enhance the aesthetic and habitat value of riparian corridors including the Los Gatos and San Tomas Aquino Creeks.

COS-7.3 Focus conservation efforts on high priority conservation areas that contain suitable habitat for endangered, threatened, migratory, or special-status species and that can be managed with minimal interference with nearby urban land uses.

COS-7.4 Conserve existing native trees and vegetation where possible and integrate regionally native plant species into development and infrastructure projects where appropriate.

COS-7.5 Work with Valley Water (Santa Clara Water Valley District) to preserve wetlands, riparian corridors, and buffer zones in Campbell by continuing to require that new development follow the "Guidelines and Standards for Land Use Near Streams" to protect streams and riparian habitats. Encourage the use of water quality wetlands, biofiltration swales, watershed-scale retrofits, etc., where such measures are likely to be effective and technically and economically feasible.

COS-7.6 Limit the disturbance of natural water bodies and drainage systems in Campbell by conserving natural open space areas, protecting channels, and minimizing the impacts from stormwater and urban runoff.

COS-7.7 Build upon existing streetscapes and develop an urban forest along the City's major corridors and in residential neighborhoods to provide avian habitat, sequester carbon emissions, foster pedestrian activity, and provide shade.

COS-7.8 Reduce the use of highly-reflective and/or transparent building materials in order to reduce the potential for bird strikes and other harm to wildlife.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-7.a Cooperate with State, federal, and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the “Guidelines and Standards for Land Use Near Streams” from Valley Water (Santa Clara Valley Water District).

COS-7.b Continue to require new development and infrastructure projects to incorporate the standards and requirements contained in the Santa Clara Valley Urban Runoff Pollution Prevention Program c.3 Stormwater Handbook to ensure that Low Impact Development (LID) measures are incorporated into site designs to reduce pollutants from non-point sources, incorporate “green” infrastructure, and encourage greater use of permeable paving surfaces.

COS-7.c Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- *Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;*
- *Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and*
- *Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.*

COS-7.d Work with Valley Water (Santa Clara Valley Water District) to restrict future fencing, piping, and channelization of creeks when flood control and public safety can be achieved through measures that preserve the natural environmental and habitat of riparian corridors; in addition, evaluate opportunities to revert some existing concrete-lined channels to more natural alternatives such as levees.

COS-7.e Encourage the Santa Clara Valley Water District, County Parks Department, developers, and private property owners to plant and maintain native trees and plants and replace invasive, non-native species with native ones along creek corridors.

COS-7.f Continue to work collaboratively with the Santa Clara Valley Water District to institute on-going programs to remove invasive plant species and harmful insects from ecologically sensitive areas, primarily by means other than application of herbicides and pesticides.

COS-7.g Develop and implement a Grading Ordinance that requires the use of erosion and sediment control measures and minimizes grading and vegetation removal near creeks to ensure that the creeks are protected from reduction in bank stability, erosion, downstream sedimentation, and flooding.

3.4 BIOLOGICAL RESOURCES

COS-7.h Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara County Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Campbell and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat.

COS-7.i Adopt an ordinance incorporating the Guidelines for Land Use Near Streams into the Zoning Code.

COS-7.j Update Section 21.18.110 (Refuse and recycling storage areas) of the Municipal Code to require new and existing (subject to specified thresholds) refuse enclosures to incorporate appropriate stormwater protection measures consistent with the Santa Clara Valley Urban Runoff Pollution Prevention Program c.3 Stormwater Handbook.

COS-7.l Consider the preparation and adoption of an ordinance that establishes regulations to reduce bird mortality from windows, other specific glass features, and certain lighting elements that are known to increase the risk of bird collisions.

Impact 3.4-5: The General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

The proposed project is a policy document, in which local policies are established. This EIR presents the numerous policies of the General Plan. Policy COS-4.J requires that the City continue to implement the City's Tree Protection Ordinance. The General Plan itself does not conflict with its policies. Subsequent development projects will be required to comply with the General Plan policies, as well as the Municipal Code and local tree protection programs. This is a **less than significant** impact.

Impact 3.4-6: General Plan implementation would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan (Less than Significant)

As noted previously, the Los Gatos Creek and Los Gatos Creek County Park and Trail located within the City of Campbell are within the Santa Clara Valley Habitat Plan Permit Area. The Santa Clara Valley Habitat Plan is a habitat conservation plan (HCP) and natural community conservation plan (NCCP) encompassing about 812 square miles, or approximately 62 percent of Santa Clara County. The Santa Clara County Water District, the Santa Clara Valley Transportation Authority, are HCP member agencies.

The proposed General Plan Land Use Map does not re-designate any land currently designated for open space or habitat protection. As such, the proposed General Plan and the Land Use Map are consistent with the adopted HCP/NCCP in terms of land uses and habitat protection.

Implementation of the General Plan would not conflict with the provisions of an adopted HCP/NCCP, or other approved local, regional, or State habitat conservation plan.

Future projects that do not comply with the Santa Clara Valley Habitat Plan could result in potentially significant impacts, which would be reduced to a less than significant level through the implementation of Action COS-7.a, which requires the City to cooperate with State, federal, and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the “Guidelines and Standards for Land Use Near Streams” from Valley Water (Santa Clara Valley Water District).

Through implementation of this Action, as well as policies and actions listed throughout this Chapter that support biological and habits resources, the General Plan would have a **less than significant** impact relative to this topic.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-7.h Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara County Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Campbell and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat.

COS-7.a Cooperate with State, federal, and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the “Guidelines and Standards for Land Use Near Streams” from Valley Water (Santa Clara Valley Water District).

This page left intentionally blank.

CAMPBELL GENERAL PLAN

Figure 3.4-1. Cover Type

Legend

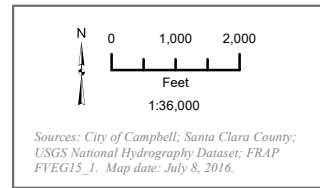
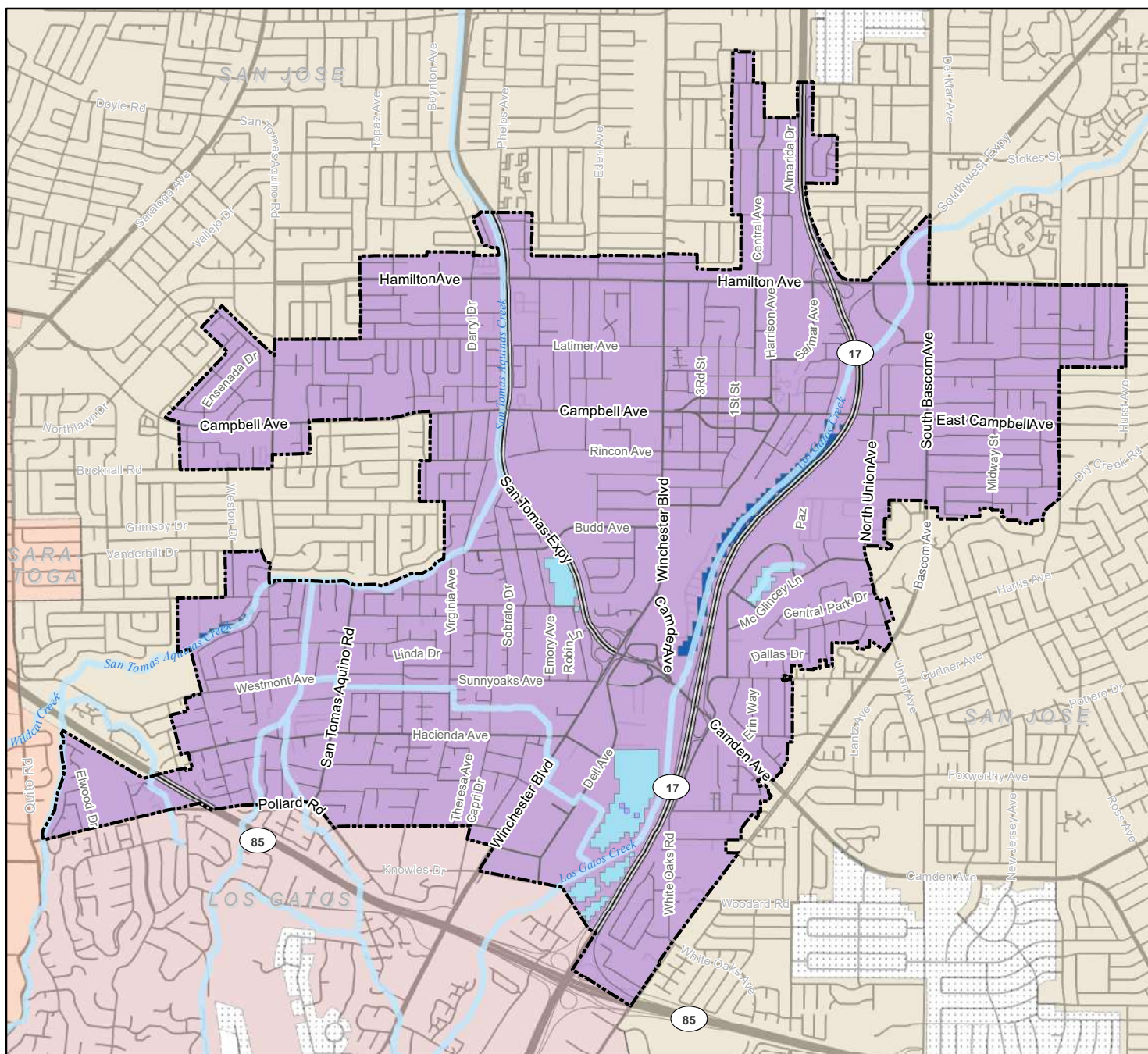
Wildlife Habitat Relationship (WHR) Type

- Lacustrine (62.01 ac)
- Montane Riparian (32.25 ac)
- Urban (3,806.28 ac)

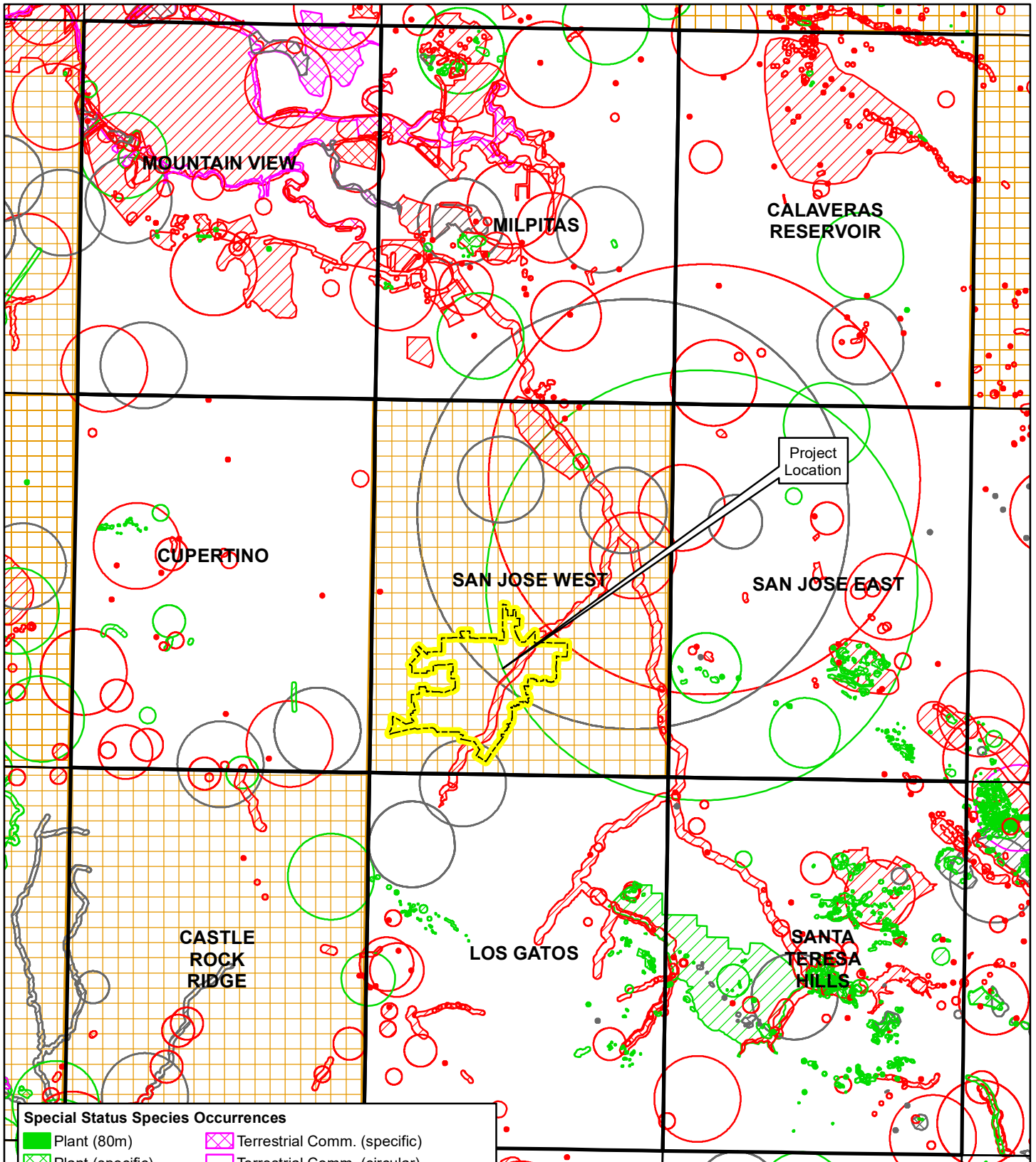
City of Campbell

Surrounding Areas

- City of San Jose
- City of Los Gatos
- City of Saratoga
- Unincorporated Santa Clara County



This page left intentionally blank.



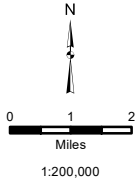
Special Status Species Occurrences

- | | |
|-----------------------|-------------------------------------|
| Plant (80m) | Terrestrial Comm. (specific) |
| Plant (specific) | Terrestrial Comm. (circular) |
| Plant (non-specific) | Multiple (80m) |
| Plant (circular) | Multiple (specific) |
| Animal (80m) | Multiple (non-specific) |
| Animal (specific) | Multiple (circular) |
| Animal (non-specific) | Sensitive Environmental Occurrences |
| Animal (circular) | |

CAMPBELL GENERAL PLAN

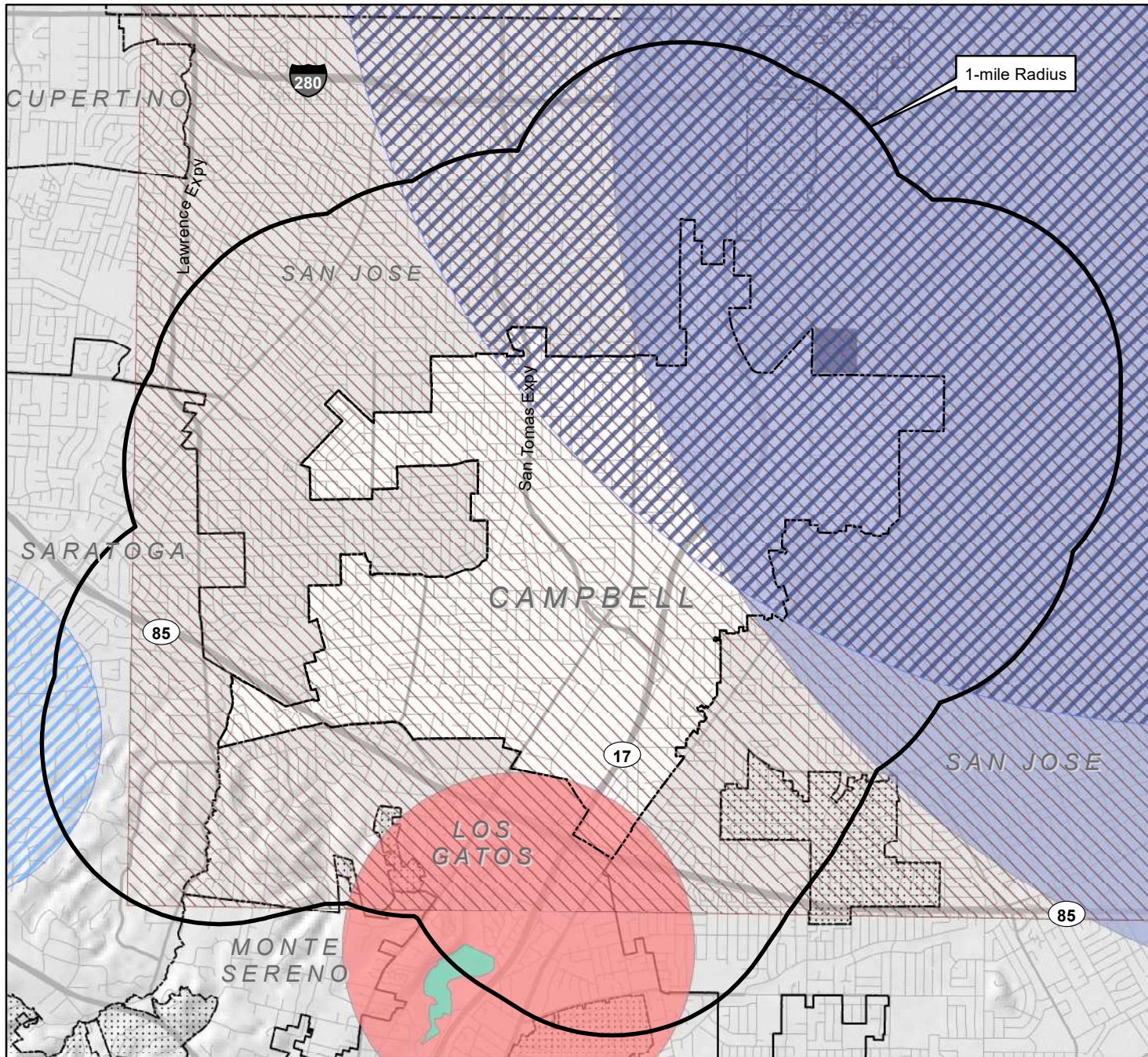
Figure 3.4-2. California Natural Diversity Database

9-Quad Search



CNDDDB version 6/2/2020. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: June 22, 2020.

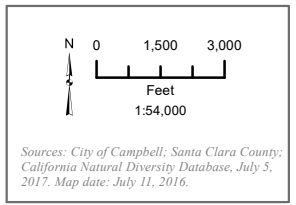
This page left intentionally blank.



**CAMPBELL
GENERAL PLAN**
Figure 3.4-3.
California Natural Diversity Database
Special Status Species Map
1-mile Radius Search

Legend

- Single Species Occurrence**
- Congdon's tarplant
 - Cooper's hawk
 - hoary bat
 - western pond turtle
- Multiple Species Occurrence**
- woodland woolly threads, obscure bumble bee, Loma Prieta hoita
 - Crotch bumble bee, obscure bumble bee, western bumble bee, robust spineflower, California Tiger Salamander
- Sensitive Environmental Occurrence**
- American peregrine falcon
- Municipalities**
- City of Campbell
 - Surrounding Cities
 - Unincorporated Santa Clara County



This page left intentionally blank.

Cultural resources are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. Preservation of the city's cultural heritage should be considered when planning for the future.

This section provides a background discussion of the prehistory, ethnology, historical period background, and cultural resources found in Campbell. This section is organized with an existing setting, regulatory setting, and impact analysis.

The City received one comment letter related to this environmental topic during the NOP comment period. The Native American Heritage Commission (NAHC) submitted a comment letter that provided an overview of tribal consultation requirements, and provided examples of recommended approaches to reducing potential impacts to cultural and tribal resources. The issues raised in this letter have been addressed in this chapter of the Draft EIR. All comments received during the NOP comment period are included in Appendix A.

KEY TERMS

The following key terms are used throughout this section to describe cultural and tribal resources and the framework that regulates them:

Archaeology. The study of historic or prehistoric peoples and their cultures by analysis of their artifacts and monuments.

Ethnography. The study of contemporary human cultures.

Complex. A patterned grouping of similar artifact assemblages from two or more sites, presumed to represent an archaeological culture.

Midden. A deposit marking a former habitation site and containing such materials as discarded artifacts, bone and shell fragments, food refuse, charcoal, ash, rock, human remains, structural remnants, and other cultural leavings.

3.5.1 ENVIRONMENTAL SETTING

PREHISTORY

Humans are believed to have resided in northern Santa Clara County for the past 13,000 years. Archeologists who have studied these past cultures have uncovered evidence of widespread activities that allowed them to divide these previous 13,000 years into periods or phases based on the kinds of subsistence behaviors practiced.

Six periods have been identified with locally defined phases and regional cultures. The six periods are (from Jones and Klar 2007):

- Paleo-Indian Period – pre 8000 B.C
- Millingstone (or Early Archaic) Period, 8000 – 3500 B.C.
- Early Period, 3500 – 600 B.C.

3.5 CULTURAL RESOURCES

- Middle Period, 600 B.C. – A.D. 1000
- Middle/Late Transition Period, A.D. 1000 – A.D. 1250
- Late Period, A.D. 1250 – A.D. 1769

Paleo-Indian Period (13,000 – 8000 B.C.) Little is known about the earliest inhabitants in the area except for a few isolated artifacts that include a fluted spear point. Archeologists have yet to uncover a habitation site from this period that would allow for a greater understanding of how these people lived apart from hunting big game.

Millingstone (or Early Archaic) Period (8000 – 3500 B.C.) Over 40 archeological sites have been discovered with evidence from the people of this time period. Coastal resources were the focus of the early peoples, but the collection and processing of seeds was paramount during this period with a secondary reliance on hunting. Millingstones and handstones, also known by their Spanish name metates and manos, are common tools for these early inhabitants while the side-notched spear points and other stone tools created for hunting purposes are less numerous.

Early Period (3500 – 600 B.C.) This period witnessed a shift from the reliance of coastal resources and seeds to an increased focus on hunting. Deposits from this period are full of various kinds of spear points indicating wild game was now a preference for meals. The switch from millingstones and a seed based diet to one with meat was widespread throughout the Central Coast.

Middle Period (600 B.C. – A.D. 1000) Diversification is key to understanding this period as the early inhabitants began to utilize the resource base in more varied ways. Spear points are still very common but new tools such as the portable mortar and pestle and circular shell fishhooks become widespread. The first use of a revolutionary technological development, the bow and arrow, was introduced during the Middle Period.

Middle/Late Transition Period (A.D. 1000 – 1250) Perhaps as a result of the increased use of bow and arrow, significant changes took place in a relatively short period of time. Coastal resources were still favored, but a new push toward inland areas occurred and deer may have been the animal of choice for hunting.

Late Period (A.D. 1250 – 1769) During the Late Period, acorns were discovered as a new food source. Acorns became dominant and suddenly the vast interior valleys, full of oak trees, became more attractive. Hunting and acorn collection were often practiced simultaneously at special use camps scattered throughout the interior areas. Where bedrock was suitable, mortar holes used to process acorns proliferate.

ETHNOLOGY

Ohlone

Tamyen ancestors of the Ohlone people moved into the San Francisco and Monterey Bay areas from the Delta of the San Joaquin and Sacramento rivers around A.D. 500. The designation "Costanoan," which was originally applied to this group by anthropologists and others, derives from the Spanish term for coastal people and was not used by the Indian people. Ohlone territory extended from the

Carquinez Strait in the northeast to just south of Chalome Creek in the southeast and from San Francisco to the Sur River along the Coast. This vast territory was broken into eight different language based zones. These eight branches of the Costanoan linguistic family were separate languages, not dialects.

The Planning Area lies in the northern portion of the territory of the Tamyen. The Tamyen Costanoan occupied the land in the Santa Clara Valley south of San Francisco Bay. They situated their permanent villages on high ground above seasonal marshes that were inundated by highwater for a few months of the year. Access to fresh drinking water was a criterion for selecting a village location.

The basic political unit of the Ohlone, like many Californian Native Americans, was the tribelet, a group of people who spoke a common language and lived in a contiguous area centered on a main village. Territorial boundaries of tribelets were defined by physiographic features. Tribelet chiefs might be either men or women. The office was inherited patrilineally, usually passing from father to son. When there were no male heirs, the position went to the man's sister or daughter. Accession to the office of chief required approval of the community. The chief was responsible for feeding visitors, providing for the impoverished, directing ceremonial activities, caring for captive grizzly bears and coyote, and directing hunting, fishing, gathering, and warfare expeditions. In all these matters, the chief acted as the leader of a council of elders. The chief and council served mainly as advisors to the community (Levy 1978:487).

The Ohlone had mixed relations with various peoples. Wars were waged both among the various Costanoan tribelets and with Esselen, Salinan, and Northern Valley Yokuts. At the same time, however, they augmented the wealth of locally-available resources by trading with the Plains Miwok, Sierra Miwok, and Yokuts. The Ohlone supplied mussels, abalone shells, salt, and dried abalone to the Yokuts, bows to the Plains Miwok, and Olivella shells to the Sierra Miwok. In return, they received piñon nuts from the Yokuts and likely clam shell disk beads from the Miwok (Levy 1978:488-489, 493).

The Ohlone followed a seasonal round of subsistence activities, gathering plant and animal foods and materials for baskets and other manufactures. They insured a sustained yield of plant and animal foods by careful management of the land. Large mammals consumed by the Ohlone included black-tailed deer, Roosevelt elk, antelope, grizzly bear, mountain lion, sea lion, and whale. The most effective method of hunting deer was stalking by individual hunters. Other mammals eaten included dog, wildcat, skunk, raccoon, brush rabbit, cottontail, jackrabbit, tree squirrel, ground squirrel, woodrat, mouse, and mole. Some of the types of fowl eaten include the Canadian goose, snow goose, pintail mallard, and mourning dove. In addition to animals, the Ohlone also ate seeds and berries, such as acorns, buckeye, blackberries, strawberries, and wild grapes, among others (Levy 1978:491).

Religion and ceremony played important roles in life and death. The Ohlone observed rituals at important life events such as birth, puberty, and death. Treatment of the dead varied, with northern groups reportedly cremating their dead except when there were no kinsman to gather wood for a

3.5 CULTURAL RESOURCES

funeral pyre, in which case the corpse was buried (Kroeber 1925:469; Levy 1978:490). The southern groups, Rumsen and Chalon, buried their dead.

Shamans controlled the weather and could cause rain to start or stop. They cured disease by cutting the skin of the patient, sucking out the disease objects, and exhibiting them to onlookers. Shamans also used herbs in curing disease and conducted performances to insure good crops of acorns, an abundance of fish, or the stranding of whales (Levy 1978:490).

Spanish explorers of coastal California between 1767 and 1776 described the Costanoans living a traditional existence. Between 1770 and 1797, the Franciscans established seven missions in Ohlone territory and effectively changed the Indian way of life. Unwilling recruits to the missions resisted control by Franciscans. In 1793, a runaway neophyte named Charquin began a three-year struggle during which tribes in the northeast Bay Area engaged in sporadic warfare with the Spanish. The Ohlone also mounted resistance against Mission San Jose in 1800 (Castillo 1978:103). Levy (1978:486) reports that “mission baptismal records demonstrate that the last Costanoan tribelets living an aboriginal existence had disappeared by 1810,” and that by 1832 the Costanoan population had decreased to one-fifth or less than its pre-contact size. After the Mexican government secularized the missions (between 1834 and 1836), some Ohlone returned to traditional religious and subsistence practices while others worked on Mexican ranchos. Former mission residents formed multi-tribal Indian communities in Pleasanton and other locations within their traditional territory. Although the Ohlone languages were probably extinct by 1935, it has been estimated that more than 200 persons of Ohlone descent were living in 1973 (Levy 1978:487).

HISTORIC PERIOD BACKGROUND

Some of the early settlers crossing the plains for a better life in California included the William Campbell family. William Campbell, born in Kentucky, had moved to Saline County, Missouri. He arrived in Santa Clara County with his family in 1846, reportedly travelling for the first part of the plains crossing with what became the ill-fated Donner party. In 1847, Campbell oversaw the survey of the towns of Santa Clara and San Jose. From 1847 to 1848, he built a saw mill about three miles from what is now Saratoga.

William’s son, Benjamin, born in 1826, came across the plains with his family and worked with him in various enterprises. In 1851, Benjamin returned to Missouri and married there. The following year, he and his wife re-crossed the Plains.

Benjamin Campbell had purchased land northeast of his father’s sawmill. He and his wife settled on that land. The land became subject to litigation by other claimants, but eventually Benjamin was able to obtain a patent for the 165 acres on what is now Campbell Road.

Benjamin Campbell became fairly prosperous, initially growing wheat on his land. In 1870, his farm was valued at over \$12,000 and he had horses, cattle, swine, dairy cows, and produced 2,000 bushels of spring wheat and 200 bushels of barley. Ten years later, the farm had increased in value to \$17,500 and had diversified with additional livestock, more land for cattle and sheep pasturage, and other portions established in vineyards and orchards. Neighboring land owners also had large tracts of land.

An illustration of his farm and land-holdings, which now covers the City of Campbell, was printed in an 1876 Santa Clara County history, giving an excellent view of the original setting of the community.

The increasing farming of more perishable products rather than just grain by Campbell and his neighbors led to the need for a quicker means of transporting these items to a larger marketplace. As a result, a railroad line was built through the region, and Benjamin Campbell sold an acre of land to the railroad for Campbell Station. A post office was established in 1885, with Benjamin Campbell serving as the first postmaster until 1888.

Benjamin Campbell subdivided and sold off much of his land beginning in 1885, with his holding only 52 acres in 1888. Many in the area planted orchards. One source claims that the lands sold by Benjamin Campbell contained a proviso that the lands would be forfeit to the original owner should alcohol be sold on the property. His land became the core of Campbell’s downtown district.

The change of crops in the region is also evident in the listing for Benjamin Campbell in the Great Register of Voters in 1896 — he was an “orchardist.” There was a large fruit drying yard and three fruit canneries in town, and the City was known for many years as the “Orchard City.”

Campbell officially incorporated in 1952. The City has transitioned from a small farm community to a progressive community with a population of over 40,000.

CULTURAL RESOURCES IN CAMPBELL GENERAL PLAN STUDY AREA

Thirty-seven cultural resources have been identified within the City of Campbell General Plan Study Area, according to files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS). As shown in Table 3.5-1, the thirty-seven recorded cultural resources are all historic period buildings.

TABLE 3.5-1: RESOURCES LISTED WITH THE NORTHWEST INFORMATION CENTER FILE DIRECTORY

<i>PROPERTY #</i>	<i>ADDRESS</i>	<i>PERIOD/TYPE</i>	<i>NAME</i>
P-43000533/ CA-SCL-558H	140 S. Peter Drive	Historic Building	Leigh House
P-43-000647	187 E. Sunnypoaks Avenue	Historic Building	First Campbell Grammar School
P-43-000732	Not Listed	Historic Building	Floyd and Violet Bohnett House
P-43-000741	Not Listed	Historic Building	Littleton/Martin Barn
P-43-000909	1922 White Oaks Avenue	Historic Building	Not Listed
P-43-001301	970 Old Orchard Road	Historic Building	Not Listed
P-43-001302	457 Chapman Drive Campbell	Historic Building	Not Listed
P-43-001303	3265 Winchester Boulevard	Historic Building	Not Listed
P-43-001350	226 Sunnyside Avenue	Historic Building	Not Listed
P-43-001351	214 Sunnyside Avenue	Historic Building	Not Listed
P-43-001352	500 Salmar Avenue	Historic Building	Not Listed
P-43-001353	1310-1328 Railway Avenue	Historic Building	Not Listed
P-43-001354	300 Railway Avenue	Historic Building	Not Listed
P-43-001355	241-261 Railway Avenue	Historic Building	Not Listed

3.5 CULTURAL RESOURCES

<i>PROPERTY #</i>	<i>ADDRESS</i>	<i>PERIOD/TYPE</i>	<i>NAME</i>
P-43-001356	226 Railway Avenue	Historic Building	Not Listed
P-43-001357	216 Railway Avenue	Historic Building	Not Listed
P-43-001358	209-225 Railway Avenue	Historic Building	Cannery Worker's Dining (Sunsweet Corporation Dining Hall)
P-43-001359	208 Railway Avenue	Historic Building	Not Listed
P-43-001360	70 Railway Avenue	Historic Building	Not Listed
P-43-001361	56-64 Railway Avenue	Historic Building	Not Listed
P-43-001362	412-416 East Campbell Avenue	Historic Building	Rock Shop
P-43-001363	415 East Campbell Avenue	Historic Building	B.O. Curry Building
P-43-001364	300 Orchard City Drive	Historic Building	The Factory/Watertower Plaza (George Hyde Company/ Sunsweet Growers)
P-43-001365	569 Hawthorne Avenue	Historic Building	Not Listed
P-43-001366	126 Harrison Street	Historic Building	Hunt Foods
P-43-001367	43 Harrison Street	Historic Building	Ainsley Corporate Headquarters Building
P-43-001368	599 El Patio Drive	Historic Building	F.M Richter House
P-43-001369	580 El Patio Drive	Historic Building	Not Listed
P-43-001370	422-428 East Campbell Avenue	Historic Building	Not Listed
P-43-002386	213-225 East Sunnyoaks Avenue	Historic Building	Not Listed
P-43-002387	561 Division Street	Historic Building	Not Listed
P-43-002388	581 Division Street	Historic Building	Not Listed
P-43-002389	2575, 2585 Winchester Boulevard; 120, 130 Justo Court	Historic Building	Not Listed
P-43-002390	3225 Winchester Boulevard	Historic Building	Not Listed
P-43-002391	3000 Winchester Boulevard	Historic Building	R.V. Cloud Company
P-43-002392	1077 – 1111 Dell Avenue	Historic Building	Not Listed
P-43-003547	Not Listed	Historic Building	Littleton/Martin Carriage House

SOURCE: NORTHWEST INFORMATION CENTER (NWIC), CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM (CHRIS).

Two hundred and eighteen buildings, landmarks, and historic districts are listed on the City of Campbell Landmarks, Historic Districts and Other Historic Properties File (updated April 14, 2015). One hundred and fifty-nine buildings within the City of Campbell General Plan are identified on the Santa Clara County Historic Property Data File Directory (see Table 3.5-2). Some resources appear on multiple directories (NWIC list of resources/City of Campbell 2015 file/Santa Clara County Historic Property Directory). Table 3.5-2 indicates these overlapping entries with asterisks. A single asterisk indicates the resource is also listed on the NWIC list of resources. Two asterisks indicate the resource is listed on both the Historic Property Directory and City of Campbell 2015 file, and three asterisks indicates the resource is listed on all three directories/files.

TABLE 3.5-2: BUILDINGS LISTED ON THE SANTA CLARA COUNTY HISTORIC PROPERTY DATA FILE DIRECTORY

<i>PROPERTY #</i>	<i>ADDRESS</i>	<i>YEAR BUILT</i>	<i>NAME</i>
012937**	30 Alice Avenue	1939	Florence and Beth Kennedy House
012938**	35 Alice Avenue	1929	Margeson-Trowbridge House
012939**	38 Alice Avenue	1939	Esther Palmquist Short House
012940**	50 Alice Avenue	1922	Andy Johnson House
012941**	51 Alice Avenue	1920	Walter and Annie Jones House
012942**	69 Alice Avenue	1929	Peter and Ida Yerkovich House
012943**	76 Alice Avenue	1922	Saunders-Maxwell House
012944**	81 Alice Avenue	1926	Doc and Cora Beal House
012945**	86 Alice Avenue	1923	Mason-Genasci House
012946**	99 Alice Avenue	1924	Grizzle House
012947**	116 Alice Avenue	1927	Ira and Matel Abbott House
012948**	119 Alice Avenue	1923	Not Listed
012949**	146 Alice Avenue	1924	Anthony Bargas, Sr. House
012950**	155 Alice Avenue	1922	Ed Arnott House
012951**	158 Alice Avenue	1936	Joseph and Alma Leverton House
012952**	166 Alice Avenue	1938	Herbert and Kathryn Schadle House
012953**	167 Alice Avenue	1927	Dunlap House
012954**	177 Alice Avenue	1924	Clark-Lund House
012955**	186 Alice Avenue	1939	Burns House
012956**	189 Alice Avenue	1933	Nancy Taylor House
012957**	198 Alice Avenue	1940	Decker House
012958**	199 Alice Avenue	1927	Vaughn House
012959**	204 Alice Avenue	1940	Harrison House
012960**	209 Alice Avenue	1926	Field House
012961**	226 Alice Avenue	1921	Alice Hyde House
012962**	227 Alice Avenue	1917	Ralph and Maud House
177004	1149 Audrey Avenue	1948	Not Listed
012963**	345 Budd Avenue	1924	Young House
012964**	1325 Burrows Road	1922	Burrows House
012985**	61 Catalpa Lane. Campbell	1930	E.R. Kennedy House
185295*	1077 Dell Avenue	1963	Not Listed
185298*	561 Division Street	1964	Not Listed
185299*	581 Division Street	1962	Not Listed
012965	11 East Campbell Avenue	1922	Campbell Union Grammar School

3.5 CULTURAL RESOURCES

<i>PROPERTY #</i>	<i>ADDRESS</i>	<i>YEAR BUILT</i>	<i>NAME</i>
164802**	51 East Campbell Avenue	Not Listed	Campbell Village Heritage Post Office
012966**	106 East Campbell Avenue	1925	Serafino Mantre House
012967**	175 East Campbell Avenue	1925	George Whitney House
012968**	231 East Campbell Avenue	1911	Rodeck House Memorial Church
012969	274 East Campbell Avenue	1923	Country Women's Club Building
012970	295 East Campbell Avenue	1947	Commercial Center, The Courtyard
012971**	354 East Campbell Avenue	1911	Mrs. Putnam's Dry Goods Store
012972**	360 East Campbell Avenue	1911	Bank of Campbell
012973**	365 East Campbell Avenue	1895	First Bank of Campbell, Farley Building
012974**	381 East Campbell Avenue	1935	Brick Barber Shop
012975**	383 East Campbell Avenue	1905	Downing Building
012976**	384 East Campbell Avenue	1925	Not Listed
012977**	400 East Campbell Avenue	1920	Growers Bank, Gas Lighter Theater
012978***	401 East Campbell Avenue	1913	B.O. Curry Building
012979***	412 East Campbell Avenue	1920	Rock Shop
149156***	415 East Campbell Avenue	1913	B.O. Curry Building
012980**	824 East Campbell Avenue	1925	Morton House
012999**	254 East Everett Avenue	1905	Lillian Voge House
013000**	264 East Everett Avenue	1920	Jim Kelley House
013029**	89 Rincon Avenue	1922	Not Listed
013030**	157 Rincon Avenue	1929	St. Lucy's Mission Church
013031**	206 Rincon Avenue	1915	Lee Saunders House
013032**	207 Rincon Avenue	1925	A.T. Davie Bungalow
013033**	212 Rincon Avenue	1910	Not Listed
013052***	187 East Sunnyoaks Avenue	1895	First Campbell Grammar School
185294	213 East Sunnyoaks Avenue	1964	Not Listed
013001***	599 El Patio Drive	1986	F.M. Righter House
013011**	56 Foote Avenue	1924	Not Listed
073061	300 Grant Avenue	1925	Ainsley, John Colpitts, House #3
156258	300 Grant Avenue	1925	Ainsley, John Colpitts Garage
013017**	1228 Harriet Avenue	1905	Littleton-Martin House
185290*	120 Justo Court	1957	Not Listed
185291*	130 Justo Court	1957	Not Listed

<i>PROPERTY #</i>	<i>ADDRESS</i>	<i>YEAR BUILT</i>	<i>NAME</i>
013026**	165 Leigh Avenue	1928	George and Pearl Leigh House
171557	88 Llewellyn Avenue	1954	Not Listed
013002**	63 North 1st Street	1900	Lena Campbell Swope House
126404**	63 North 1st Street	1900	Lena Campbell Swope House
013003**	81 North 1st Street	1900	Bull House
013004**	91 North 1st Street	1900	Not Listed
013005**	131 North 1st Street	1915	Ethel Swope Davis House
013006**	151 North 1st Street	1900	Gillman House
013039**	46 North 2nd Street	1930	Earl and Ette Eddleman
013040**	62 North 2nd Street	1925	Smith House
013041**	63 North 2nd Street	1910	De Selle House
013042**	75 North 2nd Street	1915	Not Listed
013043**	86 North 2nd Street	1925	Lantz House
013044**	112 North 2nd Street	1899	J.C. Ainsley House #2
013045**	113 North 2nd Street	1919	Ralston Alison House
013046**	125 North 2nd Street	1916	Frank Nelson House
013047**	126 North 2nd Street	1939	Nona and Don Clark House
013049**	149 North 2nd Street	1935	Hascall House
013061	34 North 3rd Street	1879	J.C. Ainsley House #1
013062**	100 North 3rd Street	1899	Not Listed
012986**	51 North Central Avenue	1951	Campbell Fire House #1
012987**	122 North Central Avenue	1895	Bickerd House Site
012988**	130 North Central Avenue	1895	Whitman House Site
012989**	142 North Central Avenue	1895	Watson-Townsend House, Watson House
012990**	196 North Central Avenue	1895	Not Listed
012991**	207 North Central Avenue	1900	Louis and Edward Genasci House, Genasci House
012992**	271 North Central Avenue	1890	Jack Lancaster House
012993**	290 North Central Avenue	1915	First Congregational Church Parsons House
012994**	300 North Central Avenue	1910	A. I. Cramer House
012995**	386 North Central Avenue	1929	George Seckavie House
012996	440 North Central Avenue	1920	Holmer House Site
013018**	43 North Harrison Avenue	1937	Ainsley Corporation Headquarters
013019	111 North Harrison Avenue	1895	Not Listed
013020	125 North Harrison Avenue	1924	Cutting House Site
013021**	149 North Harrison Avenue	1896	Not Listed
013022**	179 North Harrison Avenue	1910	Not Listed

3.5 CULTURAL RESOURCES

<i>PROPERTY #</i>	<i>ADDRESS</i>	<i>YEAR BUILT</i>	<i>NAME</i>
149157*	300 Orchard City Drive	1892	George Hyde Co., Sunsweet Growers
149158***	209 Railroad Avenue	1900	Cannery Worker's Dining Hall
013028***	209 Railway Avenue	1900	Cannery Worker's Dining Hall
013038	Rodeck Way	1920	J.C. Ainsley Cannery Cabins
013034	510 Rodeck Way	1920	Not Listed
013035	518 Rodeck Way	1920	Not Listed
013036	526 Rodeck Way	1920	Not Listed
013037	534 Rodeck Way	1920	Not Listed
013007**	73 South 1st Street	1895	Laura Campbell Swope House
013008**	77 South 1st Street	1894	Joe Gard House
013010	94 South 1st Street	1928	Campbell Water Co. Pump House
013009	94 South 1st Street	1928	Campbell Water Co. Tower
013049**	80 South 2nd Street	1935	Not Listed
013050**	91 South 2nd Street	1895	James Henry and Jessie Campbell House
013051**	110 South 2nd Street	1913	Baron-Hulsman House
013063**	57 South 3rd Street	1920	Walton House
013064**	105 South 3rd Street	1914	Jim G. Burns House
013012**	38 South 4th Street	1930	Not Listed
013013**	81 South 4th Street	1935	Not Listed
013014**	88 South 4th Street	1910	Elmer and Carrie Weeks House
013015**	91 South 4th Street	1934	Frank Blaine House
013016**	106 South 4th Street	1918	Lincoln Bump House
185300	1350 South Bascom Avenue	1950	Dick's Center
013072	2295 South Bascom Avenue	1882	Captain James A. Hamilton House
012997	30 South Central Avenue	1909	Farmers Union Packing House
012998**	93 South Central Avenue	1892	George Hyde Co. / Sunsweet Growers
013027***	140 South Peter Drive	1830	Galindo / Leigh House
013069	1885 South Winchester Boulevard	1926	Yeager House Site
0130070	1905 South Winchester Boulevard	1925	Bohnett House Site
154673	1145 Shamrock Drive	1946	Not Listed
072813	1215 Steinway Avenue	1936	Not Listed
013053	67 Sunnyside Avenue	1900	Emil and May Giles Fritz House
013054**	68 Sunnyside Avenue	1904	C. W. and Julia Cobb House
074273	92 Sunnyside Avenue	1901	Not Listed
013055**	120 Sunnyside Avenue	1904	Not Listed
013056**	131 Sunnyside Avenue	1910	Not Listed

<i>PROPERTY #</i>	<i>ADDRESS</i>	<i>YEAR BUILT</i>	<i>NAME</i>
013057**	132 Sunnyside Avenue	1905	Not Listed
013058**	154 Sunnyside Avenue	1900	Not Listed
013059**	188 Sunnyside Avenue	1905	Not Listed
013060**	211 Sunnyside Avenue	1905	Not Listed
013065**	75 Union Street	1890	Duncan House Site
013066**	346 Union Street	1929	Floyd and Violet Bohnett House
013067**	356 Union Street	1926	Gilbert and Alice Newcomb House
012984**	1 West Campbell Avenue	1936	Campbell Union High School
012982**	1 West Campbell Avenue	1936	Campbell Union High School Administration Building
012981**	1 West Campbell Avenue	1936	Campbell Union High School Auditorium Building
012983**	1 West Campbell Avenue	1936	Campbell Union High School Classroom Building
013023**	500 West Latimer Avenue	1931	Sayles House
013024**	1171 West Latimer Avenue	1935	Second Serafino Manfre House
013025**	1196 West Latimer Avenue	1923	Jesse and Joseph Barbano House
013068**	1888 White Oaks Road	1928	Earl and Virginia Young House
185292*	2575 Winchester Boulevard	1957	Not Listed
185293*	2585 Winchester Boulevard	1957	Not Listed
185296	3000 Winchester Boulevard	1964	R. V. Cloud Company
185297*	3225 Winchester Boulevard	1956	Not Listed

NOTES: * = RESOURCE IS LISTED ON THE NWIC LIST OF RESOURCES; ** = RESOURCE IS LISTED ON BOTH THE HISTORIC PROPERTY DIRECTORY AND CITY OF CAMPBELL 2005 FILE; *** = RESOURCE IS LISTED ON ALL THREE DIRECTORIES/FILES.

SOURCE: SANTA CLARA COUNTY HISTORIC PROPERTY DATA FILE DIRECTORY.

Seventy-one potentially eligible historic properties are listed on the City of Campbell Landmarks, Historic Districts and Other Historic Properties File last updated April 14, 2015, but are not yet included on the list of resources on file with the Northwest Information Center (Table 3.5-1) or the Historic Properties Data File for Santa Clara County (Table 3.5-2). Table 3.5-3 lists these 71 potentially eligible historic properties.

TABLE 3.5-3: CITY OF CAMPBELL POTENTIAL HISTORIC PROPERTIES NOT LISTED ON NORTHWEST INFORMATION CENTER OR HISTORIC PROPERTIES DIRECTORIES

<i>CITY OF CAMPBELL #</i>	<i>ADDRESS</i>	<i>YEAR BUILT</i>	<i>NAME</i>
44	955 Apricot Avenue	ca. 1929	Not Listed
52	287 East Campbell Avenue	Not Listed	Ski's Royal Furniture / ISLG Interior Showroom
54	347-349 East Campbell Avenue	1927	T.A. Cutting Building / Orchard Valley Coffee

3.5 CULTURAL RESOURCES

<i>CITY OF CAMPBELL #</i>	<i>ADDRESS</i>	<i>YEAR BUILT</i>	<i>NAME</i>
65	690 East Campbell Avenue	1936-1938	WPA Bridge
67	866 East Campbell Avenue	1926	George Robson House / Togos
69	146 West Campbell Avenue	Not Listed	Not Listed
70	200 West Campbell Avenue	1930	Charles A. and Georgie (Fraiser) Jones House
71	266 West Campbell Avenue	Not Listed	Not Listed
72	464 West Campbell Avenue	1925	Dubcich House
74	39 North Central Avenue	Not Listed	Not Listed
79	251 North Central Avenue	Not Listed	Not Listed
80	260 North Central Avenue	Not Listed	Not Listed
85	25 South Central Avenue	ca. 1935	Byron Botts Garage / Can-Am Auto Repair
86	46 South Central Avenue	1911	Farmer's Union Packing House
89	616 El Patio Drive	Not Listed	Not Listed
90	649 El Patio Drive	Not Listed	Morley House
91	705 El Patio Drive	ca. 1920s	El Patio California Mission Revival District
92	458 North Esther Avenue	ca. 1930	De Vita House
93	233-237 Everett Avenue	Not Listed	Not Listed
97	73-75 North First Street	ca. 1900	M.M. Green / Ben Austin House
100	109 North First Street	1951-1952	Orchard City Grange
103	158 North First Street	ca. 1900	Not Listed
104	35-45 South First Street	ca. 1925	Grizzle Court Duplex
111	61 South Fourth Street	ca. 1934	Tony Raffantti House
112	68 South Fourth Street	1940	Edwin and Marian (Duncan) Parker House
113	71 South Forth Street	ca. 1936	Hedegard-Rees House
116	91 South Fourth Street	Not Listed	Frank Blaine House
119	126 South Forth Street	1910-1920	Not Listed
121	1940 East Hamilton Avenue	Not Listed	Queen Anne Victorian
125	125 North Harrison Avenue	1890-1900	Joe and Francis Meckler House
127	199 North Harrison Avenue	1900	Not Listed
130	1075 West Latimer Avenue	1925	Frank Lipari / Taromino House
132	1198 West Latimer Avenue	1923	Jessie and Joseph Barbano House
134	1740 Leigh Avenue	ca. 1910	Castello House
137	1395 Munro Avenue	1942	Robert Herschback House
138	32 Page Street	ca. 1920	Not Listed
139	40 Page Street	ca. 1920	Not Listed
140	48 Page Street	ca. 1920	Not Listed

<i>CITY OF CAMPBELL #</i>	<i>ADDRESS</i>	<i>YEAR BUILT</i>	<i>NAME</i>
141	56 Page Street	ca. 1920	Not Listed
142	62 Page Street	ca. 1920	Not Listed
146	241 Railway Avenue	1940	Quonset Hut
149	97 East Rincon Avenue	1925	James and Edith Soutar House
154	176 East Rincon Avenue	1920	Not Listed
155	186 East Rincon Avenue	ca. 1900	Not Listed
156	196 East Rincon Avenue	Pre-1920	Not Listed
160	232 East Rincon Avenue	Not Listed	Not Listed
173	74 South Second Street	1922	Not Listed
175	86 South Second Street	1911	Silva House
178	100 South Second Street	1920s	Not Listed
179	100 South Second Street	1926	Nelson Blake House?
182	120 South Second Street	1930s	Morgan House
183	129 South Second Street	1930s	Not Listed
184	150 Shelley Avenue	ca. 1930	Bellings / Doerr House
185	1124 Steinway Avenue	ca. 1910	Not Listed
187	44 Sunnyside Avenue	ca. 1900	Not Listed
190	92 Sunnyside Avenue	1901	Not Listed
191	104 Sunnyside Avenue	ca. 1910	Not Listed
200	222 North Third Street	ca. 1950s	Not Listed
202	58 South Third Street	ca. 1920	Joe Simas House
203	67 South Third Street	1926	Phineas Pomeroy House
204	68 South Third Street	ca. 1936	Dorothy Royce House
205	77 South Third Street	1923	H. Weste House
206	95 South Third Street	ca. 1930	James G. Burns House
208	106 South Third Street	ca. 1920s	Ed Mitchell House
211	20 Union Avenue	ca. 1910	Barron House
212	40 Union Avenue	ca. 1910	Warren Shelley / Roy Archibald House
214	316 Union Avenue	Not Listed	Not Listed
217	1700 White Oaks Avenue	1928	Robert and Geraldine Cash House / Sartorette House

SOURCE: CITY OF CAMPBELL LANDMARKS, HISTORIC DISTRICTS AND OTHER HISTORIC PROPERTIES DATA FILE UPDATED APRIL 14, 2015.

The City of Campbell's 2015 Directory also lists 55 properties as Landmarks and Historic Districts. Fifteen of these 55 properties are not listed with the Northwest Information Center (table 3.5-1) or on the Santa Clara County Historic Property Data File (Table 3.5-2). Table 3.5-4 lists these additional properties.

3.5 CULTURAL RESOURCES

TABLE 3.5-4: CITY OF CAMPBELL IDENTIFIED LANDMARKS AND HISTORIC DISTRICT PROPERTIES NOT LISTED ON NORTHWEST INFORMATION OR HISTORIC PROPERTIES DIRECTORIES

CITY OF CAMPBELL #	ADDRESS	YEAR BUILT	NAME
8	20 Alice Avenue	1939	Mary Fablinger House
9	21 Alice Avenue	1939	Guy and Eamestine (Kennedy) Farley House
11	35 Alice Avenue	1929	Margeson-Trowbridge House
15	58 Alice Avenue	1940	Lillie and Joseph Agostinho House
16	59 Alice Avenue	ca. 1970	Clarence and Marion Plumb House
19	80 Alice Avenue	Not Listed	Not Listed
25	133 Alice Avenue	ca. 1938	Harry Berry – Babb House
26	136 Alice Avenue	1927	Ira and Mabel Abbot House
28	150 Alice Avenue	1947	Richard and Leah Strong House
33	176 Alice Avenue	1939	Bill Haley House
41	214 Alice Avenue	1950	Earl and Mildred Canrite House
108	235 South First Street	1930	Not Listed
143	140 Peter Drive	1830	Galindo-Leigh House
209	189 South Third Street	ca. 1935	Not Listed
210	190 South Third Street	ca. 1925	Not Listed

SOURCE: CITY OF CAMPBELL LANDMARKS, HISTORIC DISTRICTS AND OTHER HISTORIC PROPERTIES DATA FILE UPDATED APRIL 14, 2015.

NATIVE AMERICAN CONSULTATION

Tribal consultation letters regarding the City of Campbell General Plan Update were sent to: the Native American Heritage Commission; the Campbell Historical Museum & Ainsley House; Mr. Valentine Lopez, Amah Mutsun Tribal Band; Ms. Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista; Ms. Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Coastanoan; Ms. Rosemary Cabra, Chairperson, Muwekma Ohlone Indian Tribe of the SF Bay Area; and Ms. Katherine Erolinda Perez, Chairperson, North Valley Yokuts; Mr. Andrew Galvin, Ohlone Indian Tribe.

The Native American Heritage Commission responded with a letter dated August 15, 2016. Ms. Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista, responded by email on August 24, 2016 requesting additional information about Senate Bill 18 and the State Office of Historic Preservation Power Point presentation concerning Senate Bill 18 was sent to her email address. Ms. Kerry Perkins, Senior Museum Specialist at The Campbell Historical Museum & Ainsley House, responded by email asking what she and the museum could do to assist in the General Plan Update process. The results of the Northwest Information Center record search were forwarded to Ms. Perkins for her review. Peak & Associates requested that if she, or anyone with her organization, saw missing entries concerning historic period resources, she shall contact Peak & Associates so that that information could be entered onto the Northwest Information Center list.

The City conducted Native American consultations under Senate Bill 18 (Chapter 905, Statutes of 2004), also known as SB18, which requires local governments to consult with Tribes prior to making certain planning decisions and requires consultation and notice for a general and specific plan adoption or amendments in order to preserve, or mitigate impacts to, cultural places that may be affected. In addition to SB18 consultation, the City conducted tribal consultations under the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)), also known as AB 52, which requires consulting for projects within the City's jurisdiction and within the traditional territory of the Tribal Organizations who have previously requested AB52 consultations with the City. Eleven (11) Native American Tribes and Bands were contacted under AB52 and under SB18 by first-class mail and by email. To date, no responses have been received.

3.5.2 REGULATORY SETTING

FEDERAL REGULATIONS

National Historic Preservation Act

Most regulations at the Federal level stem from the National Environmental Policy Act (NEPA) and historic preservation legislation such as the National Historic Preservation Act (NHPA) of 1966, as amended. NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations specifically for Federal land-holding agencies, but also includes regulations (Section 106) which pertain to all projects that are funded, permitted, or approved by any Federal agency and which have the potential to affect cultural resources. All projects that are subject to NEPA are also subject to compliance with Section 106 of the NHPA and NEPA requirements concerning cultural resources. Provisions of NHPA establish a National Register of Historic Places (The National Register) maintained by the National Park Service, the Advisory Councils on Historic Preservation, State Historic Preservation Offices, and grants-in-aid programs.

American Indian Religious Freedom Act and Native American Graves and Repatriation Act

The American Indian Religious Freedom Act recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access), and the use of sacred objects shall be protected and preserved. Additionally, Native American remains are protected by the Native American Graves and Repatriation Act of 1990.

Other Federal Legislation

Historic preservation legislation was initiated by the Antiquities Act of 1966, which aimed to protect important historic and archaeological sites. It established a system of permits for conducting archaeological studies on federal land, as well as setting penalties for noncompliance. This permit process controls the disturbance of archaeological sites on federal land. New permits are currently

issued under the Archaeological Resources Protection Act (ARPA) of 1979. The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 declared that it is national policy to "Preserve for public use historic sites, buildings, and objects of national significance."

STATE REGULATIONS

California Register of Historic Resources (CRHR)

California State law also provides for the protection of cultural resources by requiring evaluations of the significance of prehistoric and historic resources identified in documents prepared pursuant to the California Environmental Quality Act (CEQA). Under CEQA, a cultural resource is considered an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. Criteria identified in the CEQA Guidelines are similar to those described under the NHPA. The State Historic Preservation Office (SHPO) maintains the CRHR. Historic properties listed, or formally designated for eligibility to be listed, on The National Register are automatically listed on the CRHR. State Landmarks and Points of Interest are also automatically listed. The CRHR can also include properties designated under local preservation ordinances or identified through local historical resource surveys.

California Environmental Quality Act (CEQA)

CEQA requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. This determination applies to those resources which meet significance criteria qualifying them as "unique," "important," listed on the California Register of Historical Resources (CRHR), or eligible for listing on the CRHR. If the agency determines that a project may have a significant effect on a significant resource, the project is determined to have a significant effect on the environment, and these effects must be addressed. If a cultural resource is found not to be significant under the qualifying criteria, it need not be considered further in the planning process.

CEQA emphasizes avoidance of archaeological and historical resources as the preferred means of reducing potential significant environmental effects resulting from projects. If avoidance is not feasible, an excavation program or some other form of mitigation must be developed to mitigate the impacts. In order to adequately address the level of potential impacts, and thereby design appropriate mitigation measures, the significance and nature of the cultural resources must be determined. The following are steps typically taken to assess and mitigate potential impacts to cultural resources for the purposes of CEQA:

- identify cultural resources;
- evaluate the significance of the cultural resources found;
- evaluate the effects of the project on cultural resources; and
- develop and implement measures to mitigate the effects of the project on cultural resources that would be significantly affected.

In 2015, CEQA was amended to require lead agencies to determine whether projects may have a significant effect on tribal cultural resources. (Public Resources Code [PRC] § 21084.2). To qualify as a tribal cultural resource, the resource must be a site, feature, place, cultural landscape, sacred place, or object, which is of cultural value to a California Native American Tribe and is listed, or eligible for listing, on the national, state, or local register of historic resources. Lead agencies may also use their discretion to treat any notable resource as a tribal cultural resource. To determine whether a project may have an impact on a resource, the lead agency is required to consult with any California Native American tribe that requests consultation and is affiliated with the geographic area of a proposed project (PRC § 21080.3.1). CEQA requires that a lead agency consider the value of the cultural resource to the tribe and consider measures to mitigate any adverse impact.

California Public Resources Code

Section 5097 of the Public Resources Code specifies the procedures to be followed in the event of the unexpected discovery of historic, archaeological, and paleontological resources, including human remains, historic or prehistoric resources, paleontological resources on nonfederal land. The disposition of Native American burial falls within the jurisdiction of the California Native American Heritage Commission (NAHC). Section 5097.5 of the Code states the following:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

California Health and Safety Code

Section 7050.5 of the California Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission. CEQA Guidelines (Section 15064.5) specify the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials falls within the jurisdiction of the Native American Heritage Commission.

Senate Bill 18 (Burton, Chapter 905, Statutes 2004)

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (“cultural places”) through local land use planning. This legislation, which amended §65040.2, §65092, §65351, §65352, and §65560, and added §65352.3, §653524, and §65562.5 to the Government Code; also requires the Governor’s Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use

3.5 CULTURAL RESOURCES

decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.).

Assembly Bill 978

In 2001, Assembly Bill (AB) 978 expanded the reach of Native American Graves Protection and Repatriation Act of 1990 and established a State commission with statutory powers to assure that Federal and State laws regarding the repatriation of Native American human remains and items of patrimony are fully complied with. In addition, AB 978 also included non-Federally recognized tribes for repatriation.

Assembly Bill 52

Assembly Bill (AB) 52, approved in September 2014, creates a formal role for California Native American tribes by creating a formal consultation process and establishing that a substantial adverse change to a tribal cultural resource has a significant effect on the environment. Tribal cultural resources are defined as:

- 1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A) Included or determined to be eligible for inclusion in the CRHR
 - B) Included in a local register of historical resources as defined in PRC Section 5020.1(k)
- 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1 (c). In applying the criteria set forth in PRC Section 5024.1 (c) the lead agency shall consider the significance of the resource to a California Native American tribe.

A cultural landscape that meets the criteria above is also a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. In addition, a historical resource described in PRC Section 21084.1, a unique archaeological resource as defined in PRC Section 21083.2(g), or a “non-unique archaeological resource” as defined in PRC Section 21083.2(h) may also be a tribal cultural resource if it conforms with above criteria.

AB 52 requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

LOCAL REGULATIONS

City of Campbell Municipal Code

Chapter 21.33, Historic Preservation, of the Campbell Municipal Code outlines procedures for the designation and protection of historic resource, including Structures of Merit, Landmarks, and Historic Districts.

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on cultural or tribal resources if it will:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- Disturb any human remains, including those interred outside of formal cemeteries?
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?
 - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: General Plan implementation could cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to Section 15064.5 (Less than Significant)

A substantial adverse change in the significance of an historic resource is defined in Section 15064.5 (b)(1) of the CEQA Guidelines as the “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. Known historic resource sites are located throughout the Planning Area, as shown in Tables 3.5-1 through 3.5-4, and there is potential for additional undiscovered prehistoric sites may also be located in various areas of the city as well.

As described previously, thirty-seven cultural resources have been identified within the City of Campbell General Plan Study Area, according to files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS). Two hundred and eighteen buildings, landmarks, and historic districts are listed on the City of Campbell Landmarks, Historic Districts and Other Historic Properties File. One hundred and fifty-nine buildings within the City of Campbell General Plan are identified on the Santa Clara County Historic Property Data File Directory (see Table 3.5-2). Seventy-one potentially eligible historic properties are listed on the City of Campbell Landmarks, Historic Districts and Other Historic Properties File last updated April 14, 2015, but are not yet included on the list of resources on file with the Northwest Information Center (Table 3.5-1) or the Historic Properties Data File for Santa Clara County (Table 3.5-2). Table 3.5-3 lists these 71 potentially eligible historic properties.

While the General Plan does not directly propose any adverse changes to any historic or archaeological resources, future development allowed under the General Plan could affect known historical or unknown historical and archaeological resources which have not yet been identified.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the City’s General Plan, Municipal Code, and other applicable State and local regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The General Plan includes policies and actions that would reduce impacts to cultural, historic, and archaeological resources, as well as policies and actions for the conservation of cultural, historic, and archaeological resources. Specifically, General Plan policies require development projects with a potential to impact archeological resources to be monitored by a relevant expert. In the event of a resource discovery, it is required that all ground disturbing activities and construction to be halted until a qualified expert is able to analyze the project site and determine appropriate mitigation. Additionally, the General Plan requires tribal consultation with tribes that may be impacted by proposed development, in accordance with state, local, and tribal intergovernmental consultation requirements.

Campbell also has numerous programs and ordinances in place which serve to protect the integrity of historical resources and structures. As described in greater detail in the Regulatory Setting section of this chapter, the City implements Chapter 21.33, Historic Preservation, of the Campbell Municipal Code, which outlines procedures for designation of historic resource inventory properties, landmarks, and historic districts, summarizes the procedures to authorize construction, demolition, relocation, or material change to a historic resources inventory property, and contains incentives for preserving historic resources. General Plan Policy COS-5.1 requires the City to protect significant historic resources and use these resources to promote a sense of place and history in Campbell through implementation of the Historic Preservation Ordinance, Design Guidelines for Historic Buildings, the conservation and preservation of the City's historical collection at the Campbell Museum, and other applicable codes, regulations, and area plans.

Adoption and implementation of the policies and actions listed below, combined with future CEQA review requirements and the City's other existing programs that protect historical resources, would result in a **less than significant** to historic and archaeological resources.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-5.1: Protect significant historic resources and use these resources to promote a sense of place and history in Campbell through implementation of the Historic Preservation Ordinance, Historic Design Guidelines for Residential Buildings, the conservation and preservation of the City's historical collection at the Campbell Museum, and other applicable codes, regulations, and area plans.

COS-5.2: Evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement of historic structures; when possible, encourage the adaptive re-use of the historic structure.

COS-5.3: Use the preservation standards outlined in the City's Historic Design Guidelines for Residential Buildings and the current Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, for properties listed, or eligible for listing, on the City's Historic Resource Inventory.

COS-5.4: Provide readily available public information on the Mills Act and encourage people to renovate historic homes in disrepair using property tax savings available through the Mills Act.

COS-6.1: Review proposed developments and work in conjunction with the California Historical Resources Information System, Northwest Information Center at Sonoma State University, to determine whether project areas contain known archaeological resources, either prehistoric and/or historic-era, or have the potential for such resources.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

Action COS-5a: Periodically update the City's Historic Resources Inventory with new sites or buildings that are of local, State or federal significance.

Action COS-5b: Adopt Historic Overlay Districts in order to preserve the historic character of distinct areas and neighborhoods that are considered important to Campbell's history.

3.5 CULTURAL RESOURCES

Action COS-5c: Require recordation of the designation of a Campbell Historic Resources Inventory property on the property title, as a condition of any discretionary land use approval.

Action COS-5d: Update the Department of Parks and Recreation (DPR) forms for all designated historic properties.

Action COS-5e: Expand and retitle the City's Historic Design Guidelines for Residential Buildings to include standards and requirements for the protection of historic commercial and other non-residential buildings.

Action COS-5f: Create incentives to promote historic preservation, maintenance, and adaptive reuse by property owners, such as, expedited permits, lower permit fees, Mills Act Contracts for tax benefits, tax credits, and zero or low-interest loans for income-qualified residents.

Action COS-5g: Continue to implement the City's Historic Preservation Ordinance and periodically review and modify the Ordinance as necessary in order to ensure that it continues to meet the City's historic preservation goals, including creation of a penalty provision to discourage the unlawful alteration or demolition of designated properties.

Action COS-5h: Create an annual work plan in coordination with the City Council, Historic Preservation Board, and Historic Museum to further preservation goals.

Action COS-5i: Continue to provide educational resources and public outreach efforts that inform citizens of ways to become involved with local historical preservation efforts including:

- *School age programs, adult lectures, on-line exhibits;*
- *Partnerships with other cultural and historical institutions to promote local awareness and appreciation of Campbell's rich history; and*
- *Collaboration among community groups, educational institutions, the Campbell Library and the Campbell Historical Museum and Ainsley House.*

Action COS-5j: Use amenities such as signs and historical lighting in key public access areas. Consider incorporating public art to reflect historical elements.

Action COS-5k: Leverage public and private resources to further preservation goals.

Action COS-6a: Consider preparing a cultural and archaeological survey of the community to determine which sites will require a study for cultural or archaeological resources prior to excavation. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.

Action COS-6b: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Planning Division shall be notified, the resources shall be examined*

by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Planning Division.

- *If human remains are discovered during any ground disturbing activity, work shall stop until the Planning Division and the County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the Planning Division. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.*

Impact 3.5-2: Implementation of the General Plan could lead to the disturbance of any human remains (Less than Significant)

Indications are that humans have occupied areas near the Planning Area for at least the past 13,000 years and it is not always possible to predict where human remains may occur outside of formal burials. Therefore, excavation and construction activities allowed under the General Plan may yield human remains that may not be marked in formal burials.

Future projects may disturb or destroy buried Native American human remains, including those interred outside of formal cemeteries. Consistent with state laws protecting these remains (that is, Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98), sites containing Native American human remains must be treated in a sensitive manner.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Public Resources Code Section 5097 has specific stop-work and notification procedures to follow in the event that Native American human remains are inadvertently discovered during development activities. The General Plan requires that human remains are treated in compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98 (Policy COS-6.2). Action COS-6b outlines specific steps and avoidance measures that must be implemented in the event of an inadvertent discover of human remains during construction or ground disturbing activities. Implementation of the policies and actions of the General Plan listed below would result in a **less than significant** impact to disturbance of human remains.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-6.1: Review proposed developments and work in conjunction with the California Historical Resources Information System, Northwest Information Center at Sonoma State University, to determine whether project areas contain known archaeological resources, either prehistoric and/or historic-era, or have the potential for such resources.

3.5 CULTURAL RESOURCES

COS-6.2: If found during construction, ensure that human remains are treated with sensitivity and dignity, and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.

COS-6.3: Work with Native American representatives to identify and appropriately address, through avoidance or mitigation, impacts to Native American cultural resources and sacred sites during the development review process.

COS-6.4: Consistent with State, local, and tribal intergovernmental consultation requirements such as SB 18 and AB 52, the City shall consult as necessary with Native American tribes that may be interested in proposed new development and land use policy changes.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

Action COS-6a: Consider preparing a cultural and archaeological survey of the community to determine which sites will require a study for cultural or archaeological resources prior to excavation. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.

Action COS-6b: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Planning Division shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Planning Division.*
- If human remains are discovered during any ground disturbing activity, work shall stop until the Planning Division and the County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the Planning Division. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.*

Impact 3.5-3: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or a resource determined by the lead agency (Less than Significant).

At the onset of the General plan update tribal consultation letters regarding the City of Campbell General Plan Update were sent to: the Native American Heritage Commission; the Campbell Historical Museum & Ainsley House; Mr. Valentine Lopez, Amah Mutsun Tribal Band; Ms. Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista; Ms. Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Coastanoan; Ms. Rosemary Cabra, Chairperson, Muwekma Ohlone Indian Tribe of the SF Bay Area; and Ms. Katherine Erolinda Perez, Chairperson, North Valley Yokuts; Mr. Andrew Galvin, Ohlone Indian Tribe.

The Native American Heritage Commission responded with a letter dated August 15, 2016. Ms. Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista, responded by email on August 24, 2016 requesting additional information about Senate Bill 18 and the State Office of Historic Preservation Power Point presentation concerning Senate Bill 18 was sent to her email address. Ms. Kerry Perkins, Senior Museum Specialist at The Campbell Historical Museum & Ainsley House, responded by email asking what she and the museum could do to assist in the General Plan Update process. The results of the Northwest Information Center record search were forwarded to Ms. Perkins for her review. Peak & Associates requested that if she, or anyone with her organization, saw missing entries concerning historic period resources, she shall contact Peak & Associates so that that information could be entered onto the Northwest Information Center list.

The City of Campbell conducted Native American consultations under Senate Bill 18 (Chapter 905, Statutes of 2004), also known as SB18, which requires local governments to consult with Tribes prior to making certain planning decisions and requires consultation and notice for a general and specific plan adoption or amendments in order to preserve, or mitigate impacts to, cultural places that may be affected. In addition to SB18 consultation, the City conducted tribal consultations under the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)), also known as AB 52, which requires consulting for projects within the City's jurisdiction and within the traditional territory of the Tribal Organizations who have previously requested AB52 consultations with the City. Eleven (11) Native American Tribes and Bands were contacted under AB52 and under SB18 by first-class mail and by email. To date, no responses have been received.

While no specific resources have been identified through consultation with affiliated tribes, it is possible that unknown tribal cultural resources may be present and could be adversely affected by implementation of the proposed Project and that local tribes should continue to be notified as future development projects are proposed.

Specific locations for future development and improvements have not been identified. Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of

3.5 CULTURAL RESOURCES

application. The General Plan and local CEQA guidelines require tribal consultation and the protections of any identified archeological and tribal resources.

All future development projects would be required to follow development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of tribal resources. Subsequent projects would be required to prepare site-specific project-level analysis to fulfill CEQA requirements, which also would include additional AB 52 consultation that could lead to the identification of potential site specific tribal resources

As discussed under impact discussions 3.5-1 and 3.5-2, impacts from future development could impact unknown archaeological resources including Native American artifacts and human remains. Impacts would be reduced to a less-than-significant level with implementation of General Plan policies and actions and local review guidelines. Compliance with the General Plan policies and actions, as well as State and local guidelines would provide an opportunity to identify, disclose, and avoid or minimize the disturbance of and impacts to a tribal resource through tribal consultation and CEQA review procedures. Therefore, implementation of the policies and actions within the General Plan listed below would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-5.1: Protect significant historic resources and use these resources to promote a sense of place and history in Campbell through implementation of the Historic Preservation Ordinance, Design Guidelines for Historic Buildings, the conservation and preservation of the City's historical collection at the Campbell Museum, and other applicable codes, regulations, and area plans.

COS-5.2: Evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement.

COS-6.1: Review proposed developments and work in conjunction with the California Historical Resources Information System, Northwest Information Center at Sonoma State University, to determine whether project areas contain known archaeological resources, either prehistoric and/or historic-era, or have the potential for such resources.

COS-6.2: If found during construction, ensure that human remains are treated with sensitivity and dignity, and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.

COS-6.3: Work with Native American representatives to identify and appropriately address, through avoidance or mitigation, impacts to Native American cultural resources and sacred sites during the development review process.

COS-6.4: Consistent with State, local, and tribal intergovernmental consultation requirements such as SB 18 and AB 52, the City shall consult as necessary with Native American tribes that may be interested in proposed new development and land use policy changes.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

Action COS-5a: Periodically update the City's Historic Resources Inventory with new sites or buildings that are of local, State or federal significance.

Action COS-6a: Consider preparing a cultural and archaeological survey of the community to determine which sites will require a study for cultural or archaeological resources prior to excavation. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.

Action COS-6b: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Planning Division shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Planning Division.*
- If human remains are discovered during any ground disturbing activity, work shall stop until the Planning Division and the County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the Planning Division. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.*

This page left intentionally blank

This section provides a background discussion of the seismic and geologic hazards found in the City and the regional vicinity. This section is organized with an environmental setting, regulatory setting, and impact analysis.

No comments on this environmental topic were received during the NOP comment period.

3.6.1 ENVIRONMENTAL SETTING

The City of Campbell lies near the west-central edge of the Santa Clara Valley, a broad, alluvial plain of generally low topographic relief that slopes gently towards San Francisco Bay to the north. The Santa Clara Valley is located within the Coast Ranges geomorphic province of California. This province is characterized by northwest-trending ridges and valleys, underlain by strongly deformed sedimentary and metamorphic rocks of the Franciscan Complex. Major strike-slip faults help define the valley margins, such as the San Andreas Fault to the southwest and the Hayward and Calaveras Faults to the east.

The Santa Clara Valley consists of a large structural basin containing alluvial deposits that were deposited as a series of coalescing alluvial fans. The fans were formed by streams that drain the Diablo Range to the east and the Santa Cruz Mountains to the west. The Planning Area is located near the west-central margin of the valley, where the alluvium abuts the east flank of the Santa Cruz Mountains.

The general pattern of surficial geology is typified by progressively older sediments as one traverses the City of Campbell from the northeast to the southwest, as summarized below:

- Holocene alluvial fan deposits that are typically comprised of gravelly sand grading upward to sandy or silty clay;
- Pleistocene alluvial fan deposits generally composed of gravelly to clayey sand; and
- Lower Pleistocene to Upper Pliocene fluvial deposits of the Santa Clara Formation that generally consist of poorly sorted, poorly consolidated boulder and gravel conglomerate with beds of poorly sorted sandstone, siltstone, and clay. The depositional environment for the Santa Clara Formation has been interpreted as non-marine environments that were produced by late Cenozoic tectonism and uplift of the nearby Coast Ranges.

The Planning Area lies at the head of an alluvial fan, where Los Gatos Creek emerges from the foothills. In addition to the alluvium described above, less extensive alluvial terrace deposits locally flank the creek, where they are frequently composed of poorly sorted gravels and cobbles set in a sandy matrix.

GEOMORPHIC PROVINCE

California's geomorphic provinces are naturally defined geologic regions that display a distinct landscape or landform. Earth scientists recognize eleven provinces in California. Each region displays unique, defining features based on geology, faults, topographic relief, and climate. These geomorphic provinces are remarkably diverse. They provide spectacular vistas and unique

opportunities to learn about Earth's geologic processes and history. The City of Campbell lies within the Coast Range Geomorphic Province.

The Coast Range is a northwest-trending mountain range (2,000 to 4,000, occasionally 6,000 feet elevation above sea level) and set of valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Range is composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma, and Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault. The San Andreas is more than 600 miles long, extending from Pt. Arena to the Gulf of California. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands.

REGIONAL GEOLOGY

As noted previously, the Coast Range Geomorphic Province is dominated by northwest-southeast trending ranges of low mountains and intervening valleys. The City of Campbell is located near the southeastern margin of San Francisco Bay. The bay occupies the upper part of a geological structural depression which has formed over the last 1,000,000 years. However, the southern San Francisco Bay appears to have formed by tectonic subsidence that has occurred over the last 200,000 to 300,000 years. The bay margin is characterized by relatively flat topography developed on recently deposited unconsolidated alluvial and bay deposits. The bay margin lowlands are bounded to the east by the East Bay Hills formed on faulted and folded Franciscan Assemblage bedrock.

SEISMIC HAZARDS

Seismic hazards include both rupture (surface and subsurface) along active faults and ground shaking, which can occur over wider areas. Ground shaking, produced by various tectonic phenomena, is the principal source of seismic hazards including liquefaction in areas devoid of active faults. All areas of the state are subject to some level of seismic ground shaking.

Several scales may be used to measure the strength or magnitude of an earthquake. Magnitude scales (ML) measure the energy released by earthquakes. The Richter scale, which represents magnitude at the earthquake epicenter, is an example of an ML. As the Richter scale is logarithmic, each whole number represents a 10-fold increase in magnitude over the preceding number. Table 3.6-1 represents effects that would be commonly associated with Richter Magnitudes.

TABLE 3.6-1: RICHTER MAGNITUDES AND EFFECTS

MAGNITUDE	EFFECTS
< 3.5	Typically not felt
3.5 – 5.4	Often felt but damage is rare
5.5 – < 6	Damage is slight for well-built buildings
6.1 – 6.9	Destructive potential over ±60 miles of occupied area
7.0 – 7.9	“Major Earthquake” with the ability to cause damage over larger areas
≥ 8	“Great Earthquake” can cause damage over several hundred miles

SOURCE: USGS, EARTHQUAKE PROGRAM.

Moment Magnitude (Mw) is used by the United States Geological Service (USGS) to describe the magnitude of large earthquakes in the U.S. The value of moment is proportional to fault slip multiplied by the fault surface area. Thus, moment is a measurement that is related to the amount of energy released at the point of movement. The Mw scale is often preferred over other scales, such as the Richter, because it is valid over the entire range of magnitudes. Moment is normally converted to Mw, a scale that approximates the values of the Richter scale.

Seismic ground shaking hazards are calculated as a probability of exceeding certain ground motion over a period of time, usually expressed in terms of "acceleration." The acceleration of the Earth during an earthquake can be described in terms of its percentage of gravity (g). For example, the 10% probability of exceedance in 50 years is an annual probability of 1 in 475 of being exceeded each year. This level of ground shaking has been used for designing buildings in high seismic areas. This probability level allows engineers to design buildings for larger ground motions than what is expected to occur during a 50-year interval, which will make buildings safer than if they were only designed for the ground motions that are expected to occur in the next 50 years.

The California Geological Survey estimates a 10 percent probability of exceeding 70 percent of gravity at peak ground acceleration over the next 50 years in the Campbell Planning Area, as well as other communities within Santa Clara County. Moving east toward Modesto, the estimates decrease to 40 percent or less of gravity at peak ground acceleration.

In contrast, other scales describe earthquake intensity, which can vary depending on local characteristics. The Modified Mercalli Scale (MM) expresses earthquake intensity at the surface on a scale of I through XII. The Planning Area could experience considerable ground shaking generated by faults outside Campbell. For example, Campbell could experience intensities of MM VII to VIII generated by seismic events occurring along the Hayward fault and San Andreas fault (ABAG, 2016). Table 3.6-2 represents the potential effects of an earthquake based on the Modified Mercalli Intensities.

3.6 GEOLOGY AND SOILS

TABLE 3.6-2: MODIFIED MERCALLI INTENSITIES AND EFFECTS

<i>MM</i>	<i>EFFECTS</i>
I	Movement is imperceptible
II	Movement may be perceived (by those at rest or in tall buildings)
III	Many feel movement indoors; may not be perceptible outdoors
IV	Most feel movement indoors; windows, doors, and dishes will rattle
V	Nearly everyone will feel movement; sleeping people may be awakened
VI	Difficulty walking; many items fall from shelves; pictures fall from walls
VII	Difficulty standing; vehicle shaking felt by drivers; some furniture breaks
VIII	Difficulty steering vehicles; houses may shift on foundations
IX	Well-built buildings suffer considerable damage; ground may crack
X	Most buildings and foundations and some bridges destroyed
XI	Most buildings collapse; some bridges destroyed; large cracks in ground
XII	Large scale destruction; objects can be thrown into the air

SOURCE: ASSOCIATION OF BAY AREA GOVERNMENTS, 2011.

The Significant United States Earthquakes 1568 – 2009 data published by the USGS in the National Atlas identifies earthquakes that caused deaths, property damage, geologic effects or were felt by populations near the epicenter. No significant earthquakes are identified within Campbell; however, significant earthquakes are documented in the region, as presented in Table 3.6-3.

TABLE 3.6-3: SIGNIFICANT EARTHQUAKES IN THE REGION

<i>MAGNITUDE</i>	<i>INTENSITY</i>	<i>LOCATION</i>	<i>YEAR</i>
4.5	VI	Pleasant Hill	2019
4.3	VI	Byron	2019
4.4	V	Berkeley	2018
4.1	IV	Alum Rock	2017
4.0	IV	Aromas	2017
4.0	V	Piedmont	2015
4.1	IV	Yountville	2014
4.2	V	San Juan Bautista	2014
6.0	VIII	South Napa	2014
4.0	IV	Central California	2010
4.3	V	Northern California	2009
5.5	VI	San Francisco Bay area	2007
4.2	V	Central California	2007
4.2	V	San Francisco Bay area	2007
4.5	V	Northern California	2006
4.3	VI	Northern California	2006
4.7	V	Northern California	2006
4.1	III	Northern California	2005
4.3	V	Central California	2004
4.0	V	San Francisco Bay	2003
4.1	IV	Dublin	2003

MAGNITUDE	INTENSITY	LOCATION	YEAR
4.6	V	Channel Islands Beach	2002
5.0	VII	Napa	2000
6.9	IX	Loma Prieta (San Andreas)	1989
5.4	N/A	Santa Cruz County	1989
6.2	N/A	Morgan Hill	1984
5.8, 5.8	VII	Livermore	1980
5.7	N/A	Coyote Lake	1979
5.7, 5.6	N/A	Santa Rosa	1969
5.3, 4.2	N/A	Daly City	1957
5.4	N/A	Concord	1954
6.5	N/A	Calaveras fault	1911
7.9	IX	San Francisco	1906
6.8	N/A	Mendocino	1898
6.2	N/A	Mare Island	1898
6.3	N/A	Calaveras fault	1893
6.2	VIII	Winters	1892
6.4	N/A	Vacaville	1892
6.8	VII	Hayward	1868
6.5	VIII	Santa Cruz Mountains	1865
6.8	N/A	San Francisco Peninsula	1838

SOURCE: UNITED STATE GEOLOGICAL SURVEY, 2019.

The City of Campbell could also be subject to major earthquakes along currently inactive or unrecognized faults. Two examples in California include the 1983 Coalinga Quake (6.5 magnitude) and the 1994 Northridge Quake (6.7 magnitude), which was an unknown fault, and a “blind” thrust fault over 10 miles below the surface, respectively.

FAULTS

Faults are classified as Historic, Holocene, Late Quaternary, Quaternary, and Pre-Quaternary according to the age of most recent movement (California Geological Survey, 2002). These classifications are described as follows:

- **Historic:** faults on which surface displacement has occurred within the past 200 years;
- **Holocene:** shows evidence of fault displacement within the past 11,000 years, but without historic record;
- **Late Quaternary:** shows evidence of fault displacement within the past 700,000 years, but may be younger due to a lack of overlying deposits that enable more accurate age estimates;
- **Quaternary:** shows evidence of displacement sometime during the past 1.6 million years; and
- **Pre-Quaternary:** without recognized displacement during the past 1.6 million years.

Faults are further distinguished as active, potentially active, or inactive. (California Geological Survey, 2002).

- **Active:** An active fault is a Historic or Holocene fault that has had surface displacement within the last 11,000 years;
- **Potentially Active:** A potentially active fault is a pre-Holocene Quaternary fault that has evidence of surface displacement between about 1.6 million and 11,000 years ago; and
- **Inactive:** An inactive fault is a pre-Quaternary fault that does not have evidence of surface displacement within the past 1.6 million years. The probability of fault rupture is considered low; however, this classification does not mean that inactive faults cannot, or will not, rupture.

The Cascade Fault is a Quaternary Fault that traverses the southwestern portion of the Planning Area. Additionally, there are numerous active faults located in the regional vicinity of Campbell. However, it should be noted that no “active” faults are located within the Planning Area. Figure 3.6-1 illustrates the location of some of the closest faults. Below is a brief summary of the most notable faults in the regional vicinity:

- **Cascade Fault:** The Cascade fault is a quaternary fault that traverses the southwestern portion of the Planning Area. The Cascade fault appears in the form of several discontinuous folds that are caused by blind reverse faulting. The 30 km fault originates along the eastern edge of Los Gatos and continues parallel with the Santa Cruz Mountains to the City of Cupertino, where there is a small break in the fault line. After this break, the fault continues northwest until it reaches western Mountain View City. As the Cascade fault cuts through southwestern Campbell, it breaks into a lateral pair of fault lines for less than 2 miles until the most western section discontinues. The Cascade fault lines are northeast of the Monte Vista fault, in the southernmost portion of the Planning Area.
- **San Jose Fault:** The San Jose fault is a quaternary fault located northeast of the Planning Area. The 70 km reverse fault extends northwest from Santa Clara Valley up to East Palo Alto City. In northeast Campbell, The San Jose fault continues from a split in which the more westward facing fault becomes Stanford fault. In Eastern Mountain View, the San Jose fault splits again and the most westward-trending break becomes the Palo Alto fault.
- **Stanford Fault:** The Stanford fault is a quaternary fault that is located northeast of the planning area. The 45 km fault is a northwestern continuation of the San Jose fault. The split from the San Jose fault occurs in northeast Campbell and the Stanford fault extends through the City of Los Altos and Stanford University, ending in Redwood City, west of Highway 82. The Stanford fault formed in the Early Quaternary period (700,000 to 1.6 million years ago) and it is considered inactive because it and its splinter traces do not show evidence of recent displacement (during the last 11,500 years).

SEISMIC HAZARD ZONES

Alquist-Priolo Fault Zones

An active earthquake fault, per California's Alquist-Priolo Act, is one that has ruptured within the Holocene Epoch (~11,000 years). Based on this criterion, the California Geological Survey identifies Earthquake Fault Zones. These Earthquake Fault Zones are identified in Special Publication 42 (SP42), which is updated as new fault data become available. The SP42 lists all counties and cities within California that are affected by designated Earthquake Fault Zones. The Fault Zones are delineated on maps within SP42 (Earthquake Fault Zone Maps).

Alquist-Priolo Earthquake Fault Zone maps detail where local governments must require site-specific geologic and engineering studies for proposed developments to ensure this hazard is identified and avoided. Additionally, all new construction for human occupancy must generally be set back 50 feet from the active surface trace of a fault.

There are no Alquist-Priolo Earthquake Fault Zones located within the City of Campbell. There are four other major faults delineated as Alquist-Priolo Fault Zones between 10 and 25 miles from Campbell (San Gregorio fault, Calaveras fault, Greenville fault, and the San Andreas fault). Figure 3.6-1 illustrates the location of the earthquake fault zones.

Seismic Hazard Zones

The State Seismic Hazards Mapping Act (1990) addresses hazards along active faults. The Northern California counties affected by the Seismic Hazard Zonation Program include Alameda, San Francisco, San Mateo, and Santa Clara. The Southern California counties affected by the Program include San Bernardino, Los Angeles, Orange, and Ventura. Seismic hazard zones are currently mapped in Campbell within the San Jose West quadrangle.

LIQUEFACTION

Liquefaction, which is primarily associated with loose, saturated materials, is most common in areas of sand and silt or on reclaimed lands. Cohesion between the loose materials that comprise the soil may be jeopardized during seismic events and the ground will take on liquid properties. Thus, liquefaction requires specific soil characteristics and seismic shaking.

In collaboration with the USGS Earthquake Hazard Program, the California Geological Survey (CGS) produces Liquefaction Susceptibility Maps and identifies "Zones of Required Investigation" per the State's Seismic Hazard Zonation Program.

The article *Mapping Liquefaction-Induced Ground Failure Potential* (Youd and Perkins, 1978) provides a generalized matrix to demonstrate the relationship between liquefaction potential and depositional landscapes. Table 3.6-4, which is recreated from Youd and Perkins, demonstrates the general relationship between the nature and age of sediment and the anticipated liquefaction potential.

3.6 GEOLOGY AND SOILS

TABLE 3.6-4: LIQUEFACTION POTENTIAL BASED ON SEDIMENT TYPE AND AGE OF DEPOSIT

SEDIMENT	SUSCEPTIBILITY BASED ON AGE OF DEPOSITS (YEARS BEFORE PRESENT)			
	MODERN (< 500)	HOLOCENE (< 10,000)	PLEISTOCENE (< 2 MILLION)	PRE-PLEISTOCENE (> 2 MILLION)
River Channel	Very High	High	Low	Very Low
Flood Plain	High	Moderate	Low	Very Low
Alluvial Fan/Plain	Moderate	Low	Low	Very Low
Lacustrine/Playa	High	Moderate	Low	Very Low
Colluvium	High	Moderate	Low	Very Low
Talus	Low	Low	Very Low	Very Low
Loess	High	High	High	- ? -
Glacial Till	Low	Low	Very Low	Very Low
Tuff	Low	Low	Very Low	Very Low
Tephra	High	High	- ? -	- ? -
Residual Soils	Low	Low	Very Low	Very Low
Sebka	High	Moderate	Low	Very Low
Un-compacted Fill	Very High	NA	NA	NA
Compacted fill	Low	NA	NA	NA

SOURCE: YOUD AND PERKINS, 1978

The CGS Liquefaction Susceptibility Maps and “Zones of Required Investigation” are produced per the State’s Seismic Hazard Zonation Program. In Northern California, the areas of high liquefaction potential identified by the CGS are confined to the nine counties comprising the Bay Area, which includes Santa Clara County. Figure 3.6-2 illustrates the liquefaction potential in the vicinity of the Planning Area.

Liquefaction potential in the Planning Area varies from low to very high. The areas designated “low” potential for liquefaction are located in the southern portion of Planning Area. Moving to the north the potential for liquefaction increases to “moderate.” The areas designated “high” and “very high” potential for liquefaction are located near the creeks in the Planning Area (i.e, Los Gatos Creek, San Tomas Aquinas Creek).

STRUCTURAL DAMAGE

Fault Rupture Damage. There are known active faults that have been mapped within the Planning Area, and the potential for structures to be adversely affected by fault rupture is considered to be moderate. The California Geological Survey has not established any Alquist-Priolo Earthquake Fault Zones in the Planning Area. It is possible that future investigation could identify active faults in the Planning Area. Fault rupture hazards in the Planning Area should be reevaluated if data suggests that such a hazard is present.

Ground Shaking Damage. As is the case for most areas within California, the potential for seismic ground shaking in the Planning Area is expected. As a result, the State requires special design considerations for all structural improvements in accordance with the seismic design provisions in the California Building Code. California’s seismic design provisions require enhanced structural

integrity based on several risk parameters with the ultimate objective of protecting the life and safety of building occupants and the public. For large earthquakes, the seismic design standards primarily ensure that the building will not collapse, but some structural and non-structural damage may be expected. Older buildings constructed of unreinforced masonry, including materials such as brick, concrete, and stone, pre-1940 wood frame houses, and pre-1973 tilt-up concrete buildings are particularly susceptible to structural damage from ground shaking. In most cases, these older buildings require retrofit, or they risk significant structural damage during an earthquake.

Liquefaction Damage. As noted previously, the liquefaction potential in the Planning Area varies from low to very high. The areas designated "low" potential for liquefaction are located in the southern portion of Planning Area. Moving to the north the potential for liquefaction increases to "moderate." The areas designated "high" and "very high" potential for liquefaction are located near the creeks in the Planning Area (i.e., Los Gatos Creek, San Tomas Aquinas Creek). Liquefaction poses a source of hazard to structures and infrastructure located throughout the Planning Area. There are a variety of geotechnical strategies that can be implemented to mitigate the potential for structural damage. These include appropriate foundation design, engineering soils, groundwater management, and the use of special flexible materials for construction.

Landslide and Lateral Spreading Damage. Given the relatively level slopes throughout the majority of the Planning Area, the landslide and lateral spreading potential is very low. The landslide and lateral spreading potential in the Planning Area is low. There are a variety of geotechnical strategies that can be implemented to mitigate the potential for landslide and lateral spreading in this area. These include engineering soils, groundwater management, surface water control, slope reconfiguration, and structural reinforcement if necessary.

OTHER GEOLOGIC HAZARDS

Soils

The soils in the Planning Area are predominately formed from alluvial fans. According to the Natural Resource Conservation Service (2016), there are nine different soil series located in the Planning Area. These include the Urban land-Still complex, Urban land-Elpaloalto complex, Urban land-Stevenscreek complex, Urban land-Flaskan complex, Urban land-Elder complex, Urban land-Landelspark complex, Elder, Urban land-Botella complex, and Urban land-Montavista-Togasara complex. Figure 3.6-3 presents a map of the soils located in the Planning Area, and Table 3.6-5 provides a summary of the soils and acreages in the Planning Area. Information from the NRCS official soil description for these series is provided below.

3.6 GEOLOGY AND SOILS

TABLE 3.6-5: PLANNING AREA SOILS

MAP SYMBOL AND SOIL NAME	ACREAGE
130: Urban land-Still complex	462.64
131: Urban land-Elpaloalto complex	572.23
135: Urban land-Stevenscreek complex	480.74
140: Urban land-Flaskan complex	1,675.42
169: Urban land-Elder complex	191.58
170: Urban land-Landelspark complex	261.06
171: Elder fine sandy loam	91.13
175: Urban land-Botella complex	72.85
334: Urban land-Montavista-Togasara complex	2.43
W: Water	90.17

SOURCE: NATURAL RESOURCE CONSERVATION SERVICE, 2016.

- The Urban land-Still complex series of soils consists of well-drained soils with sandy loam and silt loam soil textures. They are found on alluvial fans and floodplains, and have moderately high to high permeability. These soils are found mainly in the eastern portion of the Planning Area, east of Highway 17, and have slopes of 0 to 2%.
- The Urban land-Elpaloalto complex series of soils consists of well-drained soils with clay loam and silty clay loam textures. They are found on alluvial fans and have moderately high permeability. These soils are found mainly in the northeastern and northwestern outer edges of the Planning Area, and have slopes of 0 to 2%.
- The Urban land-Stevens Creek complex series of soils consists of well-drained soils with sandy loam, silt loam, silty clay loam, and clay loam soil textures. They are found on alluvial fans and have moderately high permeability. These soils are found mainly in the northern portion of the Planning Area, west of Highway 17, and have slopes of 0 to 2%.
- The Urban land-Flaskan complex series of soils consists of well-drained soils with sandy loam, sand clay loam, and gravelly sandy clay loam textures. They are found on alluvial fans and have moderately high permeability. These soils make up the majority of the Planning Area and are found mainly in the central and southern portions of the Planning Area. The slope of this soil series ranges from 0 to 2%.
- The Urban land-Elder complex series of soils consists of somewhat excessively drained soils with a fine sandy loam texture. They are found on alluvial fans and in streams and have high permeability. These soils are found mainly in a strip parallel to Highway 17, extending across most of the Planning Area. The slope of this soil series ranges from 0 to 2%.
- The Urban land-Landelspark complex series of soils consists of well drained soils with sandy loam, sandy clay loam, gravelly sand, silty clay loam, and clay loam textures. They are found on alluvial fans and have moderately high permeability. These soils are found mainly on the western edges of the Planning Area and in a patch adjacent to Highway 17 on the southeast portion of the Planning Area. The slope of the soil series ranges from 0 to 2%.
- The Elder series of soils consists of somewhat excessively drained soils with a fine sandy loam texture. They are found in streams and have high permeability. Within the Planning

Area, this series is found mainly adjacent Highway 17, east of the Urban land-Elder complex series and west of the highway. The slope of the soil series ranges from 0 to 2%.

- The Urban land-Botella complex series of soils consists of well-drained soils with sandy clay loam and clay loam textures. They are found in alluvial fans and have moderately high permeability. This series is found mainly in small patches in the southwestern portion of the Planning Area. The slope of the soil series ranges from 0 to 2%.
- The Urban land-Montavista-Togasara complex series of soils consists of well-drained soils with a gravelly sandy loam texture. They are formed in alluvium and have a strong medium subangular blocky structure with many very fine interstitial pores. This series is found mainly in a very small patch on the southwestern edge of the Planning Area. The slope of the soil series ranges 9 to 15%.

Erosion

The U.S. Natural Resource Conservation Service (NRCS) delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The following description of erosion factors is provided by the NRCS Physical Properties Descriptions:

- Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Erosion factor Kw indicates the erodibility of the whole soil, whereas Kf indicates the erodibility of the fine soils. The estimates are modified by the presence of rock fragments.

The NRCS does not provide erosion factors for the Urban land soils in the City of Campbell. Because the majority of the Planning Area contains existing urban uses, the erosion potential is considered to be low.

Expansive Soils

The NRCS delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The following description of linear extensibility (also known as shrink-swell potential or expansive potential) is provided by the NRCS Physical Properties Descriptions:

"Linear extensibility" refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

The linear extensibility of the soils within Campbell ranges from "low" to "moderate to high". Figure 3.6-4 illustrates the shrink-swell potential of soils in the Planning Area. The majority of the Planning

Area has “low” to “moderate” expansive soils, including most of the developed land. The majority of the areas of the Planning Area with “moderate” or “moderate to high” expansive soils are located east of State Route 17 or north of Campbell Avenue. The areas with “moderate to high” expansive soils would require special design considerations due to shrink-swell potentials.

Landslide

The California Geological Survey classifies landslides with a two-part designation based on Varnes (1978) and Cruden and Varnes (1996). The designation captures both the type of material that failed and the type of movement that the failed material exhibited. Material types are broadly categorized as either rock or soil, or a combination of the two for complex movements. Landslide movements are categorized as falls, topples, spreads, slides, or flows.

Landslide potential is influenced by physical factors, such as slope, soil, vegetation, and precipitation. Landslides require a slope, and can occur naturally from seismic activity, excessive saturation, and wildfires, or from human-made conditions such as construction disturbance, vegetation removal, wildfires, etc.

Within Santa Clara County, the hillsides have some susceptibility for landslides, while the valleys have a low susceptibility. Figure 3.6-5 illustrates the landslide potential in the vicinity of the Planning Area. Given the relatively flat land throughout Campbell, the landslide potential is very low. This is not a significant constraint in the Planning Area. The landslide potential is low throughout the entire Planning Area.

Lateral Spreading

Lateral spreading generally is a phenomenon where blocks of intact, non-liquefied soil move down slope on a liquefied substrate of large areal extent. The potential for lateral spreading is present where open banks and unsupported cut slopes provide a free face (unsupported vertical slope face). Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. The lateral spreading potential is low throughout the entire Planning Area.

Subsidence

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. In Santa Clara County, subsidence has occurred over much of the Santa Clara Valley, including land adjacent to the southern end of the San Francisco Bay.

Land uplift and subsidence in the Santa Clara Valley due to the recharge and withdrawal of fluids is well documented by several public agencies such as the Santa Clara Valley Water District (SCVWD)

and the USGS.¹ An increase in the withdrawal of water from the aquifer and a decrease in rainfall for the first half of the twentieth century resulted in a substantial drop in well levels and a corresponding land subsidence of approximately four meters. Recovery efforts over the past quarter century, such as the import of water from outside sources and the construction of percolation ponds, have allowed water levels to partially recover.

Corrosivity

Corrosivity refers to potential soil-induced electrochemical or chemical action that could corrode or deteriorate concrete, reinforcing steel in concrete structures, and bare-metal structures exposed to these soils. The rate of corrosion is related to factors such as soil moisture, particle-size distribution, and the chemical composition and electrical conductivity of the soil. The natural soils found in the Planning Area have low corrosivity. The materials used in the construction of modern infrastructure is typically designed to resist the effects of corrosion over the design life of the infrastructure. In addition, native soils are typically replaced by engineered backfill which generally has a low corrosive potential.

Naturally Occurring Asbestos

The term “asbestos” is used to describe a variety of fibrous minerals that, when airborne, can result in serious human health effects. Naturally occurring asbestos is commonly associated with ultramafic rocks and serpentinite. Ultramafic rocks, such as dunite, peridotite, and pyroxenite are igneous rocks comprised largely of iron-magnesium minerals. As they are intrusive in nature, these rocks often undergo metamorphosis, prior to their being exposed on the Earth’s surface. The metamorphic rock serpentinite is a common product of the alteration process. Naturally occurring asbestos is mapped in Santa Clara County, although it is all located to the west of the Planning Area in San Jose. There is no naturally occurring asbestos mapped within Campbell.

Tsunami/Seiches

Tsunamis and seiches are standing waves that occur in the ocean or relatively large, enclosed bodies of water (i.e., Lake Tahoe) that can follow seismic, landslide, and other events from local sources (California, Oregon, Washington coast) or distant sources (Pacific Rim, South American Coast, Alaska/Canadian coast). The City of Campbell is not within a tsunami or seiche hazard area.

¹ Schmidt, D., Bürgmann, R. 2002. Land Uplift and Subsidence in the Santa Clara Valley. Berkeley Seismological Laboratory. Accessed July 20, 2016. Available at: <https://seismo.berkeley.edu/annual_report/ar01_02/node26.html>.

PALEONTOLOGICAL RESOURCES

The natural resources existing within the General Plan Update Study Area which deserve conservation and preservation are the often unseen records of past life buried in the sediments and rocks below the pavement, buildings, soils, and vegetation which now cover most of the area. These records – fossils and their geologic context – undoubtedly exist in large quantities below the surface in many areas in and near the City of Campbell, and span millions of years in age of origin. Fossils constitute a non-renewable resource because, once lost or destroyed, the exact information they contained can never be reproduced.

Paleontology is the science that attempts to unravel the meaning of these fossils in terms of the organisms they represent, the ages and geographic distribution of those organisms, how they interacted in ancient ecosystems and responded to past climatic changes, and the changes through time of all of these aspects.

The sensitivity of a given area or body of sediment with respect to paleontologic resources is a function of both the potential for the existence of fossils and the predicted significance of any fossils which may be found there. The primary consideration in the determination of paleontologic sensitivity of a given area, body of sediment, or rock formation is its potential to include fossils. Information that can contribute to assessment of this potential includes: 1) direct observation of fossils within the project area; 2) the existence of known fossil localities or documented absence of fossils in the same geologic unit (e.g., “Formation” or one of its subunits); 3) descriptive nature of sedimentary deposits (such as size of included particles or clasts, color, and bedding type) in the area of interest compared with those of similar deposits known elsewhere to favor or disfavor inclusion of fossils; and 4) interpretation of sediment details and known geologic history of the sedimentary body of interest in terms of the ancient environments in which they were deposited, followed by assessment of the favorability of those environments for the preservation of fossils.

The most general paleontological information can be obtained from geologic maps, but geologic cross sections (slices of the layer to view the third dimension) must be reviewed for each area in question. These usually accompany geologic maps or technical reports. Once it can be determined which formations may be present in the subsurface, the question of paleontological resources must be addressed. Even though a formation is known to contain fossils, they are not usually distributed uniformly throughout the many square miles the formation may cover. If the fossils were part of a bay environment when they died, perhaps a scattered layer of shells will be preserved over large areas. If on the other hand, a whale died near the bay, one might expect to find fossil whalebone only in one small area of less than a few hundred square feet. Other resources to be considered in the determination of paleontological potential are regional geologic reports, site records on file with paleontological repositories, and site-specific field surveys.

Paleontologists consider all vertebrate fossils to be of significance. Fossils of other types are considered significant if they represent a new record, new species, an oldest occurring species, the most complete specimen of its kind, a rare species worldwide, or a species helpful in the dating of formations. However, even a previously designated low potential site may yield significant fossils.

3.6.2 REGULATORY SETTING

FEDERAL REGULATIONS

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 (42 USC, 7701 et seq.) requires the establishment and maintenance of an earthquake hazards reduction program by the Federal government.

Executive Order 12699

Signed in January 1990, this executive order of the President implements provisions of the Earthquake Hazards Reduction Act for “federal, federally assisted or federally regulated new building construction” and requires the development and implementation of seismic safety programs by Federal agencies.

International Building Code (IBC)

The purpose of the International Building Code (IBC) is to provide minimum standards to preserve the public peace, health, and safety by regulating the design, construction, quality of materials, certain equipment, location, grading, use, occupancy, and maintenance of all buildings and structures. IBC standards address foundation design, shear wall strength, and other structurally related conditions.

STATE REGULATIONS

California Building Standards Code

Title 24 of the California Code of Regulations, known as the California Building Standards Code (CBSC) or simply "Title 24," contains the regulations that govern the construction of buildings in California. The CBSC includes 12 parts: California Building Standards Administrative Code, California Building Code, California Residential Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Historical Building Code, California Fire Code, California Existing Building Code, California Green Building Standards Code (CAL Green Code), and the California Reference Standards Code. Through the CBSC, the State provides a minimum standard for building design and construction. The CBSC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

California Health and Safety Code

Section 19100 et seq. of the California Health and Safety Code establishes the State’s regulations for earthquake protection. This section of the code requires structural designs to be capable of resisting likely stresses produced by phenomena such as strong winds and earthquakes.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 sets forth the policies and criteria of the State Mining and Geology Board, which governs the exercise of governments' responsibilities to prohibit the location of developments and structures for human occupancy across the trace of active faults. The policies and criteria are limited to potential hazards resulting from surface faulting or fault creep within Earthquake Fault Zones, as delineated on maps officially issued by the State Geologist. Working definitions include:

- Fault – a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side;
- Fault Zone – a zone of related faults, which commonly are braided and sub parallel, but may be branching and divergent. A fault zone has a significant width (with respect to the scale at which the fault is being considered, portrayed, or investigated), ranging from a few feet to several miles;
- Sufficiently Active Fault – a fault that has evidence of Holocene surface displacement along one or more of its segments or branches (last 11,000 years); and
- Well-Defined Fault – a fault whose trace is clearly detectable by a trained geologist as a physical feature at or just below the ground surface. The geologist should be able to locate the fault in the field with sufficient precision and confidence to indicate that the required site-specific investigations would meet with some success.

“Sufficiently Active” and “Well Defined” are the two criteria used by the State to determine if a fault should be zoned under the Alquist-Priolo Act.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act, passed in 1990, addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically-induced landslides. Under the Act, seismic hazard zones are to be mapped by the State Geologist to assist local governments in land use planning. The program and actions mandated by the Seismic Hazards Mapping Act closely resemble those of the Alquist-Priolo Earthquake Fault Zoning Act (which addresses only surface fault-rupture hazards) and are outlined below:

The State Geologist is required to delineate the various “seismic hazard zones.”

- Cities and counties, or other local permitting authority, must regulate certain development “projects” within the zones. They must withhold the development permits for a site within a zone until the geologic and soil conditions of the site are investigated and appropriate mitigation measures, if any, are incorporated into development plans.
- The State Mining and Geology Board provides additional regulations, policies, and criteria to guide cities and counties in their implementation of the law. The Board also provides guidelines for preparation of the Seismic Hazard Zone Maps and for evaluating and mitigating seismic hazards.
- Sellers (and their agents) of real property within a mapped hazard zone must disclose that the property lies within such a zone at the time of sale.

Caltrans Seismic Design Criteria

The California Department of Transportation (Caltrans) has Seismic Design Criteria (SDC), which is an encyclopedia of new and currently practiced seismic design and analysis methodologies for the design of new bridges in California. The SDC adopts a performance-based approach specifying minimum levels of structural system performance, component performance, analysis, and design practices for ordinary standard bridges. The SDC has been developed with input from the Caltrans Offices of Structure Design, Earthquake Engineering and Design Support, and Materials and Foundations. Memo 20-1 Seismic Design Methodology (Caltrans 1999) outlines the bridge category and classification, seismic performance criteria, seismic design philosophy and approach, seismic demands and capacities on structural components, and seismic design practices that collectively make up Caltrans' seismic design.

Division of Mines and Geology

The California Division of Mines and Geology (DMG) operates within the Department of Conservation. The DMG is responsible for assisting in the utilization of mineral deposits and the identification of geological hazards.

State Geological Survey

Similar to the DMG, the California Geological Survey is responsible for assisting in the identification and proper utilization of mineral deposits, as well as the identification of fault locations and other geological hazards.

LOCAL REGULATIONS

City of Campbell Municipal Code

The City of Campbell Municipal Code includes Chapter 20.72 requires a soils report if expansive soils or other problem soils are found, prior to a subdivision of five or more lots. Title 21 (Zoning) Chapter 21.18 (Site Development Standards) Section 21.18.130 (Seismic and Geologic Hazards) requires that all new development, remodels, and redevelopment shall comply with the uniform building code and the California Building Code provisions regarding engineering and geotechnical analysis. The type of geotechnical investigation required is dependent on the location of the subject site and the extent of the proposed development. Official seismic hazard zone maps² are on file with the community development department and are the major basis for determination by the community development director or building official whether a geotechnical report shall be required. Where a geotechnical report is required, it shall be prepared by a certified engineering geologist and submitted to the community development director for review and approval prior to final action on the application. The conclusions and recommendations set forth in the geotechnical report shall become the standards for review and shall govern development.

² Seismic Hazard Zone Maps identify where a site investigation is required, and the site investigation determines whether structural design or modification of the project site is necessary to ensure safe development

3.6.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on geology and soils if it will:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;
 - Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; or
 - Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water; or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

IMPACTS AND MITIGATION MEASURES

Impact 3.6-1: General Plan implementation has the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides (Less than Significant)

There are no Alquist-Priolo Earthquake Fault Zones, located within the Planning Area. However, there are numerous faults located in the region and Planning Area. The Cascade Fault, traverses the southwestern portion of the Planning Area. Additionally, there are numerous active faults located in the regional vicinity of Campbell. Figure 3.6-1 illustrates the location of some of the closest Quaternary faults. As a result, future development in the City of Campbell may expose people or structures to potential adverse effects associated with a seismic event, including strong ground shaking and seismic-related ground failure.

The City of Campbell could also be subject to major earthquakes along currently inactive or unrecognized faults. Two examples in California include the 1983 Coalinga Quake (6.5 magnitude)

and the 1994 Northridge Quake (6.7 magnitude), which was an unknown fault, and a “blind” thrust fault over 10 miles below the surface, respectively.

Additionally, as noted previously, the State Seismic Hazards Mapping Act (1990) addresses hazards along active faults. Seismic hazard zones are currently mapped in Campbell and include areas mapped for liquefaction and earthquake-induced landslide hazards. The most prominent areas of the City susceptible to liquefaction are located along Creek corridors including Los Gatos Creek, and San Tomas Creek.

As noted previously, the liquefaction potential in the Planning Area varies from low to very high. The areas designated "low" potential for liquefaction are located in the southern portion of Planning Area. Moving to the north the potential for liquefaction increases to “moderate.” The areas designated “high” and “very high” potential for liquefaction are located near the creeks in the Planning Area (i.e, Los Gatos Creek, San Tomas Aquinas Creek). Liquefaction poses a hazard to structures and infrastructure located throughout the Planning Area.

There are a variety of geotechnical strategies that can be implemented to mitigate the potential for structural damage. These include appropriate foundation design, engineering soils, groundwater management, and the use of special flexible materials for construction.

All projects would be required to comply with the provisions of the CBSC, which requires development projects to: perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues, and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other regulations. Subsequent development and infrastructure would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan includes policies and actions to address potential impacts associated with seismic activity.

The General Plan policies and actions (listed below) require review of development proposals to ensure compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind. Policy SA-1.3 requires geotechnical investigations to be completed prior to approval of any public safety or other critical facilities, new critical infrastructure and facilities that may be built in the City and to incorporate site specific seismic structural design as required by applicable building codes. In addition to “active” fault requirements per Alquist-Priolo and Earthquake Zones of Required Investigation, the City of Campbell will also analyze and further investigate potential local hazards associated with “potentially active” Quaternary faults within the region. Specifically, General Plan Action SA-1f requires the City to coordinate with the County Geologist on preparation of additional geologic studies or other actions that would support the creation of a designated hazard zone associated with the identified location of the Cascade Fault in Campbell, as shown on Figure 3.6-1. The purpose of this hazard zone would be to identify an area

where site specific geologic studies are needed in association with new development on properties located in close proximity to mapped fault lines.

All development and construction proposals must be reviewed by the City to ensure conformance with applicable building standards. Development on soils sensitive to seismic activity is only allowed after adequate site analysis, including appropriate siting, design of structure, and foundation integrity. Action SA-1b requires the submission of geologic and soils reports to ensure that facilities are constructed in a way that mitigates site-specific seismic and/or geologic hazards. All future projects are subject to CEQA review to address seismic safety issues and provide adequate site-specific mitigation for existing and potential hazards identified. With the implementation of the policies and actions in the General Plan, as well as applicable State and City codes, potential impacts associated with a seismic event, including rupture of an earthquake fault, seismic ground shaking, liquefaction, and landslides would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SA-1.1 Regulate development to reduce risks to life and property associated with earthquakes, liquefaction, erosion, landslides, and unstable soil conditions.

SA-1.2 Ensure that all new development and construction is in conformance with applicable building standards related to geologic and seismic safety.

SA-1.3 Require geotechnical investigations to be completed prior to approval of any public safety or other critical facilities, in order to ensure that these facilities are constructed in a way that mitigates site-specific seismic and/or geologic hazards.

SA-1.4 Require an erosion and sediment control plan prepared by a civil engineer, or other professional who is qualified to prepare such a plan, as part of any grading permit application for new development. The erosion and sediment control plan shall delineate measures to appropriately and effectively minimize soil erosion and sedimentation.

SA-1.5 All structures and building foundations requiring a building permit located within areas containing expansive soils shall be designed and engineered to comply with the most current version of the California Code of Regulations (CCR), Title 24.

SAFETY ELEMENT ACTIONS

SA-1.a Continue to implement geologic review procedures for Geologic Reports required by the Municipal Code through the development review process.

SA-1.b Require and review the submission of geologic and soils reports for all developments consistent with Campbell Municipal Code (Chapter 21.18 - Site Development Standards Section 21.18.130 - Seismic and geologic hazards, and Chapter 20.72 - Soils Reports). The geologic risk areas that are determined from these studies shall include standards established and recommendations which shall be incorporated into development.

SA-1.c Require strict adherence to the requirements of the California Code of Regulations (CCR), Title 24 in all areas of the city during the plan check review process.

SA-1.d Periodically review the structural integrity of all existing City-owned critical facilities and, if any facilities are found unsatisfactory, take steps to ensure structural integrity and safety.

SA-1.e Continue to maintain and provide an inventory of all natural hazards, including active faults, Alquist-Priolo Special Study Zones, floodplains, hazardous soil conditions, and dam failure inundation areas.

SA-1.f The City shall coordinate with the County Geologist on preparation of additional geologic studies or other actions that would support the creation of a designated hazard zone associated with the identified location of the Cascade Fault in Campbell. The purpose of this hazard zone would be to identify an area where site specific geologic studies are needed in association with new development on properties located in close proximity to mapped fault lines.

Impact 3.6-2: General Plan implementation has the potential to result in substantial soil erosion or the loss of topsoil (Less than Significant)

The General Plan would allow development and improvement projects that would involve some land clearing, grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters.

As noted previously, because the majority of the Planning Area contains existing urban uses, the erosion potential is considered to be low. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other regulations. In addition to compliance with City standards and policies, the Regional Water Quality Control Board will require a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each project that disturbs an area of one acre or larger. The SWPPPs will include project specific best management measures that are designed to control drainage and erosion. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The General Plan includes a range of policies and one action related to best management practices, NPDES requirements, and minimizing discharge of materials (including eroded soils) into the storm drain system. With the implementation of the policies and actions in the General Plan, as well as applicable State and City requirements, potential impacts associated with erosion and loss of topsoil would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SA-1.1 Regulate development to reduce risks to life and property associated with earthquakes, liquefaction, erosion, landslides, and unstable soil conditions.

3.6 GEOLOGY AND SOILS

SA-1.4 Require an erosion and sediment control plan prepared by a civil engineer, or other professional who is qualified to prepare such a plan, as part of any grading permit application for new development. The erosion and sediment control plan shall delineate measures to appropriately and effectively minimize soil erosion and sedimentation.

SA-2.7 Ensure that adequate drainage and erosion control measures are provided during construction of all new development which requires a building permit.

SA-2.8 Ensure that any development activity that requires a grading permit does not impact adjacent properties, local creeks, or storm drainage systems by designing and building the site to drain properly to minimize drainage issues and erosion.

COMMUNITY SERVICES AND FACILITIES ELEMENT POLICIES

CSF-5.1 Maintain and improve Campbell's storm drainage facilities.

CSF-5.2 Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

CSF-5.3 Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

CSF-5.4 Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

CSF-5.5 Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and trees, and maintain natural drainage patterns.

CSF-5.6 Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

CSF-5.7 Where possible, avoid new outfalls to natural or earthen channels.

CSF-5.8 Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

CSF-5.9 Encourage dual-use detention basins for parks, ball fields, and other appropriate uses.

ACTION

SAFETY ELEMENT POLICIES

SA-1.b Require and review the submission of geologic and soils reports for all developments consistent with Campbell Municipal Code (Chapter 21.18 - Site Development Standards Section 21.18.130 - Seismic and geologic hazards, and Chapter 20.72 - Soils Reports). The geologic risk areas

that are determined from these studies shall include standards established and recommendations which shall be incorporated into development.

COMMUNITY SERVICES AND FACILITIES ELEMENT ACTIONS

CSF-5.a Regularly review and update the City of Campbell's Green Stormwater Infrastructure Plan.

CSF-5.b Continue to complete gaps in the drainage system in areas of existing development through the implementation of drainage improvement projects identified in the Green Stormwater Infrastructure Plan.

CSF-5.c Continue to review development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

CSF-5.d Require project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

CSF-5.e Identify which stormwater drainage facilities are in need of repair and address these needs through the City's Capital Improvement Program.

CSF-5.f Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the C.3 Stormwater Handbook.

CSF-5.g Work cooperatively with local, State, and Federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

Impact 3.6-3: General Plan implementation has the potential to result in development located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse (Less than Significant)

Development allowed under the General Plan could result in the exposure of people and structures to conditions that have the potential for adverse effects associated with ground instability or failure. Soils and geologic conditions in the Planning Area have the potential for landslides, lateral spreading, subsidence, liquefaction, or collapse. Each are discussed below:

Landslide: Within Santa Clara County, the hillsides have some susceptibility for landslides, while the valleys have a low susceptibility. Figure 3.6-5 illustrates the landslide potential in the vicinity of the Planning Area. Given the relatively flat land throughout Campbell, the landslide potential is very low. This is not a significant constraint in the Planning Area. The landslide potential is low throughout the entire Planning Area.

Lateral Spreading: Lateral spreading generally is a phenomenon where blocks of intact, non-liquefied soil move down slope on a liquefied substrate of large areal extent. The potential for lateral spreading is present where open banks and unsupported cut slopes provide a free face (unsupported vertical slope face). Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. The majority of the planning area is relatively flat, and the lateral spreading potential is low throughout the entire Planning Area.

Subsidence: In Santa Clara County, subsidence has occurred over much of the Santa Clara Valley, including land adjacent to the southern end of the San Francisco Bay.

Land uplift and subsidence in the Santa Clara Valley due to the recharge and withdrawal of fluids is well documented by several public agencies such as the Santa Clara Valley Water District (SCVWD) and the USGS. An increase in the withdrawal of water from the aquifer and a decrease in rainfall for the first half of the twentieth century resulted in a substantial drop in well levels and a corresponding land subsidence of approximately four meters. Recovery efforts over the past quarter century, such as the import of water from outside sources and the construction of percolation ponds, have allowed water levels to partially recover.

Liquefaction: The CGS Liquefaction Susceptibility Maps and “Zones of Required Investigation” are produced per the State’s Seismic Hazard Zonation Program. In Northern California, the areas of high liquefaction potential identified by the CGS are confined to the nine counties comprising the Bay Area, which includes Santa Clara County. Figure 3.6-2 illustrates the liquefaction potential in the vicinity of the Planning Area.

As described previously, Liquefaction potential in the Planning Area varies from low to very high. The areas designated “low” potential for liquefaction are located in the southern portion of Planning Area. Moving to the north the potential for liquefaction increases to “moderate.” The areas designated “high” and “very high” potential for liquefaction are located near the creeks in the Planning Area (i.e., Los Gatos Creek, San Tomas Aquinas Creek).

Collapse: Collapsible soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial fan and wash sediments have been deposited during rapid run-off events. Differential settlement of structures typically occurs when heavily irrigated landscape areas are near a building foundation. Examples of common problems associated with collapsible soils include tilting floors, cracking or separation in structures, sagging floors, and nonfunctional windows and doors. Existing alluvium within the city may be susceptible to collapse and settlements.

Conclusion: Unstable geologic units could be present within the Plan Area. The potential impacts of such unstable materials could include subsidence where artificial fill material may be poorly engineered and highly compressible. As previously noted, development sites in the Plan Area may be at risk for seismically induced liquefaction, especially in areas that adjoin Los Gatos Creek. As future development and infrastructure projects are considered by the City of Campbell, each project will be evaluated for conformance with the CBSC, the General Plan, Zoning Ordinance, and other

regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Future development and improvement projects would be required to have a specific geotechnical study prepared and incorporated into the improvement design, consistent with the requirements of the State and City codes. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan includes policies and actions to ensure that development projects address potential geologic hazards, at-risk buildings and infrastructure is evaluated for potential risks, and site-specific studies are completed for area subject to liquefaction. With the implementation of the policies and actions in the General Plan, as well as applicable State and City codes, potential impacts associated with ground instability or failure would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SA-1.1 Regulate development to reduce risks to life and property associated with earthquakes, liquefaction, erosion, landslides, and unstable soil conditions.

SA-1.2 Ensure that all new development and construction is in conformance with applicable building standards related to geologic and seismic safety.

SA-1.3 Require geotechnical investigations to be completed prior to approval of any public safety or other critical facilities, in order to ensure that these facilities are constructed in a way that mitigates site-specific seismic and/or geologic hazards.

SA-1.4 Require an erosion and sediment control plan prepared by a civil engineer, or other professional who is qualified to prepare such a plan, as part of any grading permit application for new development. The erosion and sediment control plan shall delineate measures to appropriately and effectively minimize soil erosion and sedimentation.

SA-1.5 All structures and building foundations requiring a building permit located within areas containing expansive soils shall be designed and engineered to comply with the most current version of the California Code of Regulations (CCR), Title 24.

SAFETY ELEMENT ACTIONS

SA-1.a Continue to implement geologic review procedures for Geologic Reports required by the Municipal Code through the development review process.

SA-1.b Require and review the submission of geologic and soils reports for all developments consistent with Campbell Municipal Code (Chapter 21.18 - Site Development Standards Section 21.18.130 - Seismic and geologic hazards, and Chapter 20.72 - Soils Reports). The geologic risk areas that are determined from these studies shall include standards established and recommendations which shall be incorporated into development.

SA-1.c Require strict adherence to the requirements of the California Code of Regulations (CCR), Title 24 in all areas of the city during the plan check review process.

SA-1.d Periodically review the structural integrity of all existing City-owned critical facilities and, if any facilities are found unsatisfactory, take steps to ensure structural integrity and safety.

SA-1.e Continue to maintain and provide an inventory of all natural hazards, including active faults, Alquist-Priolo Special Study Zones, floodplains, hazardous soil conditions, and dam failure inundation areas.

Impact 3.6-4: General Plan implementation has the potential to result in development on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property (Less than Significant)

Expansive soil properties can cause substantial damage to building foundations, piles, pavements, underground utilities, and/or other improvements. Structural damage, such as warping and cracking of improvements, and rupture of underground utility lines, may occur if the expansive potential of soils is not considered during the design and construction of all improvements.

Linear extensibility is a method for measuring expansion potential. The linear extensibility of the soils within Campbell ranges from “low” to “moderate to high”. Figure 3.6-4 illustrates the shrink-swell potential of soils in the Planning Area. The majority of the Planning Area has “low” to “moderate” expansive soils, including most of the developed land. The majority of the areas of the Planning Area with “moderate” or “moderate to high” expansive soils are located east of State Route 17 or north of Campbell Avenue. The areas with “moderate to high” expansive soils would require special design considerations due to shrink-swell potentials.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The Safety Element of the General Plan establishes policies that are designed to protect from geologic hazards, including expansive soils. Consistency with the General Plan policies will require identification of geologic hazards and risk inventory of existing at-risk buildings and infrastructure. As required by the CBSC, a site-specific geotechnical investigation will identify the potential for damage related to expansive soils and non-uniformly compacted fill and engineered fill. If a risk is identified, design criteria and specification options may include removal of the problematic soils, and replacement, as needed, with properly conditioned and compacted fill material that is designed to withstand the forces exerted during the expected shrink-swell cycles and settlements.

Design criteria and specifications set forth in the design-level geotechnical investigation will ensure impacts from problematic soils are minimized. There are no additional significant adverse environmental impacts, apart from those disclosed in the relevant chapters of this Draft EIR, that are anticipated to occur associated with expansive soils. Therefore, this impact is considered **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SA-1.1 Regulate development to reduce risks to life and property associated with earthquakes, liquefaction, erosion, landslides, and unstable soil conditions.

SA-1.2 Ensure that all new development and construction is in conformance with applicable building standards related to geologic and seismic safety.

SA-1.3 Require geotechnical investigations to be completed prior to approval of any public safety or other critical facilities, in order to ensure that these facilities are constructed in a way that mitigates site-specific seismic and/or geologic hazards.

SA-1.5 All structures and building foundations requiring a building permit located within areas containing expansive soils shall be designed and engineered to comply with the most current version of the California Code of Regulations (CCR), Title 24.

SAFETY ELEMENT ACTIONS

SA-1.a Continue to implement geologic review procedures for Geologic Reports required by the Municipal Code through the development review process.

SA-1.b Require and review the submission of geologic and soils reports for all developments consistent with Campbell Municipal Code (Chapter 21.18 - Site Development Standards Section 21.18.130 - Seismic and geologic hazards, and Chapter 20.72 - Soils Reports). The geologic risk areas that are determined from these studies shall include standards established and recommendations which shall be incorporated into development.

SA-1.c Require strict adherence to the requirements of the California Code of Regulations (CCR), Title 24 in all areas of the city during the plan check review process.

Impact 3.6-5: General Plan implementation does not have the potential to have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water (no impact)

Construction allowed by the proposed Plan would not require the use of septic tanks or alternative wastewater disposal systems. Wastewater would be discharged into the existing public sanitary sewer system in the Plan Area, which is serviced by the West Valley Sanitation District (WVSD).

As discussed in Section 3.15 of this DEIR, adequate system capacity is ensured through implementation and periodic auditing of WVSD's Sewer System Management Plan (SSMP), as well as sewer related capital improvement program (CIP) projects and studies. All new wastewater generated from General Plan land uses will be collected and transmitted via sewer. There will be no septic tanks or alternative waste water disposal systems utilized for new development planned under the General Plan. Therefore, this impact is considered **less than significant**.

Impact 3.6-6: General Plan implementation has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (Less than Significant)

DEFINITION OF SIGNIFICANCE FOR PALEONTOLOGICAL RESOURCES

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life;
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.
6. All identifiable vertebrate fossils are considered significant due to the rarity of their preservation.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and invertebrate animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important.

Although no significant paleontological resources have been recorded within the Plan Area, there could be fossils of potential scientific significance and other unique geologic features that remain undiscovered or are not recorded. ground-disturbing construction associated with development allowed under the proposed General Plan could uncover previously unknown resources. Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, state, or federal criteria. Implementation of the proposed General Plan actions would ensure steps would be taken to reduce impacts to paleontological resources in the event that they are discovered during construction. This General Plan Action would ensure this impact is ***less-than-significant***.

GENERAL PLAN MINIMIZATION MEASURES

ACTIONS

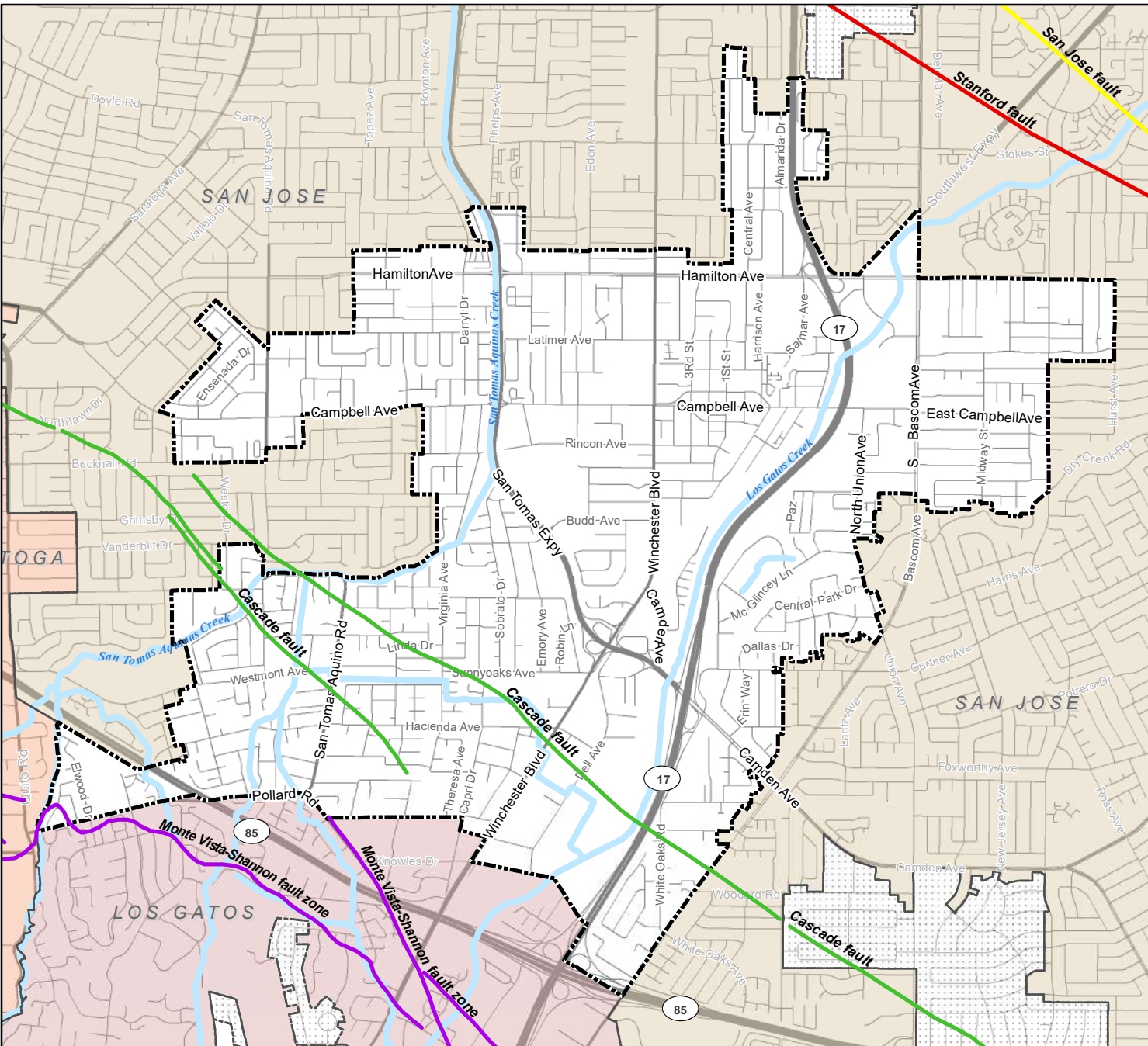
Action COS-6b *Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:*

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Planning Division shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Planning Division.*

This page left intentionally blank

**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

Figure 3.6-1. Earthquake Faults



Legend

Quaternary Faults*

- Cascade fault
- Monte Vista-Shannon fault zone
- San Jose fault
- Stanford fault

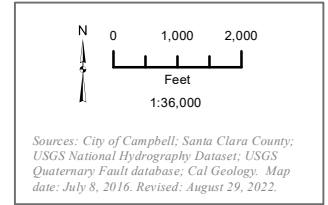
City of Campbell

Surrounding Areas

- City of San Jose
- City of Los Gatos
- City of Saratoga
- Unincorporated Santa Clara County

* A Quaternary fault is one that has been recognized at the surface and that has moved in the past 1,600,000 years (1.6 million years).

Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California. An active fault, for the purposes of Alquist-Priolo zoning, is one that has ruptured in the last 11,000 years. There are no Alquist-Priolo fault zones within the Campbell planning area.

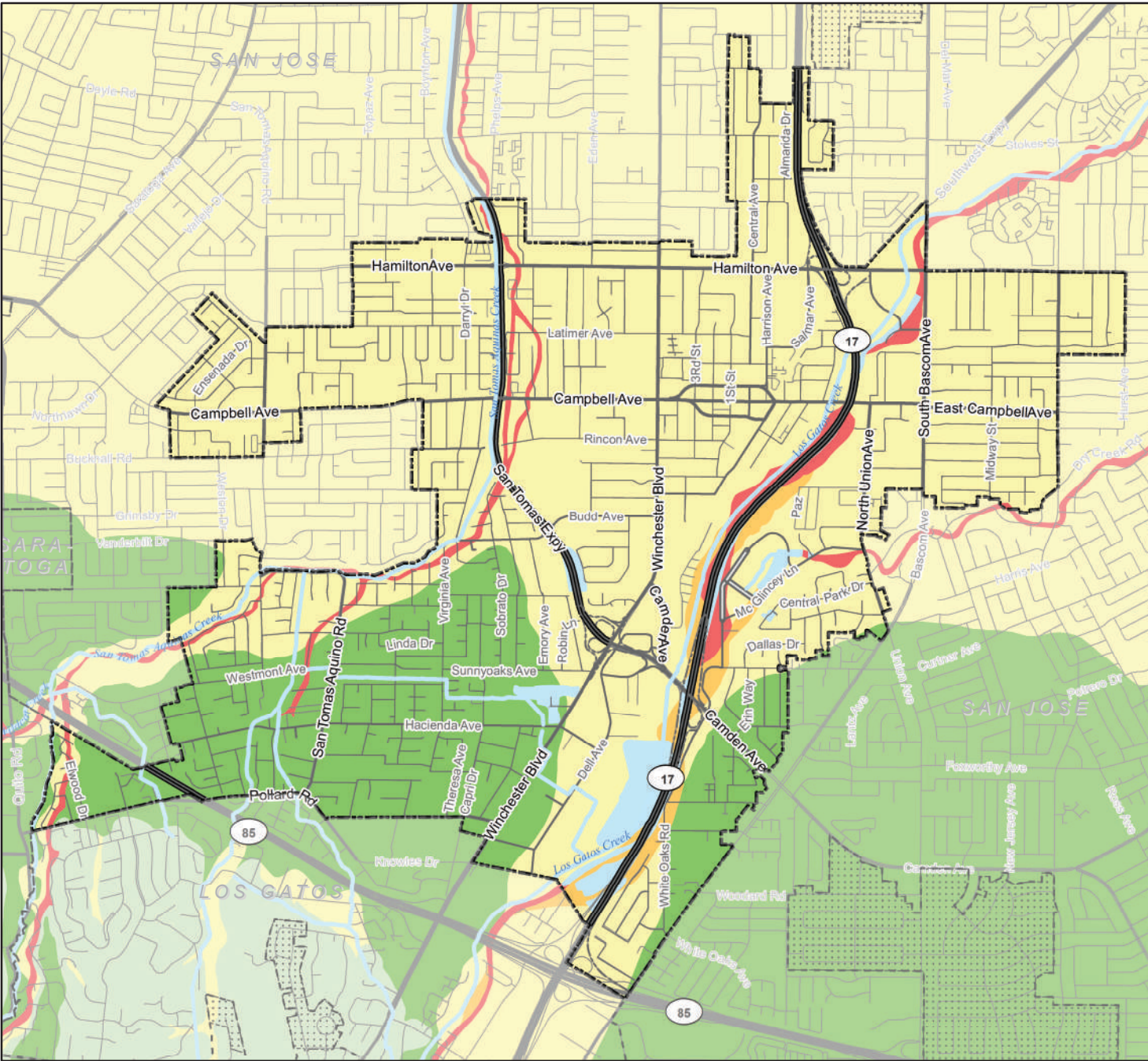


Sources: City of Campbell; Santa Clara County; USGS National Hydrography Dataset; USGS Quaternary Fault database; Cal Geology. Map date: July 8, 2016. Revised: August 29, 2022.

This page left intentionally blank

CITY OF CAMPBELL GENERAL PLAN UPDATE

Figure 3.6-2. Liquefaction Susceptibility



Legend

Liquefaction Susceptibility

- Very Low
- Low
- Moderate
- High
- Very High
- Water

City of Campbell

Surrounding Areas

- Cities: San Jose, Saratoga, Los Gatos
- Unincorporated Santa Clara County

N

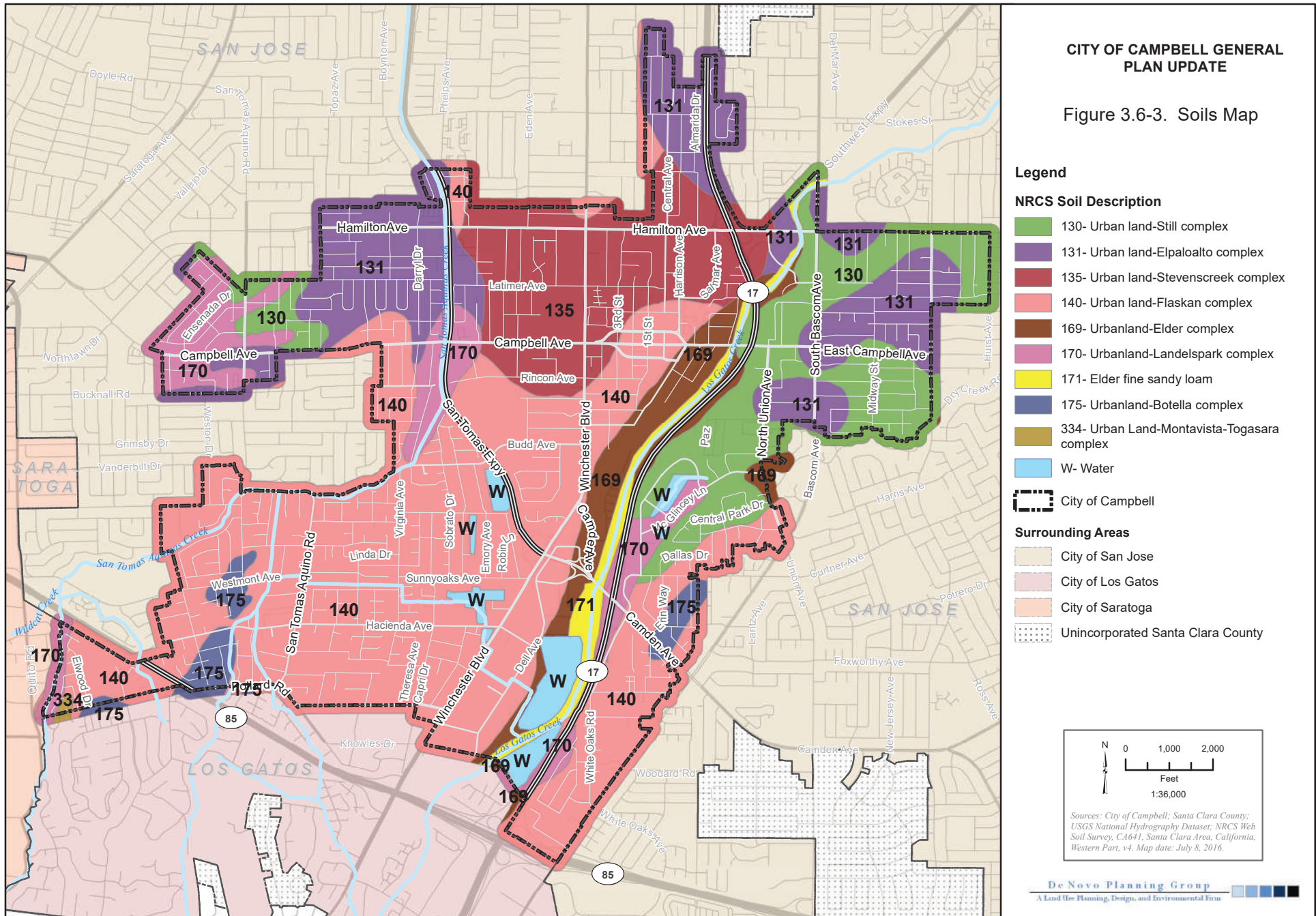
Feet
1:36,000

Sources: City of Campbell: Santa Clara County; USGS National Hydrography Dataset; U.S. Geological Survey Open-File Report 2006-1037, Version 1.1. Map date: July 8, 2016.

This page left intentionally blank

CITY OF CAMPBELL GENERAL PLAN UPDATE

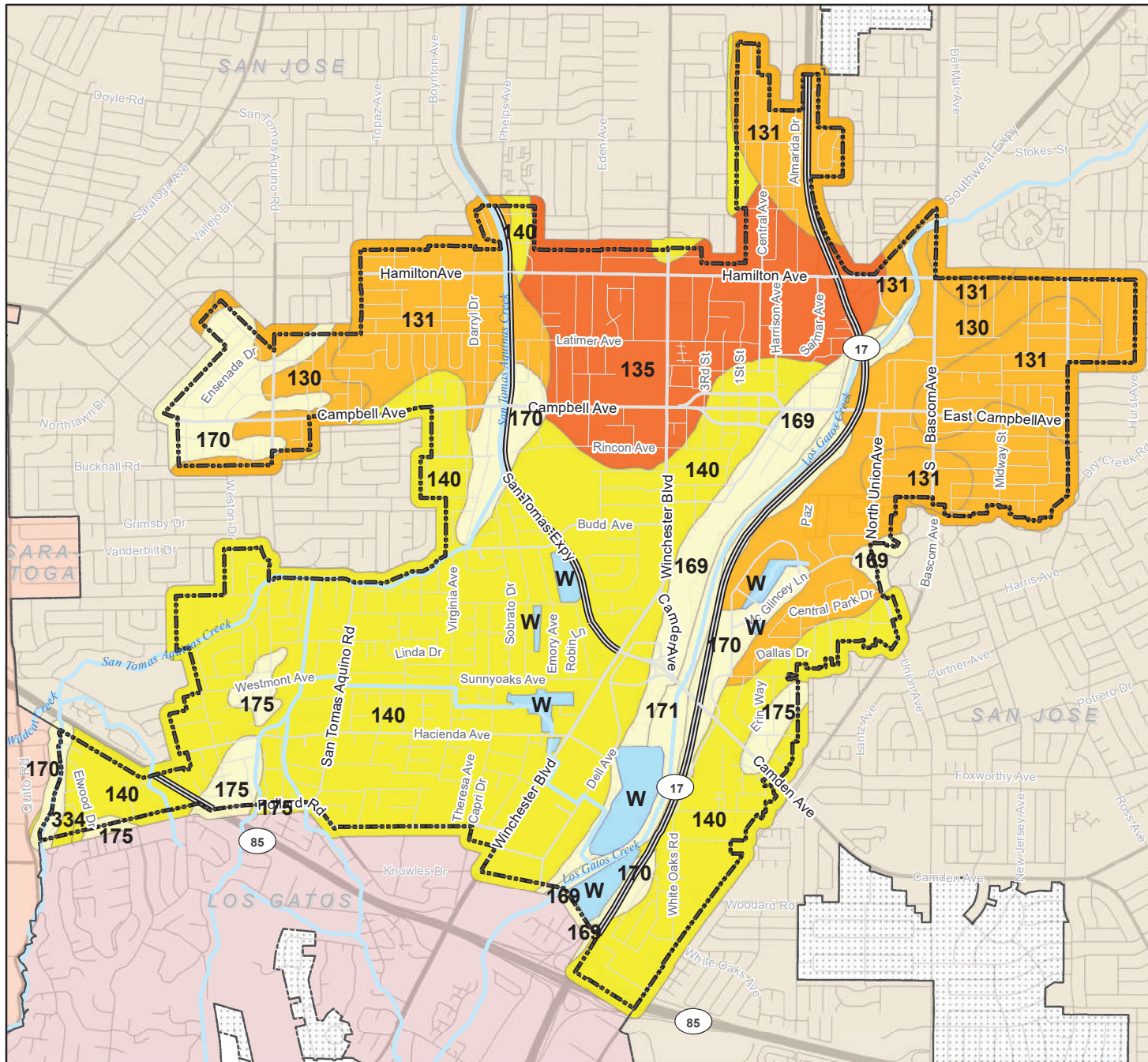
Figure 3.6-3. Soils Map



This page left intentionally blank

**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

**Figure 3.6-4.
Shrink-Swell Potential of Soils**



Legend

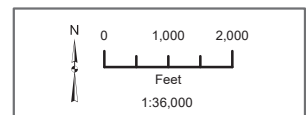
Shrink-Swell Potential of Soils*

- Low
- Low to Moderate
- Moderate
- Moderate to High
- N/A (water)
- City of Campbell

Surrounding Areas

- City of San Jose
- City of Los Gatos
- City of Saratoga
- Unincorporated Santa Clara County

* Shrink-swell potential is determined by the "linear extensibility" of the soil. Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change and is reported as a percent change for the whole soil. Shrink-swell potential is low if the soil has a linear extensibility of less than 3%; moderate if 3-6%; high if 6-9%; and very high if greater than 9%. Many of the soil types within the planning area are complexes, made up of more than one soil type, therefore the shrink-swell potential may span multiple categories. The map is labeled by soil type and may be cross-referenced with Figure 5.5-3.

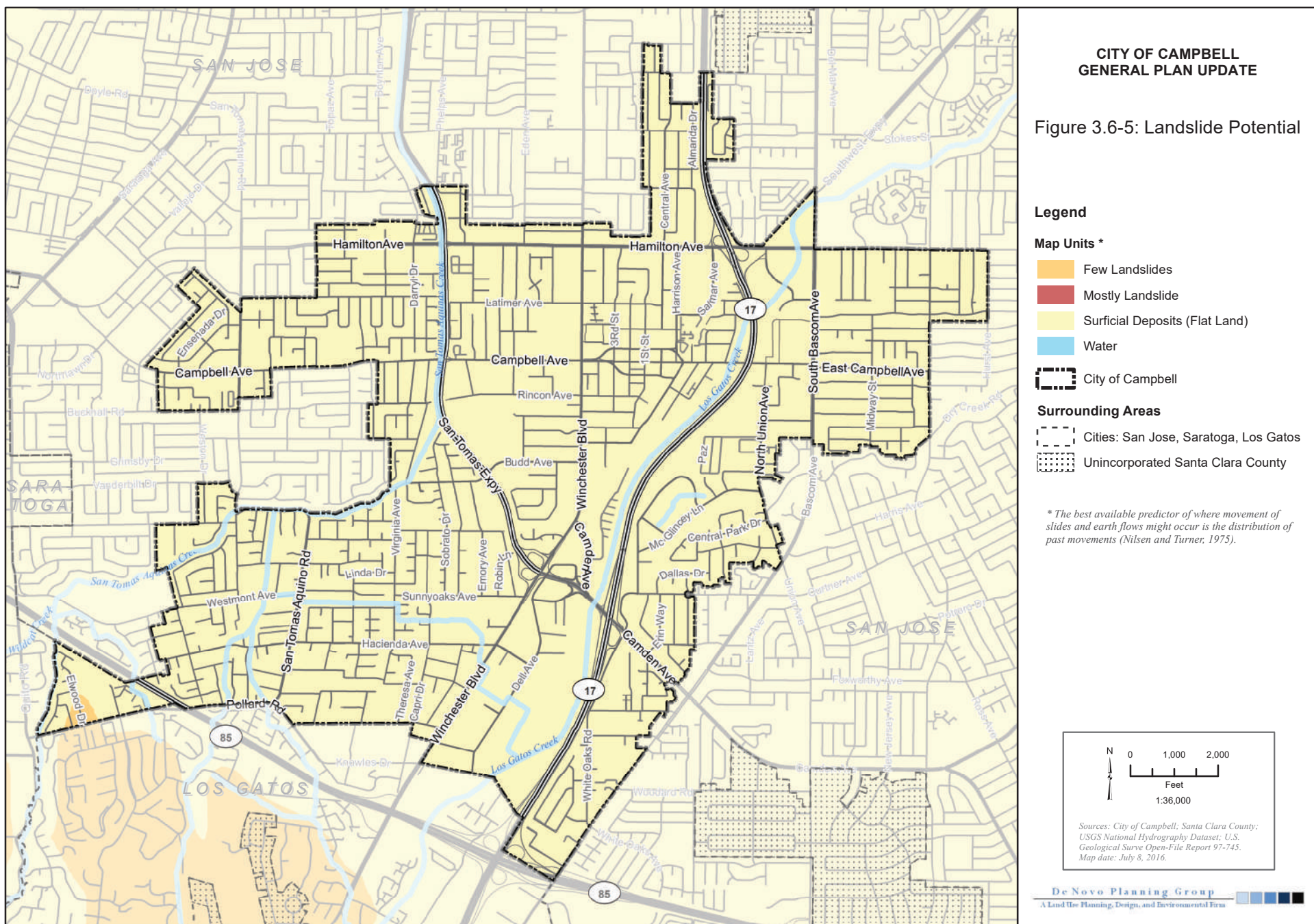


Sources: City of Campbell; Santa Clara County; USGS National Hydrography Dataset; NRCS Web Soil Survey, CA641, Santa Clara Area, California, Western Part, v4. Map date: July 8, 2016.

This page left intentionally blank

**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

Figure 3.6-5: Landslide Potential



This page left intentionally blank

This section discusses regional greenhouse gas (GHG) emissions, climate change, and energy conservation impacts that could result from implementation of the General Plan. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change. This section also provides background discussion on energy use in Campbell. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis.

The analysis and discussion of the GHG, climate change, and energy conservation impacts in this section focuses on the General Plan's consistency with local, regional, statewide, and federal climate change and energy conservation planning efforts and discusses the context of these planning efforts as they relate to the proposed project.

No comments were received during the NOP comment period regarding this environmental topic.

3.7.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO₂, CH₄, and N₂O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively (IPCC, 2013).

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors (California Energy Commission, 2020).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern,

3.7 GREENHOUSE GAS EMISSIONS

respectively. California produced 440 million gross metric tons of carbon dioxide equivalents (MMTCO₂e) in 2016 (California Air Resources Board, 2018a).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2019, accounting for 41 percent of total GHG emissions in the State. This category was followed by the industrial sector (24 percent), the electricity generation sector (including both in-State and out of-State sources) (14 percent), the agriculture sector (7 percent), the residential energy consumption sector (8 percent), and the commercial energy consumption sector (6 percent) (California Air Resources Board, 2022).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the State. The snowpack portion of the supply could potentially decline by 50 percent to 75 percent by the end of the 21st century (National Resources Defense Council, 2014). This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (California Environmental Protection Agency, 2010). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report (California Environmental Protection Agency, 2010), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25 percent to 35 percent under the lower warming range and to 75 percent to 85 percent under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major state fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25 percent of the water supply they need; decrease the potential for hydropower production within the state (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70 percent to 90 percent. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would

pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large of wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30 percent toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90 percent.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the state. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60 percent to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the higher warming scenario, sea level is anticipated to

rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. The San Francisco Bay is vulnerable to a range of natural hazards, including storms, extreme high tides, and rising sea levels resulting from climate change.

Rising seas put new areas at risk of flooding and increase the likelihood and intensity of floods in areas that are already at risk. The State's Sea Level Rise Guidance Document (2018) projects a "likely" (66 percent probability) increase in sea level at the San Francisco tide gauge of 10 inches by 2040. By the end of the century, sea levels are likely to rise by 2.4 feet under a low emissions scenario and 3.4 feet under a high emissions scenario. Flooding will be more severe when combined with storm events.

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are most widely used form of energy in the State. However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 60 percent of electricity generated from renewable resources by 2030, and to achieve zero-carbon emissions by 2045 (as passed in September 2018, under AB 100).

Overall, in 2019, California was the second-largest total energy consumer among the state, but its per capita energy consumption was less than in all other states except Rhode Island, due in part to its mild climate and its energy efficiency programs (U.S. EIA, 2022). Many State regulations since the 1970's, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of non-renewable energy (i.e. fossil fuels) associated with the operation of passenger, public transit, and commercial vehicles, results in GHG emissions that contribute to global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. In 2020, the State received approximately 30 percent of its electricity supply from outside the State. In 2020, wind energy and hydropower facilities each supplied about one-fifth of California's imported electricity. Other, unspecified sources supplied nearly one-fifth of imports. Nuclear energy and natural gas each accounted for more than one-tenth, and coal fueled less than one-tenth. Other renewable resources accounted for most of the rest. Although coal-fired power plants supplied approximately 9 percent of imports, coal's total contribution to the State's electricity supply from imports and in-state generation in 2020 was less than 3 percent (U.S. EIA, 2022). Renewable resources, including hydropower and small-

scale (less than 1-megawatt), customer-sited solar photovoltaic (PV) systems, supplied nearly half of California's total in-state electricity generation despite a decline in hydroelectric generation caused by drought. Natural gas-fired power plants provided more than two-fifths of the State's total net generation and about half of California's utility-scale generation. Nuclear power's share of in-state generation was less than one-tenth, down from nearly one-fifth in 2011 (U.S. EIA, 2022).

California's renewable portfolio standard (RPS), enacted in 2002 and revised several times since then, required that 33 percent of electricity retail sales in California come from eligible renewable resources by 2020. The State met that goal three years before the target date. The RPS also requires that 60 percent of electricity retail sales come from renewables by 2030, and 100 percent by 2045. By 2020, qualifying renewables generated an estimated 36 percent of the State's electricity retail sales (U.S. EIA, 2022). According to the California Energy Commission (CEC), total statewide electricity consumption was 272,576 gigawatt-hours (GWh) in 2020, down 2 percent from 2019. In 2020, electricity consumption in Santa Clara County was 16,435 GWh (California Energy Commission, 2022).

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2016, world consumption of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day. The transportation sector relies heavily on oil. In California, petroleum-based fuels currently provide approximately 96 percent of the State's transportation energy needs.

Natural Gas/Propane

California's natural gas production is less than one-tenth of the State's total end-use sector consumption. In 2020, about 34 percent of the natural gas delivered to California consumers went to the State's industrial sector, and about 30 percent went to the electric power sector, where it fuels about half of the State's utility-scale electricity generation. The residential sector, where two-thirds of California households use natural gas for home heating, accounted for 23 percent of natural gas use, and the commercial sector used about 12 percent. The transportation sector uses compressed natural gas vehicle fuel, and it consumed the remaining 1 percent (U.S. EIA, 2022). PG&E is the largest publicly-owned utility in California and provides natural gas for residential, industrial, and agency consumers within the Santa Clara County area, including the City of Campbell. In 2020, natural gas consumption in Santa Clara County was 419 million therms (California Energy Commission, 2022).

3.7.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (CAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The CAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, State attainment plans, motor National Ambient Air Quality Standards (NAAQS) vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the CAA. The CAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

On April 2, 2007, in the court case of *Massachusetts et al. vs. the USEPA et al.* (549 U.S. 497), the U.S. Supreme Court found that GHGs are air pollutants covered by the federal Clean Air Act (42 USC Sections 7401-7671q). The Supreme Court held that the Administrator of the United States Environmental Protection Agency must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the Administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing GHG emission standards for vehicles. In collaboration with the National Highway Traffic Safety Administration (NHTSA) and CARB, the USEPA developed emission standards for light-duty vehicles (2012-2025 model years), and heavy-duty vehicles (2014-2027 model years).

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, State, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate

Leaders”, and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

In 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO₂ per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial GHGs along with vehicle and engine manufacturers will report at the corporate level. An estimated 85 percent of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

STATE

The California Legislature has enacted a series of statutes in recent years addressing the need to reduce GHG emissions all across the State. These statutes can be categorized into four broad categories: (i) statutes setting numerical statewide targets for GHG reductions, and authorizing CARB to enact regulations to achieve such targets; (ii) statutes setting separate targets for increasing the use of renewable energy for the generation of electricity throughout the State; (iii) statutes addressing the carbon intensity of vehicle fuels, which prompted the adoption of regulations by CARB; and (iv) statutes intended to facilitate land use planning consistent with statewide climate objectives. The discussion below will address each of these key sets of statutes, as well as CARB “Scoping Plans” intended to achieve GHG reductions under the first set of statutes and recent building code requirements intended to reduce energy consumption.

Statutes Setting Statewide GHG Reduction Targets

Assembly Bill 32 (Global Warming Solutions Act)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006 (Health & Safety Code Section 38500 et seq.), also known as Assembly Bill (AB) 32 (Stats. 2006, ch. 488). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directs the California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

Senate Bill 32

SB 32 (Stats. 2016, ch. 249) added Section 38566 to the Health and Safety Code. It provides that “[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by [Division 25.5 of the Health and Safety Code], [CARB] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030.” In other

3.7 GREENHOUSE GAS EMISSIONS

words, SB 32 requires California, by 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

Between AB 32 (2006) and SB 32 (2016), the Legislature has codified some of the ambitious GHG reduction targets included within certain high-profile Executive Orders issued by the last two Governors. The 2020 statewide GHG reduction target in AB 32 was consistent with the second of three statewide emissions reduction targets set forth in former Governor Arnold Schwarzenegger's 2005 Executive Order known as S-3-05, which is expressly mentioned in AB 32. (See Health & Safety Code Section 38501, subd. (i).) That Executive Branch document included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several State agencies to cooperate in the development of a climate action plan. The Secretary of Cal-EPA leads the Climate Action Team, whose goal is to implement global warming emission reduction programs identified in the Climate Action Plan and to report on the progress made toward meeting the emission reduction targets established in the executive order.

In 2015, Governor Brown issued Executive Order, B-30-15, which created a “new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050.” SB 32 codified this target.

In 2018, the Governor issued Executive Order B-55-18, which established a statewide goal to “achieve carbon neutrality as soon as possible, and no later than 2045, and maintain and achieve negative emissions thereafter.” The order directs the CARB to work with other State agencies to identify and recommend measures to achieve those goals.

Notably, the Legislature has not yet set a 2045 or 2050 target in the manner done for 2020 and 2030 through AB 32 and SB 32, though references to a 2050 target can be found in statutes outside the Health and Safety Code. Senate Bill 350 (SB 350) (Stats. 2015, ch. 547) added to the Public Utilities Code language that essentially puts into statute the 2050 GHG reduction target already identified in Executive Order S-3-05, albeit in the limited context of new state policies (i) increasing the overall share of electricity that must be produced through renewable energy sources and (ii) directing certain State agencies to begin planning for the widespread electrification of the California vehicle fleet. Section 740.12(a)(1)(D) of the Public Utilities Code now states that “[t]he Legislature finds and declares [that] ... [r]educing emissions of [GHGs] to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050 will require widespread transportation electrification.” Furthermore, Section 740.12(b) now states that the California Public Utilities Commission (PUC), in consultation with CARB and the California Energy Commission (CEC), must “direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, ... and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050.”

Statute Setting Target for the Use of Renewable Energy for the Generation of Electricity

California Renewables Portfolio Standard

In 2002, the Legislature enacted Senate Bill 1078 (Stats. 2002, ch. 516), which established the Renewables Portfolio Standard program, requiring retail sellers of electricity, including electrical corporations, community choice aggregators, and electric service providers, to purchase a specified minimum percentage of electricity generated by eligible renewable energy resources such as wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. (See Pub. Utilities Code, Section 399.11 et seq. [subsequently amended].) The legislation set a target by which 20 percent of the State's electricity would be generated by renewable sources. (Pub. Utility Code, Section 399.11, subd. (a) [subsequently amended].) As described in the Legislative Counsel's Digest, Senate Bill 1078 required "[e]ach electrical corporation ... to increase its total procurement of eligible renewable energy resources by at least one percent per year so that 20 percent of its retail sales are procured from eligible renewable energy resources. If an electrical corporation fails to procure sufficient eligible renewable energy resources in a given year to meet an annual target, the electrical corporation would be required to procure additional eligible renewable resources in subsequent years to compensate for the shortfall, if funds are made available as described. An electrical corporation with at least 20 percent of retail sales procured from eligible renewable energy resources in any year would not be required to increase its procurement in the following year."

In 2006, the Legislature enacted Senate Bill 107 (Stats. 2006, ch. 464), which modified the Renewables Portfolio Standard to require that at least 20 percent of electricity retail sales be served by renewable energy resources by year 2010. (Pub. Utility Code, Section 399.11, subd (a) [subsequently amended].)

Senate Bill X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1) set even more aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State's electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, Section 399.11 et seq. [subsequently amended].)

SB 350, discussed above, increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, Section 399.11, subd (a); see also Section 399.30, subd. (c)(2).) Of equal significance, Senate Bill 350 also embodies a policy encouraging a substantial increase in the use of electric vehicles. As noted earlier, Section 740.12(b) of the Public Utilities Code now states that the PUC, in consultation with CARB and the CEC, must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, ... and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

Executive Order, B-16-12, issued in 2012, embodied a similar vision of a future in which zero-emission vehicles (ZEV) will play a big part in helping the State meet its GHG reduction targets. Executive Order B-16-12 directed State government to accelerate the market for in California through fleet replacement and electric vehicle infrastructure. The Executive Order set the following targets:

- By 2015, all major cities in California will have adequate infrastructure and be “ZEV ready”;
- By 2020, the State will have established adequate infrastructure to support 1 million ZEVs in California;
- By 2025, there will be 1.5 million ZEVs on the road in California; and
- By 2050, virtually all personal transportation in the State will be based on ZEVs, and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

In 2018, Senate Bill 100 (Stats. 2018, ch. 312) revised the above-described deadlines and targets so that the State will have to achieve a 50 percent renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60 percent target by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

In summary, California has set a statutory goal of requiring that, by 2030, 60 percent of the electricity generated in California should be from renewable sources, with increased generation capacity sufficient to allow the mass conversion of the statewide vehicle fleet from petroleum-fueled vehicles to electrical vehicles and/or other ZEVs. By 2045, all electricity must come from renewable resources and other carbon-free resources. Former Governor Brown had an even more ambitious goal for the State of achieving carbon neutrality as soon as possible and by no later than 2045. The Legislature is thus looking to California drivers to buy electric cars, powered by green energy, to help the State meet its aggressive statutory goal, created by SB 32, of reducing statewide GHG emissions by 2030 to 40 percent below 1990 levels. Another key prong to this strategy is to make petroleum-based fuels less carbon-intensive. A number of statutes in recent years have addressed that strategy. These are discussed immediately below.

Statutes and CARB Regulations Addressing the Carbon Intensity of Petroleum-based Transportation Fuels

Assembly Bill 1493, Pavley Clean Cars Standards

In 2002, the Legislature enacted Assembly Bill 1493 (“Pavley Bill”) (Stats. 2002, ch. 200), which directed the CARB to develop and adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks beginning with model year 2009. (See Health and Safety Code Section 43018.5.) In September 2004, pursuant to this directive, CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. These regulations created what are commonly known as the “Pavley standards.” In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. These regulations created what are

commonly known as the “Pavley II standards.” (See California Code of Regulations, Title 13, Sections 1900, 1961, and 1961.1 et seq.)

In 2012, CARB adopted an Advanced Clean Cars (ACC) program aimed at reducing both smog-causing pollutants and GHG emissions for vehicles model years 2017-2025. This historic program, developed in coordination with the USEPA and NHTSA, combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The regulations focus on substantially increasing the number of plug-in hybrid cars and zero-emission vehicles in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle technologies. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. (See California Code of Regulations, Title 13, Sections 1900, 1961, 1961.1, 1961.2, 1961.3, 1965, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2112, 2139, 2140, 2145, 2147, 2235, and 2317 et seq.)

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 34 percent below 2016 levels by 2025, all while improving fuel efficiency and reducing motorists’ costs.

Cap and Trade Program

In 2011, CARB adopted the final cap-and-trade program for California (See California Code of Regulations, Title 17, Sections 95801-96022.) The California cap-and-trade program creates a market-based system with an overall emissions limit for affected sectors. The program is intended to regulate more than 85 percent of California’s emissions and staggers compliance requirements according to the following schedule: (1) electricity generation and large industrial sources (2012); (2) fuel combustion and transportation (2015).

According to 2012 CARB guidance, “[t]he Cap-and-Trade Program will reduce GHG emissions from major sources (covered entities) by setting a firm cap on statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals. The statewide cap for GHG emissions from major sources, which is measured in metric tons of carbon dioxide equivalent (MTCO_{2e}), will commence in 2013 and decline over time, achieving GHG emission reductions throughout the program’s duration. Each covered entity will be required to surrender one permit to emit (the majority of which will be allowances, entities are also allowed to use a limited number of CARB offset credits) for each ton of GHG emissions they emit. Some covered entities will be allocated some allowances and will be able to buy additional allowances at auction, purchase allowances from others, or purchase offset credits.”

The guidance goes on to say that “[s]tarting in 2012, major GHG-emitting sources, such as electricity generation (including imports), and large stationary sources (e.g., refineries, cement production

facilities, oil and gas production facilities, glass manufacturing facilities, and food processing plants) that emit more than 25,000 MTCO₂e per year will have to comply with the Cap-and-Trade Program. The program expands in 2015 to include fuel distributors (natural gas and propane fuel providers and transportation fuel providers) to address emissions from transportation fuels, and from combustion of other fossil fuels not directly covered at large sources in the program's initial phase." In early April 2017, the Third District Court of Appeal upheld the lawfulness of the cap-and-trade program as a "fee" rather than a "tax." (See *California Chamber of Commerce et al. v. State Air Resources Board et al.* (2017) 10 Cal.App.5th 604.)

AB 398 (Stats. 2017, ch. 135) extended the life of the existing Cap and Trade Program through December 2030.

Statute Intended to Facilitate Land Use Planning Consistent with Statewide Climate Objectives

California Senate Bill 375 (Sustainable Communities Strategy)

This 2008 legislation built on AB 32 by setting forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHGs. The focus is to reduce miles traveled by passenger vehicles and light trucks. CARB is required to set GHG reduction targets for each metropolitan region for 2020 and 2035. Each of California's metropolitan planning organizations then prepares a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. Once adopted by the metropolitan planning organizations, the sustainable communities strategy is to be incorporated into that region's federally enforceable regional transportation plan. If a metropolitan planning organization is unable to meet the targets through the sustainable communities strategy, then an alternative planning strategy must be developed which demonstrates how targets could be achieved, even if meeting the targets is deemed to be infeasible.

Climate Change Scoping Plans

AB 32 Scoping Plan

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by Assembly Bill (AB) 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide-equivalent (CO₂e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario. (This is a reduction of 42 MMT CO₂e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e);

- the Low-Carbon Fuel Standard (15.0 MMT CO₂e);
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e); and
- a renewable portfolio standard for electricity production (21.3 MMT CO₂e).

CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017 (the *Final Scoping Plan*). The 2013 Update built upon the initial Scoping Plan with new strategies and recommendations, and also set the groundwork to reach the long-term goals set forth by the State. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has put California on track to meet the 2020 target.

With the passage of SB 32, the Legislature also passed companion legislation AB 197, which provides additional direction for developing the scoping plan. In response, CARB adopted an updated Scoping Plan in December 2017. The document reflects the 2030 target of reducing statewide GHG emissions by 40 percent below 1990 levels codified by SB 32. The GHG reduction strategies in the plan that CARB will implement to meet the target include:

- SB 350 - achieve 50 percent Renewables Portfolio Standard (RPS) by 2030 and doubling of energy efficiency savings by 2030;
- Low Carbon Fuel Standard - increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020);
- Mobile Source Strategy (Cleaner Technology and Fuels Scenario) - maintaining existing GHG standards for light- and heavy-duty vehicles, put 4.2 million zero-emission vehicles on the roads, and increase zero-emission buses, delivery and other trucks.
- Sustainable Freight Action Plan - improve freight system efficiency, maximize use of near-zero emission vehicles and equipment powered by renewable energy, and deploy over 100,000 zero-emission trucks and equipment by 2030;
- Short-Lived Climate Pollutant Reduction Strategy - reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and reduce emissions of black carbon 50 percent below 2013 levels by 2030;
- SB 375 Sustainable Communities Strategies - increased stringency of 2035 targets;
- Post-2020 Cap-and-Trade Program - declining caps, continued linkage with Québec, and linkage to Ontario, Canada;
- 20 percent reduction in GHG emissions from the refinery sector; and
- By 2018, develop an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

The 2017 Update relies on the preexisting programs paired with an extended, more stringent Cap-and-Trade Program, to deliver climate, air quality, and other benefits. The 2017 Update identifies new technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction goals.

CARB released the Draft 2022 Climate Change Scoping Plan for public review in May 2022 and anticipates adoption of the document in the second half of 2022. The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045.

Building Code Requirements Intended to Reduce GHG Emissions

California Energy Code

The California Energy Code (California Code of Regulations, Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency results in decreased GHG emissions because energy efficient buildings require less electricity and thus less consumption of fossil fuels, which emit GHGs. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The current 2019 Building Energy Efficiency Standards, commonly referred to as the "Title 24" standards, include changes from the previous standards that were adopted, to do the following:

- Provide California with an adequate, reasonably priced, and environmentally sound supply of energy.
- Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its GHG emissions to 1990 levels by 2020.
- Pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.
- Act on the California Energy Commission's Integrated Energy Policy Report, which finds that standards are the most cost-effective means to achieve energy efficiency, states an expectation that the Building Energy Efficiency Standards will continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Building Energy Efficiency Standards in reducing energy related to meeting California's water needs and in reducing GHG emissions.
- Meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of State building codes.
- Meet Executive Order S-20-04, the Green Building Initiative, to improve the energy efficiency of non-residential buildings through aggressive standards.

The most recent Title 24 standards are the 2019 Title 24 standards. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and

additions and alterations to, residential and nonresidential buildings. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. The California Energy Commission updates the standards every three years.

Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. This will reduce greenhouse gas emissions by 700,000 metric tons over three years, equivalent to taking 115,000 fossil fuel cars off the road. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades.

California Green Building Standards Code

The purpose of the California Green Building Standards Code (California Code of Regulations Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. The California Green Building Standards, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

- **Tier I:** 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.
- **Tier II:** 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

LOCAL

Bay Area Air Quality Management District (BAAQMD)

The BAAQMD attains and maintains air quality conditions in the SFBAAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the BAAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The BAAQMD also inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the FCAA, FCAAA, and the CCAA. For State air quality purposes, the Bay Area is classified as a serious nonattainment area of the 1-hour ozone standard. The “serious” classification triggers various plan submittal requirements and transportation performance standards. One such requirement is that the Bay Area update the Clean Air Plan every 3 years to reflect progress in meeting the air quality standards and to incorporate new information regarding the feasibility of control measures and new emission inventory data.

The *2017 Clean Air Plan: Spare the Air, Cool the Climate* (2017 Clean Air Plan) was adopted on April 19, 2019 by BAAQMD in cooperation with the Metropolitan Transportation Commission, the San Francisco Bay Conservation and Development Commission, and the Associate of Bay Area Governments (ABAG). The 2017 Clean Air Plan describes a multi-pollutant strategy to simultaneously reduce emissions and ambient concentrations of ozone, fine particulate matter, toxic air contaminants, as well as greenhouse gases that contribute to climate change. The 2017 Clean Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the 2017 Clean Plan describes how BAAQMD will continue our progress toward attaining all State and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other “super-GHGs” that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

BAAQMD CEQA Guidelines

The BAAQMD CEQA Air Quality Guidelines¹ were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for air toxics, odors, and greenhouse gas emissions. In June 2010, the BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of their CEQA Guidelines. In May 2011, the updated BAAQMD CEQA Air Quality Guidelines were amended to include a risk and hazards threshold for new receptors and modify procedures for assessing impacts related to risk and hazard impacts.

The thresholds were challenged in court. Following litigation in the trial court, the court of appeal, and the California Supreme Court, all of the thresholds were upheld. However, in an opinion issued on December 17, 2015, the California Supreme Court held that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards unless the project would exacerbate existing environmental hazards. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA.

In view of the Supreme Court's opinion, local agencies may rely on thresholds designed to reflect the impact of locating development near areas of toxic air contamination where such an analysis is required by CEQA or where the agency has determined that such an analysis would assist in making a decision about the project. However, the thresholds are not mandatory and agencies should apply them only after determining that they reflect an appropriate measure of a project's impacts.

The Guidelines for implementation of the thresholds are for information purposes only to assist local agencies. Recommendations in the Guidelines are advisory and should be followed by local governments at their own discretion. These Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or the Air District to any specific course of regulatory action.

The Air District published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion.

¹ Bay Area Air Quality Management District, 2017. *California Environmental Quality Act Air Quality Guidelines*. May.

Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans

The BAAQMD prepared their Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans (Report) in April 2022. The Report presents the BAAQMD’s recommended thresholds of significance for use in determining whether a proposed project will have a significant impact on climate change. The Air District recommends that these thresholds of significance be used by public agencies to comply with CEQA.

The BAAQMD recommends that cities and counties evaluate such plans based on whether they will be consistent with California’s long-term climate goal of achieving carbon neutrality by 2045. To be consistent with this goal, these plans should reduce GHG emissions in the relevant jurisdiction to meet an interim milestone of 40 percent below the 1990 emission levels by 2030, consistent with Senate Bill (SB) 32, and to support the State’s goal of carbon neutrality by 2045. Cities and counties planning to develop in a manner that is not consistent with meeting these GHG reduction targets will have a significant climate impact because they will hinder California’s efforts to address climate change. Specifically, in order to demonstrate a less-than-significant impact to climate change under the CEQA, the BAAQMD states that General Plans and related planning documents must demonstrate they the plan either: a) meets the State’s goal to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045; or b) is consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

Association of Bay Area Governments and Metropolitan Transportation Commission Bay Area Plan

Plan Bay Area 2050 was jointly adopted by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) in October 2021 and is the region’s Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS). The Bay Area Plan is a long-range regional plan for the nine-county San Francisco Bay Area, encompassing housing, economic, transportation, and environmental strategies designed to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges.

The Bay Area Plan is composed of 35 integrated strategies across the four elements that provide a blueprint for how the Bay Area can accommodate future growth and make the region more equitable and resilient in the face of unexpected challenges and achieve regional GHG emissions reduction targets established by CARB, pursuant to SB 375.

In summary, the Bay Area Plan:

- Details housing and economic strategies (“land use”) to invest \$702 billion in expected revenues to accommodate 2.7 million new persons, 1.4 million new households, 1.5 new forecasted housing units, and 1.4 million new jobs between 2015 and 2050;
- Details transportation strategies to invest \$579 billion in expected revenues from federal, State, regional, and local sources over the next 30 years;

- Details environmental strategies to invest \$102 billion in expected revenues to protect the region from at least two feet of future permanent sea level rise inundation, reduce climate emissions, and maintain and expand the region's parks and open space system; and
- Complies with Senate Bill (SB) 375, the State's SCS law, which requires integration of land use and transportation planning to reduce per-capita passenger vehicle GHG emissions by 2035 and provide adequate housing for the region's forecast of 2.7 million new persons and 1.4 million new households.

3.7.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Greenhouse Gas Emissions/Climate Change

Consistent with Appendix G of the State CEQA Guidelines, the project will have a significant impact related to greenhouse gases and climate change if it will:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Analysis Approach

The BAAQMD prepared their *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* (Report) in April 2022. The Report presents the BAAQMD's recommended thresholds of significance for use in determining whether a proposed project will have a significant impact on climate change. The Air District recommends that these thresholds of significance be used by public agencies to comply with CEQA.

The BAAQMD recommends that cities and counties evaluate such plans based on whether they will be consistent with California's long-term climate goal of achieving carbon neutrality by 2045. To be consistent with this goal, these plans should reduce GHG emissions in the relevant jurisdiction to meet an interim milestone of 40 percent below the 1990 emission levels by 2030, consistent with Senate Bill (SB) 32, and to support the State's goal of carbon neutrality by 2045. Cities and counties planning to develop in a manner that is not consistent with meeting these GHG reduction targets will have a significant climate impact because they will hinder California's efforts to address climate change

Specifically, in order to demonstrate a less-than-significant impact to climate change under the CEQA, the BAAQMD states that General Plans and related planning documents must demonstrate they the plan either: a) meets the State's goal to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045; and/or b) is consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

Energy Conservation

The proposed project would result in a significant impact on energy use if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

IMPACTS AND MITIGATION

Impact 3.7-1: Project implementation could generate greenhouse gas emissions that could have a significant impact on the environment and could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Significant and Unavoidable)

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the proposed project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO₂ and other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O), from mobile sources and utility usage.

Development that occurs because of implementation of the proposed project would include activities that emit greenhouse gas emissions over the short and long term. The City of Campbell does not have a Climate Action Plan or other current local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

Short-Term Emissions

Short-term GHG emissions would occur because of construction equipment used for the following: demolition, grading, paving, and building construction activities associated with future development and infrastructure projects that will be undertaken in Campbell over the buildout timeframe of the General Plan Update. GHG emissions would also result from worker and vendor trips to and from project sites and from demolition and soil hauling trips. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases.

Adoption of the proposed General Plan does not directly approve or otherwise entitle any new development projects or infrastructure improvement projects in Campbell. As such, the

construction-related GHG emissions of future projects cannot be known or quantified at this time, as it would be highly speculative. Typically, construction-related GHG emissions contribute unsubstantially (less than one percent) to a project's annual greenhouse gas emissions inventory and mitigation for construction-related emissions is not effective in reducing a project's overall contribution to climate change, given how small of a piece of the total emissions construction emissions are. Short-term climate change impacts due to future construction-related activities would be subject to State requirements for GHG emissions and would be assessed on project-by-project basis.

The General Plan Update includes policies and implementing measures that address short-term GHG emissions. For example, Policy COS-10.b requires the review of development, infrastructure, and planning projects for consistency with BAAQMD requirements during the CEQA review process, including requiring project applicants to prepare air quality analyses to address BAAQMD and General Plan requirements, which includes analysis and identification of:

- Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions;
- Potential exposure of sensitive receptors to toxic air contaminants;
- Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions; and
- Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Long-Term Emissions

Future development projects will result in continuous GHG emissions from mobile, area, and operational sources. Mobile sources, including vehicle trips to and from development projects, will result primarily in emissions of CO₂, with minor emissions of CH₄ and N₂O. The most significant GHG emission from natural gas usage will be methane. Electricity usage by future development and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO₂ emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas inventory for typical development projects.

Annual vehicle miles traveled (VMT) for 2016 and buildout year 2040 was provided from the project traffic consultant; refer to Section 4.14 (Transportation and Circulation). Table 3.7-1 identifies the VMT and population for the General Plan Update. Using 2016 as a baseline year, City of Campbell VMT attributable to the General Plan Update is anticipated to increase approximately 41.8 percent, while the population would increase approximately 52.0 percent. As shown in Table 3.7-1, VMT per capita would decrease with implementation of the General Plan Update.

3.7 GREENHOUSE GAS EMISSIONS

TABLE 3.7-1: PLANNING AREA VEHICLE MILES TRAVELED

SCENARIO	POPULATION	CITY OF CAMPBELL VMT	VMT PER PERSON
Existing (2016)	42,730	2,446,780	57.3
Proposed General Plan (2040)	64,930	3,468,760	53.4
Proposed General Plan Difference	+22,200 (+52.0%)	+1,021,980 (+41.8%)	-3.9 (-6.7%)

SOURCE: FEHR & PEERS, 2022

According to the CARB’s 2017 Climate Change Scoping Plan, the transportation sector remains the largest source of GHG emissions in the State, accounting for 37% of the inventory (CARB, 2017). A typical passenger vehicle emits approximately 4.6 metric tons of CO₂ per year (U.S. EPA, 2018). This number can vary based on a vehicle’s fuel, fuel economy, and the number of miles driven per year. The 0.8% reduction in VMT per service population (under buildout for the proposed General Plan compared with the buildout of the existing General Plan) would have a substantial reduction in per capita and per service population greenhouse gas emissions, respectively.

There are numerous General Plan goals, policies and implementing measures that would minimize potential impacts associated with GHG emissions in the Planning Area. Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the reduction of GHG emissions. The City of Campbell has prepared the General Plan to include numerous policies and actions intended to reduce GHG emissions associated with future development and improvement projects over the long-term. GHG emissions would be minimized through the implementation of the policies and actions listed below.

Proposed policies and actions would reduce GHG emissions by promoting a compact urban development form, emphasizing infill development, and ensuring that land use patterns do not expose sensitive receptors to pollutant concentrations. For example, proposed General Plan Update Land Use Element Policy LU-1.1 requires the provision of a broad range of land uses located in proximity to transit opportunities. LU-4.2 supports the continued development and intensification of employment centers throughout all non-residential areas. LU-4.6 encourages the location of high quality, professional office campuses, business parks, and industrial parks along with related mixed-use development. LU-6.5 promotes transit-oriented and mixed-use development throughout Downtown Campbell.

Additionally, the Transportation Element includes a wide range of policies and actions that would effectively reduce vehicle miles traveled per service population throughout the Planning Area, through the use of complete streets and multi-modal transportation systems. These applicable policies and actions are described in greater detail in Section 4.14 (Transportation and Circulation). For example, Proposed General Plan Update Transportation Element Policy T-1.1 requires the development and implementation of a connected multi-modal transportation network that balances transportation modes, encourages non-automobile travel, and reduces greenhouse gas emissions, while promoting healthier travel alternatives for all users and respecting context. Policy T-1.2 requires implementation of best practices to improve the pedestrian and bicycle environment. Policy T-1.3 ensures that the City’s circulation network is improved over time to support buildout of the General Plan. Policy T-2.1 requires participation in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell’s local

transportation system for local users. Policy T-3.2 requires implementation of VMT reduction measures, such as Transportation Demand Management (TDM) measures, and other strategies to reduce VMT in Campbell. Additionally, Policy T-4.1 requires new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use. Further, Policy T-6.3 requires coordinating pedestrian and bicycle facility improvements and “road diet” reconfigurations with pavement improvement projects (e.g. repaving and restriping) to the greatest extent feasible and while taking into consideration potential secondary effects or unintended impacts.

Additionally, the Proposed General Plan Update includes climate resiliency and adaptation policies and actions in the General Plan Safety Element. For example, Safety Element Policy SA-7.1 requires the consideration of climate change impacts and adaptive responses in long-term planning and current development decisions. Policy SA-7.3 encourages and supports private sector investment in climate adaptation through climate-resilient infrastructure such as onsite renewable energy, integrated stormwater management, and water conservation. Policy SA-7.4 promotes community awareness of climate-resilient actions that can be implemented by citizens and businesses, such as water conservation, on-site water collection, passive solar designs, and alternative energy strategies. Policy SA-7.5 ensures that climate impacts and climate adaptation measures aimed at reducing climate risks do not lead to disproportionately adverse effects on vulnerable populations. Policy SA-7.6 requires the consideration of the needs of vulnerable populations and individuals with limited mobility when planning for access to safe and comfortable shelter during extreme heat events or other severe weather events.

The City of Campbell is also a member agency of the Silicon Valley Clean Energy (SVCE). Silicon Valley Clean Energy was established as a Joint Powers Authority in March 2016 to provide residents and businesses with a new choice to the traditional utility model, which includes a community-controlled power supply that offers electricity from cleaner energy sources at competitive rates, through the creation of a new, nonprofit public agency. In late 2016, the Campbell City Council voted to enroll the City’s municipal electricity accounts in Silicon Valley Clean Energy’s optional GreenPrime program starting April 2017. The electricity to run City-owned facilities, parks, and streetlights, comes from 100% renewable sources like wind and solar. The SVCE program is also available to Campbell residents and business. According to the SVCE City of Campbell 2021 Community Impact summary, 20,100 households and businesses receive carbon-free electricity through the SVCE program. SVCE reports that this has resulted in a 35% reduction in energy-related annual GHG emissions in Campbell compared to 2015.

General Plan Action COS-10.c requires the City to COS-10.c prepare a Climate Action Plan that establishes GHG reduction targets that are consistent with Statewide GHG reduction goals, and includes an implementation program to achieve the reduction targets. This action also requires the City to periodically review and update the Plan as necessary to achieve the GHG reduction targets specified in the Plan.

3.7 GREENHOUSE GAS EMISSIONS

The full list of General Plan Update goals, policies, and implementing measures that minimize potential GHG impacts is provided below.

As described in the analysis above, the City has taken notable steps to reduce electricity-related GHG impacts through extensive participation in the SVCE program, and has implemented a comprehensive approach to reduce mobile-source GHG emissions through efforts to reduce VMT through multimodal transportation improvements, including increased transit ridership, and the promotion of a compact and mixed-use urban form. The City has also committed to the preparation and adoption of a Climate Action Plan that would meet Statewide GHG reduction goals.

However, there is no guarantee that implementation of the General Plan Update would ensure that the City of Campbell would be consistent with California’s long-term climate goal of achieving carbon neutrality by 2045. Therefore, potential impacts to GHGs would be considered **significant and unavoidable**.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

LU-1.1 Provide for a broad range of land uses within the City that are conveniently located in proximity to transit opportunities, and provide for commercial, public, and quasi-public uses that support and enhance the livability of residential neighborhoods and districts.

LU-4.2 Support the continued development and intensification of employment centers throughout all non-residential areas.

LU-4.6 Encourage the location of high quality, professional office campuses, business parks, and industrial parks along with related mixed-use development, where appropriate within the City.

LU-6.5 Promote transit-oriented and mixed-use development throughout Downtown Campbell.

TRANSPORTATION ELEMENT POLICIES

T-1.1 Develop and implement a connected multi-modal transportation network that balances transportation modes, encourages non-automobile travel, and reduces greenhouse gas emissions, while promoting healthier travel alternatives for all users and respecting context.

T-1.2 Implement best practices to improve the pedestrian and bicycle environment.

T-1.3 Ensure that the City’s circulation network is improved over time to support buildout of the General Plan.

T-2.1 Participate in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell’s local transportation system for local users.

T-2.2 Support regional transportation funding measures.

- T-3.2 Implement VMT reduction measures, such as Transportation Demand Management (TDM) measures, and other strategies to reduce VMT in Campbell.
- T-3.3 Provide infrastructure improvements to manage regional traffic and to reduce congestion on area roadways.
- T-3.4 Support programmatic Transportation Demand Management (TDM) measures to reduce traffic demand in Campbell. Examples include but are not limited to measures such as alternative work schedules, subsidized transit passes, and future measures as programs and technologies evolve.
- T-4.1 Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.
- T-4.2 Require new developments and redevelopments to use best practices in providing pedestrian and bicycle connections between the sites and existing and planned facilities, including those identified in the Bicycle Master Plan, Pedestrian Master Plan, and other relevant plans and documents.
- T-6.3 Coordinate pedestrian and bicycle facility improvements and “road diet” reconfigurations with pavement improvement projects (e.g. repaving and restriping) to the greatest extent feasible and while taking into consideration potential secondary effects or unintended impacts.

TRANSPORTATION ELEMENT ACTIONS

- T-1.a Create a complete streets implementation guide to reflect General Plan complete street policies, including sidewalk standards, bike facility standards, Americans with Disabilities Act (ADA) requirements, lighting standards, and landscaping requirements. The guide shall include updated streetscape standards for the City’s image streets: Hamilton Avenue, Bascom Avenue, Winchester Boulevard, and parts of West Campbell Avenue.
- T-1.b Design roadway space and intersections for a variety of users, including motor vehicles, transit vehicles, bicycles, pedestrians, and future travel modes, when constructing or modifying these facilities.
- T-1.c Prepare a Bicycle Master Plan to achieve a bike network that eliminates gaps where possible and creates a safe, convenient, low-stress system that connects bicyclists of all levels and abilities to destinations throughout the City.
- T-1.d Construct improvement projects identified in the Bicycle Master Plan.
- T-1.e Provide adequate public bike parking facilities throughout the City, including all public facilities and trail heads.

3.7 GREENHOUSE GAS EMISSIONS

- T.1.f Develop and implement a Pedestrian Master Plan to provide a safe and convenient pedestrian network connecting neighborhoods with destinations throughout the City and that is consistent with the City's ADA Implementation Plan. The Pedestrian Master Plan should include Safe Routes to School policies and procedures and evaluate enhancing Downtown public alleyways for pedestrian use.
- T.1.h Improve pedestrian and bicycle access to bus and light rail stations when evaluating opportunities with new development proposals and capital improvement projects. In cooperation with VTA, evaluate transit-waiting environments to improve convenience and comfort.
- T.1.i Prepare a multimodal improvement plan to support buildout of the General Plan, update the City's Capital Improvement Program (CIP) to include, as appropriate, the identified improvements, and create and adopt a multimodal transportation impact fee (TIF) program to provide funding for the remaining improvements.
- T.1-j Seek opportunities to utilize light rail transit and railroad rights-of-way for enhanced bicycle and pedestrian connectivity.
- T.1.k Provide continuing education to members of the City's Bicycle and Pedestrian Advisory Committee (BPAC) on Complete Streets best practices and policies.
- T-2.a Participate in intergovernmental activities related to regional and sub-regional transportation planning to advance the City's interests.
- T.2-b Support the efforts of the Santa Clara Valley Transportation Authority (VTA), the Metropolitan Transportation Commission, and other agencies to coordinate transit planning and transit services in the South Bay and the entire Bay Area.
- T.2-c Cooperate with the VTA, surrounding communities, and other agencies to establish and maintain regional bicycle and pedestrian facilities including off-road paths and trails utilizing creek, utility, and railroad rights-of-way that are safe and convenient for commuting and recreational use.
- T-2.d Participate in regional initiatives to reduce traffic demand and construct infrastructure improvements to manage regional traffic (for example High Occupancy Vehicle "HOV" lanes and express lanes and freeway information systems) to reduce congestion on Campbell roadways.
- T-3.b Incentivize high-density transit-oriented developments, consistent with the Land Use Map, near light rail stations.
- T-3e Consider implementation of traffic calming measures to ensure safe and reasonable speeds in residential neighborhoods, consistent with the City's adopted Neighborhood Traffic Management Program (NTCP), as long as the measures do not impede emergency response, bicycle travel, or hinder the complete streets functionality of the roadway. Methods such as radar speed signs may be used to alert drivers on streets where speeding is prevalent.

- T-3.g Support and encourage effective programmatic Transportation Demand Management (TDM) measures for private developments consistent with proposed uses. These could include, but are not limited to, measures such as alternative work schedules, subsidized transit passes, and future measures as programs and technologies evolve. Encourage major employers (employers with over 100 employees) to develop shuttle services to transport employees to and from the worksite. Entities may form transportation management associations (TMAs) to pool resources to fund TDM measures.
- T-3.i Advertise ways to travel to and within Campbell via transit, biking, walking, and other modes that reduce traffic. Potential methods of advertisement may include, but are not limited to:
- Information and links on the City’s website;
 - Wayfinding signs indicating routes and travel times by mode of transit;
 - Postings and flyers at public buildings, parks facilities, and transit stops; and
 - Other methods and strategies that the City determines will be successful and cost effective.
- T-3j Create and adopt a VMT reduction program and adopt a VMT mitigation fee program to provide funding for the improvements identified in the VMT reduction program. The VMT reduction program should include strategies targeting VMT reductions at the site level, community level, and regional level; should be based on emerging best practices; and should leverage and compliment ongoing regional efforts to reduce VMT.
- T-4.a Require developers to make public improvements related to their project to improve and enhance bicycle, pedestrian, and transit opportunities along the site’s frontage consistent with City policy.
- T-4.e Incorporate pedestrian amenities such as plazas, landscaped areas with seating, and pedestrian walkways into new developments.
- T-4.f Require new or redevelopment projects to provide logical, safe, and well-designed bicycle and pedestrian connections, with wayfinding signage, onsite between building entrances, parking areas, and walkways, and to existing or planned public right-of-way facilities that minimize public nuisance concerns as part of the Objective Standards update. Connect dead-end streets with pedestrian and bicycle paths in new developments.
- T-4.g Require new or redevelopment projects to work with adjacent neighborhoods and jurisdictions to provide logical, safe, and well-designed bicycle and pedestrian connections that minimize public nuisance concerns.
- T-4.h Maintain short-term and long-term bicycle parking standards over and above State minimum standards to provide ample bicycle parking in new developments as part of the

3.7 GREENHOUSE GAS EMISSIONS

City's efforts to facilitate multimodal transportation options and reduce vehicle miles traveled.

- T-4.k For new businesses with 100 or more full-time employees, require Transportation Demand Management (TDM) related site design measures such as showers and changing facilities, designated carpool and van pool parking, and on-site amenities (e.g. food service, fitness center, ATM). Require TDM reports per the Campbell Municipal Code.
- T-6.e Where feasible, coordinate pedestrian and bicycle facility improvements and "road diet" reconfigurations with roadway maintenance activities so that they can be implemented in a cost-effective manner.
- T-6.h Street maintenance should include upkeep and regular cleaning of bicycle routes to remove debris and repair poor pavement conditions that discourage bicycle riding.

COMMUNITY DESIGN ELEMENT POLICIES

- CD-2.5 Encourage passive solar design and energy-efficient concepts, including, but not limited to natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities.

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

- COS-8.1 Require all development projects to comply with the mandatory energy efficiency requirements of the California Green Building Standards Code (CALGreen) and Building and Energy Efficiency Standards.
- COS-8.2 Support and encourage the implementation of innovative and green building best management practices including, but not limited to, sustainable site planning, solar opportunities, LEED certification for new development, the local adoption of Reach Codes, and incorporation of net zero energy development standards in the California Code of Regulations (CCR), Title 24, if feasible.
- COS-8.3 Promote City operations as a model for energy efficiency and green building and install, as feasible, energy-efficient lighting, appliances, and alternative-energy infrastructure in City facilities.
- COS-8.4 Pursue the use of alternative energy and fuel-efficient City vehicles and equipment that meet or surpass state emissions requirements, to the extent feasible.
- COS-8.5 Continue to participate in Silicon Valley Clean Energy (SVCE) whereby city-owned facilities, parks, and streetlights will run on 100% renewable energy sources like wind and solar, and motivate and encourage Campbell residents and businesses to participate in Silicon Valley Clean Energy (SVCE) to reduce greenhouse gas emissions and support statewide alternative energy use.

- COS-8.6 Coordinate with Pacific Gas and Electric Company (PG&E) to increase public awareness of electrical and natural gas conservation practices and programs, such as rebate programs and energy efficiency audits.
- COS-8.7 Expand water conservation, reuse, and recycling efforts throughout the City in order to meet the conservation goals established by the San Jose Water Company's adopted Urban Water Management Plan and the Campbell Climate Action Plan once adopted.
- COS-8.8 Encourage all public and private landscaping in new development and renovation projects to be designed to reduce water demand, prevent runoff, decrease flooding, and recharge groundwater through the installation of irrigation systems, the selection of appropriate plant material, and proper soil preparation.
- COS-8.9 Maintain and enhance the health of the groundwater basin by encouraging new groundwater recharge opportunities, promoting the use of permeable surface materials, providing ample areas of open space in order to decrease surface runoff and promote groundwater recharge, and through the use of other LID techniques, such bioswales, where feasible.
- COS-8.10 Support the use of on-site rainwater harvesting/catchment systems and small-scale recycled water systems for new and existing development.
- COS-8.11 Support the use and installation of on-site grey water reuse systems.
- COS-10.1 Improve air quality through continuing to require a development pattern that focuses growth in and around existing urbanized areas, locates new housing near places of employment, encourages alternative modes of transportation, supports efficient parking strategies, reduces vehicle miles traveled, and requires projects to mitigate significant air quality impacts.
- COS-10.2 Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.
- COS-10.3 Minimize exposure of sensitive receptors to concentrations discretionary projects involving sensitive receptors (i.e., children, the elderly, or people with illnesses) proposed within 500 feet of State Route 17 or State Route 85, require an analysis of mobile source toxic air contaminant health risks and, if necessary, incorporate appropriate mitigation measures to reduce health risks to the greatest extent feasible.
- COS-10.4 Require projects to adhere to the requirements of the Bay Area Air Quality Management District (BAAQMD), including standards related to fireplaces, wood stoves, heaters, dust control, and abatement measures.
- COS-10.5 Reduce adverse air quality impacts of municipal operations.

3.7 GREENHOUSE GAS EMISSIONS

COS-10.6 Use the City's development review process and the California Environmental Quality Act (CEQA) to evaluate and mitigate the local and cumulative effects of new development on air quality.

COS-10.7 Coordinate with the California Air Resources Board (CARB) and the Bay Area Air Quality Management District to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

COS-10.8 Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.

COS-10.9 Coordinate with Santa Clara County and nearby cities to implement regional GHG reduction plans and consolidate efforts to reduce GHGs throughout the county.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-8.a Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the General Plan and the Campbell Municipal Code.

COS-8.b Participate in regional energy management and conservation efforts and encourage the expanded use of energy efficient and alternative fuels, buses with bike racks, and other system improvements including infrastructure for alternative energy vehicles that enhance overall energy efficiency and conservation.

COS-8.c Continue to offer reduced permit fees and expedited permit applications on solar installation projects and promote State, federal, and private rebate programs.

COS-8.d Consider use of alternative fuel vehicles or electric vehicles for City use. If deemed appropriate, identify vehicle purchase needs in the City's Fleet Replacement Plan.

COS-8.e Encourage a reduction in residential water usage through plumbing retrofits with ultralow-flush toilets, leak detection and repair, and other programs offered through the City's water service providers.

COS-8.f Establish standards for onsite rainwater capture and storage. Standards should include size and placement requirements for above ground storage tanks, and requirements for underground water tank storage.

COS-8.g Consider appropriate incentives for new developments incorporating rainwater capture, and grey water re-use systems. Incentives may include:

- Permit fee reductions
- Reduced setback requirements

- COS-8.h Provide public information and school education programs including “water-wise” demonstration gardens, seasonal reminders in utility bills and free literature regarding water conservation.
- COS-8.i Provide a conservation page (or similar page) on the City’s website that provides links to resource agencies and provides information regarding local and regional conservation and environmental programs, to the extent that the City has readily available information, including recycling guidance for single family residences, businesses, and apartments, opportunities for reuse of materials, a description of how to compost, and a description of methods to reduce water use, such as appropriate reuse and recycling of water, water conservation measures, and xeriscaping.
- COS-8.j Work with the City’s water service providers to advertise water conservation and recycling programs for residential, commercial, industrial, and institutional users.
- COS-8.k Encourage efforts to reduce landscape water usage through landscape irrigation audits, water-efficient landscape awards programs, and landscape conservation programs offered through the City’s water service providers.
- COS-8.l Continue to require new development and remodels to follow the City’s Water Efficient Landscaping Guidelines and Landscape Requirements as defined in Chapter 21.26 of the Municipal Code.
- COS-8.m Work with the City’s water service providers to encourage the construction of additional infrastructure in the City for the use of reclaimed water for non-potable uses.
- COS-8.n Coordinate with and support the Santa Clara Valley Water District’s groundwater recharge projects, and pursue mutually beneficial agreements that identify and implement groundwater recharge projects within Campbell.
- COS-10a Review all new industrial and commercial development projects for potential air quality impacts to residences and other sensitive receptors. The City shall ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants. Adopt an ordinance codifying these requirements into the Campbell Municipal Code.
- COS-10.b Review development, infrastructure, and planning projects for consistency with BAAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address BAAQMD and General Plan requirements, which includes analysis and identification of:
- Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions;
 - Potential exposure of sensitive receptors to toxic air contaminants;

3.7 GREENHOUSE GAS EMISSIONS

- Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions; and
- Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

COS-10.c Prepare a Climate Action Plan that establishes GHG reduction targets that are consistent with Statewide GHG reduction goals, and includes an implementation program to achieve the reduction targets. Periodically review and update the Plan as necessary to achieve the GHG reduction targets specified in the Plan.

COS-10.d Encourage improvements such as bus turnouts and synchronized traffic signals for new development to reduce excessive vehicle emissions caused by idling.

COS-10.e Continue implementation of the City's Municipal Code Chapter 18.70, Woodburning Appliances, in order to improve and maintain air quality conditions in the City and enhance the health and quality of life of its citizens.

COS-10.f Require adequate buffering or other mitigation of all potential air pollutant sources, including commercial and industrial emissions.

COS-10.g Assist the BAAQMD and Santa Clara County in their efforts to achieve compliance with existing air quality regulations.

COS-10.h Assess the adequacy of environmental documents for projects proposed in the City utilizing the thresholds established in the BAAQMD guidelines.

SAFETY ELEMENT POLICIES

SA-7.1 Consider climate change impacts and adaptive responses in long-term planning and current development decisions.

SA-7.2 Ensure that emergency response plans and training programs continue to evolve and are modified in order to protect residents, infrastructure, and facilities during emergencies and extreme weather events.

SA-7.3 Encourage and support private sector investment in climate adaptation through climate-resilient infrastructure such as onsite renewable energy, integrated stormwater management, and water conservation.

SA-7.4 Promote community awareness of climate-resilient actions that can be implemented by citizens and businesses, such as water conservation, on-site water collection, passive solar designs, and alternative energy strategies.

SA-7.5 Ensure that climate impacts and climate adaptation measures aimed at reducing climate risks do not lead to disproportionately adverse effects on vulnerable populations.

SA-7.6 Consider the needs of vulnerable populations and individuals with limited mobility when planning for access to safe and comfortable shelter during extreme heat events or other severe weather events.

SAFETY ELEMENT ACTIONS

SA-7.a When updating master plans for infrastructure, including water supply, flood control and drainage, and critical facilities, review relevant climate change scenarios and ensure that the plans consider the potential effects of climate change and include measures that provide for resilience to climate impacts.

SA-7.b Upon the next revision to the Campbell Emergency Operations Plan (EOP), identify and designate public buildings, specific private buildings, or institutions with air conditioning as public cooling shelters. Extend hours at air-conditioned sites during periods of extreme heat or power outage and ensure sites are also supported by backup battery storage or generators.

SA-7.c Periodically assess and monitor the effects of climate change and the associated levels of risk in order to adapt to changing climate conditions.

SA-7.d Collaborate with utility providers to ensure that infrastructure and resource management plans account for anticipated climate change impacts.

SA-7.e Implement the policies and actions in the Community Services and Facilities and Conservation Elements that promote water and energy efficiency and conservation in new capital projects, expansions, and retrofits to civic buildings and infrastructure.

SA-7.f Utilize the Silicon Valley 2.0 Climate Adaptation Guidebook (or its successor document) as a resource tool when undertaking communitywide planning efforts, including updates to infrastructure plans.

Impact 3.7-2: Project implementation has the potential to result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Less than Significant)

The State CEQA Guidelines require consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix G of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, a project would be considered “wasteful, inefficient, and unnecessary” if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness

of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project is the updated Campbell General Plan. Buildout of the General Plan includes residential, commercial, office, industrial, mixed-use, open space, and other land uses (see Chapter 2.0: Project Description for further detail). The amount of energy used in the Planning Area at buildout would directly correlate to the type and size of development, the energy consumption associated with unit appliances, outdoor lighting, and energy use associated with other buildings and activities. Other major sources of Planning Area energy consumption include fuel used by vehicle trips generated during construction and operational activities, and fuel used by off-road and on-road construction vehicles during construction. The following discussion provides a breakdown of the energy uses in the Planning Area upon buildout of the proposed project.

Electricity and Natural Gas

At buildout, the City of Campbell's electricity and natural gas consumption would be used primarily to power buildings (all types of buildings, including residential, commercial, office, industrial, public, etc.). Electricity would primarily come from the electricity utility provider (e.g. PG&E), though on-site solar generation would generate a substantial source of energy for the community at General Plan buildout.

Fuel Consumption - On-Road Vehicles (Operation)

Buildout of the General Plan would generate vehicle trips during its operational phase. Based on the traffic study prepared for the proposed project (Fehr & Peers, 2022), the Planning Area at buildout is anticipated to have approximately 3,468,760 VMT. Fuel consumption is anticipated to represent the largest sector of GHG emissions at General Plan buildout. Energy for on-road vehicles would derive from gasoline, diesel, as well as electricity from PG&E and from on-site solar generation.

Fuel Consumption - On-Road Vehicles (Construction)

The proposed project would also generate on-road vehicle trips during construction activities (from construction workers, vendors, and haulers). The vast majority of on-road mobile vehicle fuel used during the construction activities during buildout of the General Plan would occur during building construction.

Off-Road Vehicles (Construction)

Off-road construction vehicles would use diesel fuel during construction activities. A non-exhaustive list of off-road constructive vehicles expected to be used during construction activities includes: cranes, forklifts, generator sets, tractors, excavators, and dozers.

Conclusion

Buildout of the General Plan would use energy resources for the operation of buildings (electricity and natural gas), for on-road vehicle trips (e.g. gasoline and diesel fuel), and from off-road construction activities (e.g. diesel fuel) associated with buildout of the General Plan. Each of these activities would require the use of energy resources. Developers of individual projects within the Planning Area would be responsible for conserving energy, to the extent feasible, and would rely heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

Buildout of the General Plan would be in compliance with all applicable federal, state, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio.

PG&E is expected to achieve at least 60% renewables by 2030, and 100 percent zero-carbon electricity by 2045 (in compliance with SB 100). Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards (“part 6”), would be applicable to the proposed project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Furthermore, additional project-specific sustainability features individual development projects could further energy consumption of individual projects. The proposed project would also be in compliance with the planning documents described previously within this section.

As a result, the proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for during General Plan buildout, including during construction, operations, maintenance, and/or removal. PG&E, the electricity and natural gas provider to the site, maintains sufficient capacity to serve the Planning Area. The City of Campbell would comply with all existing energy standards, and would not result in significant adverse impacts on energy resources. Furthermore, connections exist between the Planning Area and nearby pedestrian and bicycle pathways, and public transit access exists nearby, reducing the need for local motor vehicle travel. Although improvements to the City’s pedestrian, bicycle, and public transit systems would provide further opportunities for alternative transit, the Planning Area would be linked closely with existing networks that, in large part, are sufficient for most residents of the Planning Area and neighboring communities. For the reasons stated above, buildout of the General Plan would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This is a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

See the Goals, Policies, and Implementation Measures provided under Impact 3.7-1.

Hazards include man-made or natural materials or man-made or natural conditions that may pose a threat to human health, life, property, or the environment. Hazardous materials and waste present health hazards for humans and the environment. These health hazards can result during the manufacture, transportation, use, or disposal of such materials if not handled properly. In Campbell, hazards to humans can also occur from natural or human induced wildfire and air traffic accidents.

This section provides a background discussion of the hazardous materials and waste, fire hazards, and hazards from air traffic found in the City of Campbell. This section is organized with an existing setting, regulatory setting, and impact analysis. Additional analysis related to wildfire hazards is contained in Section 3.16, Wildfire, of this EIR.

One comment was received during the NOP comment period regarding this environmental topic. The Office of Planning & Environmental Analysis Department of Toxic Substances Control DTSC recommended that the following issues be evaluated: hazardous wastes/substances, contaminated soils, and surveys. All comments received during the NOP comment period are included in Appendix A.

3.8.1 ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS AND WASTE

Hazardous Materials

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health and safety, or the environment when improperly treated, stored, transported, or disposed of. Hazardous materials are mainly present because of industries involving chemical byproducts from manufacturing, petrochemicals, and hazardous building materials.

Hazardous Waste

Hazardous waste is the subset of hazardous materials that has been abandoned, discarded, or recycled and is not properly contained, including soil or groundwater that is contaminated with concentrations of chemicals, infectious agents, or toxic elements sufficiently high to increase human mortality or to destroy the ecological environment. If a hazardous material is spilled and cannot be effectively picked up and used as a product, it is considered to be hazardous waste. If a hazardous material site is unused, and it is obvious there is no realistic intent to use the material, it is also considered to be a hazardous waste. Examples of hazardous materials include flammable and combustible materials, corrosives, explosives, oxidizers, poisons, materials that react violently with water, radioactive materials, and chemicals.

Transportation of Hazardous Materials

The transportation of hazardous materials within California is subject to various Federal, State, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading of such materials (California Vehicle Code §§ 31602(b), 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

HAZARDOUS SITES

Envirostor Data Management System

The DTSC maintains the *Envirostor Data Management System*, which provides information on hazardous waste facilities (both permitted and corrective action) as well as any available site cleanup information. This site cleanup information includes: Federal Superfund Sites (NPL), State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, and Evaluation / Investigation Sites. The hazardous waste facilities include: Permitted–Operating, Post-Closure Permitted, and Historical Non-Operating.

There are 8 locations with a Campbell address that are listed in the Envirostor database. Table 3.8-1 lists the location of DTSC sites within Campbell.

TABLE 3.8-1: CAMPBELL SITE CLEANUP AND HAZARDOUS FACILITIES LIST (ENVIROSTOR)

NAME	STATUS	LOCATION
<i>VOLUNTARY CLEANUP – EVALUATION, TIERED PERMIT</i>		
Ashland Chemical Co.	Inactive - Needs Evaluation	1600 Dell Ave.
Etched Media Corp.	No Action Required	101 Gilman Ave.
Noble Properties.	Refer: RWQCB	535 Redeck Way / 159 Orchard Oak Cir.
Pacific Aerospace Services.	Refer: RCRA	354 East McGlincey Ln
Pacific Aerospace Services.	Inactive-Needs Evaluation	354 McGlincey Ln.
Riverside Cleaners.	Voluntary Cleanup Certified As Of 11/5/2012	691 West Hamilton Ave.
Silicon Genesis Corp.	Inactive-Needs Evaluation	590 Division St.
SummerHill-Campbell Avenue Site	Voluntary Cleanup No Further Action	511-555 West Campbell Ave.

SOURCE: CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL, ENVIROSTOR DATABASE, 2020.

Cortese List

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites.

Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. There are no hazardous materials release sites located in the Planning Area listed on the Cortese List.

GeoTracker

GeoTracker is the California Water Resources Control Board's data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites.

Leaking Underground Storage Tanks (LUST)

There are 76 locations with a Campbell address that are listed in the GeoTracker database for Leaking Underground Storage Tanks (LUST). All but one of the locations have undergone LUST cleanup and the State has closed the cases. Table 3.8-2 lists the name and location for LUSTs in Campbell.

TABLE 3.8-2: CAMPBELL GEOTRACKER DATABASE LUST SITES

<i>SITE NAME</i>	<i>STATUS</i>	<i>ADDRESS</i>
4 Day Tire Store	Completed - Case Closed	1311 Camden Ave
AAMCO Transmissions	Completed - Case Closed	3373 Winchester Blvd
ARCO #5370	Completed - Case Closed	1860 Campbell Ave
ARCO #6147	Completed - Case Closed	2015 Winchester Blvd
ARCO 5370	Completed - Case Closed	1860 W Campbell Ave
Arthur Concrete Associates	Completed - Case Closed	480 Mcglincey Ln
B.O.S. Construction	Completed - Case Closed	580 E El Patio Dr
Bartyzel Property	Completed - Case Closed	880 San Tomas Aquino
Bauer Concrete	Completed - Case Closed	615 Mcglincey Ln
Bay Area Mechanical	Completed - Case Closed	100 Gilman Ave
Beacon Station – 1370 Camden	Completed - Case Closed	1370 Camden Ave
Campbell Chevron (#9-2566)	Completed - Case Closed	535 W Hamilton Ave
Campbell City Hall	Completed - Case Closed	70 N 1st St
Campbell City Service Center	Completed - Case Closed	290 Dillon Ave
Campbell Fire Department	Completed - Case Closed	123 Union Ave
Campbell Fire Station #2	Completed - Case Closed	485 W Sunnyoaks Ave
Campbell, City Of	Completed - Case Closed	2220 S Winchester Blvd
Charter Plumbing	Completed - Case Closed	200 Cristich Lane
Chevron #9-0489	Completed - Case Closed	1255 Hacienda Ave
Chevron #9-7870	Completed - Case Closed	1589 S Bascom Ave
Chevron #9-8122	Completed - Case Closed	3405 Winchester Blvd

3.8 HAZARDS AND HAZARDOUS MATERIALS

<i>SITE NAME</i>	<i>STATUS</i>	<i>ADDRESS</i>
Chevron #9-8354	Open - Site Assessment	1402 Camden Ave
Clemente Tobacco	Completed - Case Closed	1181 Abbott Ave
Coast Oil #51	Completed - Case Closed	790 E Campbell Ave
Conocophillips 76 St# 11216	Completed - Case Closed	1533 W. Campbell Ave
Control Data Corporation	Completed - Case Closed	430 Darryl Dr
Core/Roem Development	Completed - Case Closed	100 Harrison Ave
Cushman Construction	Completed - Case Closed	420 Mcglincey Ln
Delta Queen Car Wash	Completed - Case Closed	981 E Hamilton Ave
Exxon #7-7121	Completed - Case Closed	921 W Hamilton Ave
Fire-Matic Systems, Inc.	Completed - Case Closed	190 Dillon Ave
Glage Underground Construction	Completed - Case Closed	1116 Dell Ave
Griffith's Property	Completed - Case Closed	260 Cristich Ln
Henry Little Tractor Svc.	Completed - Case Closed	310 Railway Ave
Himelhoch Property	Completed - Case Closed	1661 Bascom Ave
Houge Construction	Completed - Case Closed	210 Veitenheimer Dr
Hubbard And Raskin	Completed - Case Closed	500 Salmar Ave
Jiffy Lube	Completed - Case Closed	1387 Camden Ave
Kilroy Pest Control	Completed - Case Closed	1175 Dell Ave
Kravica John	Completed - Case Closed	1464 Bent Dr
Martin Oil Station	Completed - Case Closed	851 E Hamilton Ave
Mello Pipelines	Completed - Case Closed	260 Mcglincey Ln
Milk Farm Market	Completed - Case Closed	900 S San Tomas Aquino Rd
Morris Management Co.	Completed - Case Closed	747 Camden Ave
Nostalgia Motors	Completed - Case Closed	126 Harrison Ave
Old Galante Bros. Const. Site	Completed - Case Closed	535 Rodeck Way
Orchard City Plaza	Completed - Case Closed	300 Orchard City Dr (307)
Pacific Surfacing	Completed - Case Closed	520 W Chester Dr
Private Residence	Completed - Case Closed	Private Residence
Private Residence	Completed - Case Closed	Private Residence
Rotten Robbie #03	Completed - Case Closed	370 E Hamilton Ave
Rotten Robbie #27	Completed - Case Closed	2140 Winchester Blvd
Sanco Pipeline	Completed - Case Closed	213 Cristich Ln
Shell	Completed - Case Closed	1530 W Campbell Ave
Shell	Completed - Case Closed	2029 S Bascom Ave
Shell	Completed - Case Closed	570 E Hamilton Ave
Specialty Detail	Completed - Case Closed	951 Camden Ave
Summerhill Homes	Completed - Case Closed	126 Harrison Ave
Swedish Auto Service	Completed - Case Closed	300 Railway Ave
Sweeney & Sons Inc.	Completed - Case Closed	70 Cristich Ln
Tanner Construction	Completed - Case Closed	214 Cristich Ln

<i>SITE NAME</i>	<i>STATUS</i>	<i>ADDRESS</i>
Tesoro # 67058	Completed - Case Closed	921 W. Hamilton Ave.
Thrifty Oil #166	Completed - Case Closed	1820 S Winchester Blvd
Tosco	Completed - Case Closed	1533 W Campbell Ave
Tosco 76 #5088	Completed - Case Closed	3035 Winchester Blvd
U.S. Postal Service	Completed - Case Closed	500 W Hamilton Ave
Unocal #3879	Completed - Case Closed	337 Hamilton Ave
Unocal Station #5088	Completed - Case Closed	3035 Winchester Blvd
Unocal Station #5731	Completed - Case Closed	891 W Hamilton St
West Valley Charter Lines	Completed - Case Closed	240 Cristich Ln
West Valley Construction	Completed - Case Closed	580 Mcglincey Ln
West Valley Sanitation District	Completed - Case Closed	100 E Sunnyoaks Ave
Western Gravel	Completed - Case Closed	500 Railway Ave
Wolf Property	Completed - Case Closed	126 Dillon Ave
WSP Trucking	Completed - Case Closed	175 S Curtner Ave
Wyatt Property	Completed - Case Closed	368 E Campbell Ave

SOURCE: CALIFORNIA WATER RESOURCES CONTROL BOARD GEOTRACKER DATABASE, 2020.

Permitted Underground Storage Tank (UST)

There are 20 locations with a Campbell address that have Underground Storage Tanks (UST) that are permitted through the California Water Resources Control Board. Table 3.8-3 lists the name and location of the 20 permitted underground storage tanks in Campbell.

TABLE 3.8-3: CAMPBELL GEOTRACKER DATABASE UST SITES

<i>SITE NAME</i>	<i>LOCATION</i>
ARCO AM/PM	1860 W Campbell Av
ARCO AM/PM	2015 S Winchester Blvd
Campbell EXXON	3035 Winchester Blvd
Campbell Fire Station	123 S Union Av
Central Gas	1533 W Campbell Ave
Campbell Shell	1530 W Campbell Av
Chevron 97870	1589 S Bascom Av
Chevron #98112	3405 S Winchester Bl
City of Campbell Corp Yard	290 S Dillon Ave
City of Campbell	70 N First St
Delta Queen Classic Car Wash	981 E Hamilton Av
Duram School Services	1506 White Oaks Road
Hamilton Chevron	337 E Hamilton Ave
Hamilton Shell	570 E Hamilton Av
Midpeninsula Regional Open Space District	240 Cristich Ln
Pruneyard Shell	2029 S Bascom Av
R V Cloud Company	3000 S Winchester Blvd

3.8 HAZARDS AND HAZARDOUS MATERIALS

<i>SITE NAME</i>	<i>LOCATION</i>
Rotten Robbie #27	2140 S Winchester Bl
Rotten Robbie #3	370 E Hamilton Av
Sunnyoak Valero	2855 S Winchester Bl
Tesoro (Speedway XP) #68117	1370 Camden Ave
Tesoro (Speedway) #68118	921 W Hamilton Ave
USA #68117	1370 Camden Av
West Valley Construction	580 E Mc Glincey Ln

SOURCE: CALIFORNIA WATER RESOURCES CONTROL BOARD GEOTRACKER DATABASE, 2020.

Water Board Program Cleanup Sites

There are 19 locations with a Campbell address that are listed in the GeoTracker database for Water Board Cleanup Sites. Nine of the locations have undergone cleanup and the State has closed the case. There are ten locations in Campbell with an open case. Table 3.8-4 lists the location of open and closed cases for Water Board Program Cleanup Sites in Campbell.

TABLE 3.8-4: CAMPBELL WATER BOARD CLEANUP SITES

<i>NAME</i>	<i>LOCATION</i>
<i>CLOSED CASES (CLEANUP COMPLETED)</i>	
Deluxe Corp	1551 Dell Ave
Dillon Avenue Property	230, 280 & 282 Dillon Avenue
Former Calhoun Brothers	910 S. Mcglincey Lane
Kirkwood Auto Center - Kirkwood Carwash	125 S San Tomas Aquino Rd
Kirkwood Auto Center - Kirkwood Auto Center	125 S. San Tomas Aquino Road
Lloyd Square Shopping Center	501-533 East Campbell Avenue
Midas	1236 White Oaks
Montgomery Property	480 McGlincey Lane
Railway Distributing Inc.	261-264 Railway Avenue
Summerhill Homes	Harrison Avenue
VSL Corporation	1077 Dell Avenue
Warner-Lambert Co	1587 Dell Ave
<i>OPEN – SITE ASSESSMENT</i>	
Campbell Village	540 E Campbell Avenue
Dell Investments	901-905 Dell Avenue
Former Elite Cleaners	128 San Tomas Aquino Road
<i>OPEN – VERIFICATION MONITORING</i>	
Former Fillauer Property	561 Division Street

<i>NAME</i>	<i>LOCATION</i>
<i>OPEN – ASSESSMENT AND INTERIM REMEDIAL AND REMEDIAL ACTION</i>	
Kirkorian Plaza	1570-1630 W Campbell Ave
SJWC Ridgeley Station	Ridgeley Dr & Campisi Way
SJWC Virginia Station	320 Virginia Ave
<i>OPEN - INACTIVE CASE</i>	
Frank Foreign Car Service	3303 Winchester Blvd S
K & K Manufacturing	1500 Dell Ave
<i>OPEN - ELIGIBLE FOR CLOSURE</i>	
BWD Ventures	Foote Ave. & Page Street

SOURCE: CALIFORNIA WATER RESOURCES CONTROL BOARD GEOTRACKER DATABASE, 2020.

Solid Waste Information System (SWIS)

The Solid Waste Information System (SWIS) is a database of solid waste facilities that is maintained by the California Integrated Waste Management Board (CIWMB). The SWIS data identifies active, planned and closed sites. The City of Campbell has one solid waste facility listed in the SWIS database. The facility is the West Valley Landfill (43-CR-0001), a closed solid waste disposal site. There are no other SWIS solid waste facilities located in Campbell.

HAZARDS FROM AIR TRAFFIC

The State Division of Aeronautics has compiled extensive data regarding aircraft accidents around airports in California. This data is much more detailed and specific than data currently available from the FAA and the National Transportation Safety Board (NTSB). According to the California Airport Land Use Planning Handbook (2011), prepared by the State Division of Aeronautics, 21 percent of general aviation accidents occur during takeoff and initial climb and 44.2 percent of general aviation accidents occur during approach and landing. The State Division of Aeronautics has plotted accidents during these phases at airports across the country and has determined certain theoretical areas of high accident probability.

Approach and Landing Accidents

As nearly half of all general aviation accidents occur in the approach and landing phases of flight, considerable work has been done to determine the approximate probability of such accidents. Nearly 77 percent of accidents during this phase of flight occur during touchdown onto the runway or during the roll-out. These accidents typically consist of hard or long landings, ground loops (where the aircraft spins out on the ground), departures from the runway surface, etc. These types of accidents are rarely fatal and often do not involve other aircraft or structures. Commonly these accidents occur due to loss of control on the part of the pilot and, to some extent, weather conditions. (California Division of Aeronautics, 2011).

3.8 HAZARDS AND HAZARDOUS MATERIALS

The remaining 23 percent of accidents during the approach and landing phase of flight occur as the aircraft is maneuvered towards the runway for landing, in a portion of the airspace around the airport commonly called the traffic pattern. Common causes of approach accidents include the pilot's misjudging of the rate of descent, poor visibility, unexpected downdrafts, or tall objects beneath the final approach course. Improper use of rudder on an aircraft during the last turn toward the runway can sometimes result in a stall (a cross-control stall) and resultant spin, causing the aircraft to strike the ground directly below the aircraft. The types of events that lead to approach accidents tend to place the accident site fairly close to the extended runway centerline. The probability of accidents increases as the flight path nears the approach end of the runway. (California Division of Aeronautics, 2011).

According to aircraft accident plotting provided by the State Division of Aeronautics, most accidents that occur during the approach and landing phase of flight occur on the airport surface itself. The remainder of accidents that occur during this phase of flight are generally clustered along the extended centerline of the runway, where the aircraft is flying closest to the ground and with the lowest airspeed. (California Division of Aeronautics, 2002).

Takeoff and Departure Accidents

According to data collected by the State Division of Aeronautics, nearly 65 percent of all accidents during the takeoff and departure phase of flight occur during the initial climb phase, immediately after takeoff. This data is correlated by two physical constraints of general aviation aircraft:

- The takeoff and initial climb phase are times when the aircraft engine(s) is under maximum stress and is thus more susceptible to mechanical problems than at other phases of flight; and
- Average general aviation runways are not typically long enough to allow an aircraft that experiences a loss of power shortly after takeoff to land again and stop before the end of the runway.

While the majority of approach and landing accidents occur on or near to the centerline of the runway, accidents that occur during initial climb are more dispersed in their location as pilots are not attempting to get to any one specific point (such as a runway). Additionally, aircraft vary widely in payload, engine power, glide ratio, and several other factors that affect glide distance, handling characteristics after engine loss, and general response to engine failure. This further disperses the accident pattern. However, while the pattern is more dispersed than that seen for approach and landing accidents, the departure pattern is still generally localized in the direction of departure and within proximity of the centerline. This is partially due to the fact that pilots are trained to fly straight ahead and avoid turns when experiencing a loss of power or engine failure. Turning flight causes the aircraft to sink faster and flying straight allows for more time to attempt to fix the problem (California Division of Aeronautics, 2002).

Local Airport Facilities

There are no private or public airport facilities in the Planning Area.

Major Regional Airport Facilities

San Francisco International Airport (SFO): The San Francisco International Airport is located approximately 30 miles north of Campbell. SFO is the largest airport in the region, and provides a wide range of domestic airline service and long-haul international flights. San Francisco serves 68 percent of regional Bay Area air passengers and 43 percent of regional air cargo shipments. The Airport Influence Area (AIA) for SFO includes two parts: Area A and Area B. Area A is the larger of the two areas and encompasses all of San Mateo County and is approximately 10 miles from Campbell. Area B lies within Area A and includes land exposed to aircraft noise above CNEL 65 dB or lying below critical airspace. Additional information on this facility can be found in the City/County Association of Governments of San Mateo County *San Francisco International Airport Comprehensive Airport Land Use Compatibility Plan*.

Metropolitan Oakland International Airport (OAK): The Oakland International Airport is located approximately 35 miles north of Campbell. Oakland Airport has traditionally been the hub for low cost carriers and a major air cargo center due to operations by FedEx and UPS. Oakland serves 17 percent of Bay Area regional air passengers and 52 percent of air cargo. The Airport's Influence Area (AIA), includes portions of the cities of Oakland, San Leandro, Alameda, Hayward, and small unincorporated areas of Alameda County in the vicinity of the Airport, including San Lorenzo. Additional information on this facility can be found in the Alameda County Airport Land Use Commission's *Oakland International Airport Land Use Compatibility Plan*.

Norman Y. Mineta San Jose International Airport (SJC): The San Jose International Airport is located approximately 5 miles north of Campbell, and is the only Air Carrier airport in Santa Clara County. Air Carrier aviation is defined as scheduled commercial passenger flights and includes scheduled airfreight flights. San Jose International Airport has a full range of aircraft parking/storage facilities, aircraft fueling facilities and aircraft support operations, and is classified as a Medium Hub Airport based on the number of annual passenger enplanements. Medium Hub airports (such as SJC) are those that account for between 0.25 and 1 percent of total U.S. enplanements.

SJC serves 15 percent of the Bay Area regional air passengers and 6 percent of air cargo. The Airport Influence Area extends south along SR-87 to just south of I-280 (approximately 3 miles northeast of the City of Campbell). Additional information on this facility can be found in the Santa Clara County Airport Land Use Commission *San Jose International Airport Comprehensive Land Use Plan (CLUP)*.

Palo Alto Airport (PAO): The Palo Alto Airport is located at the northwestern edge of Santa Clara County, on the western shore of the southern portion of San Francisco Bay (approximately 16 miles northwest of Campbell). The Airport is located on 103 acres of land, and is owned by the City of Palo Alto, but managed until 2017 by the County of Santa Clara. It is surrounded by the City of Palo Alto on the west and south, San Francisco bay on the north and east and the City of East Palo Alto in San Mateo County on the northwest. The Airport Influence Area (AIA) is defined as the portion of Palo Alto east of the Bayshore Freeway bounded by U.S. Highway 101 to San Francisquito Creek along the Palo Alto City boundary to Charleston Slough to Barron Creek back to U.S. Highway 101. The AIA is located approximately 15 miles from the City of Campbell. Additional information on this facility

3.8 HAZARDS AND HAZARDOUS MATERIALS

can be found in the Santa Clara County Airport Land Use Commission *Palo Alto Airport Comprehensive Land Use Plan* (CLUP).

Moffett Federal Airfield: The Moffett Federal Airfield is Located in the north-central area of Santa Clara County, at the southwest end of San Francisco Bay, adjacent to the cities of Mountain View and Sunnyvale. The Airport is located on 952 acres of land. The Airport is owned by the U.S. Government and operated by NASA Ames Research Center. The Airport is surrounded by San Francisco Bay on the north, the City of Sunnyvale on the east and south, and the City of Mountain View on the south and west, and is approximately 6 miles northwest of the City of Campbell. The Airport Influence Area extends southeast from the airport and includes the northwestern portion of the City of Sunnyvale (approximately 5 miles from Campbell). Additional information on this facility can be found in the Santa Clara County Airport Land Use Commission *Moffet Federal Airfield Comprehensive Land Use Plan* (CLUP).

Reid-Hillview Airport: The Reid-Hillview Airport is located in the north-central area of Santa Clara County, in the City of San Jose, at the southeast end of San Francisco Bay (approximately 6 miles from Campbell). The Airport is located on 179 acres of land surrounded by the City of San Jose, and is owned by the County of Santa Clara. The Airport Influence Area (AIA) is defined as the area bounded by Highway 101 on the west side, Highway 680 to Silver Creek to Story Road on the northwest to White Road on the northeast to Aborn Road on the southeast to Highway 101. The AIA at its nearest point, is located approximately 5 miles from the City of Campbell. Additional information on this facility can be found in the Santa Clara County Airport Land Use Commission *Reid-Hillview Airport Comprehensive Land Use Plan* (CLUP).

South County Airport (San Martin Airport): The South County Airport is located in the southeast area of Santa Clara County, between the cities of Morgan Hill and Gilroy (approximately 25 miles southeast of Campbell). The Airport is located on 179 acres of land, and is owned by the County of Santa Clara and surrounded by the community of San Martin. Additional information on this facility can be found in the Santa Clara County Airport Land Use Commission *South County Airport Comprehensive Land Use Plan* (CLUP).

National Transportation Safety Board Aviation Accident Database

The National Transportation Safety Board Aviation Accident Database does not identify any aircraft accidents with Campbell. The nearest locations identified included: accidents in 1982 and 1987 in Los Gatos, two accidents in 1997 and one in 2001 in Cupertino, and 114 accidents between 1982 and 2015 in San Jose. The accidents involved a variety of aircraft, including airplanes and helicopters. None of the accidents occurred in the Planning Area.

FIRE HAZARDS

Fuel Rank

Fuel rank is a ranking system developed by the California Department of Forestry and Fire Protection (CalFire) that incorporates four wildfire factors: fuel model, slope, ladder index, and crown index.

The U.S. Forest Service has developed a series of fuel models, which categorize fuels based on burn characteristics. These fuel models help predict fire behavior. In addition to fuel characteristics, slope is an important contributor to fire hazard levels. A surface ranking system has been developed by CalFire, which incorporates the applicable fuel models and slope data. The model categorizes slope into six ranges: 0-10 percent, 11-25 percent, 26-40 percent, 41-55 percent, 56-75 percent, and over 75 percent. The combined fuel model and slope data are organized into three categories, referred to as surface rank. Thus, surface rank is a reflection of the quantity and burn characteristics of the fuels and the topography in a given area.

The ladder index is a reflection of the distance from the ground to the lowest leafy vegetation for tree and plant species. The crown index is a reflection of the quantity of leafy vegetation present within individual specimens of a given species.

The surface rank, ladder index, and crown index for a given area are combined in order to establish fuel rank of medium, high, or very high. Fuel rank is used by CalFire to identify areas in the California Fire Plan where large, catastrophic fires are most likely.

The City of Campbell is primarily designated as moderate by CalFire fuel ranks. CalFire data for the foothill and mountain areas to the west of the Planning Area include a preponderance of "moderate" and "high" fuel ranks.

The fuel rank data are used by CalFire to delineate fire threat based on a system of ordinal ranking. Thus, the Fire Threat model creates discrete regions, which reflect fire probability and predicted fire behavior. The four classes of fire threat range from moderate to extreme.

Fire Hazard Severity Zones

The state has charged CalFire with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas. In addition, CalFire must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas. The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards. Figure 3.8-1 shows Fire Hazard Severity Zones near Campbell.

LOCAL RESPONSIBILITY AREAS

Local Responsibility Areas (LRA) are concentrated in the incorporated areas of Santa Clara County. Campbell is an LRA that is served by the Santa Clara County Fire Department. The City of Campbell or the general vicinity is not categorized as a "Very High" FHSZ by CalFire.

STATE RESPONSIBILITY AREAS

There are no State Responsibility Areas (SRAs) within the vicinity of the Planning Area.

FEDERAL RESPONSIBILITY AREAS

There are no Federal Responsibility Areas (FRAs) within the vicinity of the Planning Area.

3.8.2 REGULATORY SETTING

FEDERAL

Aviation Act of 1958

The Federal Aviation Act resulted in the creation of the Federal Aviation Administration (FAA). The FAA is charged with the creation and maintenance of a National Airspace System.

Federal Aviation Regulations (CFR, Title 14)

The Federal Aviation Regulation (FAR) establish regulations related to aircraft, aeronautics, and inspection and permitting.

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

Clean Water Act (CWA)

The CWA, which amended the Water Pollution Control Act (WPCA) of 1972, sets forth the §404 program to regulate the discharge of dredged and fill material into Waters of the U.S. and the §402 National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants into Waters of the U.S. The §401 Water Quality Certification program establishes a framework of water quality protection for activities requiring a variety of Federal permits and approvals (including CWA §404, CWA §402, FERC Hydropower and §10 Rivers and Harbors).

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active Federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous material releases. CERCLA deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Environmental Protection Agency

The primary regulator of hazards and hazardous materials is the EPA, whose mission is to protect human health and the environment. The city of Campbell is located within EPA Region 9, which includes Arizona, California, Hawaii, and New Mexico.

FY 2001 Appropriations Act

Title IV of the Appropriations Act required the identification of “Urban Wildland Interface Communities in the Vicinity of Federal Lands that are at High Risk from Wildfire” by the U.S. Departments of the Interior and Agriculture.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act, as amended, is the statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the U.S. Department of Transportation (USDOT) and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials (DOE 2002).

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the Federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for State assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual certification. To qualify for certification, a state must adopt the minimum Federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

Resource Conservation and Recovery Act

The Resources Conservation and Recovery Act (RCRA) established EPA’s “cradle to grave” control (generation, transportation, treatment, storage and disposal) over hazardous materials and wastes. In California, the Department of Toxic Substances Control (DTSC) has RCRA authorization.

STATE

Aeronautics Act (Public Utilities Code §21001)

The Caltrans Division of Aeronautics bases the majority of its aviation policies on the Aeronautics Act. Policies include permits and annual inspections for public airports and hospital heliports and recommendations for schools proposed within two miles of airport runways.

Airport Land Use Commission Law (Public Utilities Code §21670 et seq.)

The law, passed in 1967, authorized the creation of Airport Land Use Commissions (ALUC) in California. Per the Public Utilities Code, the purpose of an ALUC is to protect *public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses* (Pub. Util. Code §21670). Furthermore, each ALUC must prepare an Airport Land Use Compatibility Plan (ALUCP). Each ALUCP, which must be based on a twenty-year planning horizon, should focus on broadly defined noise and safety impacts.

Assembly Bill 337

Per AB 337, local fire prevention authorities and the California Department of Forestry and Fire Protection (CalFire) are required to identify Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRA). Standards related to brush clearance and the use of fire resistant materials in fire hazard severity zones are also established.

California Code of Regulations

Title 3 of the CCR pertains to the application of pesticides and related chemicals. Parties applying regulated substances must continuously evaluate application equipment, the weather, the treated lands and all surrounding properties. Title 3 prohibits any application that would:

- Contaminate persons not involved in the application;
- Damage non-target crops or animals or any other public or private property; and
- Contaminate public or private property or create health hazards on said property.

Title 8 of the CCR establishes California Occupational Safety and Health Administration (Cal OSHA) requirements related to public and worker protection. Topics addressed in Title 8 include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident prevention. Construction safety and exposure standards for lead and asbestos are set forth in Title 8.

Title 14 of the CCR establishes minimum standards for solid waste handling and disposal. Division 1.5 (Department of Forestry and Fire Protection), Title 14 of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

Title 17 of the CCR establishes regulations relating to the use and disturbance of materials containing naturally occurring asbestos.

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

Title 22 of the CCR sets forth definitions of hazardous waste and special waste. The section also identifies hazardous waste criteria and establishes regulations pertaining to the storage, transport, and disposal of hazardous waste.

Title 24 of the CCR is the California Building Standards Code. The California Fire Code is set forth in Part 9 of the Building Standards Code. The CA Fire Code, which is pre-assembled with the International Fire Code by the ICC, contains fire-safety building standards referenced in other parts of Title 24.

Title 26 of the CCR is a medley of State regulations pertaining to hazardous materials and waste that are presented in other regulatory sections. Title 26 mandates specific management criteria related to hazardous materials identification, packaging, and disposal. In addition, Title 26 establishes requirements for hazardous materials transport, containment, treatment, and disposal. Finally, staff training standards are set forth in Title 26.

Title 27 of the CCR sets forth a variety of regulations relating to the construction, operation, and maintenance of the state's landfills. The title establishes a landfill classification system and categories of waste. Each class of landfill is constructed to contain specific types of waste (household, inert, special, and hazardous).

California Department of Transportation

Caltrans has adopted policy and guidelines relating to traffic noise as outlined in the Traffic Noise Analysis Protocol (Caltrans 2011). The noise abatement criteria specified in the protocol are the same as those specified by FHWA.

California Government Code Section 65302

This section, which establishes standards for developing and updating General Plans, includes fire hazard assessment and Safety Element content requirements.

California Health and Safety Code

Division 11 of the Health and Safety Code establishes regulations related to a variety of explosive substances and devices, including high explosives and fireworks. Section 12000 et seq. establishes regulations related to explosives and explosive devices, including permitting, handling, storage, and transport (in quantities greater than 1,000 pounds).

Division 12 establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and postsecondary buildings.

Division 20 establishes DTSC authority and sets forth hazardous waste and underground storage tank regulations. In addition, the division creates a State superfund framework that mirrors the Federal program.

Division 26 establishes California Air Resources Board (CARB) authority. The division designates CARB as the air pollution control agency per Federal regulations and charges the Board with meeting Clean Air Act requirements.

California Health and Safety Code and Uniform Building Code Section 13000 et seq.

State fire regulations are set forth in §13000 *et seq.* of the California Health and Safety Code, which is divided into “Fires and Fire Protection” and “Buildings Used by the Public.” The regulations provide for the enforcement of the Uniform Building Code (UBC) and mandate the abatement of fire hazards.

The code establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

California Vehicle Code §31600 (Transportation of Explosives)

This code establishes requirements related to the transportation of explosives in quantities greater than 1,000 pounds, including licensing and route identification.

California Public Resources Code

The State’s Fire Safety Regulations are set forth in Public Resources Code §4290, which include the establishment of State Responsibility Areas (SRA).

Public Resources Code §4291 sets forth defensible space requirements, which are applicable to anyone who “...owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material” (§4291(a)).

Food and Agriculture Code

Division 6 of the California Food and Agriculture Code (FAC) establishes pesticide application regulations. The division establishes training standards for pilots conducting aerial applications as well as permitting and certification requirements.

State Oversight of Hazards and Hazardous Materials

The DTSC is chiefly responsible for regulating the handling, use, and disposal of toxic materials. The State Water Resources Control Board (SWRCB) regulates discharge of potentially hazardous materials to waterways and aquifers and administers the basin plans for groundwater resources in the various regions of the state. The RWQCB oversees surface and groundwater. Programs intended to protect workers from exposure to hazardous materials and from accidental upset are covered under OSHA at the Federal and California Division of Occupational Safety and Health (Cal/OSHA) and the California Department of Health Services (DHS) at the state level. Air quality is regulated through the CARB and Bay Area Air Quality Management District. The State Fire Marshal is responsible for the protection of life and property through the development and application of fire prevention engineering, education, and enforcement; CalFire provides fire protection services for State and privately-owned wildlands.

Uniform Fire Code

The Uniform Fire Code (UFC) establishes standards related to the design, construction, and maintenance of buildings. The standards set forth in the UFC range from designing for access by firefighters and equipment and minimum requirements for automatic sprinklers and fire hydrants to the appropriate storage and use of combustible materials

Water Code

Division 7 of the California Water Code, commonly referred to as the Porter-Cologne Water Quality Control Act, created the SWRCB and the RWQCB. In addition, water quality responsibilities are established for the SWRCB and RWQCBs.

LOCAL

Certified Unified Program Agencies

Senate Bill 1082 (1993) required the establishment of a unified hazardous waste and hazardous materials management program. The result was Cal EPA's United Program, which consolidates the actions of DTSC, the SWRCB, the RWQCB's, OES, and the State Fire Marshall. DTSC oversees the implementation of the hazardous waste generator and onsite treatment program, one of six environmental programs at the local level, through Certified Unified Program Agencies (CUPAs). CUPAs have authority to enforce regulations, conduct inspections, administer penalties, and hold hearings. Santa Clara County Department of Environmental Health's Hazardous Materials Division implements the CUPA that has enforcement authority over the City of Campbell.

Santa Clara County Department of Environmental Health

The Santa Clara County Department of Environmental Health's Hazardous Materials Compliance Division is the CUPA for the City of Campbell and consolidates, coordinates, and makes consistent the following existing programs:

- California Accidental Release Prevention Program;
- Hazardous Waste Generator and On-site Hazardous Waste Treatment (tiered permitting) Programs (California Health and Safety Code, Chapter 6.5);
- Underground Storage Tank Program;
- Aboveground Storage Tank Spill Prevention, Control Countermeasure Plan (California Health and Safety Code, Chapter 6.6.7); and
- Hazardous Materials Business Plan.

Santa Clara County Fire Department

The Santa Clara Fire Department (SCCFD) is an internationally accredited emergency services agency providing emergency response to over 226,000 residents in the communities of Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, Redwood Estates, Saratoga, and the adjacent unincorporated areas. The Fire Prevention Division provides hazardous materials inspection, services for building construction, annual building inspection, and hazardous materials

regulation. The Fire Prevention Division provides a comprehensive fire/life safety plan review for land development, new building construction, interior remodel projects, fire suppression and fire alarm systems. As a Participating Agency in the CUPA, the SCCFD administers the following Hazardous Materials related state programs:

- Hazardous Materials Business Plan (California Health and Safety Code, Chapter 6.95); and
- Underground Storage Tank Program (California Health and Safety Code, Chapter 6.7).

Santa Clara County Office of Emergency Services

The Santa Clara County Office of Emergency Services has adopted an Emergency Operations Plan (EOP), which identifies emergency response programs related to hazardous waste incidents.

City of Campbell Municipal Code

The City of Campbell Municipal Code is a primary tool that guides development in the city. The Campbell Municipal Code identifies land use categories, site development regulations, and other general provisions that ensure consistency between the General Plan and proposed development projects. The following chapters regulate emergency response and hazardous materials in Campbell:

- Chapter 2.28 – Emergency Services/Citizen Corps Council. The purpose of this chapter is to outline emergency response planning procedures and responsibilities in Campbell.
- Chapter 17.06 – Aboveground Hazardous Materials Storage. The purpose of this chapter is the protection of health, life, resources, and property through prevention and control of unauthorized discharge of hazardous materials from aboveground structures (e.g., tanks, pipelines, etc.).
- Chapter 17.07 – Requirements for Facilities Where Materials Which Are or Which May Become Toxic Gases are Found. This chapter applies to all new and existing facilities where regulated materials subject to this chapter are present in concentrations that exceed the level of concern as determined in accordance with this chapter.
- Chapter 17.09 – Underground Hazardous Materials Storage. The purpose of this chapter is to protect health, life, resources, and property through prevention and control of unauthorized discharges of hazardous materials from underground structures (e.g., tanks, sumps, pipelines, etc.)
- Chapter 21.18.080 - Hazardous materials. This section provides guidelines for the regulation of hazardous materials for the protection of health, safety, and welfare of persons, resources, and property. This section topics and requirements for setbacks, changes in use, hazardous materials management plans (HMMP), Hazardous waste and substance sites disclosures, Information requirement from applicants, and City review requirements.
- Chapter 21.46 - Conditional Use Permits. Campbell requires Conditional Use Permits for uses that have a special impact or uniqueness so that their effect on the surrounding environment cannot be determined in advance of the use being proposed for a particular location.

City of Campbell Emergency Operations Plan

The City of Campbell Emergency Operations Plan (EOP) establishes policy direction for emergency planning, mitigation, response, and recovery activities within the city. The Campbell EOP addresses interagency coordination, procedures to maintain communications during emergencies, and methods to assess the extent of damage and management of volunteers. The Campbell EOP uses the Standardized Emergency Management System as required by California Government Code Section 8607(a) for managing responses to multi-agency and multi-jurisdiction emergencies in California, including those related to hazardous materials.

3.8.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact from hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: General Plan implementation has the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (Less than Significant)

Future development, infrastructure, and other projects allowed under the General Plan may involve the transportation, use, and/or disposal of hazardous materials. Hazardous materials are typically used in industrial, and commercial uses, as well as residential uses. Future uses may involve the

3.8 HAZARDS AND HAZARDOUS MATERIALS

transport and disposal of such materials from time to time. Future activities may involve equipment or construction activities that use hazardous materials (e.g., coatings, solvents and fuels, and diesel-fueled equipment), cleanup of sites with known hazardous materials, the transportation of excavated soil and/or groundwater containing contaminants from areas that are identified as being contaminated, or disposal of contaminated materials at an approved disposal site. While hazardous materials may be associated with industrial activities, hazardous materials may also be associated with the regular cleaning and maintenance of residential and other less intense uses. Accidental release of hazardous materials that are used in the construction or operation of a project may occur. There is also the potential for accidental release of pre-existing hazardous materials, associated with previous activities on a site.

The use, transportation, and disposal of hazardous materials is regulated and monitored by local fire departments, CUPAs, the Cal OSHA and the DTSC consistent with the requirements of Federal, State, and local regulations and policies. Facilities that store hazardous materials on-site are required to maintain a Hazardous Materials Business Plan in accordance with State regulations. In the event of an accidental release of hazardous materials, the local CUPA and emergency management agencies (e.g., Police and Fire) would respond. All future projects allowed under the General Plan would be required to comply with the provisions of Federal, State, and local requirements related to hazardous materials. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with hazardous materials as required under CEQA.

In addition to the requirements associated with Federal and State regulations and the Municipal Code, the General Plan includes policies and actions to address potential impacts associated with hazardous materials among other issues. These policies and actions in the General Plan would ensure that potential hazards are identified on a project site, that development is located in areas where potential exposure to hazards and hazardous materials can be mitigated to an acceptable level, and that business operations comply with Federal and State regulations regarding the use, transport, storage, and disposal of hazardous materials. The General Plan also includes policies and actions to ensure that the City has adequate emergency response plans and measures to respond in the event of an accidental release of a hazardous substance.

As described previously in the regulatory setting, hazardous materials regulations related to the use, handling, and transport of hazardous materials are codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code. These laws were established at the state level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. These regulations must be implemented by employers/businesses, as appropriate, and are monitored by the state (e.g., Cal OSHA in the workplace or DTSC for hazardous waste) and/or the County. The haulers and users of hazardous materials are listed with the SCCFD and are regulated and monitored by the Santa Clara County. Implementation of Title 49, Parts 171-180, of the Code of Federal Regulations would reduce any impacts associated with the potential for accidental release of hazardous materials. Therefore, implementation of the proposed General Plan policies and actions listed below, as well as Federal and State regulations, would result in a **less than significant** impacts

associated with the routine use, transport, storage, or disposal or accidental release of hazardous materials.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SA-5.1 Minimize the use of toxic cleaning supplies and products in civic facilities, and minimize the City's use of pesticides, herbicides, and fertilizers during landscaping and outdoor municipal operations.

SA-5.2 Encourage residents and businesses to minimize the use of toxic materials and products including the application of pesticides, herbicides, and fertilizers.

SA-5.3 Strive to reduce or eliminate private aerial spraying of pesticides throughout the city.

SA-5.4 Encourage local producers and users of hazardous materials to reduce the amounts of hazardous materials generated.

SA-5.5 Require hazardous waste generated within Campbell to be disposed of in a safe manner, consistent with all applicable local, State, and Federal laws.

SA-5.6 Require hazardous materials to be stored in a safe manner, consistent with all applicable local, State, and Federal laws.

SA-5.7 Coordinate with the Santa Clara County Fire Department (SCCFD) to ensure that businesses in Campbell that handle hazardous materials prepare and file a Hazardous Materials Management Plan (HMMP), and Hazardous Materials Inventory Statement (HMIS), consistent with CMC 21.18.080 - Hazardous materials. The HMMP and HMIS shall consist of general business information, basic information on the location, type, quantity, and health risks of hazardous materials, and emergency response and training plans.

SA-5.8 Require compliance with the Santa Clara County Hazardous Waste Management Plan.

SA-5.9 Work with existing businesses to require acceptance of oils, paints, and other recyclable hazardous materials.

SA-5.10 Periodically inspect businesses which sell paint products to ensure that they are properly displayed pursuant to State law to avoid access to minors.

SAFETY ELEMENT ACTIONS

SA-5.a Provide educational opportunities for generators of small quantity, household, and urban agriculture waste products regarding their responsibilities for source reduction and proper and safe hazardous waste management and disposal.

3.8 HAZARDS AND HAZARDOUS MATERIALS

SA-5.b Provide information about convenient drop-off programs for the local disposal of household hazardous waste offered by the Santa Clara County Department of Environmental Health. The availability of the program should be widely publicized throughout the community.

SA-5.c Continue to work cooperatively with the Santa Clara County Fire Department (SCCFD) to train local fire personnel in the specialized handling and cleanup procedures that are required for radioactive, toxic, and hazardous substance spills.

SA-5.d Require that applications for discretionary and ministerial permits provide detailed information regarding the potential for the historical use of hazardous materials on the site, including information regarding the potential for past soil and/or groundwater contaminations. If warranted, identify and require mitigation measures to ensure the exposure to hazardous materials from historical uses has been mitigated to acceptable levels consistent with EPA and/or DTSC standards.

SA-5.e Require that Business License applications for businesses that use, store, or sell hazardous materials be reviewed by the Building Division and Fire Department to ensure operations comply with all applicable local, State, and Federal laws and do not pose a risk to the public.

Impact 3.8-2: General Plan implementation has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (Less than Significant)

The City of Campbell is served by the Campbell Unified School District, Campbell Unified High School District, Moreland School District, and Cambrian School District. Table 3.8-5 provides a summary of the schools serving the City's population.

TABLE 3.8-5: ELEMENTARY, MIDDLE, AND HIGH SCHOOLS SERVING CAMPBELL

SCHOOL	GRADES SERVED	ADDRESS	ENROLLMENT (2018-2019 SCHOOL YEAR)	AVERAGE CLASS SIZE
<i>ELEMENTARY SCHOOLS</i>				
Blackford Elementary	Pre K-5	1970 Willow Street, San Jose	524	25.33
Campbell School of Innovation	Pre K-4	295 Cherry Lane, Campbell	294	24
Capri Elementary	Pre K-5	850 Chapman Drive, Campbell	589	25
Castlemont Elementary	Pre K-5	3040 E. Payne Avenue, Campbell	626	25.16
Forest Hill Elementary	Pre K-5	4450 McCoy Avenue, San Jose	657	23.5
Lynhaven Elementary	K-5	881 S. Cypress Avenue, San Jose	579	22.33
Marshall Lane Elementary	Pre K-5	14114 Marilyn Lane, Saratoga	541	25.16
Rosemary Elementary	Pre K-4	401 W. Hamilton Avenue, Campbell	466	25.16
Sherman Oaks Elementary	Pre K-6	1800 Fruitdale Avenue, San Jose	538	23.86
Village School	K-5	825 W. Parr Avenue, Campbell	263	23.8

SCHOOL	GRADES SERVED	ADDRESS	ENROLLMENT (2018-2019 SCHOOL YEAR)	AVERAGE CLASS SIZE
George C. Payne Elementary	Pre K-5	3750 Gleason Avenue, San Jose	581	24.67
Gussie M. Baker Elementary	K-5	4845 Bucknall Road, San Jose	666	22.33
Farnham Charter Elementary	K-5	15711 Woodard Rd, San Jose	528	25.66
Bagby Elementary	K-5	1840 Harris Ave, San Jose	511	22.33
<i>MIDDLE SCHOOLS</i>				
Rolling Hills Middle School	5-8	1585 More Avenue, Los Gatos	1,062	n/a
Moreland Middle School	6-8	4600 Student Lane, San Jose	944	26.4
Latimer School	K-8	4250 Latimer Avenue, San Jose	554	K-6 = 25 7-8 = 21.5
Campbell School of Innovation	5-8	295 Cherry Lane, Campbell	6	n/a
Monroe Middle School	5-8	1055 S. Monroe Street, San Jose	1,118	27.5
Price Charter Middle School	6-8	2650 New Jersey Ave, San Jose	962	24.5
<i>HIGH SCHOOLS</i>				
Branham High School	9-12	1570 Branham Lane, San Jose	1,802	23.25
Del Mar High School	9-12	1224 Del Mar Avenue, San Jose	1,300	25.25
Leigh High School	9-12	5210 Leigh Avenue, San Jose	1,772	22
Prospect High School	9-12	18900 Prospect Road, Saratoga	1,555	24.25
Westmont High School	9-12	4805 Westmont Avenue, Campbell	1,601	24.25
Boynton High School (Continuation School)	9-12	901 Boynton Avenue, San Jose	209	<15

SOURCES: CALIFORNIA DEPARTMENT OF EDUCATION, 2018-2019 SCHOOL ACCOUNTABILITY REPORT CARD SEARCH, [HTTP://SARCONLINE.ORG/](http://sarconline.org/) (ACCESSED JUNE 2020).

CAMPBELL UNIFIED SCHOOL DISTRICT, 2018-2019 SCHOOL ACCOUNTABILITY REPORT CARDS, [HTTPS://WWW. HTTPS://WWW.CAMPBELLUSD.ORG/SARC](https://www.https://www.campbellusd.org/sarc) (ACCESSED JUNE 2020).

CAMPBELL UNIFIED HIGH SCHOOL DISTRICT, 2018-2019 SCHOOL ACCOUNTABILITY REPORT CARDS. [HTTPS://WWW.CUHSD.ORG/APPS/PAGES/SARC](https://www.cuhsd.org/apps/pages/sarc) (ACCESSED JUNE 2020).

The General Plan Land Use Element includes land use designations, but does not propose actual development projects, or businesses. As such, it is not possible to determine if a specific use will result in hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste. The land use designations with the highest possibility of having businesses that result in hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste would be commercial, and light industrial uses. Some of these uses would likely occur within ¼ mile of an existing school. Each of these uses may use a variety of hazardous materials commonly found in urban areas including: paints, cleaners, and cleaning solvents. If handled appropriately, these materials do not pose a significant risk. The Commercial land use designation generally provides for a variety of retail, professional office, medical, service-oriented business activities, and hospitality facilities that with adequate setback requirements are generally compatible with surrounding urban development. The Light Industrial designation provides for a

3.8 HAZARDS AND HAZARDOUS MATERIALS

variety of light industrial uses that as indicated in the land use description are to be nonpolluting and which can co-exist with surrounding land uses and which do not in their maintenance, assembly, manufacturing or operations create smoke, gas, dust, sound, vibration, soot or glare to any degree which might be obnoxious or offensive to persons residing or conducting business in the city.

The proposed General Plan is not anticipated to directly lead to the establishment of new businesses that would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste because the General Plan does not approve any specific development project. However, given the unknown nature of future business establishments within the commercial and industrial use areas, the potential for hazardous materials is present.

Nevertheless, all hazardous materials would be required to be handled in accordance with Federal, State, and County requirements, which would limit the potential for a project to expose nearby uses, including schools, to hazardous emissions or an accidental release. Hazardous emissions are monitored by the BAAQMD, RWQCB, DTSC and the local CUPA. In the event of a hazardous materials spill or release, notification and cleanup operations would be performed in compliance with applicable Federal, State, and local regulations and policies, including hazard mitigation plans. As part of the development review process, the City's proposed General Plan also requires projects that may result in significant risks associated with hazardous materials to include measures to address and reduce the risks to an acceptable level such that surrounding uses are not exposed to hazardous materials in excess of adopted state and federal standards, and also requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to the SCCFD. Compliance with all existing regulations as well as the proposed General Plan policies and actions related to land use compatibility and hazardous materials would result in a **less than significant** impact related to this topic.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SA-5.1 Minimize the use of toxic cleaning supplies and products in civic facilities, and minimize the City's use of pesticides, herbicides, and fertilizers during landscaping and outdoor municipal operations.

SA-5.2 Encourage residents and businesses to minimize the use of toxic materials and products including the application of pesticides, herbicides, and fertilizers.

SA-5.3 Strive to reduce or eliminate private aerial spraying of pesticides throughout the city.

SA-5.4 Encourage local producers and users of hazardous materials to reduce the amounts of hazardous materials generated.

SA-5.5 Require hazardous waste generated within Campbell to be disposed of in a safe manner, consistent with all applicable local, State, and Federal laws.

SA-5.6 Require hazardous materials to be stored in a safe manner, consistent with all applicable local, State, and Federal laws.

SA-5.7 Coordinate with the Santa Clara County Fire Department (SCCFD) to ensure that businesses in Campbell that handle hazardous materials prepare and file a Hazardous Materials Management Plan (HMMP), and Hazardous Materials Inventory Statement (HMIS), consistent with CMC 21.18.080 - Hazardous materials. The HMMP and HMIS shall consist of general business information, basic information on the location, type, quantity, and health risks of hazardous materials, and emergency response and training plans.

SA-5.8 Require compliance with the Santa Clara County Hazardous Waste Management Plan.

SA-5.9 Work with existing businesses to require acceptance of oils, paints, and other recyclable hazardous materials.

SA-5.10 Periodically inspect businesses which sell paint products to ensure that they are properly displayed pursuant to State law to avoid access to minors.

SAFETY ELEMENT ACTIONS

SA-5.a Provide educational opportunities for generators of small quantity, household, and urban agriculture waste products regarding their responsibilities for source reduction and proper and safe hazardous waste management and disposal.

SA-5.b Provide information about convenient drop-off programs for the local disposal of household hazardous waste offered by the Santa Clara County Department of Environmental Health. The availability of the program should be widely publicized throughout the community.

SA-5.c Continue to work cooperatively with the Santa Clara County Fire Department (SCCFD) to train local fire personnel in the specialized handling and cleanup procedures that are required for radioactive, toxic, and hazardous substance spills.

SA-5.d Require that applications for discretionary and ministerial permits provide detailed information regarding the potential for the historical use of hazardous materials on the site, including information regarding the potential for past soil and/or groundwater contaminations. If warranted, identify and require mitigation measures to ensure the exposure to hazardous materials from historical uses has been mitigated to acceptable levels consistent with EPA and/or DTSC standards.

SA-5.e Require that Business License applications for businesses that use, store, or sell hazardous materials be reviewed by the Building Division and Fire Department to ensure operations comply with all applicable local, State, and Federal laws and do not pose a risk to the public.

Impact 3.8-3: General Plan implementation has the potential to have projects located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Less than Significant)

There are no hazardous materials release sites compiled pursuant to Government Code Section 65962.5 located in the Planning Area.

There are 8 locations with a Campbell address that are listed in the Envirostor database. One site was listed as no further action, three sites were listed as inactive and need further evaluation, one site was referred to the RWQCB, one site was referred to the RCRA, one site is voluntary clean up certified as of November 15, 2012, and one site is a voluntary cleanup no further actions. As previously shown, Table 3.8-1 lists the active sites and the inactive (needs evaluation or action required) sites within Campbell.

There are 76 locations within Campbell (i.e. with a Campbell address) that are listed in the GeoTracker database. 75 of the locations have undergone LUST cleanup and the State has closed the case. There is one location in Campbell with an open case. As previously shown, in Table 3.8-2 lists the location of the open and closed cases for LUSTs in Manteca

The City of Campbell has one solid waste disposal site listed in the SWIS database. The facility is the West Valley Landfill (43-CR-0001); however, this facility is closed. There are no other SWIS solid waste facilities located in Campbell.

The above-mentioned sites are subject to various Federal and State laws and regulatory agencies, including the CERCLA, EPA, DTSC, and RWQCB. Development allowed by the General Plan could create a hazard to the public or the environment through a disturbance or release of contaminated materials if the development occurs on or adjacent to contaminated sites without appropriate measures to contain or mitigate the existing contamination. However, any potential impacts would be reduced to a less than significant level through the implementation of the Federal and State regulations. Federal and State regulations ensure that existing hazards, including those associated with known hazardous materials sites, are addressed prior to development. Compliance with Federal and State regulations would ensure that potential impacts associated with the hazardous conditions on sites listed pursuant to Government Code Section 65962.5 would be **less than significant**.

Impact 3.8-4: General Plan implementation is not located within an airport land use plan, two miles of a public airport or public use airport, and would not result in a safety hazard for people residing or working in the project area (Less than Significant)

Hazards related to airports are typically grouped into two categories: air hazards and ground hazards. Air hazards jeopardize the safety of an airborne aircraft and expose passengers, pilots, and crews to danger. Examples of air hazards include tall structures, glare-producing objects, bird and wildlife attractants, radio waves from communication centers, or other features that have the potential to interfere with take-off or landing procedures, posing a risk to aircraft. Ground hazards jeopardize the safety of current and future residents and/or workers in the vicinity of an airport. The most obvious ground hazard is a crash, which may produce a serious, immediate risk to those residing in or using areas adjacent to the airport. Most accidents occur during take-off and landing. Therefore, the higher the density around an airport, including transportation facilities, the higher the risk associated with this type of hazard.

There are no airport facilities located within the Planning Area. The nearest airport facility within the vicinity of the Planning Area is the San Jose International Airport. The San Jose International Airport is located approximately 5 miles north of Campbell, and is the only Air Carrier airport in Santa Clara County. Air Carrier aviation is defined as scheduled commercial passenger flights and includes scheduled airfreight flights. San Jose International Airport has a full range of aircraft parking/storage facilities, aircraft fueling facilities and aircraft support operations, and is classified as a Medium Hub Airport based on the number of annual passenger enplanements. Medium Hub airports (such as the San Jose International Airport) are those that account for between 0.25 and 1 percent of total U.S. enplanements. SJC serves 15 percent of the Bay Area regional air passengers and 6 percent of air cargo. The Airport Influence Area extends south along SR-87 to just south of I-280 (approximately 3 miles northeast of the City of Campbell).

The National Transportation Safety Board Aviation Accident Database does not identify any aircraft accidents with Campbell. The nearest locations identified included: accidents in 1982 and 1987 in Los Gatos, two accidents in 1997 and one in 2001 in Cupertino, and San Jose had 115 accidents listed from 1983 to 2014 of which 12 were listed as fatal accidents.

The accidents involved a variety of aircraft, including airplanes and helicopters. None of the accidents occurred in the Planning Area.

In relation to airplane noise General Plan Policy N-1.14 states that the City will work cooperatively with the Santa Clara County Airport Land Use Commission to minimize noise impacts from airspace activities in Campbell, such as airplane and helicopter flights, and unmanned aerial vehicles. However, because the City of Campbell is not located within an Airport Influence Area the General Plan does not include any policies or actions that would impact air hazards or safety. Implementation of the General Plan would have a **less than significant** impact with regard to this issue and no mitigation is required.

Impact 3.8-5: General Plan implementation has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (Less than Significant)

The General Plan would allow a variety of new development, including residential, commercial, industrial, and public projects, which would result in increased jobs and population in Campbell. Road and infrastructure improvements would occur to accommodate the new growth. Future development and infrastructure projects are not anticipated to remove or impede any established evacuation routes within the City. Furthermore, the General Plan does not include land uses, policies, or other components that conflict with adopted emergency response or evacuation plans. However, given that the type, location, and size of future development and infrastructure projects is not known at this time, there is the potential that the City could receive a development proposal that could potentially interfere with an established emergency evacuation route or plan.

According to the Santa Clara County Emergency Operations Plan, Campbell is a partner of the Santa Clara County Operation Area and the Santa Clara County Emergency Management Organization. Both of these entities provide mutual aid to communities via the Santa Clara County Sheriff's Department, SCCFD, and the State of California Office of Emergency Services. In addition, the City of Campbell adopted the City of Campbell EOP in June 2019, which establishes policy direction for emergency planning, mitigation, response, and recovery activities within the city. The City of Campbell Police Department is responsible for coordinating agency response to disasters or other large-scale emergencies in the City of Campbell with assistance from the Santa Clara County Office of Emergency Services and the SCCFD.

The General Plan ensures that the City's emergency access routes, emergency contact lists, and public information regarding designated facilities and routes are regularly reviewed to ensure that up to date information is available to the City and the public in the event of an emergency. Important new critical facilities would be located to ensure resiliency in the event of a natural disaster. Implementation of the proposed General Plan policies and actions listed below would result in a **less than significant** impact related to this topic.

GENERAL PLAN MINIMIZATION MEASURES**SAFETY ELEMENT POLICIES**

SA-3.1 Ensure that new critical facilities in Campbell are located in areas that minimize exposure to potential natural hazards.

SA-3.2 Enhance training of identified City staff on their functions and responsibilities in disaster preparedness

SA-3.3 Ensure that critical facilities are properly supplied and equipped to provide emergency services.

SA-3.4 Ensure that critical facilities in Campbell are designed and constructed to withstand the "maximum probable" seismic events and still remain capable of service use to provide emergency assistance after a major disaster.

SA-3.5 Strive to improve the City's Emergency Operations Center (EOC) so that it is easily accessible to staff and the public, and is seismically safe for emergency response personnel.

SA-3.6 Encourage participation in Community Emergency Response Team (CERT) training. Encourage residents and community leaders to participate in disaster training programs, and as feasible, assist in neighborhood drills and safety exercises to increase participation and build community support.

SA-3.7 Support local and regional disaster planning and emergency response planning efforts, and look for opportunities to collaborate and share resources with other municipalities in the region.

SA-3.8 Continue to maintain and implement the City's Emergency Services Program.

SA-3.9 Encourage residents to register with the City's Community Emergency Notification Systems to ensure notification in the event of an emergency.

SA-3.10 Continue to promote public safety through public education programs.

SA-3.11 Maintain effective mutual aid agreements for fire, medical response, and other functions as appropriate.

SA-3.12 Clearly communicate to the public the City's plans, procedures, and responsibilities in the event of a disaster or emergency.

SA-3.13 Provide efficient 911 services (emergency calls) to minimize incident response time, and promote the use/availability of non-emergency phone line information for routine non-emergency calls as a means to improve service and maintain the effectiveness of the 911 system.

SAFETY ELEMENT ACTIONS

SA-3.a Coordinate with the Santa Clara County Office of Emergency Services (OES) and other local agencies, as necessary, to participate in and implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County.

SA-3.b Conduct regular emergency response training exercises and or participate in regional exercises to ensure that key members, local leaders, and emergency response personnel are adequately trained and prepared for emergency situations. Critical facilities within Campbell shall also be annually assessed to ensure they are properly equipped and supplied.

SA-3.c Encourage schools, neighborhood associations, and other interested groups to teach first aid and disaster preparedness, including Community Emergency Response Team (CERT) programs, and other tools available to neighborhood and community groups to improve disaster preparedness.

SA-3.d Provide signage at public buildings and critical facilities that contain Automated External Defibrillators (AEDs).

SA-3.e Provide adequate funding for fire and police services to ensure preparedness of response teams and implementation of emergency response plans.

SA-3.f As part of the development review process, consult with the police and fire departments in order to ensure that the project provides adequate emergency access.

Impact 3.8-6: General Plan implementation has the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires (less than significant)

Wildfires are a generally a potential hazard to development a located in the foothill and forested areas. The severity of wildfire problems depends on a combination of vegetation, climate, slope, and people. Weather is one of the most significant factors in determining the severity of wildfires; natural fire patterns are driven by conditions such as drought, temperature, precipitation, and wind, and also by changes to vegetation structure and fuel (i.e., biomass) availability. In addition to natural factors such as lightning, human activity is a primary factor contributing to the incidence of wildfires. Campfires, smoking, debris burning, arson, public utility infrastructure, and equipment use are common human-related causes of wildfires.

A 2012 study (Bryant et al), suggested that an increase in wildfire risk to residential property will accompany climate change due to extra-urban growth and increased susceptibility of landscapes and vegetation to wildfire due to climate change. The Bay Area was identified in the study as one of the more risk-prone areas in California. Generally, a 1- to 7-fold increase in wildfire risk to residential properties across Santa Clara County was shown for the low and high population growth scenarios. Fire risk increase rates are highly localized, and the City of Campbell and the general vicinity is not categorized as an area where a high degree of increased fire threat from climate change is predicted, due to its urban nature and surrounding urban uses, however the city may experience other local impacts from increased wildfires in surrounding areas including impacts to local air quality.

Additionally, as shown in Figure 3.8-1, the City of Campbell and general vicinity are not categorized as “Very High” FHSZ by CalFire or located within a State Responsibility area or Federal Responsibility area. Local Responsibility Areas (LRA) are concentrated in the unincorporated areas of Santa Clara County. CalFire data for the foothill and mountain areas to the west of the Planning Area include a preponderance of “moderate” and “high” fuel ranks.

The proposed General Plan includes requirements for adequate water supply and water flow availability, ensuring adequate emergency access, adequate fire protection services, fire safe design site standards, and ensuring public awareness regarding fire safety. All future projects allowed under the General Plan would be required to comply with the provisions of Federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated fire hazards as required under CEQA. Development under the General Plan would now allow development to place people and/or structures in areas that are identified as having a high risk of wildland fires; therefore, this is considered a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SA-3.1 Ensure that new critical facilities in Campbell are located in areas that minimize exposure to potential natural hazards.

SA-3.2 Enhance training of identified City staff on their functions and responsibilities in disaster preparedness

SA-3.3 Ensure that critical facilities are properly supplied and equipped to provide emergency services.

SA-3.11 Maintain effective mutual aid agreements for fire, medical response, and other functions as appropriate.

SA-3.12 Clearly communicate to the public the City's plans, procedures, and responsibilities in the event of a disaster or emergency.

SA-3.13 Provide efficient 911 services (emergency calls) to minimize incident response time, and promote the use/availability of non-emergency phone line information for routine non-emergency calls as a means to improve service and maintain the effectiveness of the 911 system.

SA-4.6 Ensure that fire and emergency medical services meet existing and future demand.

SA-4.7 Ensure that adequate water supplies are available for fire-suppression throughout the City. Require development to construct and fund all fire suppression infrastructure and equipment needed to provide adequate fire protection services.

SA-4.8 Promote fire safety through education and building design.

SA-4.9 Support San Jose Water Company efforts to remedy any deficiencies in the water delivery system to ensure adequate fire-suppression flows.

SAFETY ELEMENT ACTIONS

SA-3.a Coordinate with the Santa Clara County Office of Emergency Services (OES) and other local agencies, as necessary, to participate in and implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County.

SA-3.b Conduct regular emergency response training exercises and or participate in regional exercises to ensure that key members, local leaders, and emergency response personnel are adequately trained and prepared for emergency situations. Critical facilities within Campbell shall also be annually assessed to ensure they are properly equipped and supplied.

SA-3.c Encourage schools, neighborhood associations, and other interested groups to teach first aid and disaster preparedness, including Community Emergency Response Team (CERT) programs, and other tools available to neighborhood and community groups to improve disaster preparedness.

3.8 HAZARDS AND HAZARDOUS MATERIALS

SA-3.e Provide adequate funding for fire and police services to ensure preparedness of response teams and implementation of emergency response plans.

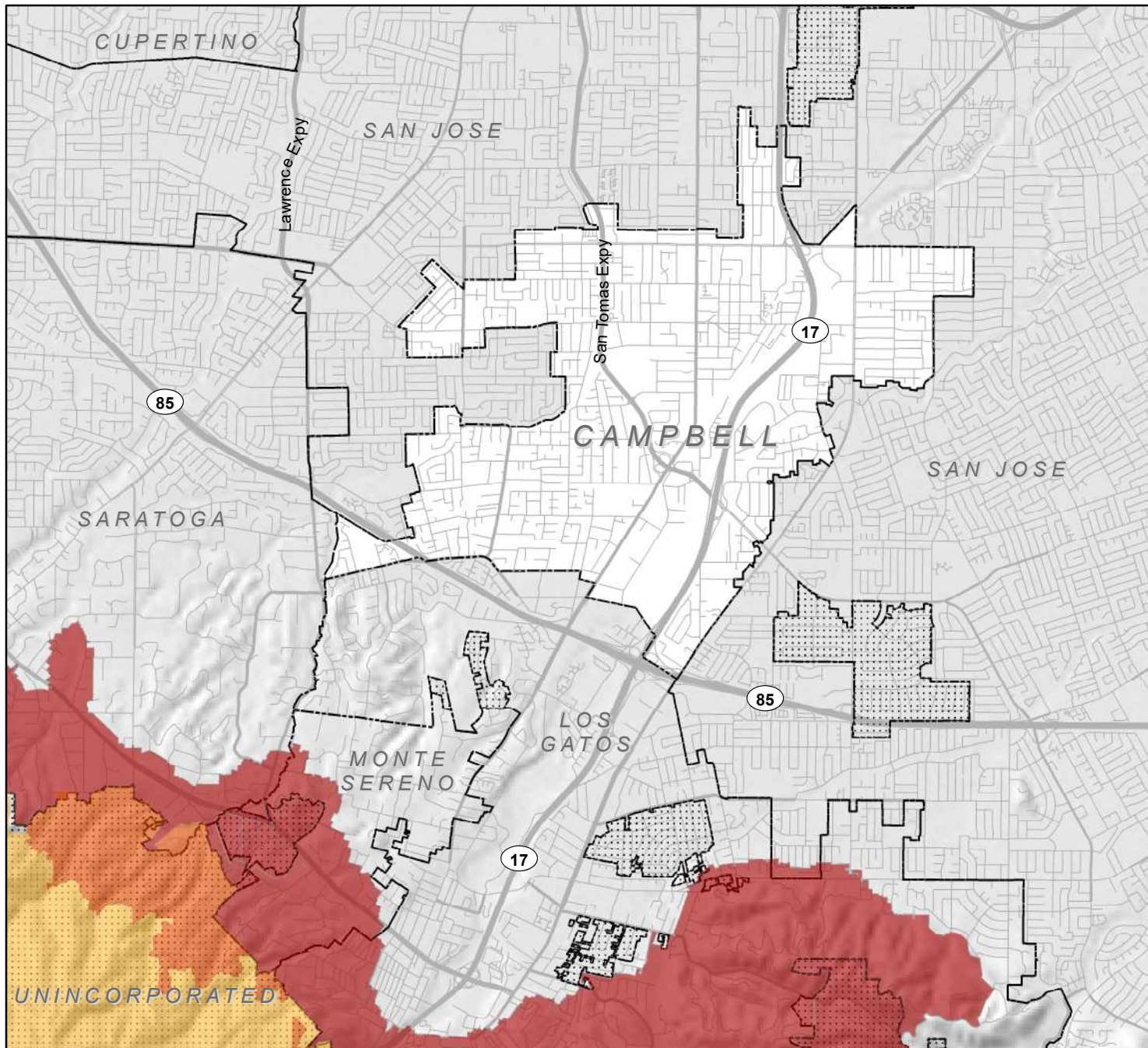
SA-3.f As part of the development review process, consult with the police and fire departments in order to ensure that the project provides adequate emergency access.

SA-4.c Ensure the adequacy of fire and emergency services by participating in Santa Clara County Fire Department evaluations.

SA-4.d Coordinate with the Santa Clara County Fire Department to provide annual inspections to ensure that commercial, industrial, and multiple-family uses comply with fire and building codes.

SA-4.e As part of the development review process, consult with the Santa Clara Fire Department in order to ensure that development projects facilitate adequate fire services and fire prevention measures.





SA-4.f Promote community awareness and participation in the Santa Clara County Fire Department's fire education programs.

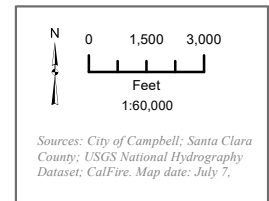


**CAMPBELL
GENERAL PLAN**

Figure 3.8-1
Fire Hazards Map

Legend

-  City of Campbell
- Fire Hazard Severity Zones in State Responsibility Area (SRA)**
-  High
-  Very High
- Fire Hazard Severity Zones in Local Responsibility Areas**
-  Very High Fire Hazard
- Surrounding Areas**
-  Surrounding Cities
-  Unincorporated Santa Clara County



This page left intentionally blank

This section provides a background discussion of the regional hydrology, flooding, water quality, water purveyors, and water sources in Campbell. This section is organized with an existing setting, regulatory setting, and impact analysis.

Comments were received during the NOP comment period regarding this environmental topic. The San Jose Water Company (Valley Water) provided comments related to water supplies, groundwater recharge, storm water quality, and the future coordination to ensure that there are adequate water supplies to serve proposed and future development. The Sierra Club provided comments related to areas identified as flood zones, sea levels rise and 100-year flood events which can create vulnerabilities for the Bay ecology. Additionally, during the Public Scoping meeting comments offered included topics related to local water resources. It should be noted that impacts as they relate to biological resources are included in Chapter 3.4 (Biological Resources), and impacts related to the delivery any capacity of services is included in Chapter 3.13 (Public Services and Recreation) of this Draft EIR. All comments received during the NOP comments period are included in Appendix A.

KEY TERMS

Groundwater: Water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth's surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called "aquifers" and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

Surface water: Water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is naturally replenished through precipitation, but is naturally lost through evaporation and seepage into soil.

3.9.1 EXISTING SETTING

REGIONAL HYDROLOGY

The City of Campbell is surrounded by the City of San Jose to the west, north, east, and southeast; the City of Los Gatos to the south and southwest, and the City of Saratoga to the west between San Jose and Los Gatos. The City of Campbell lies near the west-central edge of the Santa Clara Valley, a broad, alluvial plain of generally low topographic relief that slopes gently towards San Francisco Bay to the north. The City of Campbell is generally flat with elevations ranging from approximately 170 feet above mean sea level (amsl) at the northeastern corner of the City to approximately 250 feet amsl at the southwestern corner the City¹.

The City of Campbell is located within the San Francisco Bay Region (Region). According to the San Francisco Bay Basin Water Quality Control Plan, the Region is 4,603 square miles and characterized by its dominant feature, 1,100 square miles of the 1,600 square mile San Francisco Bay Estuary (Estuary), the largest estuary on the west coast of the United States, where fresh waters from California's Central Valley mix with the saline waters of the Pacific Ocean. The Estuary conveys the waters of the Sacramento and San Joaquin rivers into the Pacific Ocean.

¹ City of Campbell Public Works Department. August 27, 2012. *City of Campbell and Santa Clara Valley Water District Benchmark Locations Map*.

3.9 HYDROLOGY AND WATER QUALITY

Located on the central coast of California, the Bay system functions as the only drainage outlet for waters of the Central Valley. It also marks natural topographic separation between the northern and southern coastal mountain ranges (San Francisco Bay Regional Water Control Board, 2007). The Region's waterways, wetlands, and bays form the centerpiece of the United States' fourth-largest metropolitan region, including all or major portions of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.

CLIMATE

Climate in the City of Campbell is characterized by long, warm summers, short, cold winters, and highly seasonal rainfall; nearly all rain falls between fall to early spring with nearly no precipitation during the summer months. Over the course of the year, the temperature varies from 57°F to 84°F with temperatures rarely below 35°F or above 90°F. Mean precipitation within the Proposed Project vicinity is approximately 23 inches per year with the February (5.1 inches of rain) being the wettest month and July and August being the driest (0 inches of rain)

WATERSHEDS

A watershed is a region that is bound by a divide that drains to a common watercourse or body of water. Watersheds serve an important biological function, oftentimes supporting an abundance of aquatic and terrestrial wildlife including special status species and anadromous and native local fisheries. Watersheds provide conditions necessary for riparian habitat.

The State uses a hierarchical naming and numbering convention to define watershed areas for management purposes. This means that boundaries are defined according to size and topography, with multiple sub-watersheds within larger watersheds. Table 3.9-1 shows the primary watershed classification levels used by the State of California. The second column indicates the approximate size that a watershed area may be within a particular classification level, although variation in size is common.

TABLE 3.9-1: STATE OF CALIFORNIA WATERSHED HIERARCHY NAMING CONVENTION

<i>WATERSHED LEVEL</i>	<i>APPROXIMATE SQUARE MILES (ACRES)</i>	<i>DESCRIPTION</i>
Hydrologic Region (HR)	12,735 (8,150,000)	Defined by large-scale topographic and geologic considerations. The State of California is divided into ten HRs.
Hydrologic Unit (HU)	672 (430,000)	Defined by surface drainage; may include a major river watershed, groundwater basin, or closed drainage, among others.
Hydrologic Area (HA)	244 (156,000)	Major subdivisions of hydrologic units, such as by major tributaries, groundwater attributes, or stream components.
Hydrologic Sub-Area (HSA)	195 (125,000)	A major segment of an HA with significant geographical characteristics or hydrological homogeneity.

SOURCE: CALWATER, CALIFORNIA INTERAGENCY WATERSHED MAPPING COMMITTEE 2008

Hydrologic Region

The Planning Area is located within the San Francisco Hydrologic Region, which covers approximately 2.8 million acres (4,500 square miles) and includes all of San Francisco and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda counties. Significant geographic features include the Santa Clara, Napa, Sonoma, Petaluma, Suisun-Fairfield, and Livermore valleys; the Marin and San Francisco peninsulas; San Francisco, Suisun, and San Pablo bays; and the Santa Cruz Mountains, Diablo Range, Bolinas Ridge, and Vaca Mountains of the Coast Range. While being the smallest in size of the 10 HRs, the region has the second largest population in the State. Major population centers include the cities of San Francisco, San Jose and Oakland.

Hydrologic Area

For purposes of planning on a city-wide basis, hydrologic areas are generally considered to be the appropriate watershed planning level. As a planning area becomes smaller the hydrologic area level may be too large in terms of scale, and a hydrologic subarea may be considered more appropriate. The Planning Area is located within two hydrologic areas: the Guadalupe River Hydrologic Area and the Palo Alto Hydrologic Area. Figure 3.9-1 shows the Hydrologic Areas within and surrounding the City.

Hydrologic Unit

The Planning Area is within the Guadalupe River, Los Gatos Creek, San Jose International Airport – Frontal San Francisco Bay Estuaries, and San Tomas Aquinas hydrologic units. The majority of the Planning Areas is located within the San Tomas Aquina hydrologic unit. A small portion of the northern Planning Area is located within the San Jose International Airport – Frontal San Francisco Bay Estuaries hydrologic unit, and a small portion of the southeastern Planning Area is located within the Guadalupe River hydrologic unit. Additionally, the central portion of the Planning Area generally following State Route 17 is located within the Los Gatos Creek hydrologic unit. Figure 3.9-2 shows the Hydrologic Units within and surrounding the City.

Hydrologic Sub-Area

There are several hydrologic sub-areas within and throughout City of Campbell. Analysis of hydrologic sub-areas is appropriate for the review of individual projects, but is not appropriate for the watershed analysis of the City's General Plan.

CREEKS AND WATERWAYS

Two creeks are located within the City's Planning Area: Los Gatos Creek and San Tomas Aquino Creek. The City of Campbell maintains a system of laterals and storm drain pipes that drain runoff into Los Gatos Creek and San Tomas Aquino Creek, which ultimately drain into the San Francisco Bay. Historically, streams within the Santa Clara Valley, including Los Gatos and San Tomas Aquino Creeks, have supported and may still support small runs of steelhead.

The Los Gatos Creek runs 24 miles from the Santa Cruz Mountains through the Santa Clara Valley until its confluence with the Guadalupe River in downtown San Jose. It flows from Loma Prieta northwesterly to Lake Elsmar, then northward into the Lexington Reservoir, through Los Gatos Canyon and through the town of Los Gatos and the Vasona Reservoir, and then northeasterly through Campbell and San Jose. The Los Gatos Creek

Trail runs along the river from Lexington Reservoir to the Guadalupe River near downtown San Jose and is popular among local hikers and bicyclists.

The San Tomas Aquino Creek is a 16.5-mile long stream that heads on El Sereno mountain in the El Sereno Open Space Preserve in Saratoga. The creek flows through the cities of Saratoga, Monte Sereno, Los Gatos, Campbell, Santa Clara, and San Jose before its confluence with the Guadalupe Slough in south San Francisco Bay. The San Tomas Aquinas Creek watershed drains 44.8 square miles. The major tributaries of San Tomas Aquino Creek include (heading downstream) Mistletoe, Wildcat (and its Vasona sub-tributary), Smith and Saratoga Creeks.

GROUNDWATER

The Santa Clara Valley Groundwater Basin provide nearly half of the water used in Santa Clara County. The Santa Clara Valley Groundwater Basin consists of two subbasins: the Santa Clara and Llagas Subbasins. For over 80 years, the Santa Clara Valley Water District (SCVWD) has managed groundwater per statutory authority provided by the Santa Clara Valley Water District Act². The SCVWD operates and maintains a complex infrastructure network, with major features including:

- 10 surface water reservoirs;
- 169,000 acre-feet total reservoir storage capacity;
- 17 miles of raw surface water canals;
- 393 acres of groundwater recharge ponds;
- 91 miles of controlled in-stream recharge;
- 142 miles of pipelines;
- three pumping stations;
- three drinking water treatment plants; and
- Silicon Valley Advanced Water Purification Center.

The Planning Area lies within the Santa Clara Subbasin (DWR Basin 2-9.02). The Santa Clara Subbasin occupies a structural trough parallel to the northwest trending Coast Ranges and covers a surface area of 297 square miles. The Diablo Range bounds the subbasin on the west and the Santa Cruz Mountains forms the basin boundary on the east. The Santa Clara Subbasin extends from the southern edge of San Francisco Bay through the Coyote Valley, with the boundary located near Cochrane Road in Morgan Hill.

Local Groundwater Resources

The Planning Area lies within the Santa Clara Subbasin. The Santa Clara Subbasin occupies a structural trough parallel to the northwest trending Coast Ranges and covers a surface area of 297 square miles. The Diablo Range bounds the subbasin on the west and the Santa Cruz Mountains forms the basin boundary on the east. The Santa Clara Subbasin extends from the southern edge of San Francisco Bay through the Coyote Valley, with the boundary located near Cochrane Road in Morgan Hill.

² Santa Clara Valley Water District Act, Water Code Appendix, Chapter 60.

The Santa Clara Subbasin splits the subbasin into two areas: The Santa Clara Plain and the Coyote Valley. The Santa Clara Plain covers 280 miles of the subbasin, extending from southern San Francisco Bay to the Coyote Narrows, near Metcalf Road. The Coyote Valley is much smaller than the Santa Clara Plain, covering 17 square miles of the subbasin from Coyote Narrows to the boundary with the Llagas Subbasin. The Planning Area is located in the Santa Clara Plain area of the Santa Clara Subbasin.

The Santa Clara Subbasin is a trough-like depression filled with Quaternary alluvium deposits of unconsolidated gravel, sand, silt and clay that eroded from adjacent mountain ranges by flowing water and were deposited into the valley. The thickness of the aquifer materials in the Santa Clara Plain ranges from about 150 feet near the Coyote Narrows to more than 1,500 feet in the interior of the subbasin. The alluvium thins towards the western and eastern edges of the Santa Clara Plain. The central portion of the Santa Clara Plain contains a laterally extensive, low permeability aquitard that restricts the vertical flow of groundwater. Groundwater movement generally follows surface water patterns flowing from the interior of the subbasin northerly toward San Francisco Bay.

The Santa Clara Plain is divided into confined areas and recharge areas. Within confined areas, laterally extensive low permeability clays and silts (confining units or aquitards) divide upper and lower aquifers. The SCVWD refers to these as the shallow and principal aquifers, with the latter defined as aquifer materials greater than 150 feet below ground surface (bgs). Groundwater levels within the Planning Area generally are 20 to 35 feet below ground surface (bgs). However, groundwater levels are influenced by the level of water in the groundwater recharge ponds. When the ponds are dry, groundwater levels may drop to greater than 40 feet bgs.

Recharge within the Santa Clara Subbasin generally occurs along the margins and southern portion of the subbasin where coarse-grained sediments predominate. Recharge areas are primarily comprised of high permeability aquifer materials such as sands and gravels that allow surface water to infiltrate into the aquifers. The recharge area includes the alluvial fan and fluvial deposits along the edge of the subbasin where high lateral and vertical permeability allow surface water to infiltrate the aquifers. Most groundwater recharge occurs in these areas through the infiltration of precipitation and the SCVWD managed recharge to augment groundwater supplies. In the Santa Clara Valley, the areas with the highest recharge are along the creeks and on the western edge of the valley floor, just below the toe of the foothills. The City of Campbell is entirely within the Santa Clara Plain recharge area of the subbasin and six SCVWD groundwater recharge facilities with a total of 122.4 acres are located within the city boundaries. Water held in the groundwater recharge ponds seeps or percolates through the soil until it reaches the underground aquifers.

The long-term average groundwater pumping in the Santa Clara Subbasin is 103,000 AFY, including the Santa Clara Plain and Coyote Valley. Average 2003 to 2012 groundwater pumping in the Santa Clara Plain is 92,000 AFY, with maximum and minimum annual pumping of 110,000 AF and 71,000 AF, respectively. Nearly all groundwater used in the Santa Clara Subbasin (99%) is for municipal and industrial uses with only one percent for agriculture and domestic purposes.

FLOODING

Flooding is a temporary increase in water flow that overtops the banks of a river, stream, or drainage channel to inundate adjacent areas not normally covered by water.

Campbell is primarily an urban community with few undeveloped areas where storm water can percolate into the ground. Additionally, paving further reduces infiltration and increases surface runoff, which can increase the risk of localized flooding. Localized flooding may occur in low spots or where infrastructure is unable to accommodate peak flows during a storm event. In most cases, localized flooding dissipates quickly after heavy rain ceases.

FEMA Flood Zones

FEMA mapping provides important guidance for the City in planning for flooding events and regulating development within identified flood hazard areas. FEMA’s National Flood Insurance Program (NFIP) is intended to encourage State and local governments to adopt responsible floodplain management programs and flood measures. As part of the program, the NFIP defines floodplain and floodway boundaries that are shown on Flood Insurance Rate Maps (FIRMs). The FEMA FIRM for the Planning Area is shown on Figure 3.9-3.

Areas that are subject to flooding are indicated by a series of alphabetical symbols, indicating anticipated exposure to flood events:

- **Zone A:** Subject to 100-year flooding with no base flood elevation determined. Identified as an area that has a one percent chance of being flooded in any given year.
- **Zone AE:** Subject to 100-year flooding with base flood elevations determined.
- **Zone AH:** Subject to 100-year flooding with flood depths between one and three feet being areas of ponding with base flood elevations determined.
- **500-year Flood Zone:** Subject to 500-year flooding. Identified as an area that has a 0.2 percent chance of being flooded in a given year.

As shown on Figure 3.9-3, and Table 3.9-2 below, only a small portion of Campbell is subject to flooding. The Planning Area is subject to flooding problems along the natural creeks and drainages that traverse the area. Los Gatos Creek and San Tomas Aquinas Creek are the most prominent drainages in the Planning Area that are subject to flooding. The 100-year flood plain is largely confined to the drainage channels along these creeks. As delineated by FEMA, approximately 94 acres of land within Campbell is within the 100-year flood zone, and an additional 7.02 acres is also subject to 500-year flood conditions. Zone D (Area of Undetermined Flood Hazard) accounts for 368.52 acres of land within Campbell.

TABLE 3.9-2: FEMA DELINEATED FLOOD ZONES IN CAMPBELL

FEMA DESIGNATIONS	SUM OF ACRES (GIS)
Zone A (100-yr flood)	94.00
Zone D (Area of Undetermined Flood Hazard)	368.52
500-yr Flood	7.02
Area of Minimal Flood Hazard	3,430.70

SOURCE: FEMA'S NATIONAL FLOOD HAZARD LAYER (OFFICIAL) ACCESSED JULY 7, 2016.

Dam Inundation

Earthquakes centered close to a dam are typically the most likely cause of dam failure. Dam Inundation maps have been required in California since 1972, following the 1971 San Fernando Earthquake and near failure of the Lower Van Norman Dam. Monitoring and mitigation of dam failure is constantly occurring at both the federal and state levels. There are two dams that have the potential to inundate portions of the City of Campbell in the event of dam failure including: the Austrian Dam (Lake Elsmar), and the Lenihan Dam (Lexington Reservoir). Figure 3.9-4 shows the Dam Inundation areas. A brief description of each dam is provided below:

- The Austrian Dam is a 180-foot high embankment dam, which was damaged during the October 17, 1989 Loma Prieta Earthquake. It is located within California's Santa Cruz Mountains (approximately 10 miles south of Campbell), and situated at the convergence of the Sargent Fault located 700 feet northeast of the dam, and the San Andreas Fault 1700 feet southeast of the dam. Built in 1951, the dam has 15 feet of freeboard and impounds a 6200 acre-foot reservoir. The dam's foundation is bedded clay shale while the abutments are comprised of a sandstone and clay shale. The dam is owned and operated by the San Jose Water Company.
- The Lenihan Dam and Lexington Reservoir is located on Los Gatos Creek approximately seven miles south of Campbell. The dam was constructed in 1952 and the Santa Clara Valley Water District is the owner/operator of the dam. The 2.5-miles-long reservoir is the second-largest water district reservoir. The reservoir capacity is 19,044 acre-feet of water. Its surface area is 412 acres.

These dams do not have a history of dam failure; however, these dams are identified as having the potential to inundate habitable portions of the Planning Area in the unlikely event of dam failure. The Santa Clara Valley Water District's Dam Safety Program recognizes the catastrophic nature of potential dam failure and operates a comprehensive dam safety program to protect the public.

The Dam Safety Program includes four main components:

1. Periodic special engineering studies;
2. Surveillance and monitoring program;
3. Routine inspections and maintenance activities; and
4. Maintaining emergency response and preparedness plans.

Through the water district's dam safety program, it ensures the continued operation of its 10 major dams within the county. The water district also works closely with state and federal regulators, and downstream emergency response partners.

WATER QUALITY

Surface water quality is affected by point source and non-point source pollutants. Point source pollutants are those emitted at a specific point, such as a pipe, while non-point source pollutants are typically generated by surface runoff from diffuse sources, such as streets, paved areas, and landscaped areas. Point source pollutants are controlled with pollutant discharge regulations or Waste Discharge Requirements (WDRs). Non-point source pollutants are more difficult to monitor and control although they are important contributors to surface water quality in urban areas.

Stormwater runoff pollutants vary based on land use, topography, the amount of impervious surface, and the amount and frequency of rainfall and irrigation practices. Runoff in developed areas typically contains oil, grease, and metals accumulated in streets, driveways, parking lots, and rooftops, as well as pesticides, herbicides, particulate matter, nutrients, animal waste, and other oxygen-demanding substances from landscaped areas. The highest pollutant concentrations usually occur at the beginning of the wet season during the “first flush.”

Santa Clara Valley streams do not receive discharges from industrial or municipal wastewater. Industrial discharges are routed to municipal sanitary sewers and then to regional municipal wastewater treatment plants that discharge treated effluent to the tidal sloughs of San Francisco Bay. In general, pollutant concentrations in stormwater runoff do not vary significantly within an urbanized watershed. However, pollutant concentrations do increase when impervious cover is more than 40 to 50 percent of the drainage area. Runoff volume is the most important variable in predicting pollutant loads.

Water quality in the City is governed by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), which set water quality standards in their San Francisco Bay Basin Water Quality Control Plan (Basin Plan). The Basin Plans identify beneficial uses for surface water and groundwater and establish water quality objectives to attain those beneficial uses.

303(d) Impaired Water Bodies: Section 303(d) of the Federal Clean Water Act requires states to identify waters that do not meet water quality standards or objectives and, thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the states to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

The only impaired water body in the vicinity of the Planning Area is Los Gatos Creek, which was listed as impaired for diazinon, a commonly used household pesticide. The TMDL for diazinon in Los Gatos Creek was approved by the EPA in 2007.

Storm water runoff may play a role in the water quality impairments described above. Runoff that occurs as overland flow across yards, driveways, and public streets is intercepted by the storm water drainage system and conveyed to local drainages before eventually being routed to the Pacific. This storm water can carry pollutants that can enter the local waterways and result in the types of water quality impairments described above. Common sources of storm water pollution in the City include litter, trash, pet waste, paint residue, organic material (yard waste), fertilizers, pesticides, sediments construction debris, metals from automobile brake pad

dust, air pollutants that settle on the ground or attach to rainwater, cooking grease, illegally dumped motor oil, and other harmful fluids.

3.9.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the water resources of the state and nation including the Federal Emergency Management Agency, the US Environmental Protection Agency, the State Water Resources Board, and the Regional Water Quality Control Board. The following is an overview of the federal, state and local regulations that are applicable to the proposed project.

FEDERAL

Clean Water Act

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The CWA establishes the basic structure for regulating the discharges of pollutants into the waters of the United States and gives the US Environmental Protection Agency (EPA) the authority to implement pollution control programs. The statute's goal is to regulate all discharges into the nation's waters and to restore, maintain, and preserve the integrity of those waters. The CWA sets water quality standards for all contaminants in surface waters and mandates permits for wastewater and stormwater discharges.

The CWA also requires states to establish site-specific water quality standards for navigable bodies of water and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The following CWA sections assist in ensuring water quality for the water of the United States:

CWA Section 208 requires the use of Best Management Practices (BMPs) to control the discharge of pollutants in stormwater during construction CWA Section 303(d) requires the creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies, and preparation of plans to improve the quality of these water bodies. CWA Section 303(d) also establishes Total Maximum Daily Loads (TMDLs), which is the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards CWA Section 404 authorizes the US Army Corps of Engineers to require permits that will discharge dredge or fill materials into waters in the US, including wetlands.

In California, the EPA has designated the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) with the authority to identify beneficial uses and adopt applicable water quality objectives.

The SWRCB is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits).

Federal Emergency Management Agency

FEMA operates the National Flood Insurance Program (NFIP). Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the California Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

Flood Control Act

The Flood Control Act (1917) established survey and cost estimate requirements for flood hazards in the Sacramento Valley. All levees and structures constructed per the Act were to be maintained locally but controlled federally. All rights of way necessary for the construction of flood control infrastructure were to be provided to the Federal government at no cost.

Federal involvement in the construction of flood control infrastructure, primarily dams and levees, became more pronounced upon passage of the Flood Control Act of 1936.

Flood Disaster Protection Act (FDPA)

The FDPA of 1973 was a response to the shortcomings of the NFIP, which were experienced during the flood season of 1972. The FDPA prohibited Federal assistance, including acquisition, construction, and financial assistance, within delineated floodplains in non-participating NFIP communities. Furthermore, all Federal agencies and/or federally insured and federally regulated lenders must require flood insurance for all acquisitions or developments in designated Special Flood Hazard Areas (SFHAs) in communities that participate in the NFIP.

Improvements, construction, and developments within SFHAs are generally subject to the following standards:

- All new construction and substantial improvements of residential buildings must have the lowest floor (including basement) elevated to or above the base flood elevation (BFE).
- All new construction and substantial improvements of non-residential buildings must either have the lowest floor (including basement) elevated to or above the BFE or dry-floodproofed to the BFE.
- Buildings can be elevated to or above the BFE using fill, or they can be elevated on extended foundation walls or other enclosure walls, on piles, or on columns.
- Extended foundation or other enclosure walls must be designed and constructed to withstand hydrostatic pressure and be constructed with flood-resistant materials and contain openings that will permit the automatic entry and exit of floodwaters. Any enclosed area below the BFE can only be used for the parking of vehicles, building access, or storage.

National Flood Insurance Program (NFIP)

Per the National Flood Insurance Act of 1968, the NFIP has three fundamental purposes: *Better indemnify individuals for flood losses through insurance; Reduce future flood damages through State and community floodplain management regulations; and Reduce Federal expenditures for disaster assistance and flood control.*

While the Act provided for subsidized flood insurance for existing structures, the provision of flood insurance by FEMA became contingent on the adoption of floodplain regulations at the local level.

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCB). The Plan Area is in a watershed administered by the SFBRWQCB.

Individual projects in the City that disturb more than one acre would be required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing Best Management Practices (BMP) the discharger would use to prevent and retain storm water runoff. The SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a waterbody listed on the 303(d) list for sediment.

Rivers and Harbors Appropriation Act of 1899

One of the country's first environmental laws, this Act established a regulatory program to address activities that could affect navigation in Waters of the United States.

Water Pollution Control Act of 1972

The Water Pollution Control Act (WPCA) established a program to regulate activities that result in the discharge of pollutants to waters of the United States.

STATE

California Fish and Wildlife Code

The California Department of Fish and Wildlife (CDFW) protects streams, water bodies, and riparian corridors through the streambed alteration agreement process under Section 1600 to 1616 of the California Fish and Game Code. The California Fish and Game Code establishes that "an entity may not substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river stream, or lake" (Fish and Game Code Section 1602(a)) without notifying the CDFW, incorporating necessary mitigation and obtaining a streambed alteration agreement. The CDFW's jurisdiction extends to the top of banks and often includes the outer edge of riparian vegetation canopy cover.

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

California Government Code

Relevant sections of the California Government Code are identified below.

SECTION 65302

Revised safety elements must include maps of any 200-year flood plains and levee protection zones within the Planning Area.

SECTION 65584.04

Any land having inadequate flood protection, as determined by FEMA or DWR, must be excluded from land identified as suitable for urban development within the planning area.

SECTION 8589.4

California Government Code §8589.4, commonly referred to as the Potential Flooding-Dam Inundation Act, requires owners of dams to prepare maps showing potential inundation areas in the event of dam failure. A dam failure inundation zone is different from a flood hazard zone under the National Flood Insurance Program (NFIP). NFIP flood zones are areas along streams or coasts where storm flooding is possible from a "100-year flood." In contrast, a dam failure inundation zone is the area downstream from a dam that could be flooded in the event of dam failure due to an earthquake or other catastrophe. Dam failure inundation maps are reviewed and approved by the California Office of Emergency Services (OES). Sellers of real estate within inundation zones are required to disclose this information to prospective buyers.

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund (“SRF”) and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

Consumer Confidence Report Requirements

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminant levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

California Water Code

California’s primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the Regional Water Quality Control Boards (RWQCBs) power to protect water quality, and is the primary vehicle for implementation of California’s responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Assembly Bill 162

This bill requires a general plan’s land use element to identify and annually review those areas covered by the general plan that are subject to flooding as identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA) or the Department of Water Resources (DWR). The bill also requires, upon the next revision of the housing element, on or after January 1, 2009, the conservation element of the general plan to identify rivers, creeks, streams, flood corridors, riparian habitat, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management. By imposing new duties on local public officials, the bill creates a State-mandated local program.

This bill also requires, upon the next revision of the housing element, on or after January 1, 2009, the safety element to identify, among other things, information regarding flood hazards and to establish a set of comprehensive goals, policies, and objectives, based on specified information for the protection of the community from, among other things, the unreasonable risks of flooding.

Assembly Bill 70

This bill provides that a city or county may be required to contribute its fair and reasonable share of the property damage caused by a flood to the extent that it has increased the State's exposure to liability for property damage by unreasonably approving, as defined, new development in a previously undeveloped area, as defined, that is protected by a State flood control project, unless the city or county meets specified requirements.

Senate Bill (SB) 610 and Assembly Bill (AB) 901

The State Legislature passed SB 610 and AB 901 in 2001. Both measures modified the Urban Water Management Planning Act.

SB 610 requires additional information in an urban water management plan if groundwater is identified as a source of water available to an urban water supplier. It also requires that the plan include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water to the project and to request identified public water systems to prepare a specified water supply assessment. The assessment must include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and water received in prior years pursuant to these entitlements, rights, and contracts.

AB 901 requires an urban water management plan to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the manner in which water quality affects water management strategies and supply reliability. The bill requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable. Additional findings and declarations relating to water quality are required.

Senate Bill 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a "sufficient water supply" exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

State Updated Model Landscape Ordinance

Under Assembly Bill (AB) 1881, the updated Model Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by January 31, 2010 or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Ordinance (MO). Chapter 9.146 of the Campbell Municipal Code (Water Efficient Landscape Regulations) includes landscaping water use standards.

Urban Water Management Planning Act

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is required to prepare and adopt an urban water management plan. An “urban water supplier” is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier’s water demand management measures. The urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Department of Water Resources must receive a copy of an adopted urban water management plan.

San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)

The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term “water quality standards,” as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region’s ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

State Water Resources Control Board (State Water Board) Storm Water Strategy

The Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct the State Water Board’s role in storm water resources management and evolve the Storm Water Program by a) developing guiding principles to serve as the foundation of the storm water program, b) identifying issues that support or inhibit the program from aligning with the guiding principles, and c) proposing and prioritizing projects that the Water Boards could implement to address those issues.

The State Water Board staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the Water Board's Storm Water Program.

LOCAL

Santa Clara and Llagas Subbasins 2016 Groundwater Management Plan

The 2016 Groundwater Management Plan (GWMP) for the Santa Clara and Llagas Subbasins describes the SCVWD's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas Subbasins, located entirely in Santa Clara County and identified by the Department of Water Resources (DWR) as Basins 2-9.02 and 3-3.01, respectively.

The 2016 GWMP provides information on basin conditions and documents groundwater management goals, strategies, related activities, and metrics for desired basin outcomes. This information supports other District planning efforts including the:

- Urban Water Management Plan (UWMP) that evaluates water supply reliability over a 25-year period;
- Water Supply Master Plan that documents the water supplies, infrastructure, investments, and operating strategies needed to ensuring long-term water supply reliability;
- Annual Protection and Augmentation of Water Supplies (PAWS) Report that presents the basis for recommended groundwater production charges in accordance with the District Act;
- Salt and Nutrient Management Plans that assess the loading of salt and nutrients to groundwater and identify related management strategies; and
- Planning to address specific water management issues that could affect groundwater management.

As required by the Water Code, the SCVWD updates the GWMP at least every five years.

West Valley Clean Water Program

The West Valley Clean Water Program (WVCWP) was established in 1994 as a collaborative effort between the smaller west valley communities (Campbell, Monte Sereno, Saratoga, and Los Gatos) to implement stormwater pollution control and management efforts. The WVCWP goal is to reduce pollutants in storm drain discharges, comply with MRP regulations and requirements, and maximize the effectiveness of pollution prevention efforts. The WVCWP administers an Urban Runoff Management Plan to reduce stormwater pollution, which includes the following specific actions:

- Municipal controls such as storm drain stenciling, storm drain operation and maintenance (O&M), street sweeping, street/public facilities maintenance, and illegal discharge response.
- Construction and development measures including on-site inspections, grading and erosion controls, and educating developers.
- Commercial and industrial facility inspections to prevent wastes from discharging into the storm drain system.
- Public education activities to increase awareness and change behavior.

By agreement with the participating cities and towns, the WVSD collects an additional surcharge from residences and commercial properties to fund the WVCWP. The SVCWP complies with the requirements of the MRP for urban runoff pollution control.

Municipal NPDES Permit Waste Discharge Requirements Order R2-2009-0074 NPDES Permit No. CAS612008 (As Amended by Order R2-2011-0083)

In response to the Federal Clean Water Act, the West Valley Clean Water Program regulates waste dischargers under a National Pollutant Discharge Elimination System (NPDES) Permit administered by the appropriate Regional Water Quality Control Board. Specifically, the municipalities are regulated with regard to their jurisdiction over and/or maintenance responsibility for municipal storm drain systems and watercourses that they own or operate. The NPDES Permit is concerned primarily with regulating trash, pollutants of concern, and excessive hydrologic runoff which can carry sediment and cause flooding.

Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharge in the City of Campbell is subject to the Waste Discharge Requirements (WDRs) of the MS4 Permit (Order Number R2-2009-0074) and NPDES Permit Number CAS612008, as amended by Order Number R2-2011-0083.42

Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of 15 municipal agencies in the Santa Clara Valley that discharge stormwater to the lower South San Francisco Bay. Member agencies (Co-permittees) include the cities of Campbell, Cupertino, Los Altos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale, the towns of Los Altos Hills and Los Gatos, the County of Santa Clara, and the SCVWD. The SCVURPPP and member agencies implement pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers. The SCVURPPP also promotes valuing stormwater as an important resource.

The member agencies of the SCVURPPP share a common NPDES permit to discharge stormwater to the South San Francisco Bay. Total population within the SCVURPPP area is approximately 1.7 million people. The SCVURPPP incorporates regulatory, monitoring and outreach measures aimed at reducing pollution in urban runoff to the "maximum extent practicable" to improve the water quality of South San Francisco Bay and the streams of Santa Clara Valley.

C.3 Stormwater Handbook

The C.3 Stormwater Handbook was written to help developers, builders, and project applicants include appropriate post-construction stormwater controls in their projects, to meet local municipal requirements and requirements of the Bay Area Municipal Regional Stormwater Permit (MRP). Municipalities covered by the MRP include: Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Saratoga, Sunnyvale, Santa Clara County, and the Santa Clara Valley Water District. These municipalities must require post-construction stormwater controls on development projects as part of their obligations under Provision C.3 of the MRP. This permit is a NPDES permit issued by the San Francisco Bay

RWQCB, allowing municipal stormwater systems to discharge stormwater to local creeks, San Francisco Bay, and other water bodies if municipalities conduct prescribed actions to control pollutants.

The term “post-construction stormwater control” refers to permanent features included in a development project to reduce pollutants in stormwater and/or erosive flows during the life of the project – after construction is completed. The term “post-construction stormwater control” encompasses Low Impact Development (LID) site design, source control, and treatment measures as well as hydromodification management measures. LID techniques reduce water quality impacts by preserving and re-creating natural landscape features, minimizing imperviousness, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource.

Provision C.3 of the Municipal Regional Stormwater NPDES Permit (MRP) addresses post-construction stormwater requirements for new development and redevelopment projects that add and/or replace 10,000 square feet or more of impervious area. Provision C.3 of the MRP also mandates that new development projects that meet certain criteria: 1) incorporate site design, source control, and stormwater treatment measures into the project design; 2) minimize the discharge of pollutants in stormwater runoff and non-stormwater discharge; and 3) prevent increases in runoff flows as compared to pre-development conditions. Low-impact development (LID) methods are the primary mechanisms for implementing such controls.

City of Campbell Stormwater Regulations

In order to comply with Provision C.3 of the MRP, project applicants are required to submit a Stormwater Management Plan (SWMP) with building plans, to be reviewed and approved by the City of Campbell’s Public Works Department. The SWMP must be prepared under the direction of and certified by a licensed and qualified professional, which includes civil engineers, architects, or landscape architects. Conditions of approval for development projects include the installation and maintenance of Best Management Practices (BMPs) for site design and stormwater treatment, which must be designed per approved numeric sizing criteria.

Each development project mandated to implement stormwater treatment will also require a Certification of Engineered Stormwater Treatment for New and Redevelopment Projects. The Certification of Engineered Stormwater Treatment for New and Redevelopment Projects may be obtained at the City’s Public Works Department. Owners of properties with treatment BMPs will also be required to certify on-going operation and maintenance by filing and recording a covenant submitted to the City.

In addition to implementing LID measures, the MRP also includes a provision to mitigate for hydromodification caused by increases in the volume and frequency of runoff discharges to creeks and streams. Generally, projects in highly developed urban areas are less likely to cause hydromodification. Consequently, projects located in catchment/watersheds that are already more than 65 percent impervious are exempt from this requirement. For projects in these areas that create or replace one acre or more of impervious surfaces, flow controls are required so that post-project runoff does not exceed pre-project runoff rates and durations.

City of Campbell Municipal Code

Besides the General Plan, the City of Campbell Municipal Code is the primary tool that guides development in the city. The City’s Municipal Code identifies land use categories, site development regulations, and other general

provisions that ensure consistency between the General Plan and proposed development projects. The following four chapters of the City of Campbell's Municipal Code contain directives pertaining to stormwater:

- Chapter 14.02 – Stormwater Pollution Control. The purpose of this chapter is to provide minimum requirements designed to control the discharge of pollutants into the City's municipal storm drain system and to assure that discharges from the City's storm drain system comply with applicable provisions of the Federal CWQ and the current NPDES Permit.
- Chapter 20.56 – Drainage and Sewer Facilities. Prior to filing a final map or parcel map, the project applicant must pay fees for defraying the costs of constructing planned drainage facilities.
- Chapter 20.80 – Environmental Impact and Grading and Erosion Control. Every parcel or tentative map filed with the City is conditional on compliance with requirements for grading and erosion control, including the prevention of sediment or damage to off-site property.
- Chapter 21.22 – Flood Damage Prevention. The purpose of this chapter is to minimize public and private losses due to flood conditions. A development permit must be obtained and reviewed by the Director of Public Works before new construction, substantial improvements, or development occurs within any area of a special flood hazard area (SFHA). The chapter also contains construction standards that must be implemented within the 100-year floodplain to protect buildings and improvements from flood damage.
- Chapter 21.26 – Landscaping Requirements. This chapter implements the California Water Conservation in Landscaping Act of 2006 by establishing new water-efficient landscaping and irrigation requirements.

3.9.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with hydrology and water quality if it will:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - Result in substantial erosion or siltation on- or off-site;
 - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

IMPACTS AND MITIGATION

Impact 3.9-1: General Plan implementation could violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality or obstruct implementation of a water quality control plan (Less than Significant)

CONSTRUCTION-RELATED WATER QUALITY IMPACTS

Grading, excavation, removal of vegetation cover, and loading activities associated with future construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion impacts that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

As required by the Clean Water Act, each subsequent development project or improvement project will require an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading and preservation of topsoil. A SWPPP is not required if the project will disturb less than one acre. SWPPPs are designed to control storm water quality degradation to the extent practicable using best management practices during and after construction.

Future development project applicants must submit the SWPPP with a Notice of Intent to the RWQCB to obtain a General Permit. The RWQCB is an agency responsible for reviewing the SWPPP with the Notice of Intent, prior to issuance of a General Permit for the discharge of storm water during construction activities. The RWQCB

accepts General Permit applications (with the SWPPP and Notice of Intent) after specific projects have been approved by the lead agency. The lead agency for each specific project that is larger than one acre is required to obtain a General Permit for discharge of storm water during construction activities prior to commencing construction (per the Clean Water Act).

The General Plan sets policies and actions for build-out of the City, but it does not envision or authorize any specific development project. Because of this, the site-specific details of potential future development projects are currently unknown and analysis of potential impacts of such projects is not feasible and would be speculative. However, each future project must include detailed project specific drainage plans that control storm water runoff and erosion, both during and after construction. The Regional Water Quality Control Board will require a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each future project that disturbs an area one acre or larger. The SWPPPs will include project specific best management measures that are designed to control drainage and erosion.

Additionally, the General Plan includes policies and actions to reduce water quality impacts from grading and runoff. Specifically, Policy COS-7.6 limits the disturbance of natural water bodies and drainage systems in Campbell by conserving natural open space areas, protecting channels, and minimizing the impacts from stormwater and urban runoff. Furthermore, Actions provide additional guidance when projects are brought forward including: Action COS-7.b which requires new development and infrastructure projects to incorporate the standards and requirements contained in the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 Stormwater Handbook to ensure that Low Impact Development (LID) measures are incorporated into site designs to reduce pollutants from non-point sources, incorporate “green” infrastructure, and encourage greater use of permeable paving surfaces. Additionally, Action COS-7.g requires the City to develop and implement a Grading Ordinance that requires the use of erosion and sediment control measures and minimizes grading and vegetation removal near creeks to ensure that the creeks are protected from reduction in bank stability, erosion, downstream sedimentation, and flooding.

NEW DEVELOPMENT-RELATED WATER QUALITY IMPACTS

New development and infrastructure improvements projects under the proposed General Plan could introduce constituents into the storm water system that are typically associated with urban runoff. These constituents include sediments, petroleum hydrocarbons, pesticides, fertilizers, and heavy metals such as lead, zinc, and copper. These pollutants tend to build up during the dry months of the year. Precipitation during the early portion of the wet season (generally from November to April) washes away most of these pollutants, resulting in high pollutant concentrations in the initial wet weather runoff. This initial runoff is referred to as the “first flush” of storm events. Subsequent periods of rain would result in less concentrated pollutant levels in the runoff.

The majority of development allowed under the General Plan would be within areas currently developed with urban uses and the amount and type of runoff generated by various future development and infrastructure projects would be similar to existing conditions. However, new development and infrastructure projects have the potential to result in increases in the amount of impervious surfaces throughout Campbell. Future increases in impervious surfaces would result in increased urban runoff, pollutants, and first flush roadway contaminants,

as well as an increase in nutrients and other chemicals from landscaped areas. These constituents could result in water quality impacts to onsite and offsite drainage flows to area waterways.

Waters that are listed under Section 303(d) of the CWA are known as “impaired.” The only impaired water body in the vicinity of the Planning Area is Los Gatos Creek. The total maximum daily load (TMDL) is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved. These are described in more detail as follows (with estimated Total Maximum Daily Load completion date in parenthesis):

- Los Gatos Creek, which was listed as impaired for diazinon, a commonly used household pesticide. The TMDL for diazinon in Los Gatos Creek was approved by the EPA in 2007.

Storm water runoff may play a role in the water quality impairments described above. Runoff that occurs as overland flow across yards, driveways, and public streets is intercepted by the storm water drainage system and conveyed to local drainages before eventually being routed to the Pacific. This storm water can carry pollutants that can enter the local waterways and result in the types of water quality impairments described above. Common sources of storm water pollution in the City include litter, trash, pet waste, paint residue, organic material (yard waste), fertilizers, pesticides, sediments, construction debris, metals from automobile brake pad dust, air pollutants that settle on the ground or attach to rainwater, cooking grease, illegally dumped motor oil, and other harmful fluids.

Due to future development and infrastructure projects, the overall volume of runoff in Campbell could be increased compared to existing conditions. If the City’s drainage system is not adequately designed, General Plan buildout could result in localized higher peak flow rates. Localized increases in flow would be significant if increases exceeded system capacity or contributed to bank erosion. This is considered a potentially significant impact; however, through the implementation of the proposed General Plan policies and actions and the City’s adopted Municipal Code requirements, this would result in a less than significant impact.

The General Plan sets policies and actions for build-out of the City, but it does not envision or authorize any specific development project. Because of this, the site-specific details of potential future development projects are currently unknown and analysis of potential impacts of such projects is not feasible and would be speculative. However, each future development and infrastructure project is required to prepare a detailed project specific drainage plan, Water Quality Management Plan, and a Storm Water Pollution Prevention Plan (SWPPP) that will control storm water runoff and erosion, both during and after construction. If the project involves the discharge into surface waters the project proponent will need to acquire a Dewatering permit, NPDES permit, and Waste Discharge permit from the RWQCB and comply with all storm water sewer system (MS4) requirements.

As described previously under the Regulatory Setting, the City is required to implement a range of measures and procedures when reviewing new development and infrastructure projects. These included the following requirements:

West Valley Clean Water Program. The WVCWP goal is to reduce pollutants in storm drain discharges, comply with MRP regulations and requirements, and maximize the effectiveness of pollution prevention efforts. The WVCWP administers an Urban Runoff Management Plan to reduce stormwater pollution, which includes the following specific actions:

- Municipal controls such as storm drain stenciling, storm drain operation and maintenance (O&M), street sweeping, street/public facilities maintenance, and illegal discharge response.
- Construction and development measures including on-site inspections, grading and erosion controls, and educating developers.
- Commercial and industrial facility inspections to prevent wastes from discharging into the storm drain system.
- Public education activities to increase awareness and change behavior.

By agreement with the participating cities and towns, the WVSD collects an additional surcharge from residences and commercial properties to fund the WVCWP.

Santa Clara Valley Urban Runoff Pollution Prevention Program. The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of 15 municipal agencies in the Santa Clara Valley that discharge stormwater to the lower South San Francisco Bay. The SCVURPPP and member agencies implement pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers. The member agencies of the SCVURPPP share a common NPDES permit to discharge stormwater to the South San Francisco Bay. The SCVURPPP incorporates regulatory, monitoring and outreach measures aimed at reducing pollution in urban runoff to the "maximum extent practicable" to improve the water quality of South San Francisco Bay and the streams of Santa Clara Valley.

Stormwater Management Plan. The City of Campbell is covered by the Bay Area Municipal Regional Stormwater Permit (MRP), which is a NPDES permit issued by the San Francisco Bay RWQCB, allowing municipal stormwater systems to discharge stormwater to local creeks, San Francisco Bay, and other water bodies if municipalities conduct prescribed actions to control pollutants. In order to comply with Provision C.3 of the MRP, project applicants are required to submit a Stormwater Management Plan (SWMP) with building plans, to be reviewed and approved by the City of Campbell's Public Works Department. The SWMP must be prepared under the direction of and certified by a licensed and qualified professional, which includes civil engineers, architects, or landscape architects. Conditions of approval for development projects include the installation and maintenance of Best Management Practices (BMPs) for site design and stormwater treatment, which must be designed per approved numeric sizing criteria.

City of Campbell Municipal Code.

- Chapter 14.02 – Stormwater Pollution Control. The purpose of this chapter is to provide minimum requirements designed to control the discharge of pollutants into the City's municipal storm drain system and to assure that discharges from the City's storm drain system comply with applicable provisions of the Federal CWQ and the current NPDES Permit.

- Chapter 20.56 – Drainage and Sewer Facilities. Prior to filing a final map or parcel map, the project applicant must pay fees for defraying the costs of constructing planned drainage facilities.
- Chapter 20.80 – Environmental Impact and Grading and Erosion Control. Every parcel or tentative map filed with the City is conditional on compliance with requirements for grading and erosion control, including the prevention of sediment or damage to off-site property.
- Chapter 21.22 – Flood Damage Prevention. The purpose of this chapter is to minimize public and private losses due to flood conditions. A development permit must be obtained and reviewed by the Director of Public Works before new construction, substantial improvements, or development occurs within any area of a special flood hazard area (SFHA). The chapter also contains construction standards that must be implemented within the 100-year floodplain to protect buildings and improvements from flood damage.
- Chapter 21.26 – Landscaping Requirements. This chapter implements the California Water Conservation in Landscaping Act of 2006 by establishing new water-efficient landscaping and irrigation requirements.

Compliance with existing City and County construction and stormwater management codes, as outlined above, would reduce these potential impacts related to stormwater quality.

In addition, prior to the issuance of grading permits, each site developed under the proposed General Plan would be required to submit a site-specific drainage study and SWPPP to the City for approval.

While the primary regulatory mechanisms for ensuring that future development and infrastructure projects do not result in adverse water quality impacts are contained in the Campbell Municipal Code, C.3 Provision, the City of Campbell has developed the General Plan to include additional policies and actions that, when implemented, will further reduce water pollution from construction, new development, and new infrastructure projects, and protect and enhance natural storm drainage and water quality features. The policies and actions identified below include numerous requirements that would reduce the potential for General Plan implementation to result in increased water quality impacts. Actions by the City during the development review process require the review of development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events. In addition, compliance with the Clean Water Act and regulations enforced by the Regional Water Quality Control Board would ensure that construction-related impacts to water quality are minimized and future projects comply with all applicable laws and regulations.

The City manages local storm drain facilities within the city. Provision of stormwater detention facilities as needed at the project specific level would reduce runoff rates and peak flows. The implementation of the General Plan policies and actions listed below would enhance stormwater quality and infiltration and require the City to review development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure off-site runoff is not increased beyond pre-development levels. Existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, Stormwater Management Plans, SWPPPs, and to implement Best Management Practices. These regulatory requirements are intended to ensure that water quality does not degrade to levels that would violate water quality standards. Through implementation of the General Plan policies and actions

listed below, implementation of the Campbell Municipal Code requirements identified above, compliance with mandatory Federal and State regulations, and compliance with the existing regulations for the Los Gatos and San Tomas Aquinas Creeks and local Watersheds would ensure that impacts to drainage patterns and water quality would be minimized and result in a **less than significant** impact relative to this environmental topic.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-7.6 Limit the disturbance of natural water bodies and drainage systems in Campbell by conserving natural open space areas, protecting channels, and minimizing the impacts from stormwater and urban runoff.

COMMUNITY SERVICES AND FACILITIES POLICIES

CSF-5.1 Maintain and improve Campbell's storm drainage facilities.

CSF-5.2 Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

CSF-5.3 Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

CSF-5.4 Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

CSF-5.5 Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and trees, and maintain natural drainage patterns.

CSF-5.6 Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

CSF-5.7 Where possible, avoid new outfalls to natural or earthen channels.

CSF-5.8 Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

CSF-5.9 Encourage dual-use detention basins for parks, ball fields, and other appropriate uses.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-7.b Continue to require new development and infrastructure projects to incorporate the standards and requirements contained in the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 Stormwater Handbook to ensure that Low Impact Development (LID) measures are incorporated into site designs to reduce

pollutants from non-point sources, incorporate “green” infrastructure, and encourage greater use of permeable paving surfaces.

COS-7.g Develop and implement a Grading Ordinance that requires the use of erosion and sediment control measures and minimizes grading and vegetation removal near creeks to ensure that the creeks are protected from reduction in bank stability, erosion, downstream sedimentation, and flooding.

COMMUNITY SERVICES AND FACILITIES ACTIONS

CSF-5.a Regularly review and update the City of Campbell’s Green Stormwater Infrastructure Plan.

CSF-5.b Continue to complete gaps in the drainage system in areas of existing development through the implementation of drainage improvement projects identified in the Green Stormwater Infrastructure Plan.

CSF-5.c Continue to review development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

CSF-5.d Require project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

CSF-5.e Identify which stormwater drainage facilities are in need of repair and address these needs through the City’s Capital Improvement Program.

CSF-5.f Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the C.3 Stormwater Handbook.

CSF-5.g Work cooperatively with local, State, and Federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

Impact 3.9-2: General Plan implementation could result in the depletion of groundwater supplies or interfere substantially with groundwater recharge or conflict with a groundwater management plan (Less than Significant)

The City of Campbell is underlain by the Santa Clara Subbasin (DWR Bulletin 118 Basin 2-9.02), which is a subbasin of the Santa Clara Valley Groundwater Basin (DWR Bulletin 118 Basin 2-9). The Santa Clara Subbasin has a total estimated storage capacity of 1.9 million Acre-Feet (AF); however, only a fraction of this water can be extracted practically using wells and without causing undesirable results like land subsidence and salt water intrusion. The Subbasin underlies a relatively flat valley and consists of unconsolidated alluvial sediments.

Due to different hydrogeologic, land use and water supply management characteristics, the Santa Clara Subbasin is subdivided into two groundwater management areas (GMA): the Santa Clara Plain and Coyote Valley. The Santa Clara Plain covers 280 miles of the subbasin, extending from southern San Francisco Bay to the Coyote Narrows, near Metcalf Road. The Coyote Valley is much smaller than the Santa Clara Plain, covering 17 square

miles of the subbasin from Coyote Narrows to the boundary with the Llagas Subbasin. The Planning Area is located within the Santa Clara Plain groundwater management area.

The Santa Clara Subbasin is a trough-like depression filled with Quaternary alluvium deposits of unconsolidated gravel, sand, silt and clay that eroded from adjacent mountain ranges by flowing water and were deposited into the valley. The thickness of the aquifer materials in the Santa Clara Plain ranges from about 150 feet near the Coyote Narrows to more than 1,500 feet in the interior of the subbasin. The alluvium thins towards the western and eastern edges of the Santa Clara Plain. The central portion of the Santa Clara Plain contains a laterally extensive, low permeability aquitard that restricts the vertical flow of groundwater. Groundwater movement generally follows surface water patterns flowing from the interior of the subbasin northerly toward San Francisco Bay.

The long-term average groundwater pumping in the Santa Clara Subbasin is 103,000 Acre-Feet per Year (AFY), including both the Santa Clara Plain and Coyote Valley GMAs. Average 2003 to 2012 groundwater pumping in the Santa Clara Plain was 92,000 AFY, with maximum and minimum annual pumping of 110,000 AF and 71,000 AF, respectively³. Nearly all groundwater used in the Santa Clara Plain (99 percent) is for municipal and industrial uses with only 1 percent for agriculture and domestic purposes. Pumping by water retailers accounts for over 90 percent of pumping in the Santa Clara Plain.

Recharge areas are primarily comprised of high permeability aquifer materials such as sands and gravels that allow surface water to infiltrate into the aquifers. Most groundwater recharge occurs in these areas through the infiltration of precipitation and the SCVWDs managed recharge to augment groundwater supplies. In the Santa Clara Valley, the areas with the highest recharge are along the creeks and on the western edge of the valley floor, just below the toe of the foothills. The City of Campbell is entirely within the Santa Clara Subbasin recharge area and six SCVWD groundwater recharge facilities with a total of 122.4 acres are located within the city boundaries. Water held in the groundwater recharge ponds seeps or percolates through the soil until it reaches the underground aquifers.

Recharge sources in the Santa Clara Subbasin include SCVWD managed recharge and natural, or uncontrolled, recharge from the deep percolation of rainfall, septic system and irrigation return flows, and natural seepage through creeks. Natural, or uncontrolled, recharge from precipitation, return flows, seepage from creeks, and mountain front recharge is estimated to range between 15,000 and 61,000 AFY for the Santa Clara Subbasin.

The SCVWD's managed recharge programs uses both runoff captured in local reservoirs and imported water delivered by the raw water conveyance system to recharge groundwater through more than 390 acres of recharge ponds and over 90 miles of local creeks. According to the 2016 Groundwater Sustainability Plan, no District recharge ponds/facilities or instream recharge areas exist within the Planning Area boundaries. The majority of these recharge ponds/facilities and instream recharge areas are located in the southwestern portion of the County south of Interstate 280 near the cities of San Jose, Los Gatos, Campbell, Saratoga, and Cupertino. The majority of the Planning Area is within the Santa Clara Plain Confined Area. The SCVWD's managed recharge systems in the Santa Clara Subbasin are summarized below in Table 3.9-3.

³ SCVWD. *2016 Groundwater Management Plan*. Accessed July 2020.

TABLE 3.9-3: SANTA CLARA SUBBASIN MANAGED RECHARGE FACILITY SUMMARY

<i>MANAGED RECHARGE SYSTEM</i>	<i>APPROXIMATE RECHARGE CAPACITY ACRE-FEET PER YEAR (AFY)</i>	<i>WATER SUPPLY SOURCES</i>	<i>YEAR OPERATION BEGAN</i>
Guadalupe	25,000 AFY	Local watersheds, State Water Project (SWP), and Central Valley Project (CVP)	1932
Los Gatos	30,000 AFY	Local watersheds, SWP, CVP	1934
Penitencia	7,000 AFY	Local watersheds, SWP	1934
West Side	15,000 AFY	Local watersheds, SWP, CVP	1935
Coyote	27,000 AFY	Local watersheds, CVP	1934

SOURCE: SANTA CLARA VALLEY WATER DISTRICT. 2016 GROUNDWATER MANAGEMENT PLAN. ACCESSED JULY 28, 2020.

The SCVWD actively monitors groundwater elevations to evaluate current groundwater conditions and land subsidence, optimize recharge efforts, access groundwater storage, and support groundwater management efforts. According to the July 2020 Groundwater Condition Report, the Santa Clara Valley Groundwater Basin’s groundwater storage is above average and the June 2020 groundwater levels Santa Clara Plain Well (06S01W24H015) were slightly below the 5-year average. Overall, the 2020 managed recharge to date for the Santa Clara Plain is 22,300 AF while the 2020 groundwater pumping to date is 29,500 AF.

The Sustainable Groundwater Management Act (SGMA) defines sustainable yield as the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result. According to the 2016 Groundwater Management Plan, the annual Santa Clara Plain pumping should not exceed 200,000 AF. However, the District does not manage to a particular value for sustainable yield, but instead manages groundwater to maintain sustainable conditions through annual operations and long-term water supply planning.

Imported Treated Surface Water – On average, purchased water from Valley Water makes up over half of SJW’s total water supply. This water originates from several sources including Valley Water’s local reservoirs, the State Water Project and the federally funded Central Valley Project San Felipe Division. Water is piped into SJW’s system at various turnouts after it is treated at one of three Valley Water-operated water treatment plants. In 1981, SJW entered into a 70-year master contract with Valley Water for the purchase of treated water. The contract provides for rolling three-year delivery schedules establishing fixed quantities of treated water to be delivered during each period. SJW and Valley Water currently have a three-year treated water contract for fiscal years 2020/2021 – 2022/2023, with contract supplies of 70,723 AF in 2020/2021, 70,723 AF in 2021/2022, and 71,858 AF in 2022/2023. The actual amount of water delivered depends on considerations including hydrologic variability, interruptions in Valley Water facility operations, and water quality.

SJW draws water from the Santa Clara Subbasin, which is part of the larger Santa Clara Valley Basin. The Santa Clara Subbasin consists of unconsolidated alluvial sediments and covers a surface area of 297 square miles in the northern part of Santa Clara County. The subbasin is not adjudicated. Valley Water is responsible for maintaining the subbasin and ensuring the subbasin does not become overdrafted. Aquifers in the subbasin are recharged naturally by rainfall and streams and artificially mainly by recharge ponds operated by Valley Water. Due to different land use and management characteristics, Valley Water further delineates the Santa Clara Subbasin into two groundwater management areas: the Santa Clara Plain and Coyote Valley. SJW draws groundwater from

the Santa Clara Plain portion, which covers a surface area of 280 square miles and has an operational storage capacity estimated to be 350,000 AF.

As shown in Chart 2 included in the WSA (Appendix D) groundwater elevation in the Santa Clara Plain since the mid 1930's using well surface elevation as the datum. groundwater levels in the Santa Clara Subbasin quickly recovered after the drought due largely to Valley Water's proactive response and comprehensive water management activities.

Groundwater Supply Reliability – Groundwater supplies are often a reliable supply during normal and short-term drought conditions because supplies are local and large aquifer storage capacity means that groundwater supplies will still be available when surface flows become limited. However, groundwater supply availability can become threatened when overdraft occurs and when recharge and inflow decrease. Water quality is another potential constraint of this source of supply. Threats to groundwater supplies are detailed below.

- *Overdraft* – Under extended supply pressures, groundwater basins can enter overdraft conditions, which can have a series of consequences including land subsidence. Threat of overdraft conditions were witnessed in the recent 2012-2016 drought when groundwater levels declined. However, groundwater levels in the Santa Clara Subbasin quickly recovered after the drought due to Valley Water's proactive response.
- *Climate Change* – Climate change could increase the potential for overdraft by increasing demand, reducing other sources of supply, and reducing natural recharge and inflows from surface water and precipitation.
- *Regional Growth* – Population growth could increase demands on groundwater supplies, potentially creating risk of overdraft. Regional growth could also increase the amount of contaminants entering groundwater basins as a result of increased urban runoff or industrial or other activities. Growth can also impact recharge areas by expanding impervious surfaces into areas that would otherwise represent entry points for surface water recharging local aquifers.
- *Aging Infrastructure and High Land Costs* – In 2020, SJW prepared a Groundwater Well Asset Management Plan. Findings from the plan showed that SJW's groundwater well system is vulnerable due to the age of the well infrastructure. Two-thirds of the wells are 50 years or older and were installed with low carbon steel casing using a cable tool drilling method. A low carbon steel casing is susceptible to corrosion and damage in the event of an earthquake. Furthermore, many of SJW's older cable tool drilled wells were installed without sanitary seals as newer wells are, and as such, are more vulnerable to acting as conduits for downward migration of surface contaminants into the aquifer. Space for replacement wells at SJW's existing groundwater stations is limited, and thus, the majority of future wells will need to be located on new properties. However, favorable sites are limited, as they must meet certain production yield and water quality requirements. Furthermore, land prices in the Bay Area are high and present another challenge for SJW to address its aging well infrastructure.
 - *Water Quality* – The presence of per- and polyfluoroalkyl substances (PFAS) in groundwater supplies is prompting interest and concern nationwide. Out of an abundance of caution, SJW has been proactively notifying customers and removing wells from service where PFAS

3.9 HYDROLOGY AND WATER QUALITY

has been detected above the State-defined Notification Levels. SJW is in the process of studying its options for removing PFAS. In addition, because SJW depends on multiple sources of supply that use different disinfectants, maintaining a stable disinfectant residual is problematic when system operations require the blending of chlorinated water with chloraminated water to meet demands. Blending sources, depending on each source's volume and residual concentration, can result in the loss or significant decrease in disinfectant residual levels.

The Santa Clara Subbasin is able to store the largest amount of local reserves and Valley Water, as the groundwater management agency for Santa Clara County, is tasked with maintaining adequate storage in this basin to optimize reliability during extended dry periods. As groundwater is pumped by SJW and other retailers and municipalities in Santa Clara County, Valley Water influences groundwater pumping reductions and thus reliability through financial and management practices to protect groundwater storage and minimize the risk of land subsidence.

As described in the WSA (Appendix B) based on Valley Water's water supply plans and Urban Water Management Plan projections, SJW expects to be able to meet the needs of the service area through at least 2045 for average and single-dry years without a call for water use reductions. The impact of this project is not consequential and SJW has the capacity to serve this project through buildout based on current water supply capacity and Valley Water's proposed water supply projects.

Subsequent development projects under the General Plan, such as residential, commercial, industrial, and roadway projects would result in impervious surfaces and could reduce rainwater infiltration and groundwater recharge. However, the majority of the developable areas within the city are currently developed with urban uses. The majority of open undeveloped lands within the city are designated for parks and open space uses. The proposed General Plan Land Use Map does not re-designate large areas currently designated for open spaces uses to urban uses, or the development of impervious surfaces along creek corridors or percolation ponds. The amount of new pavement and impervious surfaces, and the extent to which they affect infiltration, depends on the site-specific features and soil types of a given project site. Projects located in urban areas would have less of an impact than projects converting open lands and spaces.

Given that implementation and future buildout of the proposed General Plan would generally not appreciably add to the volume of imperious surfaces in Campbell, and that there are adequate water supplies (including groundwater) to serve the projected buildout demand of the General Plan, this potential impact would be **less than significant**.

The General Plan includes policies that support water conservation, the use of permeable surfaces and the use of recycled water for non-potable uses and coordination with local water districts when planning for adequate capacity to accommodate future growth. The General Plan and development codes are consistent with the Groundwater Management Plan objectives. Implementation of the following General Plan policies, would further ensure that the General Plan would have a **less than significant** impact relative to this topic.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-8.8 Encourage all public and private landscaping in new development and renovation projects to be designed to reduce water demand, prevent runoff, decrease flooding, and recharge groundwater through the installation of irrigation systems, the selection of appropriate plant material, and proper soil preparation.

COS-8.9 Maintain and enhance the health of the groundwater basin by encouraging new groundwater recharge opportunities, promoting the use of permeable surface materials and, providing ample areas of open space in order to decrease surface runoff and promote groundwater recharge, and through the use of other LID techniques, such bioswales, where feasible.

COMMUNITY SERVICES AND FACILITIES POLICIES

CSF-3.2 Coordinate with local water districts to ensure the water system and supply adequately meets the needs of existing and future development and is utilized in a sustainable manner.

CSF-3.3 Prior to the approval of major new development, Specific Plans, major infrastructure improvements, or other projects that would result in increased demand for public water conveyance and treatment, such projects must demonstrate proof of adequate water supply (e.g., that existing services are adequate to accommodate the increased demand, or improvements to the capacity of the system to meet increased demand will be made prior to project implementation) and that potential cumulative impacts to water users and the environment will be addressed.

CSF-3.4 Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate water capacity to accommodate future growth.

CSF-3.5 Ensure that all new development provides for and funds its fair share of the costs for adequate water distribution, including line extensions, easements, and dedications.

CSF-3.6 Encourage service providers to explore the use of new technologies in the acquisition, treatment, distribution, and consumption of water including monitoring technologies, and other best practices.

CSF-3.7 Work collaboratively with local water districts to encourage the use of recycled water for irrigation.

CSF-3.8 Support water conservation measures that comply with the State and Federal legislation and that are consistent with measures adopted in all applicable Urban Water Management Plans.

CSF-3.9 Reduce potable water use and increase water conservation.

CSF-3.10 Educate the public on water issues and conservation strategies, in partnership with water districts and regional partners; focus on business activities with the potential to pollute and distribute Best Management Practices (BMP) guidance for business activities.

COMMUNITY SERVICES AND FACILITIES ACTIONS

CSF-3.a Continue to require, as part of the development review process, project applicants to demonstrate sufficient access to water resources to service the project area.

CSF-3.b Continue to maintain, and periodically review and renew, Water Supply Agreements with the San Francisco Public Utilities Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD). The Water Supply Agreements shall provide for adequate supplies to meet the 20-year General Plan buildout projections for the City.

CSF-3.c Regularly review and update the City's water conservation measures to be consistent with current best management practices for water conservation, considering measures recommended by the State Department of Water Resources, the California Urban Water Conservation Council, and the Bay Area Water Supply and Conservation Agency.

CONSERVATION AND OPEN SPACE ACTIONS

COS-8n Coordinate with and support the Santa Clara Valley Water District's groundwater recharge projects, and pursue mutually beneficial agreements that identify and implement groundwater recharge projects within Campbell.

Impact 3.9-3: General Plan implementation could alter the existing drainage pattern in a manner which would result in substantial erosion, siltation, flooding, impeded flows, or polluted runoff (Less than Significant)

General Plan implementation has the potential to impact the Planning Area's storm drainage system. The potential impacts would be primarily derived from development in what are now underdeveloped and/or underutilized areas, which could affect the existing drainage patterns.

Construction activities are regulated by the NPDES General Construction Storm Water Permit. Compliance with the storm water permit during construction activities requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains BMPs to control the discharge of pollutants, including sediment, into local surface water drainages. Additionally, the City, in accordance with its approved SWMP, must implement Post-Construction Storm Water Management in new development and redevelopment. Further, the SCVURPPP implements pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers.

In addition to complying with the NPDES programs and SCVURPPP stormwater requirements, the General Plan contains policies and actions to reduce impacts associated with stormwater and drainage including policies to maintain sufficient levels of storm drainage service, improvements to flood control facilities, and other best practices in order to protect the community from flood hazards, and minimize the discharge of materials into the storm drain system that are toxic, or which could obstruct flows. Additionally, the General Plan policies encourage that stormwater be directed towards permeable surfaces, incorporate stormwater capture, and promote BMPs and Low Impact Development measures (LID) to treat stormwater.

Individual future projects allowed under the General Plan may create new impervious surfaces. This may result in an incremental reduction in the amount of natural soil surfaces available for infiltration of rainfall and runoff, potentially generating additional runoff during storm events. In addition, the increase in impervious surfaces, along with the increase in surface water runoff, could increase the non-point source discharge of pollutants. Anticipated runoff contaminants include sediment, pesticides, oil and grease, nutrients, metals, bacteria, and trash. Contributions of these contaminants to stormwater and non-stormwater runoff would degrade the quality of receiving waters. During the dry season, vehicles and other urban activities release contaminants onto the impervious surfaces, where they can accumulate until the first storm event. During this initial storm event, or first flush, the concentrated pollutants would be transported via runoff to stormwater drainage systems. Contaminated runoff waters could flow into the stormwater drainage systems that discharge into rivers, agricultural ditches, sloughs, and channels, and ultimately could degrade the water quality of any of these water bodies.

The General Plan sets policies and actions for build-out of the City, but it does not envision or authorize any specific development project. Because of this, the site-specific details of potential future development projects are currently unknown and analysis of potential impacts of such projects is not feasible and would be speculative. As previously discussed in the Regulatory Setting section of this chapter, future project applicants would be required to obtain permits from the Army Corps of Engineers and the Department of Fish and Wildlife if any work is performed within a waterway. Each future development project must also include detailed project specific floodplain and drainage studies that assess the drainage characteristics and flood risks so that an appropriate SWMP can be prepared to control storm water runoff, both during and after construction. The SWMP will ultimately include project specific best management measures that are designed to allow for natural recharge and infiltration of stormwater. Construction of storm drainage improvements would occur as part of an overall development or infrastructure project, and is considered in the environmental impacts associated with project construction and implementation as addressed throughout this EIR.

As previously described, the City manages local storm drain facilities and the Santa Clara Valley Water District (SCVWD) is responsible for regional flood control planning within the County. Provision of stormwater detention facilities as needed would reduce runoff rates and peak flows. The City has developed the General Plan to include policies and actions that, when implemented, will reduce flooding from new development, reduce storm water pollution from new development, and protect and enhance natural storm drainage and water quality features, which will in turn reduce water quality impacts. As described previously, existing regulatory requirements including NPDES and Waste Discharge permits from the RWQCB and implementation of BMPs manage quality. Through implementation of the General Plan policies and actions listed below, implementation of the Campbell Municipal Code requirements identified above, compliance with mandatory Federal and State regulations, and compliance with the existing regulations for the SCVURPPP would ensure that impacts related to increased flooding or water quality impacts associated with increased runoff would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND OPEN SPACE ELEMENT POLICIES

COS-7.6 Limit the disturbance of natural water bodies and drainage systems in Campbell by conserving natural open space areas, protecting channels, and minimizing the impacts from stormwater and urban runoff.

COS-8.8 Encourage all public and private landscaping in new development and renovation projects to be designed to reduce water demand, prevent runoff, decrease flooding, and recharge groundwater through the installation of irrigation systems, the selection of appropriate plant material, and proper soil preparation.

COS-8.9 Maintain and enhance the health of the groundwater basin by encouraging new groundwater recharge opportunities, promoting the use of permeable surface materials and, providing ample areas of open space in order to decrease surface runoff and promote groundwater recharge, and through the use of other LID techniques, such bioswales, where feasible.

COMMUNITY SERVICES AND FACILITIES ELEMENT POLICIES

CSF-3.2 Coordinate with local water districts to ensure the water system and supply adequately meets the needs of existing and future development and is utilized in a sustainable manner.

CSF-3.3 Prior to the approval of major new development, Specific Plans, major infrastructure improvements, or other projects that would result in increased demand for public water conveyance and treatment, such projects must demonstrate proof of adequate water supply (e.g., that existing services are adequate to accommodate the increased demand, or improvements to the capacity of the system to meet increased demand will be made prior to project implementation) and that potential cumulative impacts to water users and the environment will be addressed.

CSF-3.4 Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate water capacity to accommodate future growth.

CSF-3.5 Ensure that all new development provides for and funds its fair share of the costs for adequate water distribution, including line extensions, easements, and dedications.

CSF-3.6 Encourage service providers to explore the use of new technologies in the acquisition, treatment, distribution, and consumption of water including monitoring technologies, and other best practices.

CSF-3.7 Work collaboratively with local water districts to encourage the use of recycled water for irrigation.

CSF-3.8 Support water conservation measures that comply with the State and Federal legislation and that are consistent with measures adopted in all applicable Urban Water Management Plans.

CSF-3.9 Reduce potable water use and increase water conservation.

CSF-3.10 Educate the public on water issues and conservation strategies, in partnership with water districts and regional partners; focus on business activities with the potential to pollute and distribute Best Management Practices (BMP) guidance for business activities.

CSF-5.1 Maintain and improve Campbell's storm drainage facilities.

CSF-5.2 Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

CSF-5.3 Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

CSF-5.4 Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

CSF-5.5 Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and trees, and maintain natural drainage patterns.

CSF-5.6 Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

CSF-5.7 Where possible, avoid new outfalls to natural or earthen channels.

CSF-5.8 Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

CSF-5.9 Encourage dual-use detention basins for parks, ball fields, and other appropriate uses.

CONSERVATION AND OPEN SPACE ELEMENT ACTIONS

COS-7b Continue to require new development and infrastructure projects to incorporate the standards and requirements contained in the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 Stormwater Handbook to ensure that Low Impact Development (LID) measures are incorporated into site designs to reduce pollutants from non-point sources, incorporate "green" infrastructure, and encourage greater use of permeable paving surfaces.

COS-7j Update Section 21.18.110 (Refuse and recycling storage areas) of the Municipal Code to require new and existing (subject to specified thresholds) refuse enclosures to incorporate appropriate stormwater protection measures consistent with the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 Stormwater Handbook.

COMMUNITY SERVICES AND FACILITIES ELEMENT ACTIONS

CSF-5.a Regularly review and update the City of Campbell's Green Stormwater Infrastructure Plan.

CSF-5.b Continue to complete gaps in the drainage system in areas of existing development through the implementation of drainage improvement projects identified in the Green Stormwater Infrastructure Plan.

CSF-5.c Continue to review development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

CSF-5.d Require project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

CSF-5.e Identify which stormwater drainage facilities are in need of repair and address these needs through the City's Capital Improvement Program.

CSF-5.f Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the C.3 Stormwater Handbook.

CSF-5.g Work cooperatively with local, State, and Federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

Impact 3.9-4: General Plan implementation would not release pollutants due to project inundation by flood hazard, tsunami, or seiche (Less than Significant)

FLOOD

The Planning Area is subject to limited flooding problems along the natural creeks, and drainages in the Planning Area. The FEMA FIRM for the Planning Area is shown on Figure 3.9-3. As shown in Figure 3.9-3, only a small portion of Campbell is subject to flooding. The Planning Area is subject to flooding problems along the natural creeks and drainages that traverse the area. Los Gatos Creek and San Tomas Aquinas Creek are the most prominent drainages in the Planning Area that are subject to flooding. The 100-year flood plain is largely confined to the drainage channels along these creeks. As delineated by FEMA, approximately 94 acres of land within Campbell is within the 100-year flood zone, and an additional 7.02 acres is also subject to 500-year flood conditions. Zone D (Area of Undetermined Flood Hazard) accounts for 368.52 acres of land within Campbell.

The General Plan would allow development and improvement projects that would involve some small levels of land clearing, grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. As required by the Clean Water Act, each subsequent development project or improvement project will require an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading and preservation of topsoil. SWPPPs are designed to control storm water quality degradation to the extent practicable using best management practices during and after construction.

As described previously in the Regulatory Setting, the City of Campbell regulates storm water discharge in accordance with the NPDES permit through Chapter 14.02 of the Campbell Municipal Code, Stormwater Pollution Control. Additionally, Chapter 20.56 – Drainage and Sewer Facilities,

Chapter 20.80 – Environmental Impact and Grading and Erosion Control, and Chapter 21.22 – Flood Damage Prevention include standards for flood damage prevention and floodplain management.

In addition to complying with the NPDES programs and WQMP stormwater requirements, the General Plan contains policies to reduce impacts associated with stormwater and drainage including policies to maintain sufficient levels of storm drainage service, improvements to flood control facilities and channel segments, and other best practices in order to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic. The implementation of the General Plan would result in a **less than significant impact** relative to this topic.

TSUNAMI AND SEICHES

Tsunamis and seiches are standing waves that occur in the ocean or relatively large, enclosed bodies of water that can follow seismic, landslide, and other events from local sources (California, Oregon, Washington coast) or distant sources (Pacific Rim, South American Coast, Alaska/Canadian coast).

Campbell is located approximately 15 miles from the Pacific Ocean at an elevation of approximately 200 feet above mean sea level. Based on tsunami inundation maps prepared by the Department of Conservation, California Emergency Management Agency, and California Geological Survey the City is not identified as being within a tsunami inundation or run-up zone.

Seiches are typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm fronts may also cause seiches along ocean shelves and ocean harbors, or other bodies large of water. Any body of water may experience limited oscillation during storm events or following seismic events, however oscillation in small bodies of water is generally limited. The City of Campbell is not mapped within a tsunami or seiche hazard area. However, smaller water bodies seiches may have the potential to damage or overtop dams. Generally, in lakes the threat of large-scale damage from seiches comes from downstream flooding that would be caused by large volumes of water overtopping a dam or reservoir.

Earthquakes centered close to a dam are typically the most likely cause of dam failure. There are two dams that have the potential to inundate portions of the City of Campbell in the event of dam failure including: the Austrian Dam (Lake Elsmar), and the Lenihan Dam (Lexington Reservoir). A brief description of each dam is provided below. Dam inundation areas are shown on Figure 3.9-4.

- The Austrian Dam is a 180-foot high embankment dam, which was damaged during the October 17, 1989 Loma Prieta Earthquake. It is located within California's Santa Cruz Mountains (approximately 10 miles south of Campbell), and situated at the convergence of the Sargent Fault located 700 feet northeast of the dam, and the San Andreas Fault 1700 feet southeast of the dam. Built in 1951, the dam has 15 feet of freeboard and impounds a 6200 acre-foot reservoir. The dam's foundation is bedded clay shale while the abutments

3.9 HYDROLOGY AND WATER QUALITY

are comprised of a sandstone and clay shale. The dam is owned and operated by the San Jose Water Company.

- The Lenihan Dam and Lexington Reservoir is located on Los Gatos Creek approximately seven miles south of Campbell. The dam was constructed in 1952 and the Santa Clara Valley Water District is the owner/operator of the dam. The 2.5-miles-long reservoir is the second-largest water district reservoir. The reservoir capacity is 19,044 acre-feet of water. Its surface area is 412 acres.

These dams do not have a history of dam failure; however, these dams are identified as having the potential to inundate habitable portions of the Planning Area in the unlikely event of dam failure. The Santa Clara Valley Water District's Dam Safety Program recognizes the catastrophic nature of potential dam failure and operates a comprehensive dam safety program to protect the public.

The Dam Safety Program includes four main components:

1. Periodic special engineering studies
2. Surveillance and monitoring program
3. Routine inspections and maintenance activities
4. Maintaining emergency response and preparedness plans

Through the water district's dam safety program, it ensures the continued operation of its 10 major dams within the county. The water district also works closely with state and federal regulators, and downstream emergency response partners.

Regular inspection by Santa Clara Valley Water District's Dam Safety Program and maintenance by the dam owners ensure that the dams are kept in safe operating condition. As such, failure of these dams is considered to have an extremely low probability of occurring and is not considered to be a likely reasonably foreseeable event.

In addition, man-made ponds within the Planning Area are shallow with limited surface areas and would not generate devastating seiches. Additionally, the City of Campbell is not identified within a tsunami hazard area and would not be subject to substantial impacts from seiche events. Therefore, this is considered a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SA-2.1 Support and participate in planning efforts undertaken at the local, regional, State, and Federal levels to improve flood management facilities and dam safety throughout Santa Clara County.

SA-2.3 Ensure that construction activities and new development will not result in adverse impacts to existing properties and flood control and drainage structures.

SA-2.4 Unless otherwise mitigated, require new structures to be located outside of the 100-year floodplain. All new development within an identified Flood Hazard Area shall be built according to Federal Emergency Management Agency standards and comply with Campbell's Flood Damage Prevention Ordinance criteria (Campbell Municipal Code Chapter 21.22).

SA-2.5 Encourage and accommodate multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of Campbell's drainages, creeks, and detention ponds. Where appropriate and feasible, the City shall encourage the use of water detention facilities for use as groundwater recharge facilities.

SA-2.6 Encourage flood control measures identified within the Conservation and Open Space Element such as bioswales, and permeable materials that enhance natural drainage features, vegetation, and natural waterways, while still providing for adequate flood control and protection.

SA-2.7 Ensure that adequate drainage and erosion control measures are provided during construction of all new development which requires a building permit.

SA-2.8 Ensure that any development activity that requires a grading permit does not impact adjacent properties, local creeks, or storm drainage systems by designing and building the site to drain properly to minimize drainage issues and erosion.

SAFETY ELEMENT ACTIONS

SA-1.e Continue to maintain and provide an inventory of all natural hazards, including active faults, Alquist-Priolo Special Study Zones, floodplains, hazardous soil conditions, and dam failure inundation areas.

SA-2.a Coordinate with Federal and State agencies and encourage them to update flood hazard maps within Campbell and calculate accurate Base Flood Elevation (BFE) levels for all areas determined to be within a flood hazard zone in Campbell.

SA-2.b Have all Letter of Map Amendments (LOMAs) that are approved submit their GIS data to Santa Clara County so that the County can compile updated data on the most accurate location of flood hazard areas and BFE within the city.

SA-2.c As part of the development review process continue to require new development which requires a building permit to prepare hydraulic and storm drainage studies as necessary to define the net increase in storm water run-off resulting from construction and require mitigation to reduce impacts. Drainage and grading plans shall identify BMP protections and include standards established and recommended by the City that shall be incorporated into development.

SA-2.d Continue to participate in the National Flood Insurance Program (NFIP), and consider future participation in the NFIP Community Rating System (CRS).

SA-2.e Continue to review projects in flood hazard areas to ensure compliance with Campbell Municipal Code Chapter 21.22 (Flood Damage Prevention Ordinance).

SA-2.f Periodically review the conditions of bridges, culverts, canals and other flood control and stormwater conveyance infrastructure, and when feasible include necessary improvements within the CIP to increase safety and the adequate conveyance of stormwater.

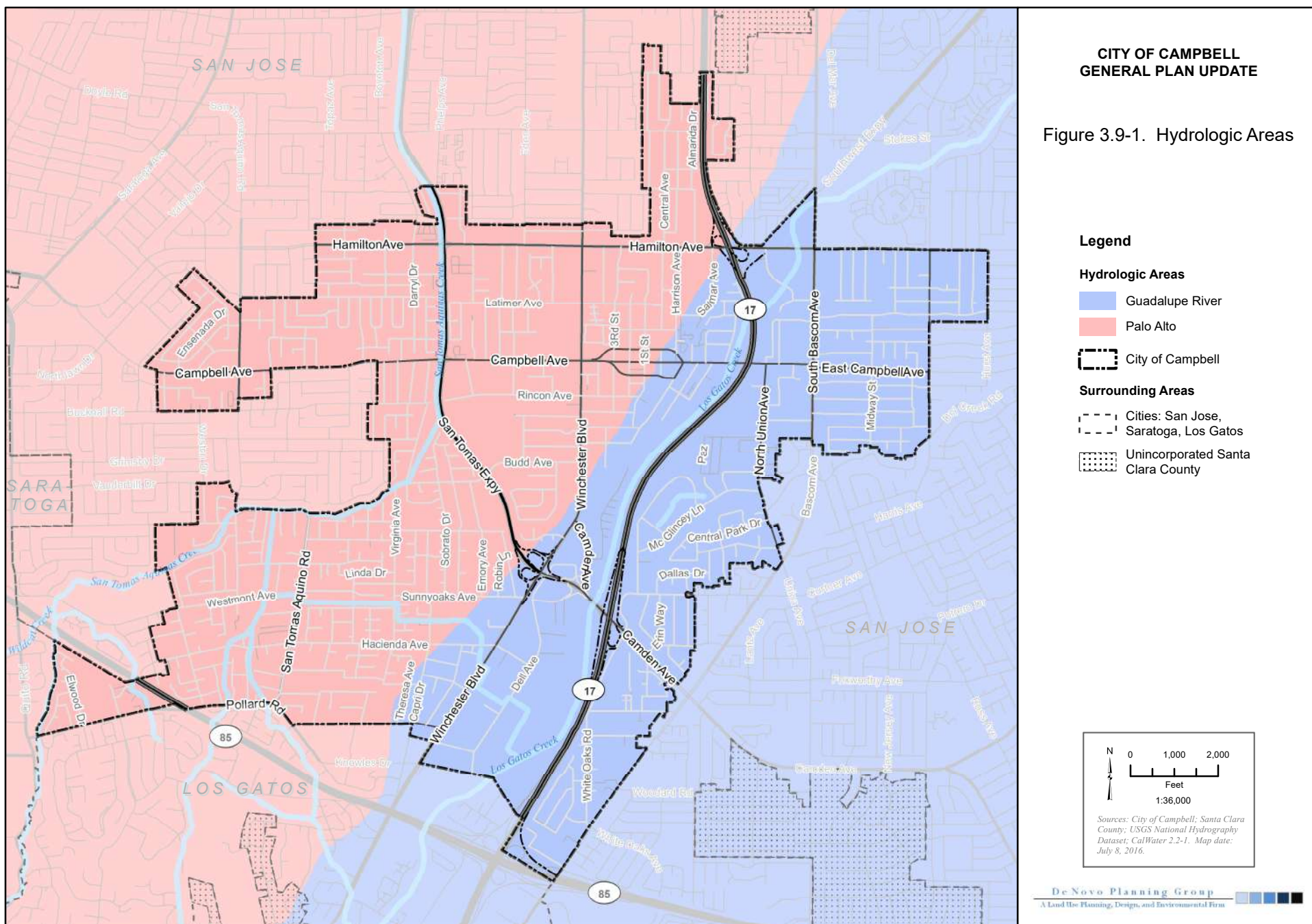
3.9 HYDROLOGY AND WATER QUALITY

SA-2.g Periodically review Campbell Municipal Code Chapter 21.22 - (Flood Damage Prevention), and revise as necessary to ensure that development standards are consistent with the requirements of State and Federal law.

SA-2.h Require developers to cover the costs of drainage facilities needed for surface runoff generated as a result of new development.

**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

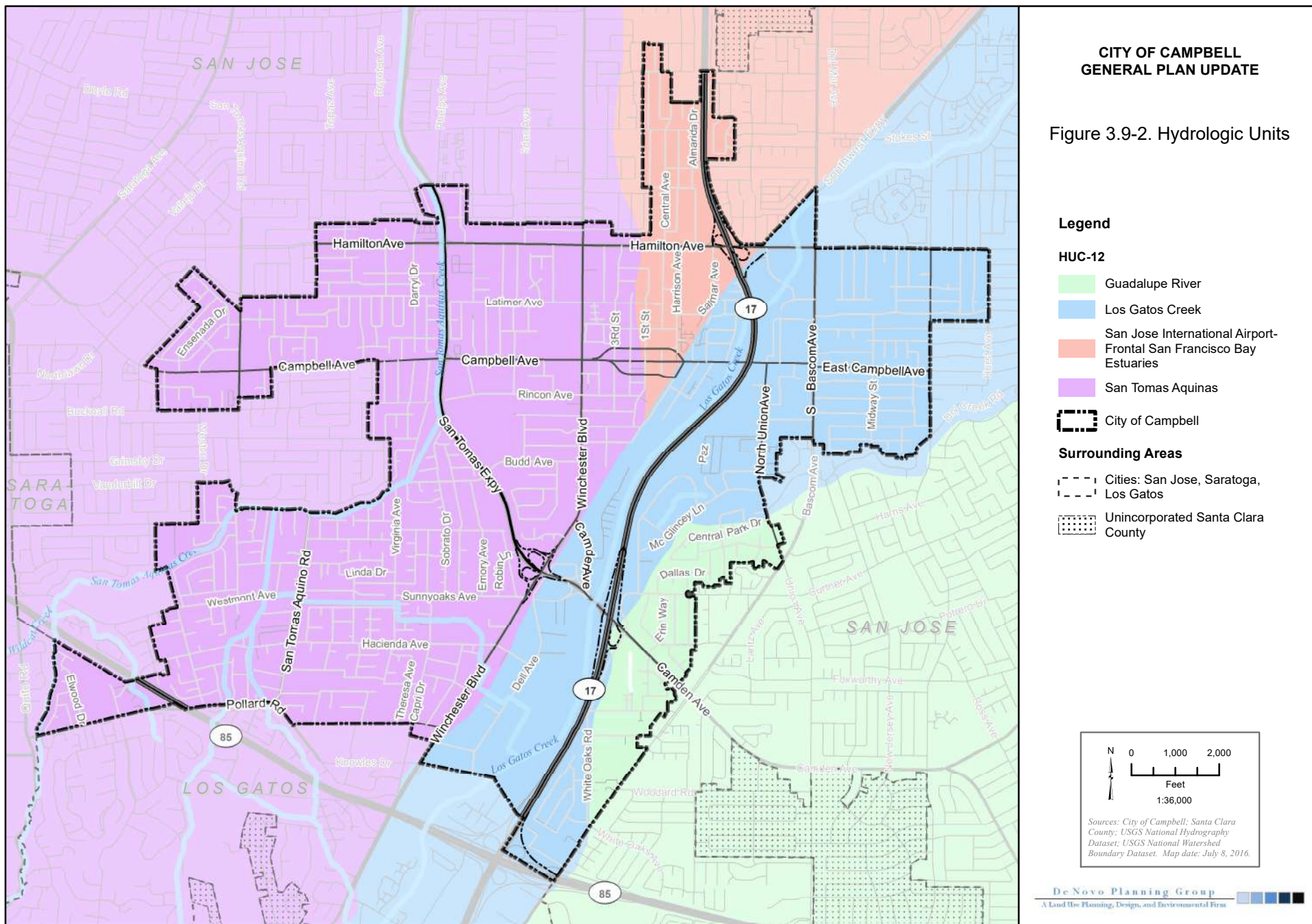
Figure 3.9-1. Hydrologic Areas



This page left intentionally blank.

**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

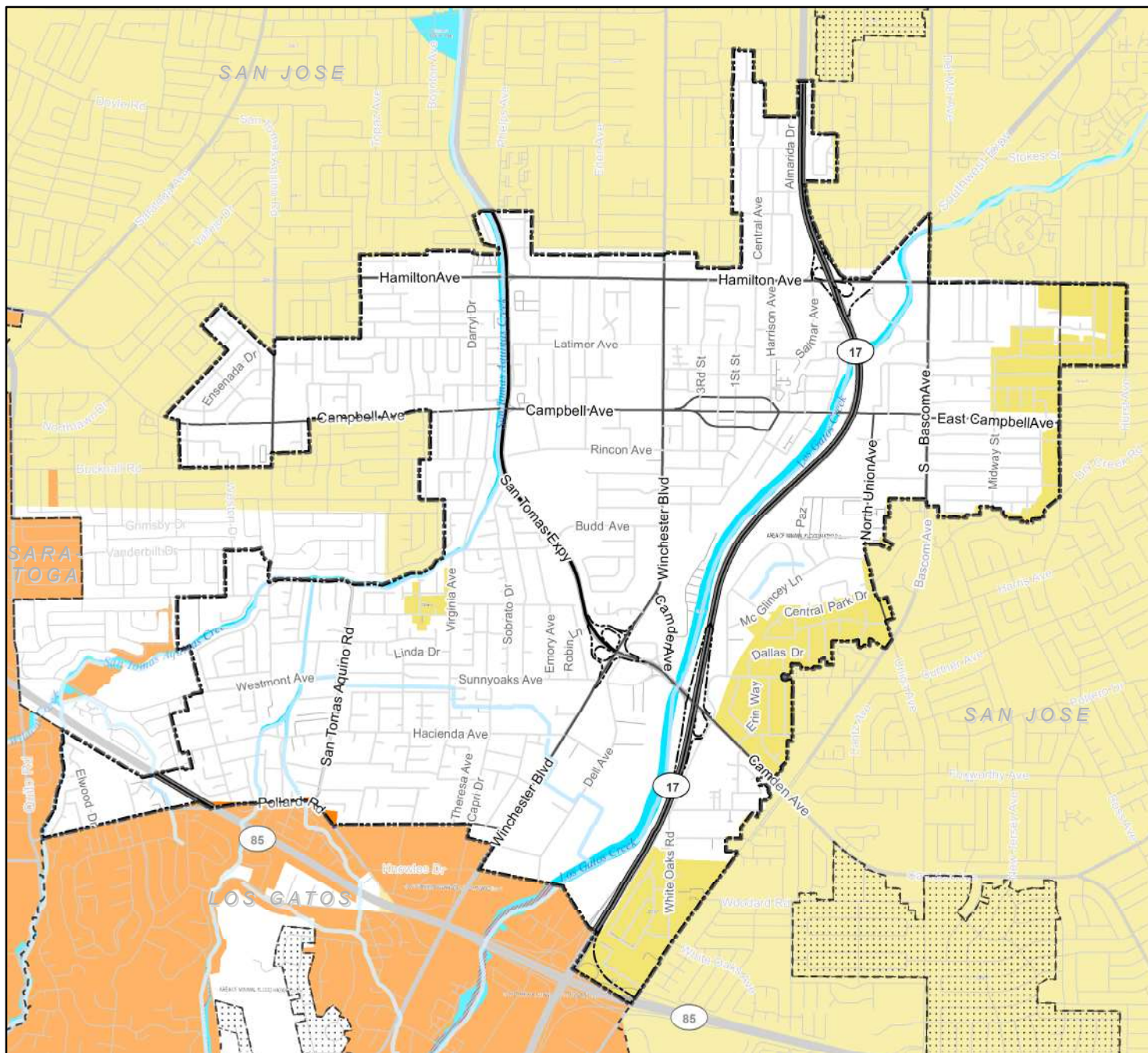
Figure 3.9-2. Hydrologic Units



This page left intentionally blank.

**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

**Figure 3.9-3.
FEMA Flood Hazard Zones**



Legend

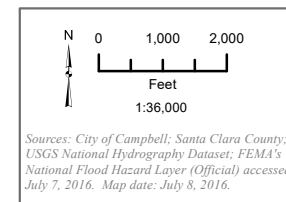
FEMA Designation

- 1% Annual Chance Flood Hazard (100-yr Flood)
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard (500-yr Flood)

City of Campbell

Surrounding

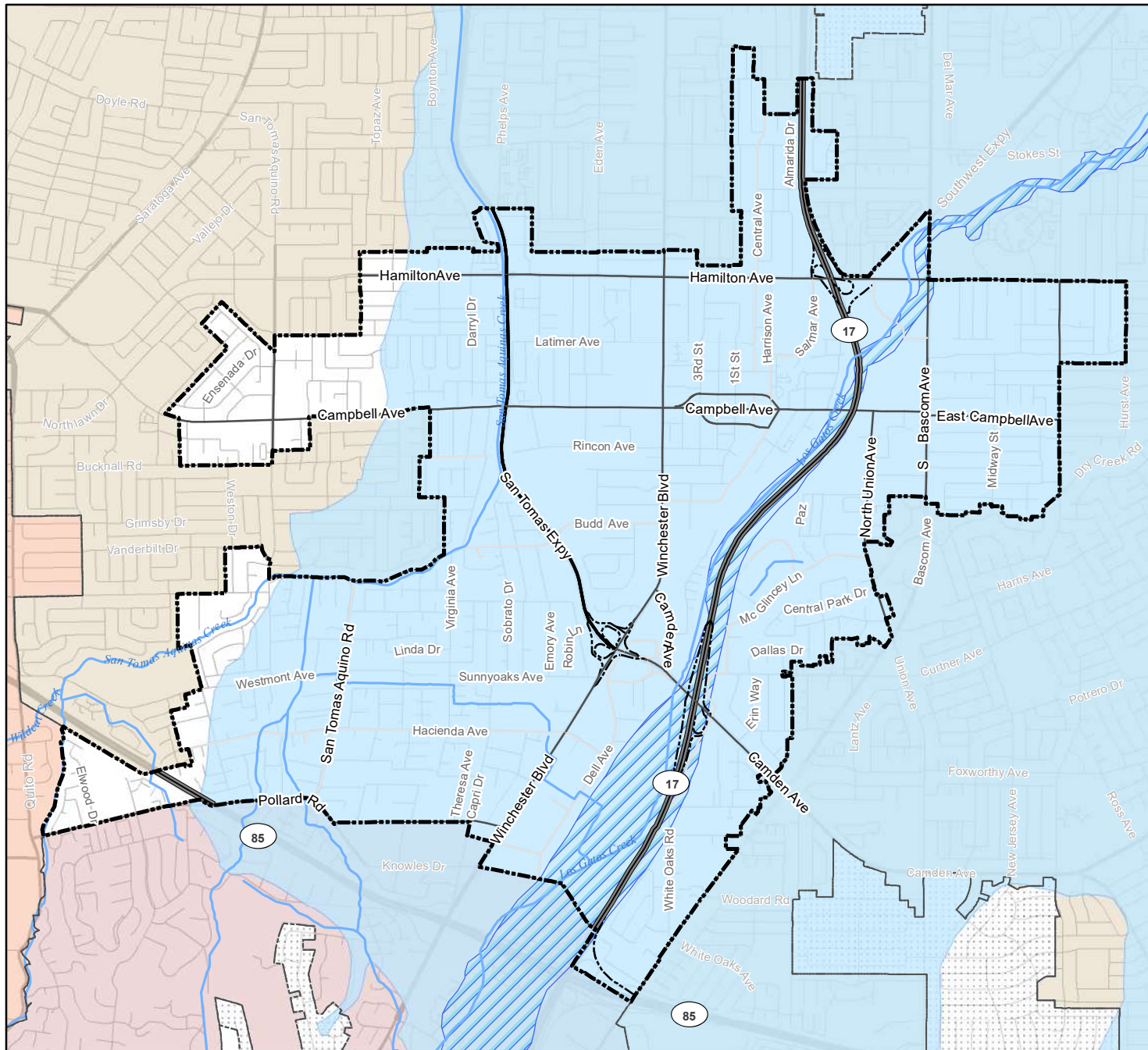
- Cities: San Jose, Saratoga, Los Gatos
- Unincorporated Santa Clara County










This page left intentionally blank.

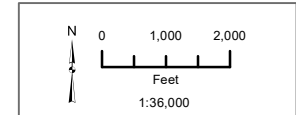
**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

**Figure 3.9-4
Dam Inundation Areas**



Legend

- Dam Inundation Areas**
-  Austrian Dam/Lake Elisman
 -  Lenihan Dam/Lexington Reservoir
-  City of Campbell
- Surrounding**
-  City of San Jose
 -  City of Los Gatos
 -  City of Saratoga
 -  Unincorporated Santa Clara County



Sources: Cal EMA, Dam Inundation Areas, April 2009; City of Campbell; Santa Clara County; USGS National Hydrography Dataset. Map date: July 5, 2016.

This page left intentionally blank.

This section identifies the existing land use conditions, discusses population and housing trends and projections, analyzes the project's consistency with relevant planning documents and policies adopted for the purpose of avoiding or mitigating an environmental effect, and recommends mitigation measures to avoid or minimize the significance of potential environmental impacts. General Plan policies associated with other specific environmental topics are discussed in the relevant sections of this EIR.

No comments on this environmental topic were received during the NOP comment period.

3.10.1 ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The City Limits includes the area within the City's corporate boundary, over which the City exercises land use authority and provides public services. A City's Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO). An SOI may include both incorporated and unincorporated areas within which a city or special district will have primary responsibility for the provision of public facilities and services. For the purposes of the Campbell General Plan Update, the Planning Area is defined as the area within the City's SOI/City Boundary that is included in the analysis and planning for the approximate 20-year horizon of the City's General Plan Update. Campbell's City limits and SOI are coterminous.

Land Use Patterns

When discussing land use, it is important to distinguish between planned land uses and existing land uses. The General Plan land use designations identify the long-term planned use of land, but do not present a complete picture of existing land uses, or what's actually present on a given parcel within the city. The Santa Clara County Assessor's office maintains a database of existing land uses on individual parcels, including the number of dwelling units and related improvements such as non-residential building square footage. This information is used as the basis for property tax assessments and is summarized in Table 3.10-1 and depicted on Figure 3.10-1.

3.10 LAND USE, POPULATION, HOUSING

TABLE 3.10-1 EXISTING ASSESSED LAND USES

<i>ROW LABELS</i>	<i>PARCEL COUNT</i>	<i>RESIDENTIAL UNITS</i>	<i>NON-RESIDENTIAL SQ FT</i>	<i>ACRES</i>	<i>% OF TOTAL ACRES</i>
Single Family Residential	7,637	7,686	0	1,465.05	47.53%
1-Single Family	7,637	7,686	0	1,465.05	47.53%
Multifamily Residential	3,486	9,714	0	400.69	13.00%
2-Two Family	253	497	0	45.67	1.48%
3-Three and Four Family	389	1,536	0	77.35	2.51%
4-Five or More Family	113	4,976	0	191.99	6.23%
6-Condominium, Townhouse	2,729	2,703	0	84.95	2.76%
7-Fraternity, Sorority, Boarding, Rooming House	2	2	0	0.73	0.02%
Agricultural	2	0	0	1.04	0.03%
91-Agriculture: Orchard	2	0	0	1.04	0.03%
Commercial	295	0	3,230,060	241.37	7.82%
51-Community Shopping Center	3	0	410,406	30.22	0.98%
52-Neighborhood Shopping Center	15	0	514,260	41.71	1.35%
58-Retail Uses other than Reg/Com/Neigh Shopping	255	0	2,286,624	159.07	5.16%
60-Parking Garage	1	0	0	0.86	0.03%
61-Service Station	16	0	18,770	6.89	0.22%

<i>ROW LABELS</i>	<i>PARCEL COUNT</i>	<i>RESIDENTIAL UNITS</i>	<i>NON-RESIDENTIAL SQ FT</i>	<i>ACRES</i>	<i>% OF TOTAL ACRES</i>
87-Commercial Open Space, Public Parking Lots	5	0	0	2.62	0.09%
Industrial Manufacturing	47	0	186,045	13.53	0.44%
20-Food and Kindred Products, Wineries	1	0	1,720	0.27	0.01%
22-General Manufacturing	8	0	50,960	3.39	0.11%
24-Lumber and Wood Products Excluding Furniture	2	0	22,170	2.10	0.07%
25-Furniture and Fixtures	1	0	1,758	0.30	0.01%
34-Fabricated Metal Products	1	0	8,160	0.28	0.01%
35-Nonelectrical Machinery & Electronics	6	0	32,341	2.13	0.07%
38-Instruments	1	0	25,600	1.84	0.06%
40-Industrial Condominium	27	0	43,336	3.21	0.10%
Industrial Non-manufacturing	255	0	3,247,869	205.60	6.67%
10-Lumber and Other Building Materials Dealers	3	0	4,477	3.49	0.11%
11-Public Warehousing	35	0	532,699	26.27	0.85%
12-Wholesaling with Stock	9	0	77,433	4.87	0.16%
14-Research & Development Branches of MFG Firms	10	0	629,680	39.82	1.29%
16-General Industrial Nonmanufacturing or Combination MFG & non-MFG	136	0	1,652,042	98.68	3.20%

3.10 LAND USE, POPULATION, HOUSING

<i>ROW LABELS</i>	<i>PARCEL COUNT</i>	<i>RESIDENTIAL UNITS</i>	<i>NON-RESIDENTIAL SQ FT</i>	<i>ACRES</i>	<i>% OF TOTAL ACRES</i>
17-Yards - Equipment/Supplies of Cont, Pub Util,	26	0	107,457	14.73	0.48%
19-Misc. Industrial Nonmanufacturing & Heavy Comm	36	0	244,081	17.74	0.58%
Institutional	65	0	569,436	191.70	6.22%
62-Childcare, Preschool, Adult Daycare Centers	7	0	73,423	8.07	0.26%
63-Residential Care Facilities	5	0	352,334	6.65	0.22%
68-Mortuaries	1	0	6,308	0.41	0.01%
71-Public Schools and Playfields	9	0	0	96.50	3.13%
72-Other Schools	3	0	0	11.59	0.38%
74-Public Buildings	10	0	0	17.26	0.56%
75-Convalescent Hospitals, Skilled Nursing Facilities	3	0	24,457	2.52	0.08%
76-Churches	27	0	112,914	48.70	1.58%
Office	224	0	2,797,454	132.95	4.31%
59-Offices, High-Rise Office, Banks, Clinics	224	0	2,797,454	132.95	4.31%
Open Spaces	68	0	666	177.18	5.75%
81-Neighborhood Parks	2	0	0	0.17	0.01%
86-Other Public Open Space Uses	2	0	666	0.58	0.02%
95-Reservoir, Water Supply, Flood Control	64	0	0	176.43	5.72%

<i>ROW LABELS</i>	<i>PARCEL COUNT</i>	<i>RESIDENTIAL UNITS</i>	<i>NON-RESIDENTIAL SQ FT</i>	<i>ACRES</i>	<i>% OF TOTAL ACRES</i>
Parks and Recreational Facilities	12	0	6,193	62.80	2.04%
65-Social Clubs, Fraternal Orders Community Ctr	2	0	5,018	21.33	0.69%
81-Neighborhood Parks	6	0	0	31.76	1.03%
83-Neighborhood Pool Clubs	2	0	1,175	0.96	0.03%
84-Playfields, not Associated with Schools	2	0	0	8.76	0.28%
Transportation/Communication/Utilities	16	0	11,559	14.12	0.46%
41-Streets - Limited Access	2	0	0	2.08	0.07%
42-Streets - Local	3	0	0	0.64	0.02%
43-Railroad Transportation	1	0	0	0.02	0.00%
44-Utilities & Communication	11	0	5,959	10.67	0.35%
46-Bus and Truck Transportation	1	0	5,600	0.72	0.02%
Vacant Urban Lands	143	0	41,052	37.51	1.22%
69-Vacant Urban	142	0	41,052	37.37	1.21%
Non-Taxable	198	0	0	110.18	3.57%
0-Unassigned	198	0	0	110.18	3.57%
ROW	22	0	0	28.43	0.92%
0-Unassigned	22	0	0	28.43	0.92%

3.10 LAND USE, POPULATION, HOUSING

<i>ROW LABELS</i>	<i>PARCEL COUNT</i>	<i>RESIDENTIAL UNITS</i>	<i>NON-RESIDENTIAL SQ FT</i>	<i>ACRES</i>	<i>% OF TOTAL ACRES</i>
Grand Total	12,472	17,400	10,090,334	3,082.16	100.00%

SOURCE: SANTA CLARA COUNTY ASSESSOR'S OFFICE, 2016; DE NOVO PLANNING GROUP, 2016

NOTE: 107 PARCELS DID NOT HAVE COUNTY ASSESSOR'S LAND USE CODES INCLUDED. THESE PARCELS WERE ASSESSED BY DE NOVO PLANNING GROUP USING 2016 GOOGLE IMAGERY.

RESIDENTIAL

Residential uses in Campbell include single-family houses and multi-family developments. Single family residential is the dominant land use type in the city, accounting for 47.5% of the city's land area. Single family residential land uses are located throughout the city, as shown on Figure 3.10-1. There are approximately 7,686 single family residential units in the city, located on 7,637 parcels which total 1,465 acres.

Multifamily residential refers to parcels that contain more than one housing unit, and attached structures including duplexes, triplexes, fourplexes, condominiums, townhomes, and apartment buildings. The predominant type of multifamily development is apartment complexes of five or more units, which account for more than half (4,976 out of 9,714; 51.2%) of the multifamily units in the City. Townhomes and condominiums account for 2,703 units (27.8%), and an additional 2,033 (20.9%) multifamily units are located within two, three and four unit structures. Multifamily uses are generally located near services, including retail uses, and are distributed throughout the city, as shown on Figure 3.10-1.

COMMERCIAL

The majority of non-residential development acreage in the city is commercial, which includes approximately 3.2 million square feet (s.f.) of building area on 241.37 acres. Commercial uses, as identified by the County Assessor, are varied. The predominate type of commercial land use, based on s.f. of development, is retail uses other than regional commercial and neighborhood shopping (2,286,624 s.f.), neighborhood shopping centers (514,260 s.f.), and community shopping centers (410,406 s.f.). Other commercial uses in Campbell include service stations that account for 6.89 acres of land and 18,770 s.f. As shown on Figure 3.10-1, many of the city's commercial uses are located in and around the Downtown core, and along South Bascom, Hamilton, and Camden Avenues.

INDUSTRIAL MANUFACTURING

Industrial Manufacturing uses total approximately 186,045 s.f. of development on 13.53 acres. Industrial Manufacturing uses include: General Manufacturing (50,960 s.f.), Industrial Condominium (43,336 s.f.), Nonelectrical Machinery & Electronics (32,341 s.f.), Instruments (25,600 s.f.), Lumber and Wood Products Excluding Furniture (22,170 s.f.), Fabricated Metal Products (8,160 s.f.), Furniture and Fixtures (1,758 s.f.), Food and Kindred Products and Wineries (1,720 s.f.). Figure 3.10-1 shows Industrial Manufacturing uses throughout the city.

INDUSTRIAL NON-MANUFACTURING

Industrial Non-Manufacturing uses total approximately 3,247,869 s.f. of development on 205.60 acres. Industrial Non-Manufacturing uses include: Nonmanufacturing or Combination Manufacturing and Non-Manufacturing (1,652,042 s.f.), Research & Development Branches of Manufacturing Firms (629,680 s.f.), Public Warehousing (532,699 s.f.), Miscellaneous Industrial Nonmanufacturing & Heavy Commercial (244,081 s.f.), General Industrial Yards - Equipment/Supplies (107,457 s.f.), Wholesaling with Stock (77,433 s.f.), and Lumber and Other Building Materials Dealers (4,477 s.f.). Figure 3.10-1 shows Industrial Non-Manufacturing uses throughout the city.

3.10 LAND USE PLANNING AND POPULATION/HOUSING

OFFICE

Offices uses include High-Rise Office, Banks, and Clinical Offices. Office development includes 224 parcels on approximately 132.95 acres of land and includes approximately 2,797,454 s.f of office uses. Office uses are located throughout the city as shown on Figure 3.10-1.

INSTITUTIONAL

Institutional uses include Childcare, Preschool, and Adult Daycare Centers, Residential Care Facilities, Mortuaries, Public and Private Schools and Playfields, Public Buildings, Convalescent Hospitals, Skilled Nursing Facilities, and Churches. There are 65 parcels with institutional uses that include 569,436 s.f. of development on 191.7 acres. Residential Care Facilities represent the most development in the institutional category with 352,334 s.f. on 6.65 acres. The category with the second highest amount of development is Churches, which include 112,914 s.f. of development on 48.7 acres. Institutional uses located throughout the city as shown on Figure 3.10-1.

AGRICULTURE LAND

The agriculture and land category includes urban agricultural uses, and orchard crops. Two parcels have been designated Agricultural by the county assessor, totaling 1.04 acres of land¹.

PARKS AND RECREATIONAL FACILITIES

The Parks and Recreational Facilities category includes Social Clubs, Community Centers, Neighborhood Parks, Neighborhood Pool Clubs, and Playfields (not associated with schools). Parks and Recreational Facilities includes 62.80 acres on 12 parcels, and includes approximately 6,193 square feet of recreational facilities.

TRANSPORTATION COMMUNICATION AND UTILITIES

Limited and Local Access Streets, Railroad Transportation, Utilities & Communication, and Bus and Truck Transportation. The Transportation Communication and Utilities uses includes 14.2 acres within the city totaling 18 parcels. Additionally, Utilities & Communication uses includes 5,959 building square feet, while Bus and Truck Transportation includes 5,600 building square feet.

VACANT URBAN LANDS

Vacant Urban Land is generally unused land. Vacant Urban Lands include 37.51 acres of land on 143 parcels, and account for approximately 1.25% of the total assessed area of the city. Lands in this category are typical void of structures however, according to County Assessor data includes approximately 41,052 square feet of non-residential uses.

Population and Household Size

As shown in Table 3.10-2, Campbell's population increased (45 percent) from 1970 through 1990. From 1990 to 2010 population growth slowed, and this trend has continued through 2020.

Over the years, the average household size has fluctuated slightly with a high of 3.39 in 1970, and a low of 2.31 in 1980. In recent years, household size has remained at similar levels with an average

¹ Note: These parcels may have had past agricultural uses, but do not include active agricultural uses as of 2022. Both parcel are developed with residential type site uses.

of 2.38 persons per household in 2000, 2.42 persons per household in 2010, and an estimated 2.53 persons per household in 2016.

TABLE 3.10-2 POPULATION AND HOUSEHOLD GROWTH

	1970	1980	1990	2000	2010	2016	2020
<i>CAMPBELL</i>							
Population	24,770	27,067	36,048	38,138	39,349	41,888	41,898
Persons per household	3.39	2.31	2.35	2.38	2.42	2.53	2.49
<i>SANTA CLARA COUNTY</i>							
Population	1,064,714	1,295,071	1,497,577	1,682,585	1,781,642	1,928,438	1,945,166
Persons per household	3.23	2.76	2.81	2.92	2.90	3.03	2.98

SOURCE: CENSUS 1970-2010, DOF E-5 POPULATION AND HOUSING ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, 2016, AND 2020.

Housing Units

As of 2020, the State Department of Finance estimates identified 18,385 housing units in Campbell. Between 2000 and 2010, the City’s housing stock increased approximately 4-percent to 16,950 housing units, with an additional 8-percent increase from 2010 to 2020. As noted previously, assessed uses within the city totaled 17,400 housing units. It is not uncommon for assessed uses data to deviate from Department of Finance projections.

Table 3.10-3 compares Campbell’s housing growth from 2000 thorough 2020 with the County as a whole. As shown in Table 3.10-3, Housing growth levels in Campbell between 2000 and 2010 were lower than countywide increases between the same time period at 4 percent and 9.1 percent respectively. However, between 2010 and 2016 Campbell’s housing unit growth has slightly increased (5 percent) compared to the countywide housing unit growth during the same time period (4 percent).

In Santa Clara County, housing units increased at a much faster pace, with a 9.1 percent increase from 2000 to 2010 compared to approximately 4 percent in the City of Campbell. However, from 2010 to 2020 housing unit growth in Campbell has outpaced the countywide increases at 8 percent and 4 percent respectively as shown below in Table 3.10-3.

3.10 LAND USE PLANNING AND POPULATION/HOUSING

TABLE 3.10-3 HOUSING UNITS

	2000	2010	2020 ESTIMATED BY DOF	2000-2010 CHANGE (%)	2010-2020 CHANGE (%)
<i>Campbell</i>	16,286	16,950	18,385	4.0%	8.04%
<i>Santa Clara County</i>	579,329	631,920	657,360	9.1%	4.0%

SOURCE: CENSUS 2000, CENSUS 2010, DOF E-5 POPULATION AND HOUSING ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, 2020.

Table 3.10-4 show housing units by type within Campbell estimated by the DOF for 2020. As shown in Table 3.10-4, Campbell has a diverse range of housing, however, the majority of the housing units in the city are single family detached, which account for 45% of housing units. The remaining housing types include single family attached (13%), duplexes through fourplexes (11%), multi-family apartments with five or more units (29%), and mobile homes (2%).

TABLE 3.10-4 HOUSING UNITS BY TYPE (2020)

	TOTAL	SINGLE DETACHED	SINGLE ATTACHED	TWO TO FOUR	FIVE PLUS	MOBILE HOMES	OCCUPIED
<i>Campbell</i>	18,385	8,294	2,433	2,053	5,285	320	17,530
Santa Clara County	688,035	357,759	66,988	50,415	193,594	19,279	656,063

SOURCE: DOF E-5 POPULATION AND HOUSING ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, APRIL 2016.

3.10.2 REGULATORY SETTING

STATE

California General Plan Law

Government Code Section 65300 requires that each county and city adopt a General Plan “for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning.”

The General Plan will include a comprehensive set of goals, policies, and actions (implementation measures), as well as a revised Land Use Map. It is a comprehensive long-term plan for the physical development of the county or city and is considered a "blueprint" for development. The General Plan must contain seven state-mandated elements: Land Use, Open Space, Conservation, Housing, Circulation, Noise, and Safety. It may also contain any other elements that the county or city wishes to include. The land use element designates the general location and intensity of designated land uses to accommodate housing, business, industry, open space, education, public buildings and grounds, recreation areas, and other land uses.

The 2017 General Plan Guidelines, established by the Governor’s Office of Planning and Research (OPR) to assist local agencies in the preparation of their general plans, further describe the mandatory land use element as a guide to planners, the general public, and decision makers prescribing the ultimate pattern of development for the county or city.

Regional Housing Needs Plan

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The share is known as the Regional Housing Needs Allocation (RHNA) and is based on a Regional Housing Needs Plan (RHNP) developed by councils of government. The Association of Bay Area Governments (ABAG) is the lead agency for developing the RHNP for the nine-county area that includes Santa Clara County and the City of Campbell. Campbell’s fair share of the adopted RHNA for 2009-2014 and the RHNAs for 2015-2023, and 2023-2031 are summarized in Table 3.10-5.

The City of Campbell is not required to ensure that adequate development to accommodate the RHNA occurs; however, the City must facilitate housing production by ensuring that land is available and that unnecessary development constraints have been removed. The City’s Housing Element, provides for the accommodation of the RHNA that has been assigned to Campbell. As part of the region's planning efforts, ABAG and the Metropolitan Transportation Commission (MTC) the RHNA must allocate housing units within the region consistent with the development pattern included in the Sustainable Communities Strategy.

3.10 LAND USE PLANNING AND POPULATION/HOUSING

TABLE 3.10-5: REGIONAL HOUSING NEEDS ALLOCATION

VERY LOW INCOME	LOW INCOME	MODERATE INCOME	ABOVE MODERATE INCOME	TOTAL
<i>2023-2031</i>				
752	434	499	1,292	2,977
<i>2015-2023</i>				
253	138	151	391	933
<i>2009-2014</i>				
199	122	158	413	892

SOURCE: CITY OF CAMPBELL HOUSING ELEMENT AND ASSOCIATION OF BAY AREA GOVERNMENTS, REGIONAL HOUSING NEEDS ALLOCATIONS.

Regional Transportation Plan/Sustainable Communities Strategy

MTC and the Association of Bay Area Governments (ABAG) have just released the Final Plan Bay Area 2050. After years of public discussion and technical work, the Final Plan Bay Area 2050 is an updated long-range Regional Transportation Plan and Sustainable Communities Strategy for the nine-county San Francisco Bay Area. The plan charts a course for transportation investment and land-use priorities.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) was developed to protect the quality of the environment and the health and safety of persons from adverse environmental effects. Discretionary projects are required to be reviewed consistent with the requirements of CEQA to determine if there is potential for the project to cause a significant adverse effect on the environment. Depending on the type of project and its potential effects, technical traffic, noise, air quality, biological resources, and geotechnical reports may be needed. If potential adverse effects can be mitigated to less than significant levels, a mitigated negative declaration may be adopted. If potentially adverse effects cannot be mitigated to less than significant levels, an environmental impact report is required. These documents have mandated content requirements and public review times. Preparation of CEQA documents can be costly and time-consuming, potentially extending the processing time of a project by a year or longer.

Subdivision Code

A subdivision is any division of land for the purpose of sale, lease or finance. The State of California Subdivision Map Act (Government Code § 66410) regulates subdivisions throughout the state. The goals of the Subdivision Map Act are as follows:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of a subdivision with proper consideration of its relationship to adjoining areas.

- To ensure that areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community.
- To protect the public and individual transferees from fraud and exploitation.

The Map Act allows cities some flexibility in the processing of subdivisions. Campbell controls this process through the subdivision regulations in the Municipal Code Title 20 (adopted by Campbell in 1986, and reflects amendments through 2013. Ord. No. 2166, § 3 (Exh. B), 5-7-2013). These regulations ensure that minimum requirements are adopted for the protection of the public health, safety and welfare; and that the subdivision includes adequate community improvements, municipal services and other public facilities. Campbell's subdivision provisions support the Subdivision Map Act and, in so doing, also support implementation of the City's General Plan.

LOCAL

Local Agency Formation Commission of Santa Clara County

In 1963, the State Legislature created a local agency formation commission (LAFCO) for each county, with the authority to regulate local agency boundary changes. Subsequently, the State has expanded the authority of a LAFCO. The goals of a LAFCO include preserving agricultural and open space land resources and providing for efficient delivery of services. The Santa Clara County LAFCO has authority over land use decisions in Santa Clara County affecting local agency boundaries. Its authority extends to the incorporated cities, including annexation of County lands into a city, and special districts within the County. The City of Campbell is surrounded by incorporated cities and does not share a common boundary with the county, thus the city's SOI is coterminous with the city's City Limits.

In addition, LAFCO conducts Municipal Service Reviews (MSRs) for services within its jurisdiction. An MSR typically includes a review of existing municipal services provided by a local agency and its infrastructure needs and deficiencies. It also evaluates financing constraints and opportunities, management efficiencies, opportunities for rate restructuring and shared facilities, local accountability and governance, and other issues.

Santa Clara County Airport Land-Use Commission

The Airport Land-Use Commission (ALUC) was established to provide for appropriate development of areas surrounding public airports in Santa Clara County. It is intended to minimize the public's exposure to excessive noise and safety hazards, and to ensure that the approaches to airports are kept clear of structures that could pose an aviation safety hazard.

The Santa Clara County Airport Land Use Commission has adopted Comprehensive Land Use Plans (CLUP) for the San Jose International Airport, Moffet Federal Airfield, Reid-Hillview Airport, Palo Alto and San Martin Airports. (CLUP) is intended to be used to safeguard the general welfare of the inhabitants within the vicinity of an airport.

The CLUP regulates land use in three major areas: safety zones, noise zones, and height restrictions. It provides land use compatibility guidelines for lands near the airport, to avert potential safety problems and to ensure unhampered airport operations. Under California Government Code

3.10 LAND USE PLANNING AND POPULATION/HOUSING

Section 65302.3(a), general plans must be consistent with any airport land use plan adopted pursuant to Public Utilities Code Section 21675. The San Jose International Airport is the closest airport to Campbell. Lands within the City of Campbell Planning Area is not located within any of the airport influence areas identified in the CLUP.

Santa Clara County General Plan

Santa Clara County adopted its General Plan on December 20, 1994. Published documents include General Plan Books A and B, and the 2000 Stanford University Community Plan. The 2000 Stanford University Community Plan, adopted December 2000, is also a part of the General Plan and is published separately as a stand-alone document. General Plan updates recently adopted include:

- Housing Element Update 2023-2031
- Health Element Update Aug 25, 2015

The County's General Plan includes the following elements:

- Growth & Development
- Economic Well-Being
- Health
- Transportation
- Housing
- Parks and Recreation
- Resource Conservation
- Safety and Noise
- Governance

City of Campbell Zoning Ordinance

Title 21 of the Campbell Municipal Code is the City's Zoning Ordinance. The Zoning Ordinance carries out the policies of the General Plan by classifying and regulating the uses of land and structures within the city, consistent with the General Plan. The Zoning Ordinance is adopted to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents, and businesses in the city.

Zoning provides a legal mechanism for local government regulation of the land uses described in the General Plan Land Use Map. In addition to providing specific regulations related to minimum lot size, building heights, setbacks, lot coverage, etc., for each zoning district, the Zoning Code also lists the uses that would be acceptable or could be considered in each district, as well as those that would be considered unacceptable. For some uses, further regulations are established. Zoning regulations designate the process to be used when a permit must be applied for in order to consider approval of a particular land use in a district. The City of Campbell Zoning Map is adopted pursuant to CMC Sec. 21.04.030.

City of Campbell - Subdivision and Land Development

Campbell controls the subdivision of land through the subdivision regulations in the Municipal Code Title 20. These regulations ensure that minimum requirements are adopted for the protection of

the public health, safety and welfare; and that the subdivision includes adequate community improvements, municipal services and other public facilities. Campbell's subdivision provisions support the Subdivision Map Act and, in so doing, also support implementation of the City's General Plan.

Design Guidelines

The City of Campbell has Design Guidelines for new Single Family development, and Single Family Home Additions. The City developed these documents to improve the overall image and aesthetic quality of Campbell. Used in conjunction with the Zoning Code, the Design Guidelines help guide and inform the public about the desired site and building design in Campbell.

As a related work effort, the City is developing "Objective" Residential Design Standards for all multi-family residential and mixed-use residential projects. Once established, these standards will serve to provide significant control over the site layout and architectural design of new housing projects – including those under consideration as part of the General Plan and Housing Element.

Historic Design Guidelines

Historic Design Guidelines are intended to assist property owners in the rehabilitation and preservation of homes identified on the City of Campbell's Historic Resources Inventory. These guidelines parallel many of the recommendations found in the Secretary of the Interior's Standards for Rehabilitation published by the U.S. Department of the Interior National Park Service, and are also used as a resource by the Historic Preservation Board and the City's staff.

The Historic Design Guidelines apply to any change in the exterior appearance of a building through alteration or the construction of any structure within a Historic District; designated a City Landmark; or properties on the city's Historic Resources Inventory.

Special Planning Areas

Campbell has several land use plans that apply to special planning areas, which regulate and guide development within their respective planning areas. These plans act as tools for implementing the goals and policies of the General Plan through the regulation of use, density, height and other design standards to achieve the overall vision for the selected area.

Several areas of the city are unique in ways that require special consideration. These Special Planning Areas include land use and development policies specific to these areas. Figure 3.10-2 displays special planning areas within the city. Special Planning Areas within Campbell include the following areas with descriptions provided below:

- **East Campbell Avenue (ECAMP).** Approval of Master Plan 2007. Approval of Conceptual Improvement Project 2008.
- **San Tomas Area Neighborhood Plan (STANP).** Adopted 1993, Amended 2000. Included in Appendix A1 of the existing General Plan.
- **Winchester Blvd Master Plan (WBMP).** Approval of Master Plan 2009.

3.10 LAND USE PLANNING AND POPULATION/HOUSING

- **Priority Development Area (PDA).** (No City Adopted plan). Developed through ABAG and VTA to fund comprehensive planning in PDAs that will result in intensified land uses around public transit hubs and bus and rail corridors in Santa Clara County.
- **Downtown Campbell Development Plan.** Adopted: October 3, 2006.
- **Pruneyard / Creekside Commercial District.** (No City adopted plan). Policy guidance included within the General Plan.
- **Hamilton Avenue Precise Plan.** (No City adopted plan). Policy guidance included within the General Plan.
- **Campbell Village Neighborhood Plan.** (No City adopted plan). Draft Plan Available for review as of December 6, 2016.

3.10.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on land use and population if it will:

- Physically divide an established community;
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect;
- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

IMPACTS AND MITIGATION MEASURES

Impact 3.10-1: General Plan implementation would not physically divide an established community (Less than Significant)

The land uses allowed under the proposed General Plan provide opportunities for cohesive new growth at in-fill locations within existing urbanized areas of the city, as well as new growth adjacent to existing urbanized areas, but would not create physical division within the community. New development and redevelopment projects would be designed to complement the character of the existing community and neighborhoods and provide connectivity between existing development and new development. The proposed General Plan Land Use Map designates sites for a range of urban developed uses as well as open space uses. The proposed General Plan does not include any new areas designated for urbanization or new roadways, infrastructure, or other features that would divide existing communities. The proposed General Plan would have a **less than significant** impact associated with the physical division of an established community. The policies listed below would ensure that future development is compatible with adjacent communities and land issues.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

LU-2.1 Promote high quality, creative design and site planning that is compatible with surrounding development, public spaces, and natural resources.

LU-2.2 Prohibit the establishment or encroachment of incompatible uses into Industrial and R&D designated lands and prohibit new uses which would result in the imposition of additional operational restrictions and/or mitigation requirements on industrial and R&D uses due to land use incompatibility.

LU-2.3 Industrial development should have functional and safe internal circulation patterns, attractive site and architectural design, and be sensitive to surrounding uses for the purposes of contributing to the positive character of industrial areas and the overall image of the City.

LU-2.4 Require new development and renovation that is located within or immediately adjacent to existing residential neighborhoods to be compatible and well-integrated with the existing residential neighborhoods.

LU-2.5 Promote new development and additions that are designed to maintain and support the existing character and development pattern of the surrounding neighborhood, especially in historic neighborhoods and neighborhoods with consistent design characteristics.

LU-2.6 Incorporate transitional land uses as buffers between land uses which are potentially incompatible. For example, this could include office uses as a buffer between industrial and residential areas, and medium density residential uses as a buffer between high and low density residential uses.

LU-2.7 Where appropriate, use higher-density residential, office and neighborhood commercial uses as buffers between lower density residential uses and larger commercial centers and transportation and rail corridors.

LU-2.8 Encourage non-conforming properties to redevelop as conforming uses.

LU-2.9 In considering land use change requests, consider factors such as compatibility with the residential surroundings, privacy, noise, and changes in traffic levels on residential streets.

LAND USE ELEMENT ACTIONS

LU-2.a Through the development review and permit process, screen development proposals for land use compatibility, including conformance with existing development or neighborhoods.

LU-2.b Through the development review and permit process, ensure that conditions of approval are adopted that require businesses to be well kept and operated in a way that limits impacts to adjacent uses.

LU-2.c Through the development review and permit process, require adequate buffers and/or architectural consideration to protect residential areas, developed or undeveloped, from intrusion of private nonresidential development activities that may degrade the quality of life in such residential areas.

Impact 3.10-2: General Plan implementation would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (Less than Significant)

STATE PLANS

The proposed General Plan was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. Discussion of the proposed General Plan's consistency with State regulations, plans, and policies associated with specific environmental issues (e.g., air quality, traffic, water quality, etc.) is provided in the relevant chapters of this Draft EIR. The State would continue to have authority over any State-owned lands in the vicinity of the city and the proposed General Plan would not conflict with continued application of State land use plans, policies, and regulations adopted to avoid or mitigate environmental effects.

CITY PLANS

As set forth by State law, the General Plan serves as the primary planning document for the City and subordinate documents and plans would be updated to be consistent with the General Plan. Similar to the existing General Plan, the proposed General Plan focuses on a balanced land use pattern, creating a community where new development blends with existing neighborhoods, and promoting the City as a desirable place to live and work. The proposed General Plan carries forward and enhances policies and measures from the City's existing General Plan that were intended for environmental protection and would not remove or conflict with City plans, policies, or regulations adopted for environmental protection. The proposed General Plan would require modifications to the City's Zoning Ordinance to provide consistency between the General Plan and zoning; however, these modifications will not remove or adversely modify portions of the Campbell Municipal Code that were adopted to mitigate an environmental effect.

Subsequent development and infrastructure projects would be required to be consistent with all applicable policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City as well as those adopted by agencies with jurisdiction over components of future development projects. Any potential environmental impact associated with conflicts with land use requirements would be **less than significant**. The policies listed below would ensure that the General Plan does not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

LU-2.1 Promote high quality, creative design and site planning that is compatible with surrounding development, public spaces, and natural resources.

LU-2.2 Prohibit the establishment or encroachment of incompatible uses into Industrial and R&D

designated lands and prohibit new uses which would result in the imposition of additional operational restrictions and/or mitigation requirements on industrial and R&D uses due to land use incompatibility.

LU-2.3 Industrial development should have functional and safe internal circulation patterns, attractive site and architectural design, and be sensitive to surrounding uses for the purposes of contributing to the positive character of industrial areas and the overall image of the City.

LU-2.4 Require new development and renovation that is located within or immediately adjacent to existing residential neighborhoods to be compatible and well-integrated with the existing residential neighborhoods.

LU-2.5 Promote new development and additions that are designed to maintain and support the existing character and development pattern of the surrounding neighborhood, especially in historic neighborhoods and neighborhoods with consistent design characteristics.

LU-2.6 Incorporate transitional land uses as buffers between land uses which are potentially incompatible. For example, this could include office uses as a buffer between industrial and residential areas, and medium density residential uses as a buffer between high and low density residential uses.

LU-2.7 Where appropriate, use higher-density residential, office and neighborhood commercial uses as buffers between lower density residential uses and larger commercial centers and transportation and rail corridors.

LU-2.8 Encourage non-conforming properties to redevelop as conforming uses.

LU-2.9 In considering land use change requests, consider factors such as compatibility with the residential surroundings, privacy, noise, and changes in traffic levels on residential streets.

LU-6.6 Coordinate with regional and local agencies on planning, transportation, economic development, and sustainability issues to ensure that regional decisions do not disproportionality affect Campbell in such a way as to degrade the fiscal health and quality of life for Campbell residents and businesses.

LU-6.7 Collaborate with neighboring jurisdictions on issues of mutual interest.

LU-6.8 Review regional planning documents prior to making decisions at the local level.

Impact 3.10-3: General Plan implementation would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) (Less than Significant)

The proposed General Plan accommodates future growth in Campbell, including new businesses, expansion of existing businesses, and new residential uses. Infrastructure and services would need to be extended/connected to individual development site to accommodate future growth. At full buildout, the proposed General Plan could accommodate approximately 26,224 housing units, a population of 64,929 people, 12,724,055 square feet of non-residential building square footage, and 36,762 jobs within the Planning Area, as shown in Table 2.0-2 in Chapter 2.0 (Project Description).

3.10 LAND USE PLANNING AND POPULATION/HOUSING

This new growth represents an increase over existing conditions of up to 8,824 new housing units, 22,203 people, 2,633,721 square feet of new non-residential building square footage and 6,194 jobs when compared to existing condition.

Depending on growth rates, the actual growth during the life of the General Plan could be lower, but would not be expected to exceed the theoretical buildout described in above and detailed in Chapter 2.0.

Given the historical and current population, housing, and employment trends, growth in the city, as well as the entire state, is inevitable. The primary factors that account for population growth are natural increase and net migration. The average annual birth rate for California is expected to be 20 births per 1,000 population. Additionally, California is expected to attract more than one third of the country's immigrants. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, transportation options, and State-level requirements for cities and counties to plan for additional housing units via the RHNA. While these factors would likely result in growth in Campbell during the planning period of the proposed General Plan, growth will continue to occur based primarily on the demand of the housing market and demand for new commercial, industrial, and other non-residential uses. As future development occurs under the proposed General Plan, new or expanded roads, infrastructure, and services would be necessary to serve the development, and this infrastructure would accommodate planned growth identified in the proposed General Plan. The proposed General Plan is intended to accommodate the City's fair share of statewide housing needs, which are allocated by the ABAG, based on regional numbers provided by the California Department of Housing and Community Development on a regular basis (every five to eight years).

The proposed General Plan includes policies and actions that minimize environmental impacts associated with growth, such as air quality, noise, traffic, water supply, and water quality effects. Chapters 3.1 through 3.16 and 4.0 provide a discussion of environmental effects associated with development allowed under the proposed General Plan. Each of these EIR chapters include relevant policies and action items that would minimize potential environmental impacts associated with growth, to the greatest extent feasible.

With implementation of General Plan policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds, beyond those disclosed and analyzed throughout this EIR. Therefore, population and housing growth associated with the proposed General Plan would result a **less than significant** impact, as there are no additional potential environmental impacts, beyond those analyzed and disclosed in this EIR, that would result from growth accommodated by the proposed Project.

Impact 3.10-4: General Plan implementation would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere (less than significant)

The majority of developed land in the Planning Area is comprised of residential uses, which are not anticipated to undergo significant land use changes under the proposed Project. The proposed

Project focuses infill development opportunities in vacant and underutilized areas in Campbell, as well as areas currently developed with commercial uses which may transition to mixed uses and residential uses in the future. The General Plan Land Use Map was developed to preserve existing neighborhoods throughout the City. Throughout the Planning Area, the proposed General Plan is projected to increase the overall number of dwelling units and provide housing to serve the diverse needs of the community at various socioeconomic levels and accommodate the Regional Housing Needs identified by ABAG.

Therefore, impacts of the proposed General Plan on the displacement of people or housing are considered **less than significant**. The policies listed below would further ensure that a range of housing types are provided in the City, and that housing conditions are evaluated as the housing supply ages.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

LU-3.1 Recognize that Campbell is comprised of unique neighborhoods, each with its own individual character; and allow change consistent with reinforcing positive neighborhood values, while protecting the integrity of the City's neighborhoods.

LU-3.2 Provide for a variety of residential land uses that meet the needs of individuals and families while ensuring that there is adequate land designated to meet Housing goals. (Additional policies specifically related to Housing are included in the Housing Element).

LU-3.3 Encourage creativity in the design and construction of residential projects in order to increase affordable housing options throughout Campbell. Projects that incorporate unique site design, smaller dwelling units, maximization of onsite open space, and other tools to increase housing options in Campbell shall be encouraged.

LU-3.4 Encourage the maintenance and revitalization of neighborhood serving commercial shopping centers.

LU-3.5 Support traditional Downtown neighborhoods and home designs that complement historic Downtown Campbell.

LU-3.6 Encourage local school districts to employ creative solutions to provide teacher and district employee housing on unused or underutilized district property within Campbell.

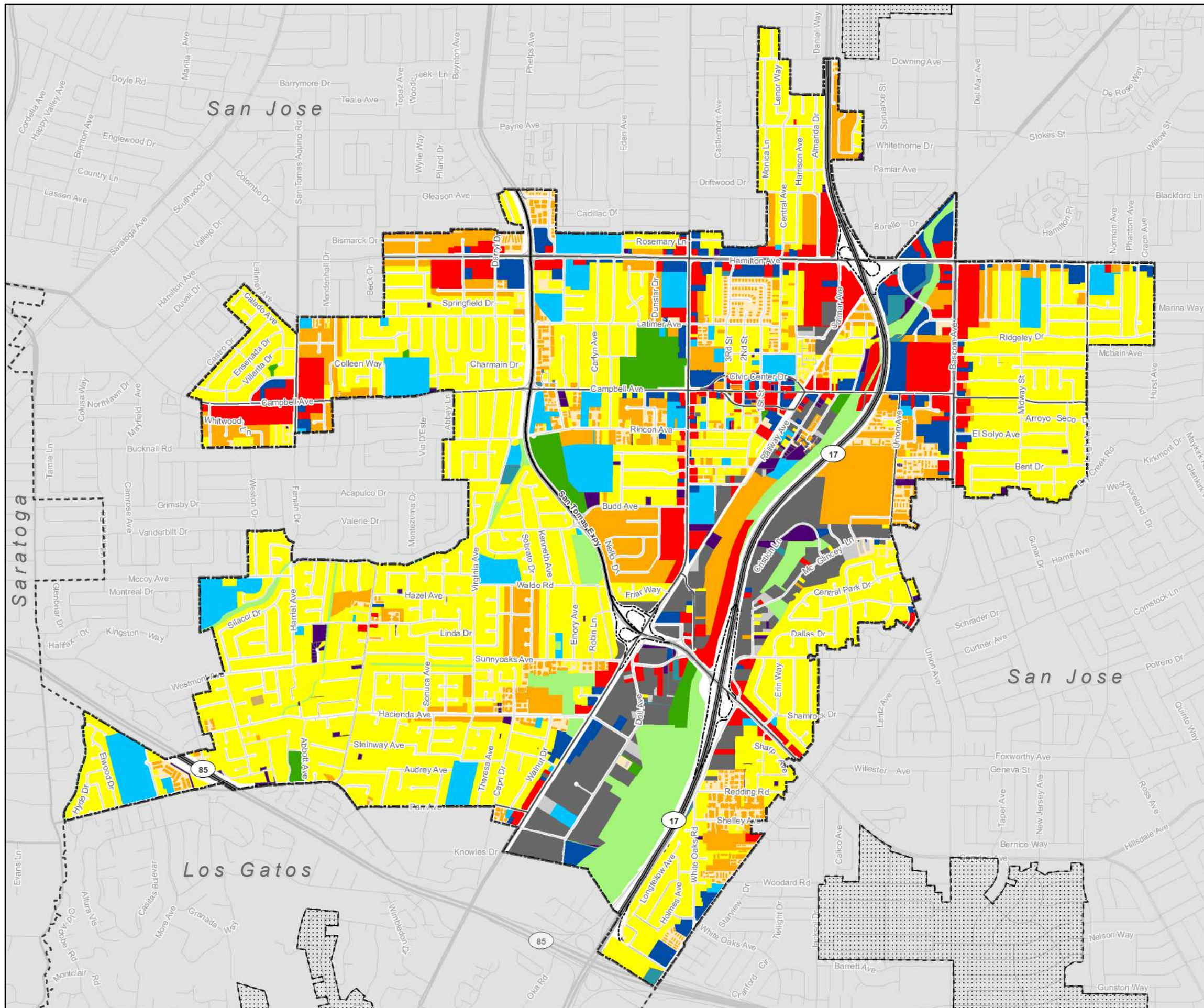
LAND USE ELEMENT ACTIONS

LU-3.a Implement the programs in the Housing Element in order to achieve the City's housing goals.

This page left intentionally blank

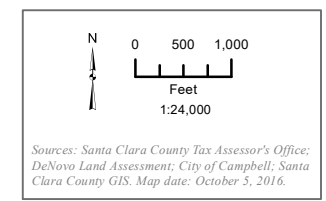
**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

Figure 3.10-1. Assessed Uses



Legend

- Single Family Residential
- Multifamily Residential
- Commercial
- Industrial Manufacturing
- Industrial Non-manufacturing
- Institutional
- Office
- Agricultural
- Parks and Recreational Facilities
- Open Spaces
- Transportation/Communication/Utilities
- Vacant Urban Lands
- Non-Taxable
- City of Campbell
- Surrounding Cities
- Unincorporated Santa Clara County



This page left intentionally blank

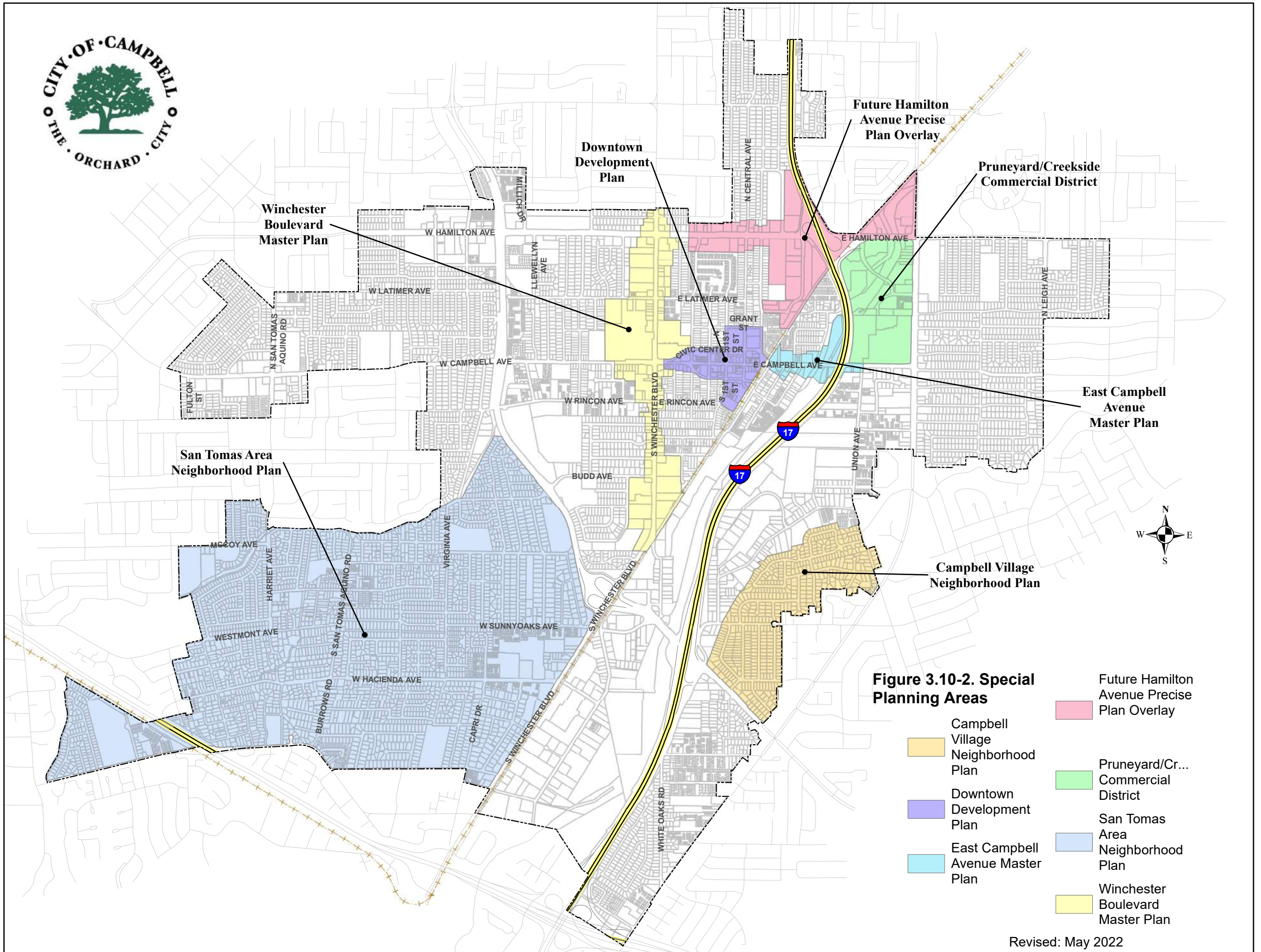
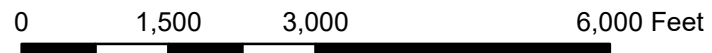


Figure 3.10-2. Special Planning Areas

-  Campbell Village Neighborhood Plan
-  Downtown Development Plan
-  East Campbell Avenue Master Plan
-  Future Hamilton Avenue Precise Plan Overlay
-  Pruneyard/Cr... Commercial District
-  San Tomas Area Neighborhood Plan
-  Winchester Boulevard Master Plan

Revised: May 2022



This page left intentionally blank

This section provides a background discussion and analysis of mineral resources in Campbell. This section is organized with an environmental setting, regulatory setting, and impact analysis.

No comments were received on this environmental topic during the NOP comment period.

3.11.1 ENVIRONMENTAL SETTING

MINERAL RESOURCE CLASSIFICATION

Pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA), the California State Mining and Geology Board oversees the Mineral Resource Zone (MRZ) classification system. The MRZ system characterizes both the location and known/presumed economic value of underlying mineral resources. The mineral resource classification system uses four main MRZs based on the degree of available geologic information, the likelihood of significant mineral resource occurrence, and the known or inferred quantity of significant mineral resources. The four classifications are described in Table 3.11-1 below.

TABLE 3.11-1: MINERAL RESOURCE CLASSIFICATION SYSTEM

<i>CLASSIFICATION</i>	<i>DESCRIPTION</i>
MRZ-1	Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
MRZ-3	Areas containing mineral deposits, the significance of which cannot be evaluated.
MRZ-4	Areas where available information is inadequate for assignment to any other MRZ classification.

SOURCE: CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND GEOLOGY, 2002.

MINERAL RESOURCES

Mineral resources of significance found and extracted in Santa Clara County include construction aggregate deposits and, to a lesser extent, salts derived from evaporation ponds at the edge of San Francisco Bay. Because of their different nature, salt evaporation ponds and the policy issues concerning them are not addressed to the extent of construction aggregates. Primary issues regarding construction aggregates are those concerning preservation, environmental impact, and reclamation of quarry sites and similar operations.

Construction aggregates, such as sand, gravel, and crushed stone, have many purposes, including road and building construction. For a growing, highly urbanized area such as Santa Clara County, ensuring adequate supplies of such materials from local sources is of fundamental importance to the economy of the county and region. Because transport costs are a significant aspect of overall supply and pricing, it is imperative that local mineral resource supplies be conserved for maximum long term availability. As sand and gravel deposits in the Bay Area have been nearly depleted, it has become necessary to rely primarily upon crushed stone for construction aggregates.

Location of Mineral Resources

The California Office of Mine Reclamation periodically publishes a list of qualified permitted aggregate mines regulated under SMARA that is generally referred to as the AB 3098 List. The Public Contract Code precludes mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates or other mined materials to State or local agencies. There are five aggregate mines on the AB 3098 list in Santa Clara County. Table 3.11-2 identifies the active aggregate mines located in the county. None of the five listed mines are within the Campbell Planning Area.

TABLE 3.11-2: AB 3098 LIST – ACTIVE MINES IN SANTA CLARA COUNTY

MINE ID	MINE NAME	MINE OPERATOR
91-43-0001	Curtner Quarry	Oliver DeSilva, Inc.
91-43-0004	Hanson Permanente Cement Permanente Quarry	Lehigh Southwest Cement Company
91-43-0006	Lexington Quarry	Calmat Co. DBA Vulcan Materials Company
91-43-0007	Steven’s Creek Quarry Plant 1	Steven’s Creek Quarry, Inc.
91-43-0010	Freeman Quarry	Granite Construction Company

SOURCE: CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND GEOLOGY, 2016.

The Curtner Quarry (State Mine ID 91-43-0001) is located in an unincorporated part of the County northeast of the City of Milpitas, east of Highway 680, off Scott Creek Road. The County approved the current reclamation plan amendment for this quarry on August 14, 2008.

The Hanson Permanente Cement Quarry (State Mine ID 91-43-0004) is a limestone and aggregate mining operation located in the unincorporated foothills of Santa Clara County, Cupertino. The Hanson Permanente Cement Quarry is an authorized use operating under Use Permit No. 173.023, issued May 8, 1939. The Hanson Permanente Cement Quarry is a “vested mine” operation, as determined by the Board of Supervisors on February 8, 2011. A “vested mine” is a mine that was established legally within the regulations in place at that time, and is allowed to continue until the use ceases. A Reclamation Plan, the document showing how the quarried lands will be restored, was originally approved in 1984 and was amended in 2012.

The Lexington Quarry (State Mine ID 91-43-0006) is located in an unincorporated part of the County east of the Lexington Reservoir, in the Santa Cruz Mountains southeast of the City of Los Gatos. Greywacke sandstone is mined at the quarry for construction aggregate, road base, and general fill. The County certified an EIR and approved a use permit, reclamation plan amendment, and lot line adjustment on June 3, 2010, for a geographic expansion of mining operations and reclamation areas as well as an expansion of the hours of operation.

The Stevens Creek Quarry (State Mine ID 91-43-0007) is located in an unincorporated part of the County, approximately three miles south of Highway 280 and adjacent to the southern boundary of the Permanente Quarry property. The County approved a reclamation plan amendment for the

Stevens Creek Quarry in 2009 to address compliance issues identified by OMR, including encroachment of quarry slopes at the eastern edge of the mined area, and disturbance of areas outside the approved reclamation plan boundary (an updated planting palette also was approved).

The Freeman Quarry (State Mine ID 91-43-0010) is located in an unincorporated part of the County south of Gilroy and west of Highway 101. The County approved the current reclamation plan amendment for the quarry in 2008. The mine operator has submitted an application to the County for a use permit modification to authorize an expansion of the quarry from 61 acres to 149 acres, expand the allowed hours of materials transportation from 6 AM to 4 PM Monday through Saturday, and to amend the reclamation plan accordingly. The County issued a Notice of Preparation and, on August 10, 2011, held a public scoping meeting about the project. As of July 20, 2016, a Draft EIR has not been completed for the project.

3.11.2 REGULATORY SETTING

STATE

Surface Mining and Reclamation Act of 1975

The California Department of Conservation Surface Mining and Reclamation Act of 1975 (§ 2710), also known as SMARA, provides a comprehensive surface mining and reclamation policy that permits the continued mining of minerals, as well as the protection and subsequent beneficial use of the mined and reclaimed land. The purpose of SMARA is to ensure that adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition and readily adaptable for alternative land uses. The production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, wildlife, range and forage, as well as aesthetic enjoyment. Residual hazards to public health and safety are eliminated. These goals are achieved through land use planning by allowing a jurisdiction to balance the economic benefits of resource reclamation with the need to provide other land uses.

If a use is proposed that might threaten the potential recovery of minerals from an area that has been classified mineral resource zone 2 (MRZ-2), SMARA would require the jurisdiction to prepare a statement specifying its reasons for permitting the proposed use, provide public notice of these reasons, and forward a copy of the statement to the State Geologist and the State Mining and Geology Board (Cal. Pub. Res. Code Section 2762). Lands classified MRZ-2 are areas that contain identified mineral resources.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project may have a significant impact on the environment associated with mineral resources if it would:

1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
2. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

3.11.3 IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: General Plan implementation would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state (No Impact)

The Planning Area does not contain any known significant mineral resources or mineral extraction operations. The entire Planning Area is developed with urban uses, and there are no opportunities for mineral resource extraction within Campbell. Therefore, the proposed Plan would have **no impact** on mineral resources.

Impact 3.11-2: General Plan implementation would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan (No Impact)

The Planning Area does not contain sites designated as a locally important mineral resource recovery site by the City's General Plan. The Santa Clara County General Plan identifies important mineral resources within its Planning Area and outside of the City of Campbell. Implementation of the proposed General Plan would not result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Therefore, the proposed Plan would have **no impact** relative to this environments topic.

This section provides a discussion of the regulatory setting and a general description of existing noise sources in the City of Campbell. The analysis of potential noise-related impacts in this section was prepared with assistance from Saxelby Acoustics.

Comments related to this environmental topic were received during the Draft EIR Public Scoping Meeting. Verbal comments were provided to the General Plan update team related to the potential for noise and vibration from heavy duty trucks to impact residents. All comments received during the 30-day NOP Public Review Comment Period are included in Appendix A.

3.12.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared. All dB levels used in this report are A-weighted values, unless otherwise stated.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by + 5 dB and nighttime hours weighted by +10 dB. Typically, 1 dB higher than L_{dn} for transportation noise sources.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50 percent of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.

Noise	Unwanted sound.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours.

The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is similar to L_{dn} , but includes a +3 dB penalty for evening noise. Table 3.12-1 lists several examples of the noise levels associated with common situations.

TABLE 3.12-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	NOISE LEVEL (DBA)	COMMON INDOOR ACTIVITIES
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. SEPTEMBER 2013.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE LEVELS

Traffic Noise Levels

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD 77-108) was used to develop L_{dn} (24-hour average) noise contours for all highways and major roadways in the Planning Area. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver and the acoustical characteristics of the site. The FHWA Model predicts hourly Leq values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 dB. To predict L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour period.

Existing traffic volumes were obtained from the traffic modeling performed for the General Plan study area. Day/night traffic distributions were based upon continuous hourly noise measurement data. Heavy truck counts were also provided by the traffic engineer. Using these data sources and the FHWA traffic noise prediction methodology, traffic noise levels were calculated for existing conditions. Table 3.12-2 shows the results of this analysis.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segments. In some locations sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is believed to be representative of the majority of sensitive receptors located closest to the project-area roadway segments analyzed in this report.

The actual distances to noise level contours may vary from the distances predicted by the FHWA model due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers. The distances reported in Table 3.12-2 are generally considered to be conservative estimates of noise exposure along roadways in the City of Campbell.

3.12 NOISE

TABLE 3.12-2: PREDICTED EXISTING TRAFFIC NOISE LEVELS (2016)

ROADWAY	SEGMENT	NOISE LEVEL AT CLOSEST RECEPTORS (DB, L _{DN}) ¹	DISTANCES TO TRAFFIC NOISE CONTOURS, L _{DN} (FEET)		
			60 dB	65 dB	70 dB
Hamilton	W/o Phoenix Dr	59.8	258	120	56
San Tomas Expy	N/o Hamilton	64.0	558	259	120
Hamilton	W/o Eden	59.1	225	105	49
Winchester	N/o Hamilton	61.8	151	70	33
Hamilton	W/o Central	61.5	314	146	68
Hamilton	W/o Bascom	62.9	338	157	73
Bascom	S/o Hamilton	55.4	276	128	59
San Tomas Aquino Rd	S/o Villarita	65.1	152	71	33
Civic Center	W/o 1st	55.5	57	27	12
Campbell	W/o 1st	52.2	50	23	11
Orchard City	W/o 1st	52.4	47	22	10
Campbell	E/o Union	53.7	94	44	20
San Tomas Expy	N/o Winchester	62.2	545	253	117
Winchester	N/o Budd	58.4	188	87	41
Union Ave	N/o McGlincy	60.2	119	55	26
Camden	E/o 17	64.4	404	188	87
Pollard	W/o 85	58.3	131	61	28
Winchester	N/o Parr Ave	54.3	189	88	41
Curtner	W/o Salerno	56.7	81	38	17
Dell Ave	S/o Hacienda Ave	45.6	70	33	15
Campbell	E/o Railway	54.3	170	79	37

NOTES: DISTANCES TO TRAFFIC NOISE CONTOURS ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS.

¹ TRAFFIC NOISE LEVELS ARE PREDICTED AT THE CLOSEST SENSITIVE RECEPTORS

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM FEHR & PEERS TRANSPORTATION CONSULTANTS, CALTRANS, AND SAXELBY ACOUSTICS 2022.

Railroad Noise Levels

In order to quantify noise exposure from existing train operations, a continuous (24-hour) noise level measurement survey was conducted along the existing Santa Clara Valley Transportation Authority (VTA) light rail tracks, between the Bascom and Hamilton light rail stations on the VTA Mountain View – Winchester line. The purpose of the noise level measurements was to determine typical sound exposure levels (SEL) for railroad line operations, while accounting for the effects of travel speed, warning horns and other factors which may affect noise generation. In addition, the noise measurement equipment was programmed to identify individual train events, so that the typical number of train operations could be determined.

Table 3.12-3 shows a summary of the continuous noise measurement results for the VTA line.

TABLE 3.12-3: RAILROAD NOISE MEASUREMENT RESULTS

MEASUREMENT LOCATION	RAILROAD TRACK	GRADE CROSSING / WARNING HORN	TRAIN EVENTS PER 24-HOUR PERIOD	AVERAGE SEL AT 100 FEET
Between the Bascom and Hamilton light rail stations on the VTA Mountain View – Winchester line	VTA	Yes	111	83 dBA

SOURCE: SAXELBY ACOUSTICS, 2022.

Noise measurement equipment consisted of a Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter equipped with a LDL ½" microphone. The measurement system was calibrated using a LDL Model CAL200 acoustical calibrator before and after testing. The measurement equipment meets all of the pertinent requirements of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

Based upon the noise level measurements shown in Table 3.12-3, the average SEL for train operations along the VTA line was 83 dB with a grade crossing nearby, at a distance of 100 feet from the railroad centerline. Based upon the VTA weekday schedule, approximately 92 train passages occur during daytime (7:00 a.m. to 10:00 p.m.) hours and 19 events during nighttime (10:00 p.m. to 7:00 a.m.) hours. To determine the distances to the day/night average (L_{dn}) railroad contours, it is necessary to calculate the L_{dn} for typical train operations. This was done using the SEL values and above-described number and distribution of daily freight train operations. The L_{dn} may be calculated as follows:

$$L_{dn} = SEL + 10 \log N_{eq} - 49.4 \text{ dB, where:}$$

SEL is the mean Sound Exposure Level of the event, N_{eq} is the sum of the number of daytime events (7 a.m. to 10 p.m.) per day, plus 10 times the number of nighttime events (10 p.m. to 7 a.m.) per day, and 49.4 is ten times the logarithm of the number of seconds per day. Based upon the above-

3.12 NOISE

described noise level data, number of operations and methods of calculation, the L_{dn} value for railroad line operations have been calculated, and the distances to the L_{dn} noise level contours are shown in Table 3.12-4.

TABLE 3.12-4: APPROXIMATE DISTANCES TO RAILROAD NOISE CONTOURS

EXTERIOR NOISE LEVEL AT 100 FEET, LDN	DISTANCE TO EXTERIOR NOISE LEVEL CONTOURS, FEET		
	60 dB LDN	65 dB LDN	70 dB LDN
VTA Line – With Grade Crossing			
58 dBA	75'	35'	16'

SOURCE: SAXELBY ACOUSTICS, 2022.

Fixed Noise Sources

The production of noise is a result of many industrial processes, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by federal and state employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise levels may exceed locally acceptable standards. Commercial, recreational and public service facility activities can also produce noise which affects adjacent sensitive land uses. These noise sources can be continuous and may contain tonal components which have a potential to annoy individuals who live nearby. In addition, noise generation from fixed noise sources may vary based upon climatic conditions, time of day and existing ambient noise levels.

In the City of Campbell, fixed noise sources typically include parking lots, loading docks, parks, schools, and other commercial/retail use noise sources (HVAC, exhaust fans, etc.)

From a land use planning perspective, fixed-source noise control issues focus upon two goals:

1. To prevent the introduction of new noise-producing uses in noise-sensitive areas, and
2. To prevent encroachment of noise sensitive uses upon existing noise-producing facilities.

The first goal can be achieved by applying noise level performance standards to proposed new noise-producing uses. The second goal can be met by requiring that new noise-sensitive uses in near proximity to noise-producing facilities include mitigation measures that would ensure compliance with noise performance standards.

Fixed noise sources which are typically of concern include but are not limited to the following:

- HVAC Systems
- Pump Stations
- Steam Valves
- Generators
- Air Compressors
- Conveyor Systems
- Pile Drivers
- Drill Rigs
- Welders
- Cooling Towers/Evaporative Condensers
- Lift Stations
- Steam Turbines
- Fans
- Heavy Equipment
- Transformers
- Grinders
- Gas or Diesel Motors
- Cutting Equipment

- Outdoor Speakers
- Blowers
- Chippers
- Cutting Equipment
- Loading Docks
- Amplified music and voice

The types of uses which may typically produce the noise sources described above, include, but are not limited to: wood processing facilities, pump stations, industrial/agricultural facilities, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, special events such as concerts, and athletic fields. Typical noise levels associated with various types of stationary noise sources are shown in Table 3.12-5.

TABLE 3.12-5: TYPICAL STATIONARY SOURCE NOISE LEVELS

USE	NOISE LEVEL AT 100 FEET, L _{EQ} ¹	DISTANCE TO NOISE CONTOURS, FEET			
		50 DB L _{EQ} (NO SHIELDING)	45 DB L _{EQ} (NO SHIELDING)	50 DB L _{EQ} (WITH 5 DB SHIELDING)	45 DB L _{EQ} (WITH 5 DB SHIELDING)
Auto Body Shop	56 dB	200	355	112	200
Auto Repair (Light)	53 dB	141	251	79	141
Busy Parking Lot	54 dB	158	281	89	158
Cabinet Shop	62 dB	398	708	224	398
Car Wash	63 dB	446	792	251	446
Cooling Tower	69 dB	889	1,581	500	889
Loading Dock	66 dB	596	1,059	335	596
Lumber Yard	68 dB	794	1,413	447	794
Maintenance Yard	68 dB	794	1,413	447	794
Paint Booth Exhaust	61 dB	355	631	200	355
Skate Park	60 dB	316	562	178	316
School Playground / Neighborhood Park	54 dB	158	281	89	158
Truck Circulation	48 dB	84	149	47	84
Vendor Deliveries	58 dB	251	446	141	251

¹ Analysis assumes a source-receiver distance of approximately 100 feet, no shielding, and flat topography. Actual noise levels will vary depending on site conditions and intensity of the use. This information is intended as a general rule only, and is not suitable for final site-specific noise studies.

Source: Saxelby Acoustics 2022.

COMMUNITY NOISE SURVEY

A community noise survey was conducted to document ambient noise levels at various locations throughout the City. Short-term noise measurements were conducted at six locations throughout the City on June 28-29, 2022. In addition, four continuous 24-hour noise monitoring sites were also conducted to record day-night statistical noise level trends. The data collected included the hourly

3.12 NOISE

average (L_{eq}), median (L_{50}), and the maximum level (L_{max}) during the measurement period. Noise monitoring sites and the measured noise levels at each site are summarized in Table 3.12-6 and Table 3.12-7. Figure 3.12-1 shows the locations of the noise monitoring sites. Noise monitoring data is provided in Appendix B.

Community noise monitoring equipment included Larson Davis Laboratories (LDL) model 820 and 831 precision integrating sound level meters equipped with ½" microphones. The measurement systems were calibrated using a CAL 200 calibrator before and after testing. The measurement equipment meets all of the pertinent requirements of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

TABLE 3.12-6: EXISTING CONTINUOUS 24-HOUR AMBIENT NOISE MONITORING RESULTS

SITE	LOCATION	L_{DN} (DBA)	MEASURED HOURLY NOISE LEVELS, DBA LOW-HIGH (AVERAGE)					
			DAYTIME (7:00 AM - 10:00 PM)			NIGHTTIME (10:00 PM - 7:00 AM)		
			L_{EQ}	L_{50}	L_{MAX}	L_{EQ}	L_{50}	L_{MAX}
LT-1	Rolling Hills Highschool	64	60	59	68	57	53	66
LT-2	Kohls Parking Lot	73	71	70	84	66	60	79
LT-3	Gerstco Parking Lot	59	55	54	70	52	46	70
LT-4	San Tomas Expressway	72	70	68	84	64	50	80

SOURCE – SAXELBY ACOUSTICS– 2022.

TABLE 3.12-7: EXISTING SHORT-TERM COMMUNITY NOISE MONITORING RESULTS

SITE	LOCATION	TIME ¹	MEASURED SOUND LEVEL, DB			NOTES
			L_{EQ}	L_{50}	L_{MAX}	
ST-1	Camden Avenue	10:56 AM	72	70	99	Primary noise source is traffic on Camden Avenue. Secondary noise sources include drive thru speaker noise. Lmax caused by passing motorcyclists.
ST-2	Winchester Boulevard	11:20 AM	63	57	91	Primary noise source is traffic on West Wood Street. Secondary noise sources include activity from neighbors. Lmax caused by passing autos.
ST-3	St. Thomas of Canebury Catholic Church	11:45 AM	58	49	86	Primary noise source is traffic on McCoy Avenue. Secondary noise sources include pedestrian traffic. Lmax caused by passing autos.

SITE	LOCATION	TIME ¹	MEASURED SOUND LEVEL, DB			NOTES
			L _{EQ}	L ₅₀	L _{MAX}	
ST-4	Campbell Community Park	1:27 PM	54	51	82	Primary noise source was traffic on Campbell Avenue and Winchester Boulevard. Secondary noise sources was pedestrian traffic.
ST-5	San Tomas Quino Rd and W. Campbell Ave	1:01 PM	67	64	94	Primary noise source was traffic on San Tomas Aquino and Landscaping Noise from lawnmowers.
ST-6	Christensen Studio on E. McGlincy Lane	10:32 AM	61	53	89	Primary noise source was traffic on East McGlincy Lane and nearby metal workshops

1 - ALL COMMUNITY NOISE MEASUREMENT SITES HAVE A TEST DURATION OF 10:00 MINUTES.

SOURCE - SAXELBY ACOUSTICS 2022.

The results of the community noise survey shown in Table 3.12-6 and 3.12-7 indicate that existing transportation (traffic and railroad) noise sources were the primary contributors of noise observed in the City with commercial and industrial noise contributing to the ambient noise environment in some locations.

3.12.2 REGULATORY SETTING

FEDERAL

Federal Highway Administration (FHWA)

The FHWA has developed noise abatement criteria that are used for federally funded roadway projects or projects that require federal review. These criteria are discussed in detail in Title 23 Part 772 of the Federal Code of Regulations (23CFR772).

Environmental Protection Agency (EPA)

The EPA has identified the relationship between noise levels and human response. The EPA has determined that over a 24-hour period, an Leq of 70 dBA will result in some hearing loss. Interference with activity and annoyance will not occur if exterior levels are maintained at an Leq of 55 dBA and interior levels at or below 45 dBA. Although these levels are relevant for planning and design and useful for informational purposes, they are not land use planning criteria because they do not consider economic cost, technical feasibility, or the needs of the community.

The EPA has set 55 dBA L_{dn} as the basic goal for residential environments. However, other federal agencies, in consideration of their own program requirements and goals, as well as difficulty of actually achieving a goal of 55 dBA L_{dn}, have generally agreed on the 65 dBA L_{dn} level as being appropriate for residential uses. At 65 dBA L_{dn} activity interference is kept to a minimum, and annoyance levels are still low. It is also a level that can realistically be achieved.

The Department of Housing and Urban Development (HUD) was established in response to the Urban Development Act of 1965 (Public Law 90-448). HUD was tasked by the Housing and Urban

Development Act of 1965 (Public Law 89-117) “to determine feasible methods of reducing the economic loss and hardships suffered by homeowners as a result of the depreciation in the value of their properties following the construction of airports in the vicinity of their homes.”

HUD first issued formal requirements related specifically to noise in 1971 (HUD Circular 1390.2). These requirements contained standards for exterior noise levels along with policies for approving HUD-supported or assisted housing projects in high noise areas. In general, these requirements established the following three zones:

- 65 dBA L_{dn} or less - an acceptable zone where all projects could be approved.
- Exceeding 65 dBA L_{dn} but not exceeding 75 dBA L_{dn} - a normally unacceptable zone where mitigation measures would be required, and each project would have to be individually evaluated for approval or denial. These measures must provide 5 dBA of attenuation above the attenuation provided by standard construction required in a 65 to 70 dBA L_{dn} area and 10 dBA of attenuation in a 70 to 75 dBA L_{dn} area.
- Exceeding 75 dBA L_{dn} - an unacceptable zone in which projects would not, as a rule, be approved.

HUD’s regulations do not include interior noise standards. Rather a goal of 45 dBA L_{dn} is set forth and attenuation requirements are geared towards achieving that goal. HUD assumes that using standard construction techniques, any building will provide sufficient attenuation so that if the exterior level is 65 dBA L_{dn} or less, the interior level will be 45 dBA L_{dn} or less. Thus, structural attenuation is assumed at 20 dBA. However, HUD regulations were promulgated solely for residential development requiring government funding and are not related to the operation of schools or churches.

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the EPA. Noise exposure of this type is dependent on work conditions and is addressed through a facility’s or construction contractor’s health and safety plan. With the exception of construction workers involved in facility construction, occupational noise is irrelevant to this study and is not addressed further in this document.

STATE

California Department of Transportation (Caltrans)

Caltrans has adopted policy and guidelines relating to traffic noise as outlined in the Traffic Noise Analysis Protocol (Caltrans 2011). The noise abatement criteria specified in the protocol are the same as those specified by FHWA.

Governor’s Office of Planning and Research (OPR)

OPR has developed guidelines for the preparation of general plans (Office of Planning and Research, 2003). The guidelines include land use compatibility guidelines for noise exposure.

LOCAL

Existing City Noise Thresholds

The City of Campbell General Plan Safety Element (2001) establishes goals and policies, as well as criteria for evaluating the compatibility of individual land uses with respect to noise exposure. The intent is to provide guidance for determining noise impacts due to, and upon proposed projects. All Projects within the city that require review under the California Environmental Quality Act (CEQA), are reviewed for compliance with the City's established noise thresholds. The existing Goals, Policies, and Strategies of the City's General Plan Noise Element are provided below:

Goal CNR-10: Protect the community, especially sensitive noise receptors such as schools, hospitals, and senior facilities, from excessive noise.

Policy CNR-10.1: Noise Reduction: Reduce noise levels at the source.

Strategy CNR-10.1a: Noise Ordinance: Adopt and strictly enforce a Noise Ordinance that establishes noise standards for various noise-sensitive land uses and for all Zoning Districts.

Strategy CNR-10.1b: Minimization of Noise Exposure and Generation: Encourage practices and technologies that minimize noise exposure and noise generation in new development and redevelopment.

Strategy CNR-10.1c: Noise and New Development: Evaluate the potential for noise pollution and ways to reduce noise impacts when reviewing development proposals.

Noise from Stationary Sources: New residential development shall conform to a stationary source noise exposure standard of 65 dBA for exterior noise levels and 45 dBA for interior noise levels. Acoustical studies shall be required for all new noise-sensitive projects that may be affected by existing noise from stationary sources. Where existing stationary noise sources exceed the City's noise standards, mitigation measures shall be implemented to reduce noise exposure to or below the allowable levels of the Noise Ordinance.

Traffic-Related Noise: New residential development shall conform to a traffic-related noise exposure standard of 60 dBA CNEL for outdoor noise in noise-sensitive outdoor activity areas and 45 dBA CNEL for indoor noise. New development, which does not and cannot be made to conform to this standard shall not be permitted. Acoustical studies, describing how the exterior and interior noise standards will be met, shall be required for all new residential developments with a noise exposure greater than 60 dBA CNEL. The studies should also satisfy the requirements set forth in Title 24, part 2, of the California Administrative Code, Noise Insulation Standards, for multiple-family attached residential projects, hotels, motels, etc., regulated by Title 24.

Strategy CNR-10.d: Noise Mitigation Measures: Review and require noise mitigation measures for development projects, including setbacks between uses, earth berms, sound walls, landscaping and site design that shields noise-sensitive uses with non-sensitive

structures such as parking lots, utility areas and garages, or orients buildings to shield outdoor spaces from noise sources.

Strategy CNR-10.1e: Construction Noise Mitigation: Require mitigation measures during construction, including limits on operating times of noise-producing activities (including vehicles).

Strategy CNR-10.1f: Sound Walls: In cases where sound walls are used as mitigation, they should be encouraged to help create an attractive setting with features such as setbacks, changes in alignment, detail and texture, pedestrian access (if appropriate) and landscaping.

Strategy CNR-10.1g: Expansion of Bay Area Airports: Participate in public forums regarding expansion of Bay Area Airports, including San Jose Airport and San Francisco International Airport, to ensure that future activities do not increase noise levels in Campbell.

Strategy CNR-10.1h: Helicopter Noise Reduction: Undertake measures to limit helicopter overflight noise in the City.

Strategy CNR-10.1i: Vehicle Noise Reduction: Employ roadway design, traffic signalization, reduced speed limits and other traffic management techniques to reduce noise caused by speed or acceleration of vehicles.

Strategy CNR-10.1j: Truck Traffic Limits: Limit commercial, industrial and construction truck traffic in residential areas.

Strategy CNR-10.1k: Vasona Light Rail: Work with VTA to identify potential noise impacts resulting from the planned Vasona Light Rail and develop adequate

3.12.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the project will have a significant impact related to noise if it will result in:

- a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b. Generate excessive groundborne vibration or groundborne noise levels?
- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project is not located within two miles of a public or private airport. Therefore item “c” is not discussed any further in this study.

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project-noise conditions.

TRANSPORTATION NOISE INCREASE CRITERIA

Table 3.12-8 is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn} .

TABLE 3.12-8: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

<i>AMBIENT NOISE LEVEL WITHOUT PROJECT, L_{DN}</i>	<i>INCREASE REQUIRED FOR SIGNIFICANT IMPACT</i>
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

SOURCE: FEDERAL INTERAGENCY COMMITTEE ON NOISE (FICON)

Based on the Table 3.12-8 data, an increase in the traffic noise level of 1.5 dB or more would be significant where the pre-project noise level exceeds 65 dB L_{dn} . Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 75 dB L_{dn} . The rationale for the Table 3.12-8 criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

These transportation noise thresholds of significance shown in Table 3.12-8 are established by the proposed General Plan via Policy N-1.8.

NON-TRANSPORTATION NOISE INCREASE CRITERIA

Stationary and Non-Transportation Noise Sources - A significant impact will occur if the project results in an exceedance of the noise level standards contained in Table N-2 of the General Plan

Noise Element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater.

Vibration Standards

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person’s perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The City does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities and railroad operations are addressed as potential noise impacts associated with project implementation.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 3.12-9 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v).

TABLE 3.12-9: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

PEAK PARTICLE VELOCITY		HUMAN REACTION	EFFECT ON BUILDINGS
MM/SEC.	IN./SEC.		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of “architectural” damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of “architectural” damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize “architectural” damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic but would cause “architectural” damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBOEN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

Construction activities may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams, pile drivers) are used. Construction activities often include demolition of existing structures, excavation, site preparation work, foundation work, and new building framing and finishing.

For structural damage, the California Department of Transportation uses a vibration limit of 0.5 inches/second, peak particle velocity (in/sec, PPV) for buildings structurally sound and designed to modern engineering standards.

Table 3.12-10 presents typical vibration levels that could be expected from construction equipment at a distance of 25-100 feet. The highest levels of vibration typically occur from pile driving operations. Pile driving vibrations are typically below 0.5 in/sec, PPV at distances of 50 feet or more.

TABLE 3.12-10: VIBRATION LEVELS FOR VARYING CONSTRUCTION EQUIPMENT

TYPE OF EQUIPMENT	P.P.V. @ 25 FEET (INCHES/SECOND)	P.P.V. @ 50 FEET (INCHES/SECOND)	P.P.V. @ 75 FEET (INCHES/SECOND)	P.P.V. @ 100 FEET (INCHES/SECOND)
Pile Drive (Impact)	0.644	0.226	0.124	0.080
Pile Drive (Sonic)	0.170	0.060	0.033	0.021
Large Bulldozer	0.089	0.031	0.017	0.011
Loaded Trucks	0.076	0.027	0.015	0.010
Small Bulldozer	0.003	0.001	0.000	0.000
Auger/Drill Rigs	0.089	0.031	0.017	0.011
Jackhammer	0.035	0.012	0.006	0.004
Vibratory Hammer	0.070	0.025	0.0135	0.009
Vibratory Compactor/Roller	0.210	0.074	0.040	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006

IMPACTS AND MITIGATION MEASURES

Impact 3.12-1: General Plan implementation may result in exposure to significant traffic noise sources (Less than Significant)

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD 77-108) was used to develop L_{dn} (24-hour average) noise contours for all highways and major roadways in the General Plan study area. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model predicts hourly Leq values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour period.

Existing (2016) and Proposed 2040 General Plan Buildout volumes were obtained from the traffic modeling performed for the General Plan study area. Day/night traffic distributions were based upon continuous hourly noise measurement data and Saxelby Acoustics file data for similar roadways. Using these data sources and the FHWA traffic noise prediction methodology, traffic noise levels were calculated for existing conditions.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. In some locations sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is representative of the majority of sensitive receptors located closest to the project-area roadway segments analyzed in this report.

The actual distances to noise level contours may vary from the distances predicted by the FHWA model due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers.

Table 3.12-11 shows the future noise levels and the increase in noise levels associated with traffic on the local roadway network under the proposed General Plan, versus the existing (2016) conditions.

TABLE 3.12-11: EXISTING (2016) VS. PROPOSED 2040 GENERAL PLAN

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN} , DB) AT NEAREST SENSITIVE RECEPTORS				
		EXISTING (2016)	PROPOSED 2040 GP	CHANGE	CRITERIA ¹	SIGNIFICANT?
Hamilton	W/o Phoenix Dr	59.8	63.1	3.2	+5.0 dB	No
San Tomas Expy	N/o Hamilton	64.0	66.8	2.8	+3.0 dB	No
Hamilton	W/o Eden	59.1	63.0	3.9	+5.0 dB	No
Winchester	N/o Hamilton	61.8	63.6	1.8	+3.0 dB	No
Hamilton	W/o Central	61.5	63.7	2.1	+3.0 dB	No
Hamilton	W/o Bascom	62.9	64.6	1.6	+3.0 dB	No
Bascom	S/o Hamilton	55.4	57.5	2.2	+5.0 dB	No
San Tomas Aquino Rd	S/o Villarita	65.1	65.5	0.0	+1.5 dB	No
Civic Center	W/o 1st	55.5	57.4	1.9	+5.0 dB	No
Campbell	W/o 1st	52.2	52.2	0.0	+5.0 dB	No
Orchard City	W/o 1st	52.4	55.9	3.1	+5.0 dB	No
Campbell	E/o Union	53.7	55.8	2.1	+5.0 dB	No
San Tomas Expy	N/o Winchester	62.2	63.7	1.5	+3.0 dB	No
Winchester	N/o Budd	58.4	59.2	0.7	+5.0 dB	No
Union Ave	N/o McGlincy	60.2	60.7	0.5	+3.0 dB	No
Camden	E/o 17	64.4	65.1	0.4	+3.0 dB	No
Pollard	W/o 85	58.3	59.8	1.5	+5.0 dB	No
Winchester	N/o Parr Ave	54.3	54.4	0.0	+5.0 dB	No
Curtner	W/o Salerno	56.7	56.7	0.0	+5.0 dB	No
Dell Ave	S/o Hacienda Ave	45.6	46.4	0.8	+5.0 dB	No
Campbell	E/o Railway	54.3	56.3	2.0	+5.0 dB	No

¹ WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB L_{DN} NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT.

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM FEHR & PEERS TRANSPORTATION CONSULTANTS, CALTRANS, AND SAXELBY ACOUSTICS 2022.

Buildout of the General Plan may contribute to an exceedance of the City's transportation noise standards and/or result in significant increases in traffic noise levels at existing sensitive receptors. As indicated by Tables 3.12-11, the related traffic noise level increases with a circulation system buildout of the proposed 2040 General Plan are predicted to increase between 0.4 to 3.2 dB versus the existing (2016) conditions.

General Plan Policies N-1.1 through N-1.10, and Action N-1a, identified below, are intended to minimize exposure to excessive noise, including noise associated with traffic. Specifically, Policies N-1.1 through N-1.8 support noise-compatible land uses in the vicinity of traffic noise sources and require that new development and infrastructure projects be reviewed for consistency with the noise standards established in Tables N-1 and N-2. The proposed General Plan standards required

under Policy N-1.3, for exposure to traffic noise meet or exceed the noise level standards of the adopted General Plan.

As shown in Table 3.12-11, the traffic noise increases associated with the proposed General Plan comply with the applicable test of significance. Therefore, the proposed General Plan would have a **less-than-significant** impact relative to traffic noise on existing noise-sensitive uses in the City.

GENERAL PLAN POLICIES AND ACTIONS THAT MINIMIZE POTENTIAL IMPACTS

POLICIES

- N-1.1 Consider the noise compatibility of existing and future development when making land use planning decisions with an emphasis on protecting neighborhoods and people from excessive noise levels, while still accommodating new development and uses.
- N-1.2 Require development projects and changes to existing uses to be consistent with the standards indicated in Table N-1 to ensure acceptable noise levels for existing and future development.
- N-1.3 Require new development to reduce excessive noise to the standards indicated in Tables N-1 and N-2 through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.
- N-1.4 Ensure that new development does not result in indoor noise levels exceeding 45 dBA Ldn for residential uses by requiring the implementation of construction techniques and noise reduction measures for all new residential development.
- N-1.5 Encourage the use of open spaces, trees, and landscaping to buffer new and existing development from noise sources. Use fences and sound walls for sound attenuation only when other measures are not practical or when recommended by an acoustical expert as part of a mitigation measure. When sound walls are required for compliance with noise standards, ensure sound walls are built to be visually compatible with the surrounding area, at the minimum height necessary to achieve the required sound attenuation. As feasible, sound walls should incorporate treatments to resist graffiti.
- N-1.6 Require acoustical studies for new noise-generating and noise-sensitive developments, and transportation improvements that would increase roadway capacity, move traffic closer to sensitive receptors, or add traffic to areas that do not currently have notable exposure to roadway noise.

- N-1.7 Continue to recognize that "late night activities" (land use activities operating from 11:00 p.m. to 6:00 a.m., not including the lawful, reasonable, and customary use of residential uses or professional offices that does not interfere with the reasonable use and enjoyment of other properties) may present a potential noise impact, and should be carefully reviewed to ensure compatibility with adjacent residences.
- N-1.8 For projects that are required to prepare an acoustical study, the following stationary and transportation noise source criteria shall be used to determine the significance of those impacts.

Stationary and Non-Transportation Noise Sources

- *A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or for instances where the ambient noise level is already above the standards contained in this element, the project will result in an increase in ambient noise levels by more than 3 dB.*
- *This does not apply to construction activities which are conducted according to the best practices contained in Chapter 18.04 of the Campbell Municipal Code, and outlined in Action N-1f. Compliance with these requirements shall be sufficient to reduce construction-related noise impacts to a less than significant level*

Transportation Noise Sources

- *Where existing traffic noise levels are 60 dB L_{dn} or less at the outdoor activity areas of noise-sensitive uses, a +5 dB L_{dn} increase in roadway noise levels will be considered significant;*
- *Where existing traffic noise levels are greater than 60 dB L_{dn} and up to 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +3 dB L_{dn} increase in roadway noise levels will be considered significant; and*
- *Where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB L_{dn} increase in roadway noise levels will be considered significant.*

- N-1.9 Support noise-compatible land uses along Highways 17 and 85 and San Tomas Expressway.
- N-1.10 Regional and pass-thru truck traffic shall be limited to specific routes as described in Chapter 10.40 of the Campbell Municipal Code (Restricted-Unrestricted Streets).

ACTIONS

- N-1a *Update Chapter 21.16 (Section 21.16.070 – Noise) of the Campbell Municipal Code to:*
- *Require that new development projects and all (ministerial and discretionary) changes in use are reviewed for compliance with the noise requirements established in this element, including the standards established in Tables N-1 and N-2, and where necessary, require mitigation measures to achieve the noise standards.*
 - *Require acoustical studies for new development projects and (ministerial and discretionary) changes in use which have the potential to generate noise impacts which exceed the*

standards identified in this element. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to ensure compliance with the noise standards included in this element.

- *Require developers to prepare a construction management/noise mitigation plan that defines best management practices to reduce construction noise, and includes proposed truck routes as part of the entitlement process.*
- *Incorporate a list of recommended best practices to reduce excessive noise levels, as identified in this element, which should be incorporated in new development projects.*
- *Provide for additional scrutiny of potential noise impacts when considering approval of new "late-night activities" (land use activities operating from 11:00 p.m. to 6:00 a.m., not including the lawful, reasonable and customary use of residential uses or professional offices that does not interfere with the reasonable use and enjoyment of other properties).*
- *Incorporate by reference the applicable noise-related provisions of Chapter 18.04 (Building Code).*

Impact 3.12-2: General Plan implementation may result in exposure to excessive railroad noise sources (Less than Significant)

Table 3.12-4 indicates that the 60 dBA L_{dn} railroad noise contours for the VTA line may extend up to 75 feet from the railroad centerline. Future development located along these railroad lines could therefore be exposed to unacceptable exterior noise levels.

Policies N-1.1 and N-1.5 support noise-compatible land uses in the vicinity of railroad noise sources and require that new development and infrastructure projects be reviewed for consistency with the noise standards established in Tables N-1 and N-2. The proposed General Plan standards required under Policy N-1.2, for exposure to railroad noise meet or exceed the noise level standards of the adopted General Plan.

Implementation of these General Plan policies and actions would ensure that development allowed under the proposed General Plan is not exposed to noise levels associated with railroad operations in excess of the City's established standards. This is a **less than significant** impact.

Impact 3.12-3: Implementation of the General Plan could result in the generation of excessive stationary noise sources (Less than Significant)

Implementation of the General Plan could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. Such land uses may include commercial area loading docks, industrial uses, HVAC equipment, car washes, daycare facilities, auto repair, and recreational uses. While the General Plan does not specifically propose any new noise generating uses, the Land Use Map includes light industrial land use designations, which may result in new noise sources. Specific land uses that would be located in the city are not known at this time. Additionally, noise from existing stationary sources, as identified in the background section of this chapter, will continue to impact noise-sensitive land uses in the vicinity. New projects which may include stationary noise sources such as automotive and truck repair facilities, tire installation centers, car washes, loading docks, corporation yards, parks, and play fields may create noise levels in excess of the City's standards.

While no specific projects are proposed under the general plan update, changes in land use may allow for more intensive noise-generating uses in closer proximity to noise-sensitive uses. Where this occurs, detailed noise studies would be required to ensure that noise control measures are implemented into the project design. Such measures could include facing loading docks of industrial buildings away from sensitive uses, construction of sound walls or berms between loading docks and sensitive uses, using buildings to create additional buffer distance and screening, or other site design measures to ensure that non-transportation (stationary) noise sources do not cause exterior noise levels to exceed allowable standards at sensitive receptors.

For example, a typical busy loading dock for a warehouse might generate noise levels of approximately 66 dBA L_{eq} at a distance of 100 feet, as shown in Table 3.12-5. This would exceed the City's proposed stationary noise standards of 55 dBA L_{eq} (daytime) and 45 dBA L_{eq} (nighttime). Construction of a 12-foot-tall sound wall would reduce loading dock noise levels to approximately 53 dBA L_{eq} . For a daytime use loading dock, this would be sufficient to meet the City's 55 dBA L_{eq} daytime noise standard. For a loading dock which requires nighttime operation, a sound wall would not be sufficient to achieve the 45 dBA L_{eq} nighttime noise standard. To achieve the nighttime noise standard, the distance from the loading dock would need to be increased to 250 feet for the 12-foot-tall wall to achieve the 45 dBA L_{eq} nighttime standard. Alternatively, the loading docks could face internal to the project site and the industrial building could be used to screen loading dock noise. In this case the loading dock could be located 150 feet from a sensitive receptor, assuming it was screened by a 20-foot-tall building. This would achieve the City's 45 dBA L_{eq} nighttime noise standard. While this is just a theoretical scenario, it illustrates that use of site design measures, screening walls, etc. can be sufficient to achieve compliance with the City's stationary noise standards, even when more intensive uses are proposed in closer proximity to sensitive receptors.

The General Plan includes policies and actions that are intended to reduce noise associated with stationary sources. Specifically, Policies N-1.1 through N-1.8, Policies N-2.1 through Policies N-2.4, and Action N-1a Action N-2a would reduce noise associated with stationary sources. Implementation of the proposed policies and actions of the General Plan will reduce noise impacts from stationary noise sources to a **less than significant** level.

POLICIES

- N-1.1 Consider the noise compatibility of existing and future development when making land use planning decisions with an emphasis on protecting neighborhoods and people from excessive noise levels, while still accommodating new development and uses.
- N-1.2 Require development projects and changes to existing uses to be consistent with the standards indicated in Table N-1 to ensure acceptable noise levels for existing and future development.
- N-1.3 Require new development to reduce excessive noise to the standards indicated in Tables N-1 and N-2 through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.
- N-1.4 Ensure that new development does not result in indoor noise levels exceeding 45 dBA Ldn for residential uses by requiring the implementation of construction techniques and noise reduction measures for all new residential development.
- N-1.5 Encourage the use of open spaces, trees, and landscaping to buffer new and existing development from noise sources. Use fences and sound walls for sound attenuation only when other measures are not practical or when recommended by an acoustical expert as part of a mitigation measure. When sound walls are required for compliance with noise standards, ensure sound walls are built to be visually compatible with the surrounding area, at the minimum height necessary to achieve the required sound attenuation. As feasible, sound walls should incorporate treatments to resist graffiti.
- N-1.6 Require acoustical studies for new noise-generating and noise-sensitive developments, and transportation improvements that would increase roadway capacity, move traffic closer to sensitive receptors, or add traffic to areas that do not currently have notable exposure to roadway noise.
- N-1.7 Continue to recognize that "late night activities" (land use activities operating from 11:00 p.m. to 6:00 a.m., not including the lawful, reasonable, and customary use of residential uses or professional offices that does not interfere with the reasonable use and enjoyment of other properties) may present a potential noise impact, and should be carefully reviewed to ensure compatibility with adjacent residences.
- N-1.8 For projects that are required to prepare an acoustical study, the following stationary and transportation noise source criteria shall be used to determine the significance of those impacts.

ACTIONS

- N-1a *Update Chapter 21.16 (Section 21.16.070 – Noise) of the Campbell Municipal Code to:*
- *Require that new development projects and all (ministerial and discretionary) changes in use are reviewed for compliance with the noise requirements established in this element, including the standards established in Tables N-1 and N-2, and where necessary, require mitigation measures to achieve the noise standards.*

- *Require acoustical studies for new development projects and (ministerial and discretionary) changes in use which have the potential to generate noise impacts which exceed the standards identified in this element. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to ensure compliance with the noise standards included in this element.*
 - *Require applicants to prepare a construction management/noise mitigation plan that defines best management practices to reduce construction noise, and includes proposed truck routes as part of the entitlement process.*
 - *Incorporate a list of recommended best practices to reduce excessive noise levels, as identified in this element, which should be incorporated in new development projects.*
 - *Provide for additional scrutiny of potential noise impacts when considering approval of new "late-night activities" (land use activities operating from 11:00 p.m. to 6:00 a.m., not including the lawful, reasonable and customary use of residential uses or professional offices that does not interfere with the reasonable use and enjoyment of other properties).*
 - *Incorporate by reference the applicable noise-related provisions of Chapter 18.04 (Building Code).*
- N-2a *In addition to the updates specified by Action N-1a, for Municipal Code Section 21.16.070 – (Noise), also include good neighbor noise practices for bar, live entertainment, and restaurant activities adjacent to residential areas. Updates should include timing standards for the disposal of recycling materials and other common sources of nighttime noise to ensure activities occur during times to minimize nighttime noise impacts to surrounding neighborhoods.*

Impact 3.12-4: General Plan implementation may result in an increase in construction noise sources (Less than Significant)

New development, maintenance of roadways, and installation of public utilities and infrastructure generally require construction activities. These activities include the use of heavy equipment and impact tools. Table 3.12-12 provides a list of the types of equipment which may be associated with construction activities, and their associated noise levels.

TABLE 3.12-12: CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	PREDICTED NOISE LEVELS, LMAX DB				DISTANCES TO NOISE CONTOURS (FEET)	
	NOISE LEVEL AT 50'	NOISE LEVEL AT 100'	NOISE LEVEL AT 200'	NOISE LEVEL AT 400'	70 DB LMAX CONTOUR	65 DB LMAX CONTOUR
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. FHWA-HEP-05-054. January 2006. Saxelby Acoustics, LLC 2019.

Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction could result in periods of significant ambient noise level increases and the potential for annoyance. However, the proposed General Plan includes policies and actions that are intended to reduce noise associated with construction noise (listed below). Specifically, Policies N-1.13, N-1.15, and N-1.17 and Actions N-1e and N-1f would reduce noise associated with construction noise. Implementation of the proposed policies and actions of the General Plan will ensure noise impacts from construction are **less than significant**.

GENERAL PLAN POLICIES AND ACTIONS THAT MINIMIZE POTENTIAL IMPACTS

POLICIES

- N-1.13 Continue to ensure that existing development is protected, to the greatest extent feasible, from noise impacts due to construction on adjacent or nearby properties.
- N-1.15 Encourage local school districts to prepare construction management plans that direct construction related traffic to appropriate arterial and unrestricted streets, and incorporate other measures to minimize community noise exposure to Campbell residents.
- N-1.17 Require construction activities to comply with standard best practices (see Action N-1h and Chapter 18.04 of the Municipal Code). Construction activities outside of the permitted construction hours identified in the Campbell Municipal Code (Chapter 18.04 - Building Code) may be approved on a case by case basis by the Building Official.

ACTIONS

- N-1e Monitor construction projects and construction activities to ensure they comply with the standards and requirements contained in the Campbell Municipal Code (Chapter 18.04 - Building Code).
- N-1h Update the Campbell Municipal Code (Chapter 18.04 - Building Code) to include the following construction noise best practices and requirements:
- *Establish standards for when a construction staging and phasing plan shall be required for new development projects and significant remodels.*
 - *The construction contractor shall utilize “quiet” models of air compressors and other stationary noise sources where technology exists.*
 - *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
 - *Unnecessary idling of internal combustion engines shall be prohibited.*
 - *Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
 - *The required construction-related noise mitigation plan shall also specify that haul truck deliveries are to occur within the same range of hours specified for construction equipment.*
 - *The construction contractor shall designate a “noise disturbance coordinator” who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.*

Impact 3.12-5: General Plan implementation may result in construction vibration (Less than Significant)

Construction activities facilitated by the proposed General Plan may include demolition of existing structures, site preparation work, excavation of below grade levels, foundation work, pile driving, and new building erection. Demolition for an individual site may last several weeks and at times may produce substantial vibration. Excavation for underground levels may also occur on some project sites and vibratory pile driving could be used to stabilize the walls of the excavated area. Piles or drilled caissons may also be used to support building foundations.

Heavy tracked vehicles (e.g., bulldozers or excavators) can generate distinctly perceptible groundborne vibration levels when this equipment operates within approximately 25 feet of sensitive land uses. Impact pile drivers can generate distinctly perceptible groundborne vibration levels at distances up to about 100 feet, and may exceed building damage thresholds within 25 feet of any building, and within 50-100 feet of a historical building, or building in poor condition. Other

construction activities, such as caisson drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may also potentially generate substantial vibration in the immediate vicinity.

Depending on the proximity of existing structures to each construction site, the structural soundness of the existing buildings, and the methods of construction used, vibration levels may be high enough to damage existing structures. Given the scope of the General Plan and the close proximity of many existing structures, groundborne vibration impacts would be potentially significant.

As with any type of construction, vibration levels may at times be perceptible. However, construction phases that have the highest potential of producing vibration (pile driving and use of jackhammers and other high-power tools) would be intermittent and would only occur for short periods of time for any individual project site.

General Plan Action N—1f would ensure administrative controls such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration to hours with the least potential to affect nearby businesses, in order to ensure that perceptible vibration can be kept to a minimum, and as such would not result in a significant impact with respect to perception. Therefore, the potential for significant impacts associated with construction vibration is **less than significant**.

GENERAL PLAN POLICIES AND ACTIONS THAT MINIMIZE POTENTIAL IMPACTS

Actions

N-1f *Update the Campbell Municipal Code (Chapter 18.04 - Building Code) to include the following construction noise best practices and requirements:*

- *Establish standards for when a construction staging and phasing plan shall be required for new development projects and significant remodels.*
- *The construction contractor shall utilize “quiet” models of air compressors and other stationary noise sources where technology exists.*
 - *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
 - *Unnecessary idling of internal combustion engines shall be prohibited.*
 - *Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
 - *The required construction-related noise mitigation plan shall also specify that haul truck deliveries are to occur within the same range of hours specified for construction equipment.*

- *The construction contractor shall designate a “noise disturbance coordinator” who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.*

Impact 3.12-6: General Plan implementation may result in exposure to groundborne vibration (Less than Significant)

Development facilitated by the General Plan could expose persons to excessive groundborne vibration levels attributable to trains. The proposed locations of buildings and their specific sensitivity to vibration are not known at this time; however, such uses located in close proximity to railroad tracks could be exposed to ground vibration levels exceeding FTA guidelines.

The proposed General Plan includes Policy N-2.5 and Action N-2b which requires that individual development projects demonstrate that that groundborne vibration and noise nuisance with rail operations have been adequately addressed, according to Federal Transit Administration (FTA) guidelines. The implementation of this policy would limit potential groundborne vibrations associated with railroad operations to a **less than significant** level.

GENERAL PLAN POLICIES AND ACTIONS THAT MINIMIZE POTENTIAL IMPACTS

POLICIES

- N-2.5 Require proposed developments in close proximity to rail lines (within 100 feet or less of the rail line measured from the property line of proposed development) to demonstrate that groundborne vibration and noise nuisance associated with rail operations have been adequately addressed prior to approving the development of sensitive uses.

ACTIONS

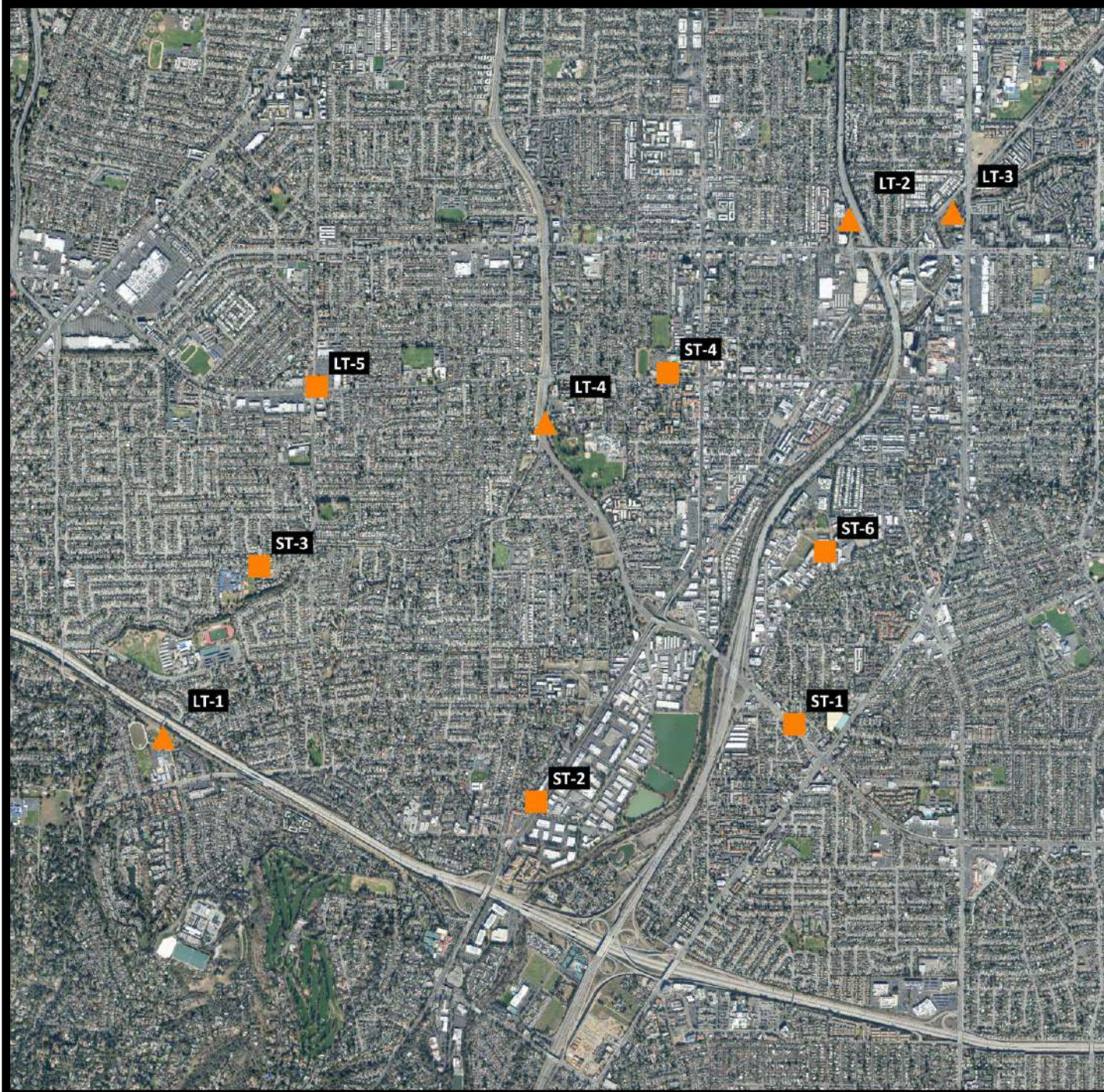
- N-2b In addition to the updates specified by Action N-1a, for Campbell Municipal Code Section 21.16.070 – (Noise), also require new developments within 100 feet of the rail line to demonstrate that vibration experienced by residents and sensitive uses would not exceed the Federal Transit Administration guidelines.

THIS PAGE LEFT INTENTIONALLY BLANK

City of Campbell GP Update

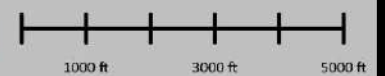
Figure 3.12-1:

Noise Measurement Sites



Legend

- ▲ Noise Measurement Site - Long Term
- Noise Measurement Site - Short Term



Projection: State Plane (California Zone 3) / NAD83 / feet
Rev. Date: 07/08/2022



THIS PAGE LEFT INTENTIONALLY BLANK

Public services such as fire and police protection are vital to maintaining a safe and healthy community. Educational services serve as a foundation for providing citizens with the skills and resources to excel today and in the future. There are many other public services that are important to a community, such as parks and recreational opportunities, libraries, museums, and healthcare facilities.

This section provides a background discussion and analysis of fire protection services, police services, schools, parks and recreational facilities, libraries, and other community facilities and services. This section is organized with an existing setting, regulatory setting, and impact analysis.

Utilities services, including water, sewer, and solid waste disposal are addressed in Chapter 3.15 (Utilities and Service Systems) of this Draft EIR.

Comments were received during the NOP comment period regarding this environmental topic. Comments provided by Nancy Tepperman noted that additional allowed development would necessitate the need for more parks, and current development has pressured existing parks within the city. All comments received during the NOP comments period are included in Appendix A.

3.13.1 ENVIRONMENTAL SETTING

FIRE PROTECTION SERVICES

The City of Campbell receives fire protection from the Santa Clara County Fire Department (SCCFD).

The Santa Clara County Fire Department (SCCFD), which was formed in 1947, provides suppression and dispatches emergency services for a 128.3-mile area. The SCCFD provides firefighting personnel and emergency medical service (basic life support) to the residents and businesses in Los Altos Hills, Los Altos, Cupertino, Saratoga, Monte Sereno, Campbell, and Los Gatos. The Department also provides protection for the unincorporated areas adjacent to those cities. The City of Campbell contracts service through the SCCFD, and the Campbell Police Chief is responsible for SCCFD contracts.

The SCCFD maintains 15 fire stations, an administrative headquarters, a maintenance facility, five other support facilities. The SCCFD offers fire resources and services that are divided into five major sections: Fire Suppression and Rescue, Fire Investigation, Emergency Medical Services, Special Operations Task Force / Haz-Mat, and Wildland Urban Interface.

The SCCFD operates two fire stations within the City of Campbell, as shown on Figure 3.13-1. Both stations are City-owned facilities.

- Campbell Fire Station, at 123 Union Avenue, Campbell
- Sunnyoaks Fire Station / McCormack Training Center, at 485 West Sunnyoaks Avenue, Campbell

Fire Suppression and Rescue

The Fire Suppression Department is configured into three districts. First-call equipment is deployed to deliver initial fire attack and EMS services within 7 minutes. A standard first-alarm assignment for structure fires consists of two engine companies, a ladder truck company, a rescue or hazardous materials company and a Battalion Chief, for a total of 15 people. On working fires, the response is increased to three engines companies, one ladder truck company, a Hazmat and Breathing Support company, one rescue company, two Battalion Chiefs, a Safety Officer, and a Duty Investigator, totaling 25 persons.

A second-alarm would add another two engine companies, one truck company, one rescue company, and an additional Chief Officer; total staffing for two alarms is then 40 persons. Wildland-urban interface companies are trained and equipped to provide structure protection and limited initial attack on wildland incidents.

A brush alarm for vegetation fires in wildland/urban interface areas consists of two engine companies, a Type 3 engine and a Battalion Chief, totaling 9 persons.

Daily emergency response staffing consists of 70 career fire personnel on a 24-hour shift assignment, operating 19 pieces of first-line apparatus, plus three 3 Battalion Chief command vehicles, operating from 15 fire stations. In daily operations during declared "Fire Season," patrols function in tandem with ladder trucks during daytime hours. This means that during the summer months, when the probability of a brush fire is high, the truck and patrol vehicle go out on calls as a pair. This guarantees continuous coverage of the entire area served, should another response be required during an alarm.

The SCCFD aims to control emergency incidents that threaten lives, property, and the environment. The Department maintains the following three goals:

- Arrive at the scene of emergencies within five minutes of receipt of alarm, at least 90 percent of the time.
- Maintain "Confined Space - Operational Level" training for all Department responders.
- Maintain "Rescue Systems I" certification for truck and rescue personnel.

The SCCFD has four first-call ladder trucks and one rescue vehicle, which employ specialized equipment designed to carry out rescues such as traffic collisions and industrial accidents. All emergency response personnel are trained in specialized rescue techniques. All apparatus carry a compliment of rescue tools.

Fire Investigation

The Department is one of the few agencies in the Bay Area to staff full time fire investigator positions, augmented by on-call personnel. Investigation of fires provides information on the cause of local fire problems, which provides information to the local news media regarding fire safety education.

Arson Investigation provides for the apprehension of arsonists who cause billions of dollars in property damage, fraud and death each year. The Department also uses the AIRS program to track arson registrants/suspects and compile fire statistics. With local police agencies, the Santa Clara

County Fire Investigation Unit track down many arson investigations, as they account for about 25% of fires. The SCCFD places a strong emphasis on quelling arson fires.

Emergency Medical Services

The SCCFD provides first response Advanced Life Support (ALS) Paramedic level services to Unincorporated Santa Clara County, Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, and Saratoga. An Emergency Medical Services (EMS) Coordinator and a Firefighter Engineer Paramedic, who report to the Battalion Chief of Operations, facilitate the delivery of high quality, effective patient care. The District operates 19 fully equipped ALS fire apparatus daily all staffed with a minimum of one Paramedic and two Emergency Medical Technicians (EMT). The Department maintains a Santa Clara County EMS Multi-Casualty Incident (MCI) supply trailer for large-scale emergency medical incidents and is a participant in Master Mutual Aid in the event of major disasters.

The Department's EMS division is an active participant in the Santa Clara County EMS System, participates in many of the EMS subcommittees, and sits as a representative on the EMS subsection of the Santa Clara County Fire Chiefs Association. The State of California's EMS Authority has recognized the Department as a Continuing Education Provider for both Paramedics and Emergency Medical Technicians.

The District is a participant in Santa Clara County's Electronic EMS patient care record (PCR) system. The software is programmed to capture patient data upon receipt of a 911 call and provides enhanced capabilities for monitoring and evaluating patient care. The Department is committed to the protection of an individual's private patient healthcare information and maintains a comprehensive Privacy Practices Policy.

Santa Clara County EMS has a contract with a third party ambulance transport provider for the ground transport of all patients. The delivery of exceptional EMS in a partially rural area involves the utilization of ALS helicopter service providers. The Department routinely works with the various transport providers in order to rapidly transport critical patients from all locations to definitive care. Some areas covered by the department are so remote that an ALS helicopter is part of the initial EMS dispatch. The Department conducts extensive in-service training on a routine basis to insure the most up to date EMS skills, procedures, and practices are implemented and delivered to the citizens and visitors of Santa Clara County.

Special Operations Task Force / Haz-Mat

The mission of the SCCFD Special Operations Task Force is to improve emergency responses that are outside the scope of typical emergency calls through advanced training, teaching, and emergency responses in the district and adjoining agencies.

In addition to regular fire department training, all members are required to have the following:

- CSFM Fire Instructor 1A and 1B
- Confined Space Rescue
- Trench Rescue
- Low Angle Rescue
- Rescue Systems I and/or II
- CSTI Hazardous Materials Technician or Specialist

3.13 PUBLIC SERVICES AND RECREATION

- Haz-Mat Safety Officer/All Risk

Continued training includes:

- Weekly Special Ops, multi company training
- Participation in the quarterly Hazardous Materials Countywide Refresher Training
- UASI Urban Shield Exercise/Competition and Participation (12 hours)

The SCCFD Special Operations Task Force may be deployed within the district when needed by Incident Command request of the Special Operations Task Force. Haz-Mat 72 is also recognized as an OES Type 1 resource for large WMD or large scale Haz-Mat events throughout the state.

Some Santa Clara County Fire Department Special Operations Task Force (SOTF) members have been attached to FEMA Task Force 3, local SWAT teams, or actively teach for private and public agencies. Some member deployments and SOTF deployments include:

- Hurricane Katrina – rescue and Haz-Mat operations (2005)
- San Jose High Rise Rescue (2011)
- Santa Clara County City Six Flags Roller Coaster Rescue (2007)
- San Jose Downtown / AT&T- 1,300-gallon Diesel Spill (2010)
- Santa Clara City/ CHP- Bomb maker's facility (2013)
- Los Altos- PG&E House Explosion (2002)
- Suspicious Package/ Envelope diagnostics at Campbell PD, Moffett Field, Google, EBay, Stanford and Apple (various years)
- Trench and steep terrain rescues (various years)

POLICE PROTECTION SERVICES

The Campbell Police Department (CPD) provides law enforcement and police protection services throughout the City. Campbell Police is responsible for all public safety and emergency preparedness services in the City of Campbell, including management of the City's contract with the Santa Clara County Fire Department for fire and medical emergency services.

The CPD headquarters is located at 70 North First Street in Campbell. The Department has 70 full-time employees and is comprised of four divisions: Administrative, Field Services, Special Enforcement, and Support Services.

Administrative Division

The Administrative Services Division consists of sworn and professional employees whose purpose is to provide internal support and supervision to each division within the organization. The Administrative Division is comprised of the Chief, two Captains, Support Services Manager, Executive Assistant, Communications & Public Engagement Coordinator, and a halftime Training Coordinator.

The Communications & Public Engagement Coordinator is a shared position under the supervision of the police department. This position manages communications, public relations, marketing, and media outreach for both the police department and the City of Campbell.

Field Services Division

The Field Services Division (FSD), also known as patrol, enhances the safety of the community by providing a full range of effective police field services. This Division is managed by a Captain, and when fully staffed, the Division has four Sergeants, four Agents, 20 Police Officers, and two Community Service Officers.

The Field Services Division is primarily responsible for responding to calls for service in the City of Campbell. Officers handle approximately 35,000 calls for service, 5,500 crime reports, and 1,800 arrests each year.

Officers patrol by car, bicycle, and foot to maintain high-profile, proactive, and preventive public safety services. Services include responding to emergency calls, investigating crimes, enforcing criminal and vehicle codes, investigating traffic collisions, community policing, crime prevention, and managing security and safety for the many special events that occur within the community.

Officers working on patrol are scheduled for 12-hour shifts. These shifts are split into four sections. Early Days works Sunday through Tuesday 6:00 AM to 6:00 PM. Early Nights works Sunday through Tuesday 6:00 PM to 6:00 AM. Late Days works Thursday through Saturday 6:00 AM to 6:00 PM. Late Nights works Thursday through Saturday 6:00 PM to 6:00 AM. Each shift alternates a fourth workday into their schedules every other Wednesday. Every two weeks, officers receive a “short day” where they work 8 hours. This provides for an 80-hour pay period.

Special Enforcement Division

The Special Enforcement Division (SED) includes the Investigative Services Unit and the Traffic Unit and falls under the supervision of a Captain.

Investigative Services Unit: The mission of Investigative Services is to resolve cases quickly and reduce crime by providing proactive and follow-up investigative services utilizing traditional and innovative methods. This unit is comprised of one Sergeant, one Agent, one Robbery/Homicide Investigator, one Sexual Assault Investigator, one Property/Financial Crimes Investigator, two Arson/General Crimes Investigators, and two Regional Task Force Investigators (SCCSET & RATTF). The Sergeant of the Investigative Services Unit is responsible for all case assignments, evidence reviews, case reviews, supervision of search warrants, parole and property searches, and investigative operations. The Unit investigates approximately 500 cases per year ranging in all levels of complexity and identifies perpetrators of crimes to assist the District Attorney’s Office in the successful prosecution of suspects.

The Campbell Police Department contracts with the Santa Clara County Fire Department to pay for our two Arson Investigators. These investigators are responsible for the Fire Protection District that spans seven different cities and some unincorporated areas within Santa Clara County, including Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, and Saratoga.

3.13 PUBLIC SERVICES AND RECREATION

Traffic: The Traffic Unit focuses on reducing traffic accidents, creating safer roadways, and decreasing hazardous conditions in neighborhoods by providing essential traffic services.

The Traffic Unit is composed of one Sergeant, one Agent, and two Police Officers when fully staffed. The Unit also includes several crossing guards who help to ensure the safety of school children crossing busy intersections to and from school.

Support Services Division

The Support Services Division is comprised of the Communications (Dispatch) Unit, the Records Unit, and Property & Evidence Unit. This Division is managed by the Support Services Division Manager.

Communications: The Communications Unit is the primary Public Safety Answering Point (PSAP) for the City of Campbell. This unit has one supervisor, ten dispatchers, and three per diem (part-time) dispatchers. Dispatchers are responsible for prioritizing and dispatching calls for service, monitoring and tracking field units, and ensuring the safety of officers in the field.

Campbell's staff of dispatchers answers all calls to 911 originating in the City of Campbell. Additionally, dispatchers answer calls received on other emergency and non-emergency telephone lines. Calls received for fire and medical emergencies are transferred to Santa Clara County Communications for dispatching fire and emergency medical units. Campbell Police dispatchers approximately 70,000 calls per year.

Records: The Police Department Records Unit is staffed by six records specialists, one property and evidence specialist, and one supervisor.

The Records Unit is responsible for the processing and management of all Police Department records, such as crime and accident reports, warrants, traffic citations, and parking citations.

Property and Evidence: One Property & Evidence Specialist staffs the Property & Evidence Unit of the Campbell Police Department.

The Property & Evidence Specialist is responsible for booking all found, safekeeping, and evidence items brought into the police department. The property is stored until it can be returned to the legal owner, until the case has been adjudicated in court, or until the statute of limitations has expired. Items stored include bicycles, firearms, money, drugs, backpacks, checks, credit cards, audio and video equipment, furniture, computers, biological material, hazardous materials, and various other items.

MISCELLANEOUS PUBLIC SAFETY

Local Coordination

The CPD works collaboratively with the Santa Clara County Fire Department to manage the City's emergency services program and provide planning, training, and coordination of City personnel for an effective response to natural, technological, and human-caused disasters. The manager of the emergency services program reviews and updates the City's emergency plan, maintains the City's Emergency Operations Center (EOC), is active in the Santa Clara County Emergency Managers

Association (EMA), and serves as staff to the City's representative on the Santa Clara County Emergency Planning Committee (EPC).

The City of Campbell uses two community emergency notification system called CodeRED® and AlertSCC. Officials use these systems to notify residents by telephone of emergencies such as earthquakes, fires, situations involving hazardous materials, hostage situations, barricaded subjects, etc.

Additionally, the Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact the area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

Emergency Operations

The CPD works collaboratively with the Santa Clara County Fire Department to manage the City's emergency services program and provide planning, training, and coordination of City personnel for an effective response to natural, technological, and human-caused disasters. The manager of the emergency services program reviews and updates the City's emergency plan, maintains the City's Emergency Operations Center (EOC), is active in the Santa Clara County Emergency Managers Association (EMA), and serves as staff to the City's representative on the Santa Clara County Emergency Planning Committee (EPC).

The City of Campbell uses two community emergency notification system called CodeRED® and AlertSCC. Officials use these systems to notify residents by telephone of emergencies such as earthquakes, fires, situations involving hazardous materials, hostage situations, barricaded subjects, etc.

Additionally, the Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact the area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

Multi-Jurisdictional Local Government Hazard Mitigation Plan for the San Francisco Bay Area

The Association of Bay Area Governments (ABAG) prepared and adopted a Local Hazards Mitigation Plan in 2005. The Plan was then updated in 2010. The purpose of the Plan is to serve as a catalyst for a dialogue on public policies needed to mitigate the natural hazards that affect the San Francisco Bay Area. The overall strategy of the Plan is to utilize a multi-jurisdictional effort to maintain and enhance the disaster resistance of the region, and to fulfill the requirements of the Disaster Mitigation Act of 2000 for all local governments to develop and adopt this type of plan.

Community Emergency Response Team (CERT)

The CERT Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue,

3.13 PUBLIC SERVICES AND RECREATION

team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.

The SCCFD offers CERT training for those community members interested in this type of community service. The CERT training for community groups costs \$35.00 and is accomplished in about 21-hours, culminating with a final disaster simulation exercise applying the skills participants have learned. The training consists of the following:

- Emergency Preparedness
- CERT Organization
- Disaster Psychology
- Fire Safety
- Light Search and Rescue
- Emergency Medical Operations
- Terrorism Awareness
- Disaster Simulation Exercise

PARKS AND RECREATIONAL FACILITIES

Parks, trails, and recreational facilities in the City of Campbell are managed and maintained by the Recreation and Community Services Department and the Public Works Department.

Types of Parks

Community parks: Community parks are designed and maintained to serve the entire community. Amenities may include sports facilities, including basketball courts, ball fields, swimming pools, recreation buildings and other special use facilities. Additional amenities may include meeting rooms, gymnasiums, locker rooms and group picnic areas.

Neighborhood parks: Neighborhood parks are intended primarily to serve a small portion of the city and are usually within a comfortable walking and biking distance from residences. They may contain amenities such as children playgrounds, picnic facilities, natural/landscaped areas and multi-use open fields.

Passive parks: Passive parks are small play areas and landscaped open spaces less than an acre in size. They are designed to provide recreation and aesthetic benefit, primarily in areas of high population density or commercial areas with high pedestrian use. Amenities may include children's playgrounds, plazas, turf, picnic areas, benches and special features.

Special open space facilities: Special open space facilities include the Campbell Historical Museum and the Campbell Civic Center. These facilities do not qualify as neighborhood parks, community parks, or recreation facilities under the Quimby Act.

Trails

Trails are a key factor in the development of a city-wide green space network of parks, trails, open space, and recreation facilities. The Los Gatos Creek Trail is operated by the County of Santa Clara Park Department, City of Campbell, Town of Los Gatos and the City of San Jose. The Los Gatos Creek Trail spans 11.2 miles and passes through several cities between San Jose and Lexington Reservoir. The San Jose section is 1.9 miles, while the Campbell section of the trail includes a paved walkway approximately three miles in length, including a two-mile par course loop. The City of Campbell is responsible for maintenance and trail use from the Bascom Avenue under crossing to Los Gatos Creek County Park.

City and Regional Parks

The City of Campbell categorizes each park into four separate categories: Community Parks, Neighborhood Parks, Passive Parks, and Special Open Space Facilities. Each type of park is characterized by scale, varying amenities, and the neighborhoods they serve. Campbell has five community parks, two neighborhood parks, four passive parks, and two special open space facilities.

The City is also home to several regionally-owned and maintained facilities, which includes the Santa Clara County Parklands, Santa Clara Valley Water District groundwater recharge facilities, and lands owned by the Santa Clara County Open Space Authority. The Los Gatos Creek County Trail and Los

3.13 PUBLIC SERVICES AND RECREATION

Gatos Creek County Park together comprise more than 53 acres and are maintained by Santa Clara County. The Hacienda Percolation Ponds, which are located near the Winchester Boulevard / W. Hacienda Avenue intersection, is one of six facilities owned and operated by the Santa Clara Valley Water District (SCVWD). Additionally, any previous joint use agreements between the City and a local school district are currently expired. It is noted, however, that part of John D. Morgan Park is located on the Campbell Middle School grounds.

A summary of existing City and regional parks with notable amenities and locations is provided in Table 3.13-1. The location of these parks is shown on Figure 3.13-2.

TABLE 3.13-1: EXISTING PARK FACILITIES

PARK	LOCATION	FACILITIES	USABLE ACREAGE
<i>Community Parks</i>			
Campbell Park	Campbell Ave. & Gilman Ave.	Basketball court, benches, horseshoe pits, Los Gatos Creek Trail access, parking, picnic tables, playground, water feature	3.2
Campbell Community Center	1 West Campbell Ave.	Campbell Adult Center, Heritage Theatre, Skate Park, Fitness Zone, recreational facilities	31.6
John D. Morgan Park	540 W. Rincon Ave.	Picnic tables, playground, recreation camp building, and pony baseball field	24.0
Community Garden	615 Campbell Technology Pkwy.	Garden plots	N/A
Edith Morely Park	615 Campbell Technology Pkwy.	Small grass area, trails, community garden	4.0
Stojanovich Family Park	316 Union Ave.	Child play areas, interpretive signs, landscaping, pedestrian walkways, plaza areas, public art	1.3
<i>Passive Parks</i>			
Gomes Park	2170 Winchester Blvd.	Benches	0.1
Ainsley Park	435 E. Campbell Ave.	Benches, parking, small grass area	0.1
Orchard City Green	70 N. First St.	Amphitheatre, benches, parking, small grass area	0.8
Hyde Park	90 S. First St.	Small grass area, swings	0.3
<i>Neighborhood Parks</i>			
Jack Fischer Park	Abbott Ave. & Pollard Rd.	Picnic tables, playground, restrooms, small grass area, water feature	4.1
Virginia Park	460 Virginia Ave.	Playground, restrooms, small grass area	0.5
<i>Regional Parks, Open Space, and Recreational Facilities</i>			
Los Gatos Creek County Dog Park	1250 Dell Ave.	Dog park	N/A
Los Gatos Creek Trail	Campbell Ave. & Gilman Ave.	Environmental areas, par course fitness equipment, paved running, walking, or biking trail	3.6
Los Gatos Creek County Park	1250 Dell Ave.	Trails, benches, picnic tables	9.0
Hacienda / Winchester Percolation Ponds	Hacienda Ave. & Winchester Blvd.	N/A	N/A

PARK	LOCATION	FACILITIES	USABLE ACREAGE
<i>Recreational Facilities</i>			
Campbell Community Center	1 West Campbell Ave.	Campbell AdultCenter, Heritage Theatre, Skate Park, Fitness Zone, recreational facilities	N/A
<i>Total</i>			82.6

SOURCE: [HTTP://WWW.CI.CAMPBELL.CA.US/FACILITIES?CLEAR=FALSE](http://www.ci.campbell.ca.us/facilities?clear=false). ACCESSED APRIL 2016.

With a City population of approximately 43,000 and 82.6 acres of parkland, the City currently provides just under 2.0 acres of parkland for every 1,000 people, which is below the City's goal of 3.0 acres for every 1,000 people.

SCHOOLS

The City of Campbell is served by the Campbell Union School District (Pre K-5 and K-5 elementary schools and 5-8 middle schools), the Campbell Union High School District (9-12 high schools), the Moreland School District (MSD), and the Cambrian School District (K through middle school). The MSD operates four public schools which serve the City of Campbell, all of which are located in the City of San Jose: George C. Payne Elementary School, Baker Elementary School, Latimer School, and Moreland Middle School. Two schools within the Cambrian School District serve Campbell students east of Highway 17: Bagby Elementary School and Farnham Charter School. Table 3.13-2 provides a summary of the public schools serving the city's population.

TABLE 3.13-2 PUBLIC SCHOOLS SERVING CAMPBELL

SCHOOL	GRADES SERVED	ADDRESS	ENROLLMENT (2020-2021)
<i>Elementary Schools</i>			
Blackford Elementary	Pre K-5	1970 Willow Street, San Jose	364
Capri Elementary	Pre K-5	850 Chapman Drive, Campbell	410
Castlemont Elementary	Pre K-5	3040 E. Payne Avenue, Campbell	409
Forest Hill Elementary	Pre K-5	4450 McCoy Avenue, San Jose	550
Lynhaven Elementary	K-5	881 S. Cypress Avenue, San Jose	422
Marshall Lane Elementary	Pre K-5	14114 Marilyn Lane, Saratoga	406
Rosemary Elementary	Pre K-4	401 W. Hamilton Avenue, Campbell	308
Sherman Oaks Elementary	Pre K-6	1800 Fruitdale Avenue, San Jose	528
Village School	K-5	825 W. Parr Avenue, Campbell	207
George C. Payne Elementary	Pre K-5	3750 Gleason Avenue, San Jose	581
Baker Elementary	K-5	4845 Bucknall Road, San Jose	666
Farnham Charter Elementary	K-5	15711 Woodard Rd, San Jose	535
Bagby Elementary	K-5	1840 Harris Ave, San Jose	376
<i>Middle Schools</i>			
Rolling Hills Middle School	5-8	1585 More Avenue, Los Gatos	936
Moreland Middle School	6-8	4600 Student Lane, San Jose	944
Latimer School	K-7	4250 Latimer Avenue, San Jose	554
Campbell Middle School	5-8	295 Cherry Lane, Campbell	698

3.13 PUBLIC SERVICES AND RECREATION

SCHOOL	GRADES SERVED	ADDRESS	ENROLLMENT (2020-2021)
Monroe Middle School	5-8	1055 S. Monroe Street, San Jose	954
Price Middle School	6-8	2650 New Jersey Ave, San Jose	923
<i>High Schools</i>			
Branham High School	9-12	1570 Branham Lane, San Jose	1,911
Del Mar High School	9-12	1224 Del Mar Avenue, San Jose	1,326
Leigh High School	9-12	5210 Leigh Avenue, San Jose	1,786
Prospect High School	9-12	18900 Prospect Road, Saratoga	1,573
Westmont High School	9-12	4805 Westmont Avenue, Campbell	1,723
Boynton High School (Continuation School)	9-12	901 Boynton Avenue, San Jose	196
Camden Community Day School (Continuation School)	9-12	2223 Camden Avenue, San Jose	33

SOURCES: CAMPBELL UNIFIED SCHOOL DISTRICT, SCHOOLS, [HTTPS://WWW.CAMPBELLUSD.ORG/SCHOOLS](https://www.campbellusd.org/schools) (ACCESSED APRIL 2022), CAMPBELL UNIFIED SCHOOL DISTRICT, SCHOOL ACCOUNTABILITY REPORT CARDS, [HTTPS://WWW.CAMPBELLUSD.ORG/REPORTS](https://www.campbellusd.org/reports) (ACCESSED APRIL 2022), CAMPBELL UNION HIGH SCHOOL DISTRICT, SCHOOLS, [HTTP://WWW.CACE.CUHSD.ORG//SITE/DEFAULT.ASPX?PAGEID=584](http://www.cace.cuhsd.org//site/default.aspx?pageid=584) (ACCESSED APRIL 2022), AND CAMPBELL UNIFIED HIGH SCHOOL DISTRICT, SCHOOL ACCOUNTABILITY REPORT CARDS [HTTP://WWW.CUHSD.ORG/DOMAIN/107](http://www.cuhsd.org/domain/107) (ACCESSED APRIL 2022).

OTHER PUBLIC FACILITIES

Campbell Public Library

In 1967, the citizens of Campbell pass a bond for the construction of a new library building. The Campbell Library is the only public library located in the City of Campbell. The library includes an approximately 24,000 square feet facility, and has a service population of approximately 50,000 people. The Campbell Library is part of the Santa Clara County Library District system. This enables the relatively small Campbell Library to access all of the other libraries that are part of the Santa Clara County Library system to obtain information not found in the Campbell Library, which has been requested by customers. In January 2007, the City completed a Library Needs Study which recommended increasing the size of the Campbell Library from 24,000 to 42,000 square feet in order to meet the future requirements of the community. The needs assessment study was necessary in order for the City to compete for State Library Bond funds which the State of California legislature was considering. The legislation subsequently failed and no library bonds were issued.

The Campbell Library is located at 77 Harrison Avenue. The library is open from 1 PM to 9 PM on Mondays and Tuesdays, 10 AM to 9 PM on Wednesdays, and 10 AM to 6 PM Thursdays through Saturdays. The library collection includes materials in English, Spanish, Chinese, Persian, and Russian. The Campbell Library offers recent bestsellers, movies, games, CDs, and audio books. The Library also offers discussion groups, lectures, author appearances, classes, travel programs, children's programs, and story-times for infants to school-age children to help them develop their language, motor, and creative skills.

Campbell Community Center

The Campbell Community Center, located at 1 West Campbell Avenue, is a unique community service complex which used to house the city's only high school. The site was purchased by the City of Campbell from the Campbell Union High School District in August of 1985. The facility was purchased primarily for the purpose of preserving its open space and recreational facilities for the use and enjoyment of the citizens of Campbell. The Community Center is home to the majority of the recreation classes offered through the City's Recreation and Community Services Department. The facility offers a variety of rental opportunities and the Campbell Adult Center is located at the Community Center.

The offices for Campbell's Recreation and Community Services Department are located on site (Building C, Room 31). In addition to the reserved athletic facilities, the Community Center is also home to the City's Heritage Theatre and the Skate Park. Most of the programs offered by the Campbell Recreation and Community Services Department are located at the Community Center with the exception of the large summer camp program which is offered at John D. Morgan Park.

The Fitness Zone is located at the Campbell Community Center on the west side of the track. This outdoor fitness area offers a variety of exercise apparatus to meet the needs of people with various fitness levels. The Fitness Zone consists of 12 stations with many different exercise options. The stations include equipment geared towards strength training, cardiovascular training, core strengthening, and flexibility. The equipment is supplemented with descriptive signs located on show boards next to each apparatus. The signs provide information for proper use and safety of each piece of equipment. The Fitness Zone is open for use during the same hours as the Community Center Track, sunrise to 10 p.m., seven days a week, and is free for the general public to use.

3.13.2 REGULATORY SETTING

FEDERAL

There are no Federal regulations applicable to the environmental topics of public services and recreation.

STATE AND LOCAL

Fire Protection and Emergency Response

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

3.13 PUBLIC SERVICES AND RECREATION

OFFICE OF EMERGENCY SERVICES

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

FIRE PROTECTION

The California Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, industrial processes, and many other general and specialized fire safety requirements for new existing buildings and premises.

CALIFORNIA FIRE CODE (CFC)

The CFC with the State of California Amendments contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

CALIFORNIA HEALTH AND SAFETY CODE

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Parks and Recreation

QUIMBY ACT

The Quimby Act (California Government Code Section 66477) states that “the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map.” Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City has adopted park fees as allowed by the Quimby Act, as described in greater detail below.

SANTA CLARA COUNTY OPEN SPACE AUTHORITY

In 1993, the City of Campbell incorporated into the Santa Clara County Open Space Authority (SCCOSA), which encompasses all areas within Santa Clara County except those within the jurisdiction of the Mid- Peninsula Open Space District. The SCCOSA has the ability to acquire land and create assessment districts, which in return can fund the acquisition of open space lands. The City of Campbell may apply for a portion of these funds to help finance City open space projects.

CITY OF CAMPBELL MUNICIPAL CODE

The Campbell Municipal Code contains the following policies related to parks and recreation.

Title 13 of Campbell Municipal Code sets regulations and standards for parks and recreation facilities and buildings in the city. Title 13 regulates any activities that may occur at parks and recreation buildings at the time of events and/or use, which includes, but is not limited to, conduct, vehicle requirements, picnic area requirements, advertising and sale restrictions, protection of wildlife, administrative and enforcement authority, special use policies, and violation penalties.

Chapter 13.08 (Park Impact Fees and Parkland Dedication Developments) of the Campbell Municipal Code requires development impact fees to acquire and maintain parks and recreational facilities to mitigate impacts from new development. The collected fee is for acquisition, improvement, maintenance, rehabilitation, expansion, or implementation of parks and recreational facilities. The fee is calculated by multiplying the park acreage standard, average number of persons per residential dwelling unit, and value per acre.

Title 20 of the Campbell Municipal Code sets regulations for subdivisions, including park dedication and in-lieu fees. Chapter 20.24 (Park Impact Fees and Park Land Dedication Subdivisions) includes different determinations of dedication requirements in the city. The Park Land Dedication regulations are applied to all development, except commercial or industrial subdivisions not involving any residential units, buildings, or structures, or the conversion of an apartment building to a stock cooperative, condominium, or townhouse units when no new dwelling units are added. The amount of land dedicated is determined by multiplying the average number of persons per unit and the park acreage standard of 4 acres of parkland for every 1,000 residents. This combines the ratio of 3 acres of parks and open space per 1,000 residents, and the 1 acre per 1,000 residents of school space available for public access. The City may also require payment of a fee in lieu of dedicating land and providing improvements, which would be determined based upon the fair market value of the land which would otherwise be required to be dedicated.

Schools

LERROY F. GREENE SCHOOL FACILITIES ACT OF 1998 (SB 50)

The “Leroy F. Greene School Facilities Act of 1998,” also known as Senate Bill No. 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district’s authority to levy school impact fees. This comprehensive legislation, together with the \$9.2 billion education bond act approved by the voters in November 1998 known as “Proposition 1A,” reformed methods of school construction financing

3.13 PUBLIC SERVICES AND RECREATION

in California. SB 50 instituted a new school facility program by which school districts can apply for State construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels:

- Level I fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.
- Level II fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30% of the district’s bonding capacity (percentage is based on revenue sources for repayment), having at least 20% of the district’s teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50% plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.
- Level III fees are outlined in Government Code Section 65995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of State funding.

THE KINDERGARTEN-UNIVERSITY PUBLIC EDUCATION FACILITIES BOND ACT OF 2002 (PROP 47)

This act was approved by California voters in November 2002 and provides for a bond issue of \$13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

CALIFORNIA DEPARTMENT OF EDUCATION

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such

cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by State regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses; and
- Traffic and school bus safety issues.

CALIFORNIA CODE OF REGULATIONS

The California Code of Regulations, Chapter 4.9, Payment of Fees, Charges, Dedications, or Other Requirements Against a Development Project. *Section 65995-65998 (h)* The payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 and, if applicable, any amounts specified in Section 65995.5 or 65995.7 are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities.

CALIFORNIA DEPARTMENT OF EDUCATION

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by state regulations and the policies of the SFPD relating to:

3.13 PUBLIC SERVICES AND RECREATION

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses; and
- Traffic and school bus safety issues.

3.13.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on public services and recreation if it would result in:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - Fire Protection;
 - Police Protection;
 - Schools;
 - Parks; and
 - Other public facilities.
- An increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- If it includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

IMPACTS AND MITIGATION MEASURES

Impact 3.13-1: General Plan implementation could result in adverse physical impacts on the environment associated with the need for new governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts and the provision of public services (Less than Significant)

Development accommodated under the General Plan would result in additional residents and businesses in the City, including new residential, industrial, office, and commercial uses. As described in Chapter 2.0, buildout of the General Plan could yield a total of up to 26,224 housing units, a population of 64,929 people, 12,724,055 square feet of non-residential building square footage, and 36,762 jobs within the Planning Area. As shown in Table 2.0-2 of Chapter 2.0, this represents development growth over existing conditions of up to 8,824 new housing units, 22,203 people, 2,633,721 square feet of new non-residential building square footage and 6,194 jobs.

Development and growth facilitated by the General Plan would result in increased demand for public services, including fire protection, law enforcement, schools, parks, libraries, and other public and governmental services. The General Plan includes policies and actions to ensure that public services

3.13 PUBLIC SERVICES AND RECREATION

are provided at acceptable levels and that the City will maintain and implement public facility master plans, in collaboration with appropriate service providers and other agencies, to ensure compliance with appropriate regional, state, and federal laws and to provide efficient public facilities and services to Campbell.

As the demand for services increases, there will likely be a need to address acceptable service ratios, response times, and other performance standards. New or expanded service structures (e.g., offices, maintenance and administrative buildings, schools, parks, fire facilities, libraries, etc.) will be needed to provide for adequate staffing, equipment, and appropriate facilities to serve growth in the city. Existing facilities may be expanded at their current location. New facilities may also be constructed. The Institutional (I) land use designations would accommodate the majority of new public facilities necessary to provide community services. There would likely be environmental impacts associated with the construction or expansion of the facilities needed to provide public services.

The General Plan does not propose or approve actual development projects, or the physical expansion of public facilities. As future development and infrastructure projects (including new governmental facilities) are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Such development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Any future expansion of public facilities required by growth in the City would be required to be reviewed for site-specific impacts.

It is also important to understand that special legal principles apply to impacts to school facilities. According to Government Code Section 65996, the development fees authorized by Senate Bill 50 (1998) (described earlier) are deemed to be “full and complete school facilities mitigation” for impact caused by new development. The legislation also recognized the need for the fee to be adjusted periodically to keep pace with inflation. The legislation indicated that in January 2000, and every two years thereafter, the State Allocation Board would increase the maximum fees according to the adjustment for inflation in the statewide index for school construction.

As previously stated, new or expanded facilities will be needed to serve growth contemplated in the General Plan. The environmental effect of providing the public services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the governmental facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. These impacts are described in the relevant chapters (Chapters 3.1 through 3.16, and 4.0) of this Draft EIR. Any future development, including new and expanded governmental facilities, under the General Plan would be subject to project-level review, would be required to comply with regulations, policies, and standards included in the General Plan, and would be reviewed for compliance with CEQA, including analysis of project-level impacts and mitigation measures as appropriate.

Potential environmental impacts associated with the future construction of government facilities within the Plan Area are addressed throughout this EIR. This EIR analyzes the physical environmental effects that may occur as a result of development and introduction of new urban land uses within the Plan Area. Each future facility, if constructed, would fall within the range of environmental impacts disclosed in this EIR, and would be subject to relevant policies and actions included in this EIR. It is noted, however, that development of facilities within the Planning Area may also contribute to impacts described throughout this DEIR.

The General Plan includes a range of policies and actions (listed below) to ensure that public services adequately accommodate growth, maintain community services and facilities, and that new development funds its fair share of services. Therefore, impacts related to the provisions and need for public facilities are **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY SERVICES AND FACILITIES ELEMENT POLICIES

CSF-1.2 Require new development to demonstrate that the City's community services and facilities can accommodate the increased demand for said services and facilities associated with the project.

CSF-1.3 Require new development to offset or mitigate impacts to community services and facilities to ensure that service levels for existing users are not degraded or impaired by new development, to the satisfaction of the City.

CSF-1.4 Maintain and implement public facility master plans, such as the Civic Center Master Plan, in collaboration with appropriate outside service providers and other agencies, to ensure compliance with appropriate regional, State, and Federal laws and to provide efficient public facilities and services to Campbell.

Impact 3.13-2: General Plan implementation may result in adverse physical impacts associated with the deterioration of existing parks and recreation facilities or the construction of new parks and recreation facilities (Less than Significant)

Growth accommodated under the General Plan would include a range of uses that could increase the population of the City and also attract additional workers and tourists to the City. Such growth would result in increased demand for parks and recreation facilities. It is anticipated that over the life of the General Plan, use of parks, trails, and recreation facilities would increase, due to new residents and businesses. The additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have environmental impacts, although the exact impacts cannot be determined since the potential improvements are unknown.

The provision of new parks and recreation facilities would reduce the potential for adverse impacts and physical deterioration of existing parks and recreation facilities, by providing additional facilities

3.13 PUBLIC SERVICES AND RECREATION

to accommodate the demand for parks and recreation facilities. New facilities would be provided as feasible at a pace and in locations appropriate to serve new development, as required to maintain the City adopted standard for park space and open space acreage at three acres for every 1,000 residents (as required by General Plan Policy COS-1.2).

As described in General Plan Policy COS-1.11 where park expansion and development of new park facilities is not feasible, the City and project applicant will identify opportunities to provide additional park uses and amenities at existing facilities to ensure the City's current parklands are highly utilized and able to serve greater numbers of residents by providing an increased number of activities. These increased amenities and or expanded facilities may also result in greater use of existing park facilities.

Development under the General Plan may indirectly lead to the construction of new or expanded parks and recreation facilities to serve new growth and to meet existing parks and recreation needs. The General Plan supports the creation of new parks and recreation facilities, including new parks and trails, to accommodate a wide range of activities for all age groups. These new parks and recreation facilities would be spread throughout areas proximate to new development in and around existing neighborhoods. Neighborhood and community parks and trails would generally be accommodated in the Open Space and Institutional land use designations.

General Plan Policy COS-1.2 establishes a citywide ratio of three acres of parkland per 1,000 residents. The City currently provides approximately two acres of parkland for every 1,000 people. The existing deficiency in park land may be offset with the recreational opportunities available in private parks and other nearby regional parks.

Future development projects may include onsite parkland, or be subject to the City's Park In-Lieu Fee/Mitigation Fees program which included park fees by development type. The 2022/2023 fees include the following:

- Single-family \$27,800 per unit
- Multi-family \$19,720 per unit
- Secondary / Accessory Dwelling Unit (750sf or Larger) \$8,159 per unit. The fee for Accessory Dwelling Units will be calculated per State law but shall not exceed the amount shown.
- Junior Accessory Dwelling Unit \$0 per unit

The proposed General Plan does not specifically propose any development projects, including parks. As a result, site-specific physical impacts of future park development and construction cannot be determined until future projects are brought forward for review. As future parks and recreation projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Parks and recreation projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

In addition to ensuring that new and expanded parks and recreation facilities are provided to accommodate new growth, the General Plan includes policies and actions to ensure that parks and

recreation facilities are adequately maintained and improved to serve both existing and planned growth.

The proposed General Plan does not propose or approve any development nor does it designate specific sites for new or expanded parks and recreational facilities. The General Plan includes a range of policies and actions (listed below) to ensure that parks and recreational facilities are adequately funded, and that new development funds its fair share of services needed to meet General Plan objectives. New development is required to participate in the provision and expansion of public services, recreational amenities, and facilities, and is also required to demonstrate that the City's public services and facilities can accommodate the increased demand for said services and facilities associated with future projects during the entitlement process.

Any new parks or recreational facilities that may be constructed in the future would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the parks and recreational facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. These impacts are described in the relevant chapters (Chapters 3.1 through 3.16, and 4.0) of this Draft EIR. Any future development under the General Plan would be required to comply with regulations, policies, and standards included in the General Plan, and would be subject to CEQA review as appropriate.

Therefore, impacts related to the provisions and need for park and recreational facilities are **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY SERVICES AND FACILITIES POLICIES

CSF-1.1 Ensure that new growth and development participates in the provision and expansion of community services and facilities, and does not exceed Campbell's ability to provide them.

CSF-1.2 Require new development to demonstrate that the City's community services and facilities can accommodate the increased demand for said services and facilities associated with the project.

CSF-1.3 Require new development to offset or mitigate impacts to community services and facilities to ensure that service levels for existing users are not degraded or impaired by new development, to the satisfaction of the City.

CSF-1.4 Maintain and implement public facility master plans, such as the Civic Center Master Plan, in collaboration with appropriate outside service providers and other agencies, to ensure compliance with appropriate regional, State, and Federal laws and to provide efficient public facilities and services to Campbell.

CSF-1.6 Maintain and fund capital improvement programs to ensure the adequate and efficient provision of public facilities and municipal improvements.

CONSERVATION AND OPEN SPACE POLICIES

3.13 PUBLIC SERVICES AND RECREATION

COS-1.1 Provide a range of open spaces, parks, trails and recreation facilities to meet the active and passive recreational needs of all Campbell residents, employees, and visitors, regardless of age, ability, or income.

COS-1.2 Strive to provide public access to three acres of open space, park land, and recreational facilities for every 1,000 residents.

COS-1.3 Recognize that some of the recreational resources available to City residents may be owned and/or operated by other entities, including the County and neighboring cities, while still meeting the recreational needs of Campbell residents.

COS-1.4 Provide open space, parks, or recreation facilities that are safely accessible within one-half mile radii of all City residents and prioritize the development of and access to these facilities in underserved areas of the community.

COS-1.5 Maintain and enhance existing open space and recreation facilities to improve their usefulness, safety, and appearance and better address traditional and non-traditional recreation needs, including active and passive recreation, wellness, historical and cultural arts/heritage, environmental education, conservation, accessibility, inclusion, diversity, and new technology.

COS-1.6 Uphold design, construction, implementation, and maintenance standards to ensure safe high-quality facilities, programs, and services that cater to a variety of ages and address the needs of all members of the community.

COS-1.7 Continue to work with regional agencies and neighboring jurisdictions to ensure that regional open space amenities located in Campbell—the Los Gatos Creek Trail, the Santa Clara County Parklands, Santa Clara Valley Water District groundwater recharge facilities, and lands owned by the Santa Clara County Open Space Authority—remain publicly-accessible, well-maintained, and utilized.

COS-1.8 Support efforts to enhance, enlarge, and provide public access to regional open space, parks, and recreation facilities using a variety of techniques such as facilities improvement, joint maintenance, and/or use agreements.

COS-1.9 Utilize the City’s Naylor Act rights and other funding mechanisms to acquire and/or lease surplus school land and other appropriately located surplus public agency lands for open space, parks, and recreation facilities as they become available.

COS-1.10 Continue to cooperate with school districts to optimize the provision of open space on school sites, while considering the needs of the City and school districts. When mutually beneficial, pursue joint use agreements for the provisions of public park and open space access at public schools.

COS-1.11 Where park expansion and development of new park facilities is not feasible, identify opportunities to provide additional park uses and amenities at existing facilities to ensure the City’s

current parklands are highly utilized and able to serve greater numbers of residents by providing an increased number of activities.

COS-1.12 Pursue joint use agreements with neighboring jurisdictions to facilitate Campbell residents' access to parks outside of the City limits, but within close proximity to residents who could use the parks.

CONSERVATION AND OPEN SPACE ACTIONS

COS-1.a Prepare and adopt a Parks and Recreation Facilities Master Plan to evaluate and address the following:

- Conduct a needs assessment through community outreach;
- Routinely evaluate the benefit and use of existing facilities, amenities, and programs against other priorities;
- Identify potential sites for new parks, including pocket-parks, community gardens, neighborhood playgrounds, and other alternative opportunities;
- Assess demand for park land based on approved development and future land use patterns;
- Guide operations;
- Develop an implementation strategy for potential park site acquisitions, leases, other public access arrangements, expansions, improvements, and ongoing maintenance;
- Identify priority projects for use of existing and future Park Impact Fee funds;
- Identify opportunities to establish joint use agreements with other municipal agencies, including but not limited to, school districts, the County, neighboring cities, and the Santa Clara Valley Water District to expand Campbell residents' access to parks, open spaces, and other recreational facilities and amenities; and
- Establish a financial plan and funding sources.

COS-1.b Update the Master Plan periodically and coordinate the implementation strategies with the City's Operating Budget and Capital Improvement Plan.

COS-1.c Evaluate open space, park, and recreation facility acquisition opportunities (including surplus public agency land) as they become available using available funding, size of parcel and geographic location. Sites located in neighborhoods without adequate open space (where open space is more than one-half mile away), parks or recreation facilities are highly desirable. This criterion should be updated as necessary. Additional criteria may include the following:

- Visibility to the public;
- Access;
- Site security;
- Optimization of existing resources;
- Maintenance costs;
- Availability for purchase, lease, or development;
- Service to Campbell residents;
- Financial feasibility;
- Proximity to open space in adjacent communities;

3.13 PUBLIC SERVICES AND RECREATION

- Support for existing youth sports groups; and
- Partnership opportunities with other agencies or organizations.

COS-1.d Pursue all forms of possible funding, including Federal, State, County, and Santa Clara Open Space Authority funding, private contributions, gifts and endowments, bond measures, and special districts, to assist in the acquisition, development, and programming of park and recreation facilities.

COS-1.e Develop and implement a plan for the systematic completion of Americans with Disabilities Act (ADA) compliance upgrades for all City parks.

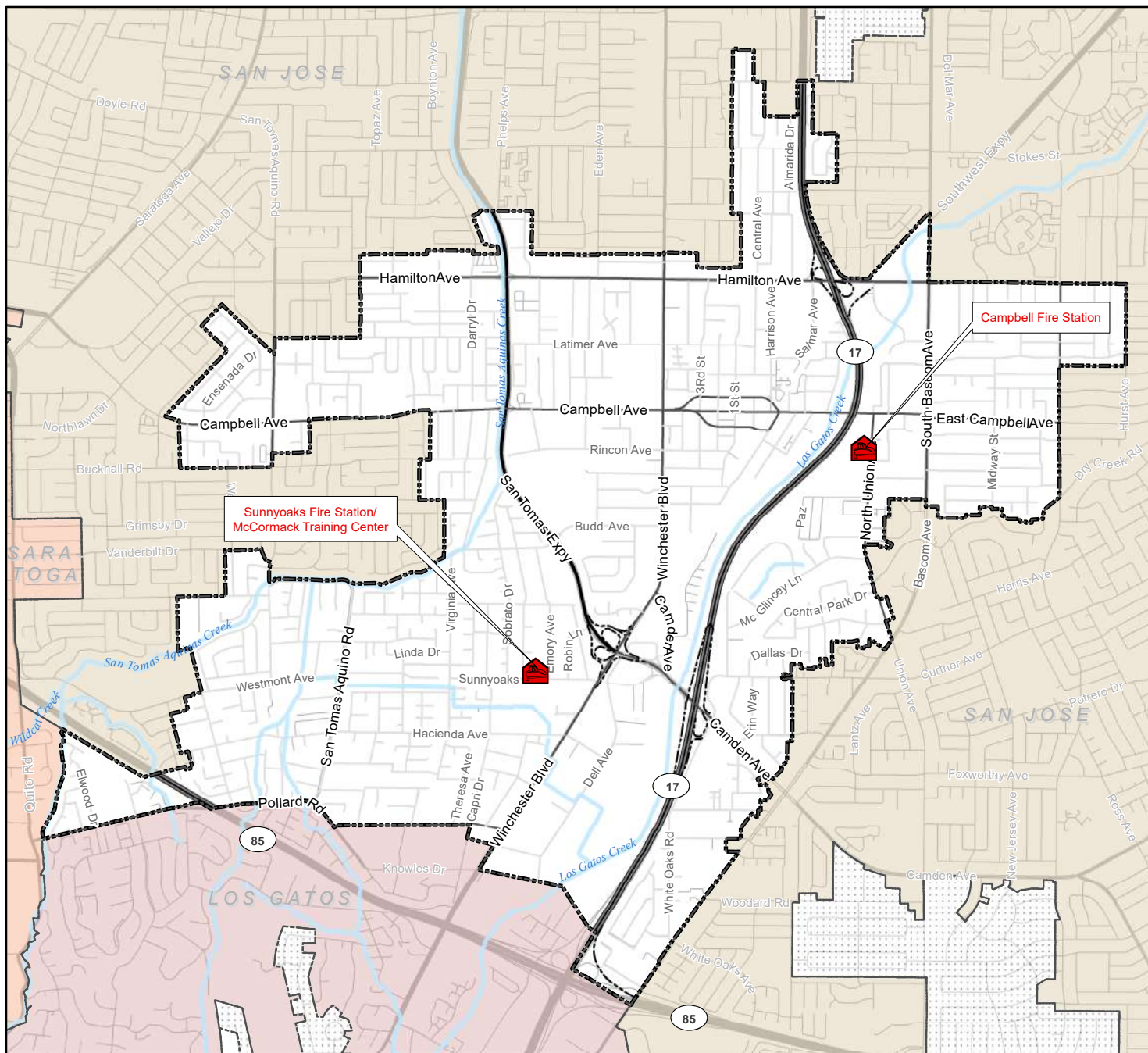
COS-1.g Enter into facilities improvement, maintenance, and use agreements with the County of Santa Clara, the Santa Clara Valley Water District, local school districts, and neighboring cities to improve, maintain, and increase access to these open space, park lands, and facilities.

COS-1.i Advocate that the Santa Clara County Open Space Authority include potential Campbell sites into its Acquisition Plan.

COS-1.k Explore and consider the preparation of a Transfer of Development Rights (TDR) program in Campbell aimed at increasing the amount of publicly-accessible open space in Campbell, including parks, orchards, and other undeveloped green space and naturalized habitat and preservation of historic resources.

**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

**Figure 3.13-1.
Santa Clara County Fire
Department (SCCFD)
Fire Stations within Campbell**



Legend

Fire Station

City of Campbell

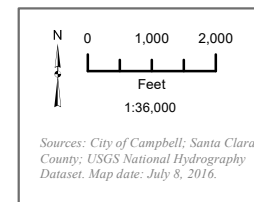
Surrounding Areas

City of San Jose

City of Los Gatos

City of Saratoga

Unincorporated Santa Clara County



This page left intentionally blank

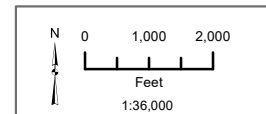
**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

Figure 3.13-2. Parks Map

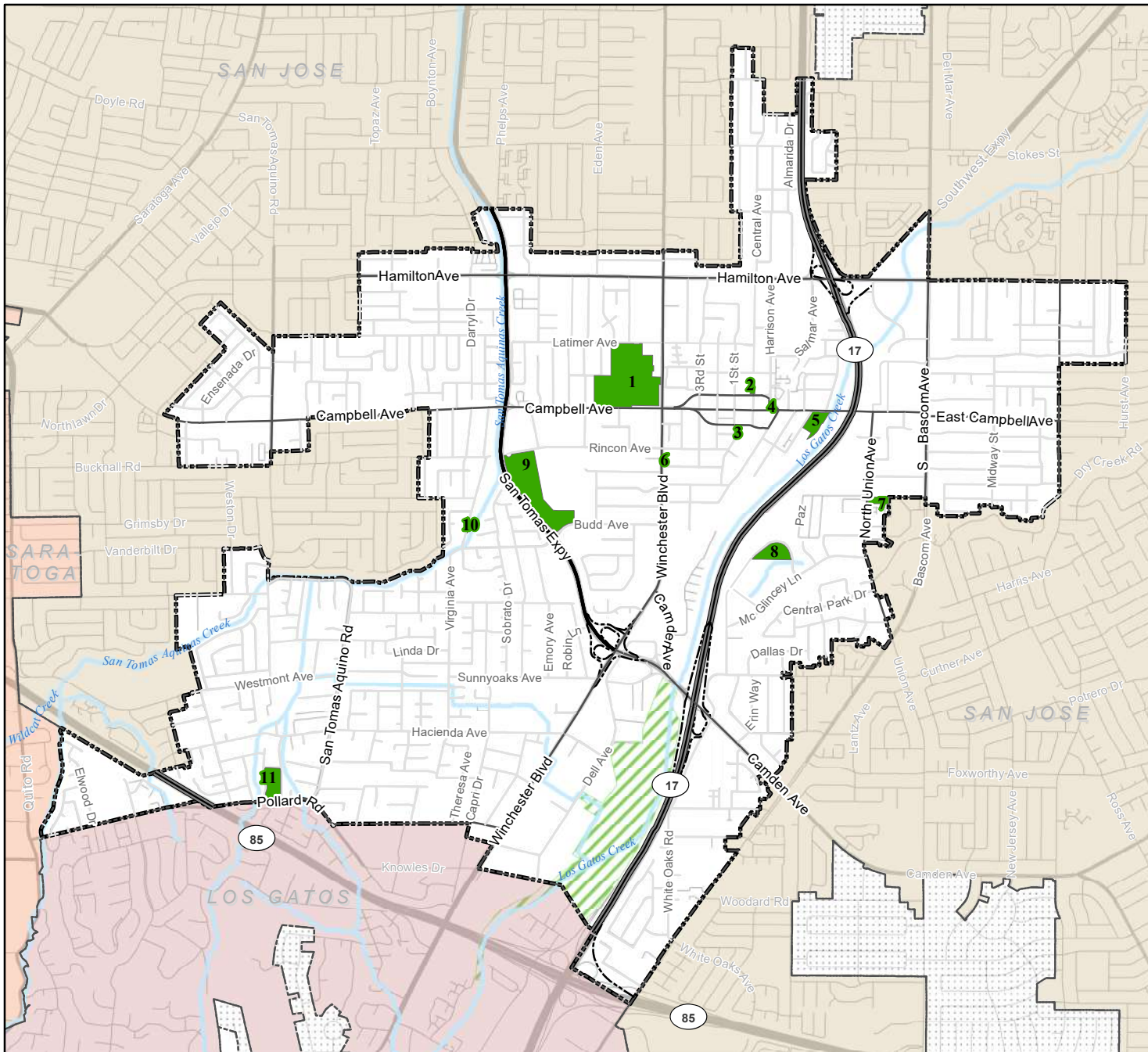
Legend

- City Park
 - County Park - Los Gatos Creek
 - City of Campbell
- Surrounding Areas**
- City of San Jose
 - City of Los Gatos
 - City of Saratoga
 - Unincorporated Santa Clara County

Label	Park Name
1	Campbell Community Center
2	Orchard City Green
3	Hyde Park
4	Ainsley Park
5	Campbell Park
6	Gomes Park
7	Stojanovich Family Park
8	Edith Morley Park
9	John D. Morgan Park
10	Virginia Park
11	Jack Fisher Park



Sources: City of Campbell; Santa Clara County; USGS National Hydrography Dataset. Map date: July 8, 2016.



This page left intentionally blank

This chapter describes the potential impacts to the transportation system associated with adoption and implementation of the General Plan. The impact analysis examines the roadway, transit, bicycle, and pedestrian components of the City's transportation system. To provide a context for the impact analysis, this chapter begins with the environmental setting, which is a description of the existing physical and operational conditions for the transportation system. Following the setting is the regulatory framework influencing the transportation system and providing the basis for impact significance thresholds used in the impact analysis. The chapter concludes with the impact analysis findings and recommended measures. The data and analysis in this section was prepared by Fehr & Peers with modeling support from the Santa Clara Valley Transportation Authority.

Comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic. Comments were received from the Santa Clara Valley Transportation Authority, Caltrans, and verbally during the public scoping meeting. Each of the comments related to this topic are addressed within this section. Full comments received are included in Appendix A.

3.14.1 ENVIRONMENTAL SETTING

This section describes the Existing Conditions (2020) of the roadway system, pedestrian and bicycle facilities, and transit services within the City of Campbell. It also presents existing traffic volumes for the study roadway segments.

The observations and counts that are used for this analysis were collected prior to the voluntary shelter-in-place polices implemented by several large technology firms beginning the first week in March 2020 and the formal shelter-in-place order issued by Santa Clara County Public Health Department on March 16, 2020, to slow the spread of COVID-19, resulting in a reduction in regional vehicle traffic.

EXISTING ROADWAY NETWORK

This section describes the physical characteristics of the roadway network. Regional vehicle access to Campbell is provided by two freeways: State Route (SR) 17 and SR 85. Roadways within the City of Campbell are classified as freeways, expressways, arterials, collectors, local access, and private lanes based on their function and relationship to adjacent land uses. The existing roadway network is shown on Figure 3.14-1. The roadway classifications and descriptions of individual freeways, expressways, and arterials are described below.

Table 3.14-1 describes each category of street in Campbell and its function as described in the adopted Campbell General Plan (2001, revised 2014, revised 2015).

3.14 TRANSPORTATION AND CIRCULATION

TABLE 3.14- 1: ROADWAY CLASSIFICATIONS

CATEGORY	FUNCTION
Freeway	Freeways are designed to be high-speed, high-capacity facilities with limited access and grade separations at cross streets. The primary function of freeways is to provide high mobility for regional and countywide motorized travel. Freeways are designed, operated, and maintained by the State of California. Both SR 17 and SR 85 traverse Campbell.
Expressway	Expressways are major divided arterials with access limited primarily to grade separations and at-grade intersections. The purpose of expressways is to serve countywide trips. Expressways are generally designed, operated, and maintained by the County of Santa Clara. San Tomas Expressway, the only expressway in Campbell, is also used for bus transit and bike travel. Bike use is available in both the northbound and southbound directions. The expressway is not used for pedestrian travel, except for access to transit stops.
Arterial	<p>Arterials are major multi-lane streets that primarily function to serve through traffic for inter-city and intra-city trips. Arterials also provide access to adjacent properties. Both bike routes and bike lanes can be found on arterials along with ADA accessible pedestrian sidewalks for access to commercial services.</p> <p>Class I arterials generally have little on-street parking and serve major bus routes such as Hamilton and Bascom Avenues.</p> <p>Class II arterials generally have on-street parking and serve major bus routes such as Campbell Avenue and Winchester Boulevard.</p>
Collectors	<p>Collectors are low- to medium-speed two-lane or multi-lane streets that serve to collect and channel local traffic to arterials and to distribute arterial traffic onto local streets. Collectors provide mobility and land access via driveways and on-street parking. Collectors serve bus routes, bicyclists, and pedestrians and provide transit opportunities.</p> <p>Commercial/Industrial Collectors have adjacent commercial and industrial land uses.</p> <p>Residential Collectors serve the residential neighborhood they penetrate.</p>
Local Street	Local streets are low-speed two-lane streets that provide direct access to abutting land uses. Local streets provide the lowest level of mobility and usually serve no bus routes. Local streets are used for bicycle and pedestrian circulation connecting neighborhoods with services and recreational amenities.
Private Lane	Private lanes are low-speed access streets that provide direct access to properties within a particular subdivision or development. Private lanes are maintained and operated by Home Owners Associations or individual private landowners.

SOURCE: CAMPBELL GENERAL PLAN, 2002; UPDATED 2014; UPDATED 2015.

State Highways

State Route 17 is a primary north-south freeway located centrally in the City of Campbell providing three travel lanes in each direction. SR 17 has two interchanges within the city limits, at Hamilton Avenue and San Tomas Expressway-Camden Avenue. The northbound direction is often congested (i.e., a roadway condition characterized by slower travel speeds, longer trip times, and increased vehicle queuing) during the AM peak period, while the southbound direction is often congested during the PM peak period.

State Route 85 is a major east-west freeway that runs south of Campbell and has an interchange with SR 17 immediately south of Campbell's city limits. It has three travel lanes in each direction with one of the travel lanes converting to a high-occupancy vehicle (HOV) lane during peak commute

periods. The northbound direction is often congested during the AM peak period and southbound direction is often congested during the PM peak period.

County Expressways

San Tomas Expressway is a north-south expressway located centrally in the City of Campbell providing three travel lanes in each direction. One travel lane in each direction is designated as a HOV lane. HOV lanes, also known as diamond or carpool lanes, are limited to use by vehicles occupied by two or more persons Monday through Friday between 6:00 AM and 9:00 AM. San Tomas Expressway has signalized intersections at Hamilton Avenue, Campbell Avenue, Budd Avenue, SR 17 Southbound Ramps, and White Oaks Avenue/Curtner Avenue and an interchange at Winchester Boulevard within the city limits. The northbound direction is congested during the AM peak period and the southbound direction is congested during the PM peak period.

Local Arterial Streets

Bascom Avenue is a north-south Class I arterial providing three travel lanes in each direction north of White Oaks Road-White Oaks Avenue. Bascom Avenue south of Apricot Avenue and north of Mt. Davidson Drive, and south of White Oaks Avenue and north of Route 85, is outside of Campbell's city limits. There are nine signalized intersections along Bascom Avenue within the City of Campbell. Several segments have a center turn lane or a raised median. The northbound direction is typically congested in the AM peak period and the southbound direction is congested in the PM peak period.

Camden Avenue is an east-west Class I arterial providing three travel lanes eastbound and three to five lanes westbound between White Oaks Avenue/Curtner Avenue and Olympia Avenue. There is one signalized intersection along Camden Avenue within the City of Campbell. The westbound direction is congested in the AM peak period and the eastbound direction is congested in the PM peak period.

Hamilton Avenue is an east-west Class I arterial providing two travel lanes in each direction between San Tomas Aquinas Road and Marathon Drive, and three travel lanes in each direction from Marathon Drive to Leigh Avenue. There are 14 signalized intersections along Hamilton Avenue within the City of Campbell. The westbound direction is congested in the AM peak period and the eastbound direction is congested in the PM peak period.

Winchester Boulevard is a north-south Class II arterial providing two travel lanes in each direction between Knowles Drive and Impala Drive, and two northbound and three southbound travel lanes between Impala Drive and Driftwood Drive. Several segments of this roadway have a center turn lane or a raised median. There are 11 signalized intersections along Winchester Boulevard within the City of Campbell. The northbound direction is congested in the AM peak period and the southbound direction is congested in the PM peak period. An interchange with San Tomas Expressway exists with on- and off-ramps along Winchester Boulevard.

Leigh Avenue is a north-south Class II arterial providing two travel lanes in each direction in Campbell. There are two signalized intersections along Leigh Avenue within the City of Campbell.

The northbound direction is congested in the AM peak period and the southbound direction is congested in the PM peak period.

Union Avenue is a north-south Class II arterial providing one travel lane in each direction in Campbell. There are three signalized intersections along Union Avenue within the City of Campbell. The northbound direction is congested in the AM peak period and the southbound direction is congested in the PM peak period.

Pollard Road is an east-west Class II arterial providing two travel lanes in each direction between San Tomas Aquino Creek and York Avenue and one travel lane in each direction between York Avenue and Parr Avenue. Several segments of this roadway have a center turn lane or a raised median. There is one signalized intersection along Pollard Road within the City of Campbell.

Campbell Avenue is an east-west Class II arterial between Fulton Street and Bascom Avenue (except between Civic Center Drive (West) and Railway Avenue, where Campbell Avenue is a commercial/industrial collector) and a residential collector between Bascom Avenue and Leigh Avenue. Campbell Avenue provides two travel lanes in each direction between Fulton Street and Civic Center Drive/ Railway Avenue (except between Civic Center Drive and Railway Avenue, where Campbell Avenue provides one travel lane in each direction) and between Civic Center Drive/ Railway Avenue and Bascom Avenue, and one travel lane in each direction between Bascom Avenue and Leigh Avenue. Several segments have a center turn lane or a raised median. There are 12 signalized intersections along Campbell Avenue within the City of Campbell. The westbound direction is congested in the AM peak period and the eastbound direction is congested in the PM peak period. Campbell Avenue between Civic Center Drive and Railway Avenue is in historic downtown Campbell.

San Tomas Aquino Road is a north-south Class II arterial providing one travel lane in each direction within Campbell. There are three signalized intersections along San Tomas Aquino Road within the City of Campbell. The northbound direction is congested in the AM peak period and the southbound direction is congested in the PM peak period.

Civic Center Drive is a Class II arterial providing two travel lanes westbound with three signalized intersections. This arterial is congested during the AM peak period. Civic Center Drive provides a westbound bypass of downtown Campbell.

Orchard City Drive is a Class II arterial providing two travel lanes eastbound with three signalized intersections. It connects to Campbell Avenue at its west end and Railway Drive at its east end. Orchard City Drive provides an eastbound bypass of downtown Campbell.

Local Collector Streets

Collectors in the City of Campbell are listed below.

- 1st Street south of Latimer and north of Rincon Avenue
- Bucknall Road
- Budd Avenue
- Burrows Road
- Campbell Avenue between Civic Center and Railway Avenue
- Campbell Avenue east of Bascom Avenue
- Campisi Way
- Capri Drive south of Hacienda Avenue
- Central Avenue
- Creekside Way
- Curtner Avenue
- Darryl Drive north of Latimer Avenue
- Dell Avenue
- Fulton Street
- Grant Street east of 1st Street
- Hacienda Avenue
- Harriet Avenue between Hacienda Avenue and Westmont Avenue and between Westmont Avenue and Fenian Drive
- Harrison Avenue between Civic Center Drive and Salmar Avenue
- Kennedy Avenue between Winchester and Railway Avenue
- Latimer Avenue
- Llewellyn Avenue north of Latimer Avenue
- McCoy Avenue
- McGlincy Lane
- Payne Avenue west of Central Avenue
- Railway Avenue between Kennedy Avenue and Campbell Avenue
- Rincon Avenue
- Salmar Avenue
- San Tomas Aquino Road east of Harriet Avenue
- Sunnyoaks Avenue
- Virginia Avenue
- West Parr Avenue
- Westmont Avenue
- White Oaks Avenue/White Oaks Road

Study Roadway Segments

The following 21 study roadway segments were identified as those most crucial to Campbell's local street system and its connectivity to the regional transportation network. Average Daily Traffic (ADT) is the typical daily traffic volume on a given street. Directional 72-hour traffic counts were collected between September 13 to 16, 2016 and September 26-October 3, 2016 during a typical non-holiday weekday while local schools were in session; the data is shown in Appendix C. Average daily traffic volumes collected along the 21 study roadway segments in Campbell are shown on Table 3.14-2. Daily volume forecasts were prepared for use as inputs for the Air Quality, Energy Consumption, and Greenhouse Gas (GHG) analyses but are not directly referenced in this report.

3.14 TRANSPORTATION AND CIRCULATION

TABLE 3.14- 2: AVERAGE DAILY TRAFFIC VOLUMES

ID	LOCATION	DIRECTION ¹	EXISTING COUNT ²
1	Hamilton Avenue west of Phoenix Drive	EB	9,900
		WB	10,700
2	San Tomas Expressway north of Hamilton Avenue	NB	23,400
		SB	23,600
3	Hamilton Avenue west of Eden Avenue	EB	15,200
		WB	15,300
4	Winchester Boulevard north of Hamilton Avenue	NB	15,700
		SB	15,100
5	Hamilton Avenue west of Central Avenue	EB	23,800
		WB	26,500
6	Hamilton Avenue west of Bascom Avenue	EB	27,700
		WB	28,300
7	Bascom Avenue south of Hamilton Avenue	NB	18,000
		SB	16,100
8	San Tomas Aquino Road south of Villarita Drive	NB	6,000
		SB	6,200
9	Civic Center Drive west of 1 st Street	WB	7,200
10	Campbell Avenue west of 1 st Street	EB	3,500
		WB	2,300
11	Orchard City Drive west of 1 st Street	EB	5,300
12	Campbell Avenue east of Union Avenue	EB	8,000
		WB	7,200
13	San Tomas Expressway north of Winchester Boulevard	NB	22,500
		SB	22,900
14	Winchester Boulevard north of Budd Avenue	NB	12,100
		SB	11,200
15	Union Avenue north of McGlincy Lane	NB	5,900
		SB	5,800
16	Camden Avenue east of SR 17	EB	35,700
		WB	37,600
17	Pollard Road west of SR 85	EB	6,700
		WB	6,800
18	Winchester Boulevard north of Parr Avenue	NB	12,000
		SB	11,500
19	Curtner Avenue west of Salerno Drive	EB	4,500
		WB	3,900
20	Dell Avenue south of Hacienda Avenue	NB	3,400
		SB	3,400
21	Campbell Avenue east of Railway Avenue	EB	9,900
		WB	10,100

Notes:

EB = Eastbound, WB = Westbound, SB = Southbound, NB = Northbound.

Average Daily Traffic Counts were collected September 13 to 16, 2016 for most roadways except for #12, #16 and #17 where counts were collected September 26 to October 3, 2016. They are rounded to the nearest 100. Source: Machine counts collected by Traffic Data Services (TDS), 2016. Fehr & Peers, 2022.

TRANSIT SERVICE

Transit service in Campbell and surrounding communities is provided by the Santa Clara Valley Transportation Authority (VTA). VTA provides express and local bus and light rail service. There are three frequent bus routes (routes 26, 60, and 61), three local bus routes (routes 27, 37, and 56), one express bus route (Express 101), and one light rail transit route (Green Line) serving Campbell. The end points, streets in Campbell, other destinations, hours of operations, and frequencies for each route are presented in Table 3.14-3. A map of the routes is shown on Figure 3.14-2. Transit service is provided most frequently by bus Route 60, which operates on Winchester Boulevard, and the Green Line light rail route, which starts on Winchester Boulevard, serves downtown Campbell, and extends to downtown San José and points beyond. Since 2019, the VTA has made schedule adjustments to several bus and light rail routes in response to the COVID-19 pandemic.

TABLE 3.14- 3: EXISTING TRANSIT SERVICES

ROUTE	END POINTS	CAMPBELL STREETS SERVED	DESTINATIONS SERVED	HOURS OF OPERATION	HEADWAYS (MINUTES)	
					PEAK HOUR	NON-PEAK HOUR
Frequent and Local Bus Service						
26	West Valley College Eastridge Transit Center	Campbell, Bascom, and Curtner	Westgate Mall, Downtown Campbell, Campbell City Hall, Pruneyard Shopping Center, Santa Clara County Fairgrounds	5:15 AM - 11:00 PM	20	60
27	Winchester Station, Kaiser San José via Downtown Los Gatos	Knowles Drive, Hacienda Avenue	Downtown Los Gatos, Winchester VTA Station	5:30 AM - 9:30 PM	30	60
37	West Valley College Capitol Station	Pollard Road, San-Tomas Expressway, Camden Avenue, and Hacienda Avenue	Central County Occupational Center, El Camino Hospital Los Gatos, West Valley College	6:30 AM - 7:00 PM	60	60
56	Lockheed Martin Station, Tamien Station	Hamilton Avenue	Tamien VTA Station, Hamilton VTA Station, Lockheed Martin	5:00 AM - 10:30 PM	30	60
60	Milpitas BART, Winchester Station via SJC Airport	Winchester	Santa Clara Convention Center, Levi's Stadium, Great America Park, Mission College, Valley Fair and Santana Row shopping centers	5:00 AM - 12:00 PM	15	30

3.14 TRANSPORTATION AND CIRCULATION

ROUTE	END POINTS	CAMPBELL STREETS SERVED	DESTINATIONS SERVED	HOURS OF OPERATION	HEADWAYS (MINUTES)	
					PEAK HOUR	NON-PEAK HOUR
61	Sierra & Piedmont, Good Samaritan Hospital	Bascom	San José Flea Market, San José City College, Santa Clara Valley Medical Center, Pruneyard Shopping Center, Good Samaritan Hospital	5:00 AM - 11:00 PM	30	30
Express Bus Service						
Express 101	Camden & Highway 85, Stanford Research Park	Hamilton Avenue, Winchester Boulevard, and Camden Avenue	Vallco Shopping Mall, Westgate Shopping Center	Northbound: 6:15 AM - 8:30 AM Southbound: 4:00 PM - 6:30 PM	60	N/A
Light Rail Service						
Green Line	Old Ironsides, Winchester	Parallels Railway Avenue and Winchester Boulevard	Levi's Stadium, North First Street, Downtown San José, Downtown Campbell	5:45 AM - 12:30 AM	20	30

Source: Santa Clara Valley Transportation Authority, 2019.

BICYCLE FACILITIES

The City of Campbell has a bicycle facilities network that provides dedicated and shared street space for bicycling. The following section presents an overview of the existing bicycle facilities within Campbell and how well they serve the bicycling population. Figure 3.14-3 shows existing bicycle facilities in the City of Campbell.

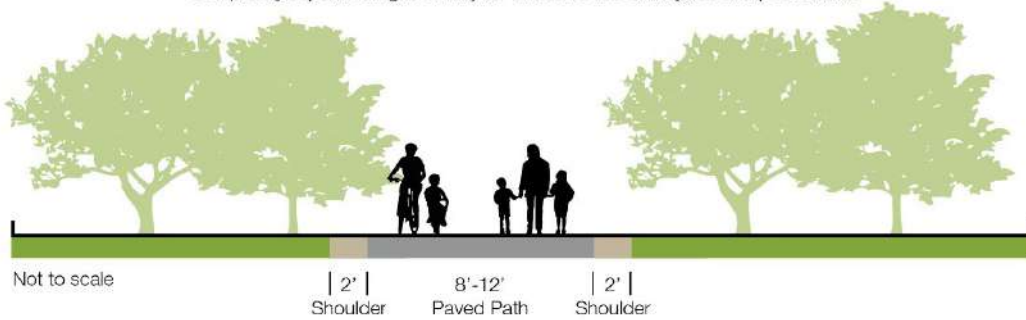
Bikeways are typically divided into four categories, or classes. The four classes of bikeways in Campbell are described in the *Santa Clara Countywide Bike Plan* (2018). These descriptions are based on California Department of Transportation (Caltrans) classifications of bikeways from California Assembly Bill 1193 and the *Highway Design Manual* (Chapter 1000: Bikeway Planning and Design). Each bikeway is intended to provide bicyclists with enhanced riding conditions. Bikeways offer various levels of separation from traffic based on traffic volume and speed. Bike lane widths in Campbell are designed per Caltrans Design Standards (*Highway Design Manual* Chapter 1000). The four bikeway types are presented below and shown in the accompanying figures.

Class I Bikeways (Shared-Use Paths): Class I Bikeways are also described as bike paths, shared paths (shared with pedestrians), and multi-use paths. They provide a separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian crossflow minimized. In general, bike paths serve corridors not served by streets and highways or where

sufficient right-of-way exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts. The Los Gatos Creek Trail is a Class I bikeway.

SHARED-USE PATH (CLASS I)

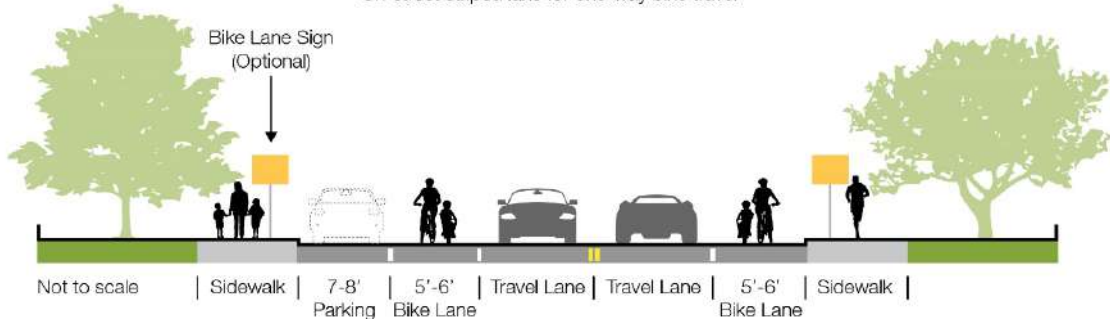
Completely separated right-of-way for exclusive use of bicycles and pedestrians



Class II Bikeways (Bike Lanes): Class II Bikeways, or bike lanes, are lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five (5) feet wide. Adjacent vehicle parking and crossing vehicle/pedestrian traffic are permitted.

BICYCLE LANE (CLASS II)

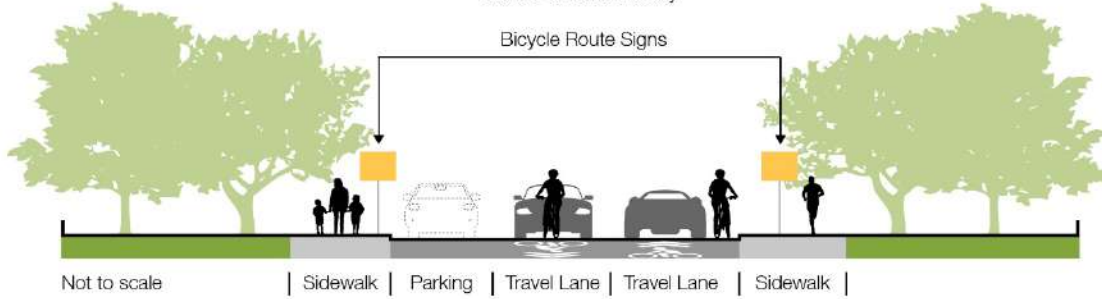
On-street striped lane for one-way bike travel



Class III Bikeways (Bike Boulevards/Routes): Class III Bikeways (bike routes) are designated by signs or pavement markings for shared use with motor vehicles but have no separated bike right-of-way or lane striping. Bike routes serve to either provide continuity to other bicycle facilities or designate preferred routes through high demand corridors. Class III Bikeways may be enhanced with traffic calming features and traffic management features that minimize the need for bicyclists to stop along the corridor, such as roundabouts and side-street stops.

BICYCLE ROUTE (CLASS III)

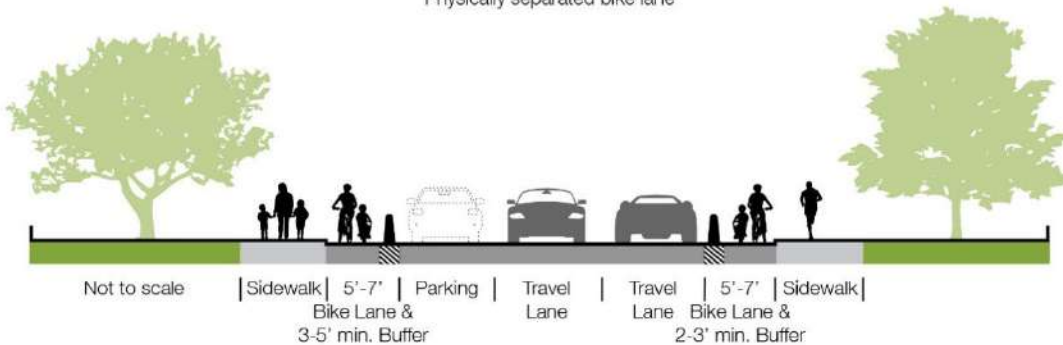
Shared on-street facility



Class IV Bikeways (“Separated” Bikeways or Cycle Tracks): Class IV Bikeways provide a right-of-way designated exclusively for bicycle travel within a roadway and which are protected from other vehicle traffic with devices including, but not limited to, grade separation, flexible posts, inflexible physical barriers, or parked cars.

CYCLE TRACK/SEPARATED BIKEWAY (CLASS IV)

Physically separated bike lane



PEDESTRIAN FACILITIES

Campbell has many amenities that make walking an important and accessible mode of travel, including level terrain, temperate weather, and numerous destinations that are attractive to walkers. Key pedestrian destinations include:

- Campbell's downtown shopping and restaurant district, along Campbell Avenue between Los Gatos Creek and Winchester Boulevard
- Campbell's library and civic center, on Civic Center Drive in downtown
- Parks and schools throughout the city
- VTA light rail stations (Hamilton, Campbell, and Winchester stations in Campbell, and the Bascom station immediately northeast of city limits)
- Retail destinations, particularly the Pruneyard shopping center on Bascom Avenue

These destinations are connected by the Los Gatos Creek Trail and a system of on-street sidewalks provided along all major streets in the City of Campbell. Only a few locations along Campbell's arterials and commercial/industrial collectors lack sidewalks, notably a short stretch of San Tomas Aquino Road immediately south of Latimer Drive and a short stretch of Orchard City Drive between S. 3rd Street and S. 2nd Street. These locations are shown on Figure 3.14-4. Some residential collectors within the San Tomas Area neighborhood also lack sidewalks, notably along Harriet Avenue between Westmont Avenue and Van Dusen Lane. Some local streets within residential areas of the San Tomas Area neighborhood also lack sidewalks in keeping with the neighborhood's semi-rural character.

Similarly, all signalized intersections in the City of Campbell provide crosswalks on all legs, except for the intersections listed below which are missing one or more marked crosswalks, as shown on Figure 3.14-4.

- S. Bascom Avenue and Pruneyard Entrance
- Union Avenue and Campbell Avenue
- Leigh Avenue and Dry Creek Road
- Winchester Boulevard and Kennedy Avenue
- Winchester Boulevard and Budd Avenue
- White Oaks Avenue-Curtner Avenue and San Tomas Expressway-Camden Avenue
- San Tomas Aquino Road and Latimer Avenue

Unsignalized intersections can also pose a challenge for pedestrians, as many are located on streets with high traffic volumes, which may be difficult to cross. Pedestrians may have to walk long distances to the next signalized intersection or marked crossing. As shown on Figure 3.14-4, Leigh Avenue, San Tomas Expressway, Winchester Boulevard, Pollard Road, and E. Campbell Avenue all include segments with ½ mile or more between marked crosswalks. While pedestrians have the right-of-way at both marked and unmarked crosswalks, drivers may be less likely to yield right-of-

way without the presence of striping, signs, or beacons to alert them to the potential for pedestrian crossings.

Campbell's downtown is a particularly attractive destination for pedestrians with the Civic Center complex; the Campbell Public Library; parks; and a commercial area that includes dining, several small retail businesses, and a popular Sunday Farmers' Market. During the Farmers' Market, Campbell Avenue is closed between Civic Center Drive and N. 3rd Street, and pedestrian traffic is high through downtown with approximately 200 pedestrians per hour crossing Civic Center Drive at N. 2nd Street.

The City of Campbell has recently invested in pedestrian infrastructure in the greater downtown area. Many of these investments were guided by the East Campbell Avenue Master Plan, adopted in 2007. Notable improvements include:

The East Campbell Avenue Portals project, which added a pedestrian walkway under the SR 17 overpass on E. Campbell Avenue, added pedestrian-scale lighting, public art, landscaping, and wayfinding, and extended bicycle lanes under the overpass.

The addition of curb extensions, benches, and pedestrian-scale lighting along Campbell Avenue east of downtown.

The installation of curb extensions, ladder-style crosswalks, and high-visibility pedestrian crossing signs at uncontrolled intersections along Orchard City Drive and Civic Center Drive.

While the downtown area is generally walkable, some challenges to pedestrian comfort and safety remain, including high-speed traffic that makes crossing Civic Center Drive and Orchard City Drive, the two one-way streets that parallel Campbell Avenue through downtown, difficult. The City of Campbell prepared a downtown-focused Transportation Improvement Plan that addresses pedestrian access on these streets.

Figure 3.14-4 shows sidewalk gaps, signalized intersections that are missing crosswalk legs, and corridors where the distance between crosswalks is greater than one half-mile.

Aviation System

Norman Y. Mineta San Jose International Airport, located approximately four miles north of Campbell within the City of San Jose and adjacent to the City of Santa Clara, is a commercial airport serving passenger and cargo airplanes. Other passenger airports in the region include San Francisco International Airport and Oakland International Airport

3.14.2 REGULATORY SETTING

The City of Campbell General Plan and a variety of regional, State, and Federal plans, legislation, and policy directives provide guidelines for the safe operation of streets and transportation facilities in Campbell. While the City has primary responsibility for the maintenance and operation of local transportation facilities in its jurisdiction, Campbell staff works on a continual basis with responsible regional, State, and Federal agencies, including the Santa Clara Valley Transportation Authority (VTA), the Metropolitan Transportation Commission (MTC), the Association of Bay Area Government (ABAG), the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), as well as others, to maintain, improve, and balance the competing transportation needs of the community.

FEDERAL

Americans With Disabilities Act

The Americans with Disabilities Act (ADA) of 1990 provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to assure equality of opportunity, full participation, independent living and economic self-sufficiency. To implement this goal, the United States Access Board has created accessibility guidelines for public rights-of-way. The guidelines address various issues, including roadway design practices, slope and terrain issues, pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

The City of Campbell is committed to ensure that people with disabilities have access to City programs, services, activities and facilities. In all of its services, programs, events, activities, facilities, and public meetings, the City strives to eliminate any barriers that prohibit people with disabilities from full access to facilities.

STATE

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining the State Highway System (SHS), including freeways, interchanges, and defined arterial routes. Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the SHS within the study area would need to be approved by Caltrans. Caltrans operates and maintains SR 17, and SR 85 in Campbell. The *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (May 2020) provides information that Caltrans uses to review the impacts of land use projects on the state highway facilities, including freeway segments. However, as the Congestion Management Agency (CMA), VTA, is responsible for monitoring operations on Caltrans facilities within Santa Clara County and VTA guidelines and thresholds are used to evaluate traffic congestion on Congestion Management Program (CMP) facilities. Caltrans also publishes design guidance for facilities under its jurisdiction. The *Highway Design Manual* (2020) provides guidelines for roadway design and bicycle facility design. Its bicycle

design standards provide a minimum acceptable standard within Santa Clara County (*VTA Bicycle Technical Guidelines*, 2011). The *California Manual on Uniform Traffic Control Devices* (2014) adapts federal standards for street markings, traffic signals, and street signs for use in California.

Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG)

The *Transportation Impact Study Guide (TISG)* was prepared by Caltrans to provide guidance to Caltrans Districts, lead agencies, tribal governments, developers, and consultants regarding Caltrans review of a land use project or plan's transportation analysis using a VMT metric. This guidance is not binding on public agencies, and it is intended to be a reference and informational document. The guidance may be updated based upon need, or in response to updates of the Governor's Office of Planning and Research's *Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory)*.

The *TISG* replaces the *Guide for the Preparation of Traffic Impact Studies* (Caltrans, 2002) and is for use with local land use projects, not for transportation projects on the State Highway System.

The *TISG* does not prescribe VMT calculation methods, metrics, or significance criteria, but rather references the guidance in the *Technical Advisory*.

Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance (December 18, 2020)

The purpose of the *Interim LDIGR Safety Review Practitioners Guidance* is to provide immediate direction about the safety review while final guidance is being developed. The interim guidance is intended to apply to proposed land use projects and plans affecting the State Highway System. Specific effects may include, but are not limited to, adding new automobile, bicycle, or pedestrian trips to state roadways; modifying access to state roadways; or affecting the safety of connections to or travel on state roadways. The interim guidance does not establish thresholds of significance for determining safety impacts under the California Environmental Quality Act (CEQA). The document states that significance of impacts should be determined with careful judgment on the part of a public agency and based, to the greatest extent possible, on scientific and factual data consistent with Caltrans' CEQA guidance contained in Caltrans' Standard Environmental Reference (SER), Chapter 36, "Environmental Impact Report," and CEQA guidelines found in the California Code of Regulations, title 14, division 6, chapter 3, article 5, section 15064, "Determining the Significance of the Environmental Effects Caused by a Project."

California Transportation Commission

The California Transportation Commission (CTC) consists of nine members appointed by the governor. The CTC is responsible for the programming and allocation of funds for the construction of highway, passenger rail, and transit improvements throughout the state. The CTC is also responsible for managing the State Transportation Improvement Program (STIP) and the State Highway Operation and Protection Program (SHOPP) funding programs.

Assembly Bill (AB) 1358

AB 1358, or the California Complete Streets Act of 2008, requires towns, cities, and counties, when updating their general plans, to ensure that local streets meet the needs of all users.

Assembly Bill (AB) 32

With the Global Warming Solutions Act of 2006, AB 32, the State of California committed itself to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resources Board (CARB) is coordinating the response to comply with AB 32.

In 2007, CARB adopted a list of early action programs that could be put in place by January 1, 2010. In 2008, CARB defined its 1990 baseline level of emissions, and by 2011 it completed its major rule making for reducing GHG emissions. Rules on emissions, as well as market-based mechanisms like the proposed cap and trade program, took effect in 2012.

On December 11, 2008, CARB adopted its Proposed Scoping Plan for AB 32. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32.

Senate Bill (SB) 743

SB 743, passed in 2013, requires the California Governor's Office of Planning and Research (OPR) to develop new guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any." The new CEQA Guidelines implementing the intent of SB 743 were approved in December 2018.

OPR General Plan Guidelines

The Governor's Office of Planning and Research (OPR) publishes General Plan Guidelines as a "how to" for cities and counties developing their general plans. OPR released its updated guidelines in 2017, which includes legislative changes, new guidance, policy recommendations, external links to resource documents, and additional resources. For each general plan element, the guidelines

discuss statutory requirements in detail, provide recommended policy language, and include examples of city and county general plans that have adopted similar policies.

California Complete Streets Act

Originally passed in 2008, California’s Complete Streets Act took effect in 2011 and requires local jurisdictions to plan for land use transportation policies that reflect a “complete streets” approach to mobility. “Complete streets” comprises a suite of policies and street design guidelines which provide for the needs of all road users, including pedestrians, bicyclists, transit operators and riders, children, the elderly, and the disabled. From 2011 onward, any local jurisdiction—county or city—that undertakes a substantive update of the circulation element of its general plan must consider “complete streets” and incorporate corresponding policies and programs. In 2010, OPR released guidelines for compliance with this legislation which provide direction on how circulation elements can best plan for a variety of travel modes such as transit, walking, bicycling, and freight.

REGIONAL

Metropolitan Transportation Commission (MTC)

The MTC is the Bay Area regional transportation planning agency and federally designated Metropolitan Planning Organization (MPO). MTC is responsible for preparing the Regional Transportation Plan (RTP), a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities. The RTP is a 20-year plan that is updated every three years to reflect new planning priorities and changing projections of future growth and travel demand. The long-range plan must be based on a realistic forecast of future revenues, and the transportation projects taken as a whole must help improve regional air quality. The MTC also screens requests from local agencies for state and federal grants for transportation projects to determine compatibility with the RTP.

Santa Clara Valley Transportation Authority (VTA)

VTA serves two roles in Santa Clara County—first, as the primary transit operator, and second, as the Congestion Management Agency (CMA).

In its role as transit operator, VTA is responsible for development, operation, and maintenance of the bus and light rail system within the county. VTA operates more than 70 bus lines and three light rail lines, in addition to shuttle and paratransit service. It also provides transit service to major regional destinations and transfer centers in adjoining counties.

As the county’s CMA, VTA is responsible for managing the Valley Transportation Plan (VTP) 2040 (adopted in October 2014) to reduce congestion and improve air quality. VTA is authorized to set state and federal funding priorities for transportation improvements that affect the Santa Clara CMP transportation system. Priority projects are also eligible for the RTP. The CMP roadway network in Campbell includes all state highways, county expressways, and some principal arterials and intersections, while the transit network includes rail service and selected bus service.

Valley Transportation Plan (VTP) 2040

As the CMA for Santa Clara County, VTA is responsible for the development of a long-range countywide transportation plan, called *Valley Transportation Plan (VTP) 2040*.¹ *VTP 2040* provides programs, projects, and policies for roadways, transit, Intelligent Transportation Systems (ITS) and Systems Operations Management, bicycle facilities, pedestrian facilities, and the integration of land use and transportation. *VTP 2040* projects serve as VTA's recommendations for the RTP known as the Plan Bay Area. *VTP 2040* was adopted by the VTA Board of Directors in October of 2014.

Plan Bay Area 2040 and Plan Bay Area 2050

*Plan Bay Area 2040*² is a joint regional planning document overseen by the MTC and the Association of Bay Area Governments (ABAG). It serves as the region's Sustainable Communities Strategy (SCS) pursuant to SB 375 and the 2040 RTP (preceded by Transportation 2035) and integrates a multipronged strategy to address housing affordability, transportation requirements, the region's widening income disparities and economic hardships faced by low- and middle-income workers, and the Bay Area's vulnerabilities to natural disasters such as earthquakes and floods. Three principal issues form the core of the Action Plan:

Housing: Lower the share of income spent on housing and transportation costs, lessen displacement risk, and increase the availability of housing affordable to low- and moderate-income households.

Economic Development: Improve transportation access to jobs, increase middle wage job creation, and maintain the region's infrastructure.

Resilience: Enhance climate protection and adaptation efforts, strengthen open space protections, create healthy and safe communities, and protect communities against natural hazards.

Major transit projects included in *Plan Bay Area 2040* include a BART extension to San José/Santa Clara, Caltrain electrification, enhanced service along the Amtrak Capitol Corridor, and improvements to local and express bus services.

¹ Santa Clara Valley Transportation Authority. *VTP 2040*. Available online at http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/VTP2040_final_hi%20res_030315.pdf.

² Metropolitan Transportation Commission, 2017. *Plan Bay Area 2040*. Available online at <http://2040.planbayarea.org/>.

In October 2021, ABAG and MTC adopted an updated plan; *Plan Bay Area 2050* (2021).³ While the plan has been adopted, it will take up to three years for the plan's growth forecast to be integrated into MTC's transportation model, after which updates to each county's transportation model will take place. For these reasons, and for purposes of this analysis, *Plan Bay Area 2040* is the regional plan that forms the basis for population, housing and employment projections in this analysis.

Santa Clara Countywide Bicycle Plan

The *Santa Clara Countywide Bicycle Plan*⁴ synthesizes other local and county plans into a comprehensive 20-year cross-county bicycle corridor network and expenditure plan. The long-range countywide transportation plan and how projects compete for funding and prioritization are documented in *VTP 2040*. VTA adopted the *Santa Clara Countywide Bicycle Plan* in May 2018.

VTA Transit Sustainability Policy

The *VTA Transit Sustainability Policy*⁵ mandates the use of a market-based approach in determining when and where transit service will be operated. More specifically, it "provides a framework for the efficient and effective expenditure of transit funds, and for realizing the highest return on investment in terms of public good and ridership productivity." Therefore, instead of requiring VTA to make service available to a large geographic region, these guidelines enable VTA to provide frequent, high-quality service to the areas with the highest ridership demand.

VTA Title VI: System-Wide Service Standards & Policies

In accordance with the Federal Transit Administration (FTA) Title VI requirements, VTA's *Title VI: System-Wide Service Standards & Policies* (OPS-PL-0059; November 2013) establishes the standards and policies that are used to measure system performance and ensure that transit services are being provided in a fair and equitable manner. VTA's performance standards for fixed bus and light rail routes relative to system-wide service standards include the following indicators:

- Vehicle Load
- Vehicle Headways
- On-Time Performance
- Service Availability

³ Metropolitan Transportation Commission, 2021. *Plan Bay Area 2050*. Available online at <https://www.planbayarea.org/finalplan2050>

⁴ Santa Clara Valley Transportation Authority. Countywide Bicycle Plan. Available online at https://www.vta.org/sites/default/files/2019-05/SCCBP_Final%20Plan%20_05.23.2018.pdf

⁵ *VTA Transit Sustainability Policy* (March 2010). Available at: http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/Transit%20Sustainability%20Policy.pdf

- Ridership Productivity

According to VTA, any significant service deficiencies identified through this monitoring process must be evaluated further to determine the extent to which minorities are affected.

VTA also monitors vehicle assignments and distribution of transit amenities based on the policies outlined in the VTA's Title VI: System-Wide Service Standards & Policies.

Santa Clara County General Plan

The Santa Clara County General Plan is a long-range comprehensive planning document required by state law and was adopted by the County in 1994 to set uniform policy, guide balanced future growth, create livable communities, and develop responsible resource conservation throughout the County.

LOCAL

Campbell Capital Improvement Plan: The City prepares a Five-Year Capital Improvement Plan (CIP) that identifies projects greater than \$25,000. Transportation projects in the current CIP (2023 – 2027) include:

- Campbell Avenue at Page Street Traffic Signal
- Citywide Intelligent Transportation Systems (ITS) enhancements
- Harriet Avenue sidewalks
- Hamilton Avenue/State Route 17 Southbound Off-ramp Widening
- Annual Street Maintenance
- Camden Avenue Resurfacing
- State Route 17/San Tomas Expressway Interim Improvements

Downtown Pedestrian Safety Study: The City has received several petitions from downtown residents regarding pedestrian safety measures along Civic Center Drive and Orchard City Drive. In response to these petitions, the City has installed a variety of treatments and has applied for several grants to install additional treatments and conduct additional studies, including the Transportation Improvement Plan described below. As part of the Downtown Pedestrian Safety Study, the City performed pedestrian counts and observations, conducted a crosswalk analysis, and evaluated the 10-year crash history at downtown intersections.

Campbell Transportation Improvement Plan: The Campbell Transportation Improvement Plan, is a complete streets plan for historic downtown Campbell. It includes an extensive review of existing conditions and integrates stakeholder input to identify opportunities and challenges to improving pedestrian, bicycle, and bus stop facilities. The plan includes projects to enhance pedestrian and bicyclist safety, mobility, and comfort within downtown, focusing on improving unsignalized intersections with high potential for collisions. The plan identifies additional projects to improve bicycle facilities, wayfinding, and transit access within downtown.

Downtown Campbell Development Plan & Standards: This plan provides “a vision for Downtown Campbell and a framework for physical development, business development and preservation of the Historic Downtown” and “looks to position the downtown for success in the 21st Century, and to enhance its role as a community gathering place and the heart of the City.” The transportation aspects of the plan are to maintain downtown as a walkable central business district, maintain the light rail connection to San José (and beyond) and maintain supportive land uses near the station. The circulation, parking, and transportation goals and strategies from the plan are:

Goal CPT-1: To improve vehicular and pedestrian circulation in the Downtown.

Policy CPT-1.1: Circulation Improvements: Circulation improvements shall be considered to enhance the perception of the Downtown beyond the loop streets.

Policy CPT-1.2: Vehicular/Pedestrian Interface: Employ methods to decrease vehicular speeds along the loop streets and provide a pedestrian environment and downtown feel.

Goal CPT-2: To create attractive Gateways into the Downtown.

Policy CPT-2.1: Gateway Design: Develop and implement plans for the Downtown Gateways.

Goal CPT-3: To provide adequate and accessible parking in the Downtown.

Policy CPT-3.1: Adequate Parking: Encourage the joint utilization of parking.

Policy CPT-3.2: Accessible Parking: Provide accessible parking in the Downtown.

Goal CPT-4: Reduce parking demand in the Downtown.

Policy CPT-4.1: Light Rail: Encourage the use of light rail and other mass transit alternatives, as well as bicycles to reduce parking demand.

East Campbell Avenue Master Plan: The East Campbell Avenue Master Plan was prepared to connect downtown Campbell to The Pruneyard through lane configuration changes along East Campbell Avenue, streetscape design concepts, improved bicycle and pedestrian access through the Highway 17 underpass, improved layout of the Railway/Campbell Avenue intersection, improved pedestrian and bicycle comfort on the East Campbell Avenue bridge over Los Gatos Creek, modified alignments of Page and Gilman Avenue, and development standards. The East Campbell Avenue Portals project and recommended roadway, streetscape, bicycle facility, and sidewalk improvements as a result of this study have been constructed.

South of Campbell Avenue Area (SOCA) Plan: The South of Campbell Avenue area is essentially the area south of Campbell Avenue and between the railroad tracks and Highway 17. The South of Campbell Avenue Area (SOCA) Plan contains information regarding the types of development allowed in each of the five subareas. The circulation improvements include an extension of Dillon Avenue, safety improvements to the on- and off-ramps between San Tomas Expressway and Dell Avenue, abandonment of an existing road, and extending Dell Avenue easterly to Camden Avenue.

North of Campbell Avenue Area (NOCA) Plan: The North of Campbell Avenue area is essentially the area south of Campbell Avenue and between the railroad tracks and Harrison Avenue with a portion just west of Salmar Avenue. The North of Campbell Avenue Area (NOCA) Plan contains information regarding the types of development allowed in this area. There are no circulation improvements in the plan, just a statement that development proposals shall assess and mitigate traffic impacts.

Winchester Boulevard Master Plan: The Winchester Boulevard Master Plan was created in response to a number of development applications for properties along the corridor. It included development policies and public improvements. The transportation-related improvements are:

- Pedestrian-oriented improvements, including pedestrian-scaled lighting, in the area located between Budd and Campbell Avenues.
- An evaluation of the feasibility of full bulb-out as all signalized pedestrian crossings and partial bulb-outs at non-signalized locations.
- Street trees in either a curbside planting strip or in tree grates along the corridor.
- A landscaped median with left-turn pockets with a review of entry locations and potential U-turn pockets.

San Tomas Area Neighborhood Plan (STANP): The San Tomas Area neighborhood is the area within the city's boundaries to the west of San Tomas Expressway and Winchester Boulevard that has a unique character with large, irregular lots and lack of curbs, gutters, and sidewalks on its streets. The San Tomas Area Neighborhood Plan (STANP) provides a framework for development in this area and established land use and transportation policies.

The plan had four primary objectives:

- Maintain the rural appearance of the local streets in the San Tomas Area.
- Take the minimum amount of right-of-way and provide only the minimum street widths necessary to maintain appropriate traffic function and safety.
- Match the actual use of streets with their functional classification and also provide for a more uniform physical appearance along all streets.
- Traffic through the area should be discouraged and routed via Winchester Boulevard, Pollard Road, Quito Road, and Campbell Avenue.

The plan identifies the following transportation policies:

Policy A: Truck Routes: Truck routes in the San Tomas Area should be restricted to arterial routes and only those collectors where the predominant abutting land uses are commercial and industrial. This means that only Pollard Road and Winchester Boulevard are truck routes within the San Tomas Area and the Campbell Municipal Code should be changed accordingly.

Policy B.1: Street Design Standard Implementation Policies: New Streets: All newly created streets shall be designed and built according to the San Tomas Street Improvement Plan and

3.14 TRANSPORTATION AND CIRCULATION

the corresponding City Standard details. New streets shall be improved with rolled curbs for improved drainage.

Policy B.2: Street Design Standard Implementation Policies: Existing Streets: Existing streets are required to be improved consistent with the San Tomas Street Improvement Plan. Any proposed new development located on those streets identified for street improvements would be required to dedicate right-of-way to the predominant dimension and construct the street to the predominant street width, install curb, gutters, sidewalks, and streetlights, as necessary.

Policy B.3: Street Design Standard Implementation Policies: Deferred Improvement Agreements: Deferred improvement agreements may be taken in lieu of installation of street improvements in the San Tomas Area, as determined by the City Engineer.

Policy B.4: Street Design Standard Implementation Policies: Removal of Existing Improvements: Property owners may apply for an encroachment permit to remove existing improvements that are not required under the San Tomas Street Improvement Plan. The property owner shall remove these improvements at their cost.

Policy B.5: Street Design Standard Implementation Policies: Return of Excess Right-of-Way: Property owners may request that any right-of-way no longer necessary under this policy be reverted to the property owner. The City's current procedures for vacation of excess right-of-way will apply.

Policy B.6: Street Design Standard Implementation Policies: Existing Deferred Street Improvement Agreements: Previous practice has created a number of secured improvement agreements for properties which under the current San Tomas Policy will no longer be required. A notice of fulfillment of the agreement will be recorded and the securities returned.

Municipal Code (Chapter 10.42): Campbell's Municipal Code (Chapter 10.42) requires employers with 100 or more employees during the morning peak commute period to implement and monitor a transportation demand management (TDM) program to reduce traffic impacts in the city. The following list of TDM services and incentives may be included in a TDM program:

- Rideshare matching
- Preferential parking for ridesharing vehicles
- Carpool/vanpool subsidies or rewards
- Transit ticket sales
- Transit ticket subsidies
- Shuttle to transit line
- Flexible work hours for people who do not drive alone
- Compressed workweeks
- Work-at-home programs
- Telecommuting
- Establishing fees for employee parking

-
- Membership in a transportation management association that provides TDM services and incentives
 - Contribution to a transportation systems management program administered by a member agency
 - Cycling and walking subsidies or rewards
 - Site design amenities that would encourage transit use, ridesharing, cycling, and walking
 - Other programs approved by the city's designee to reduce the number of employees who drive alone to the workplace

3.14.3 IMPACTS AND MITIGATION MEASURES

RECENT CHANGES TO CEQA TRANSPORTATION ANALYSIS

The analysis of transportation impacts under the California Environmental Quality Act (CEQA) was changed with Senate Bill (SB) 743. SB 743 became effective in 2020 and removed the use of automobile delay or traffic congestion, as described solely by level of service (LOS), for determining transportation impacts in environmental review. Instead, the latest *CEQA Statute & Guidelines* now specify that vehicle miles traveled, or VMT, is the appropriate metric to evaluate transportation impacts. In short, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers to measuring the impact of driving. In response to this methodological change in required transportation analysis, the City of Campbell adopted their *VMT Policy to Comply with California Senate Bill 743 (SB 743)*,⁶ which includes baseline VMT screening thresholds, VMT thresholds of significances, VMT mitigations of significant impacts, and requirements for preparing a local transportation analysis. As discussed later, the comprehensive VMT assessment (i.e., VMT including all vehicle trips, vehicle types, and trip purposes without separation by land use) presented in this report considers both the Project's direct impacts relative to Project generated VMT per service population, as well as a cumulative analysis, which considers the Project's long-term effect on VMT using boundary VMT per service population.⁷ For illustrative purposes Figure 3.14-5 presents a representation of both Project generated VMT and boundary VMT. Both metrics are needed for a comprehensive view of a project's VMT effects. The VMT assessment methods and thresholds used for this analysis go beyond the City of Campbell's VMT thresholds due to the unique characteristics of the General Plan.

ANALYSIS SCENARIOS

The analysis assesses how the study area's transportation system would operate with the implementation of proposed General Plan Update.

The transportation analysis was conducted for a typical weekday for the following scenarios:

Scenario 1: *Existing Conditions* – Existing conditions represent the current transportation system. To evaluate existing conditions, the most current version of the baseline (2015) San Mateo City and County Association of Government (C/CAG) and Santa Clara Valley Transportation Authority

⁶ City of Campbell *VMT Policy to Comply with California Senate Bill 743 (SB 743)*. Available online at: <https://www.campbellca.gov/DocumentCenter/View/17944/-Campbell-VMT-Policy?bidId=>

⁷ This is in contrast with the OPR Technical Advisory recommendation to use Partial VMT for transportation impact analysis (Governor's Office of Planning and Research, *Technical Advisory: On Evaluating Transportation Impacts in CEQA*, pages 15 and 16). Using Partial VMT for Project generated VMT screening may not tell the full story of the project's benefits. For example, mixed-use projects help reduce VMT by shortening vehicle trip lengths or reducing vehicle trips because of the convenience of walking, bicycling, or using transit between project destinations. A comprehensive VMT analysis is a more complete evaluation.

(VTA) Bi-County transportation model (“VTA Model”) was adjusted to reflect existing (Year 2020) land use in the City of Campbell and was used to determine the baseline VMT per service population, home-based VMT per resident, and home-based work VMT per employee for the traffic analysis zones (TAZs) comprising the Project planning areas.

Scenario 2: *Cumulative (2040) without Project Conditions* – The most current version of the Year 2040 VTA Model was adjusted to reflect only the land use growth and transportation network adjustments that are approved but not yet constructed in the adopted *City of Campbell General Plan* (2001, revised 2014, revised 2015).

Scenario 3: *Cumulative (2040) with Project Conditions* – The proposed land use(s) in the Campbell General Plan Update (in this case, the proposed change in housing units and employment with the Project planning areas) were added to the Cumulative (2040) without Project Conditions model for the relevant TAZs comprising the planning areas, and a full Cumulative (2040) with Project model run was performed.

METHODS OF ANALYSIS

The most common method of calculating VMT metrics is through a travel forecasting model. A travel forecasting model uses specialized software and is designed to reflect the interactions between different land use and roadway elements in a large area. The San Mateo City and County Association of Government (C/CAG) and Santa Clara Valley Transportation Authority (VTA) Bi-County transportation model (“VTA Model”) was used to prepare daily VMT and roadway segment forecasts, as well as for use as inputs for the Air Quality, Energy Consumption, and Greenhouse Gas (GHG) analysis. To understand the VMT forecasts and VMT impact analysis, this section defines important technical terms and analysis methods.

VTA Model Documentation

The VTA Model includes the regional roadways and major arterials of the nine-county Bay Area, the Association of Monterey Bay Area Governments (AMBAG) region (Santa Cruz County, Monterey County, and San Benito County), and portions of the San Joaquin (Central) Valley. There are additional transportation network detail and refined transportation analysis zones (TAZs)⁸ in San Mateo County and Santa Clara County. The VTA Model land use inputs are based on Association of Bay Area Governments (ABAG) 2017 land use projections (*Plan Bay Area 2040* land use projections), 2010 Census socio-economic data (with some additional refinements in 2019), and a future regional

⁸ Transportation analysis zones, also referred to as TAZs, are small geographic areas within the VTA Model. As defined by NCHRP Report 716, *Travel Demand Forecasting: Parameters and Techniques*, TRB, 2012, “TAZ boundaries are usually major roadways, jurisdictional borders, and geographic boundaries and are defined by homogeneous land uses to the extent possible.”

3.14 TRANSPORTATION AND CIRCULATION

transportation infrastructure consistent with *Plan Bay Area 2040* (July 2017). The VTA Model has a 2040 horizon year.

The TAZ size influences the types of streets vehicle traffic is typically assigned to. For the VTA Model, an arterial or minor arterial is the lowest street level that traffic is assigned to because the TAZ structure in Campbell has moderate detail. The VTA Model has a mode share model that can be used to express changes in mode share.

The future year VTA Model is used to develop forecasts for Cumulative (2040) Conditions and includes projected growth to Year 2040. Planned and funded roadway improvements associated with the *Valley Transportation Plan (VTP) 2040* (adopted in October 2014) are also included. VTP projects near the City of Campbell include:

- BART Silicon Valley: The Santa Clara Extension (VTP ID: T2)
- Vasona Corridor Light Rail Extension (VTP ID: T9)
- SR 85 Express Lanes: US 101 (South San José to Mountain View) (VTP ID: H1)
- SR 17 Southbound/Hamilton Ave. Off-Ramp Widening (VTP ID: H20)

The SR 17 Express Lanes (VTP ID: H16) project is included in the *VTP 2040*; however, it is not included in the Year 2040 VTA Model.

The VTA Model has four time periods to address travel during congested morning and evening peak periods and uncongested mid-day and midnight time periods. During congested times, the average trip length and speed of travel change.

Model Input Adjustments

For the purpose of this VMT analysis, the baseline (2015) VTA Model land use and population inputs were updated for the entire planning area to reflect current (Year 2020) development conditions in the City of Campbell. In addition, the Year 2040 VTA Model was updated to reflect only the land use growth and transportation network adjustments that are approved but not yet constructed in the adopted *City of Campbell General Plan* (2001, revised 2014, revised 2015). For the Cumulative (2040) with Project Conditions scenario, the proposed land use(s) in the Campbell General Plan Update – in this case, the proposed change in housing units and employment with the Project planning areas – are added to the Cumulative (2040) without Project Conditions model for the relevant TAZs comprising the planning areas. The base year model and future year travel model input assumptions are included in Appendix C.

Table 3.14-4 shows the additional land use associated with the Cumulative (2040) with Project Conditions scenario. The proposed Project would provide for an increase of 25 single-family units, 8,799 multi-family units, and 6,194 additional employees within the associated planning areas (refer to the Project Description (Chapter 2.0) for more information).

TABLE 3.14-4: PROPOSED PROJECT LAND USE SUMMARY

TAZ ¹	ADDITIONAL UNITS AND EMPLOYMENT		
	SINGLE-FAMILY UNITS	MULTI-FAMILY UNITS	TOTAL EMPLOYMENT
1	0	0	25
2	0	241	258
3	0	451	277
4	0	651	436
5	1	1031	32
6	0	0	0
7	0	30	24
8	3	80	60
9	0	159	228
10	0	106	244
11	0	662	442
12	9	15	9
13	0	48	34
14	0	24	12
15	0	586	-414
16	0	8	21
17	0	512	-158
18	0	0	0
19	0	0	723
20	0	0	0
21	0	60	517
22	0	658	453
23	0	0	191
24	2	37	76
25	0	986	117
26	0	243	91
27	0	109	367
28	3	138	148
29	0	121	5
30	0	420	1
31	0	43	0
32	0	627	-360
34	5	237	232
601	0	23	20
602	0	0	0
603	0	0	0
748	0	0	29
796	1	389	38

3.14 TRANSPORTATION AND CIRCULATION

TAZ ¹	ADDITIONAL UNITS AND EMPLOYMENT		
	SINGLE-FAMILY UNITS	MULTI-FAMILY UNITS	TOTAL EMPLOYMENT
798	0	30	108
799	0	0	50
896	0	0	0
899	0	72	19
900	0	0	104
907	1	3	87
1490	0	0	1,647
Total	25	8,799	6,194

Notes:

TAZ = VTA Model Traffic Analysis Zone.

Source: Fehr & Peers, 2022.

Service population is the sum of the number of employees and residents within the designated geographic area. Table 3.14-5 shows the service populations used in the VMT metrics for the City of Campbell and Santa Clara County for the study scenarios.

TABLE 3.14-5: SERVICE POPULATIONS

POPULATION	EXISTING CONDITIONS [A] ¹	CUMULATIVE (2040) WITHOUT PROJECT CONDITIONS [B] ¹	CUMULATIVE (2040) WITH PROJECT CONDITIONS [C] ¹	CHANGE [C-A=D] ^{1,2}
City of Campbell				
Residents (A)	42,730	46,850	64,930	22,200
Employees (B)	30,570	35,200	36,760	6,190
Service Population (A + B = C)	73,300	82,050	101,690	28,390
Santa Clara County				
Residents (D)	1,852,510	2,546,290	2,561,050	708,540
Employees (E)	1,041,520	1,304,780	1,306,160	264,640
Service Population (D + E = F)	2,894,030	3,851,070	3,867,210	973,180

Notes:

Numbers rounded to the nearest 10.

Change (Project - Existing) = Cumulative (2040) with Project Conditions column – Existing Conditions column.

Source: Fehr & Peers, 2022.

As shown on Table 3.14-5, the total residential population is forecasted to increase from the existing 42,730 residents to 64,930 people residing in Campbell (an increase of approximately 22,200 residents). In terms of employee population, the proposed Project would accommodate an additional 6,190 employees over the planning year horizon.

Including Inter-Regional Travel for VMT Analysis

The OPR *Technical Advisory* cites the importance of not truncating (i.e., ending or omitting a trip outside off the geographic boundary; truncating has the effect of shortening a trip to/from a destination) trip lengths based on travel forecasting model or political boundaries:

***Considerations for All Projects.** Lead agencies should not truncate any VMT analysis because of jurisdictional or other boundaries, for example, by failing to count the portion of a trip that falls outside the jurisdiction or by discounting the VMT from a trip that crosses a jurisdictional boundary. CEQA requires environmental analyses to reflect a “good faith effort at full disclosure.” (CEQA Statute & Guidelines, § 15151.) Thus, where methodologies exist that can estimate the full extent of vehicle travel from a project, the lead agency should apply them to do so. Where those VMT effects will grow over time, analyses should consider both a project’s short-term and long-term effects on VMT. (Quote from page 6 of the *Technical Advisory: On Evaluating Transportation Impacts in CEQA*, December 2018).*

The VTA Model extends beyond the Bay Area regional boundary to the south into the AMBAG region (Santa Cruz County, Monterey County, and San Benito County) and east into San Joaquin County. However, the travel model stops at the Bay Area regional boundary and does not include inter-regional travel to Mendocino County, Lake County, Yolo County, and Merced County, which shortens the vehicle travel to those counties. This truncation results in a lower total project generated VMT estimate for the region and Santa Clara County and affects baseline regional or county baseline VMT values used to establish VMT thresholds.

The California statewide travel demand model (CSTDm) was used to estimate and forecast trip lengths that occur outside the VTA Model boundary. These trip lengths have been appended to the external stations⁹ (refer to Table 3.14-6) and are reflected in the VMT estimates and forecasts contained in this analysis.

TABLE 3.14-6: EXTERNAL STATION ADJUSTMENTS AT BAY AREA REGIONAL BOUNDARY

<i>EXTERNAL STATION (CONNECTING COUNTY)</i>	<i>DISTANCE (MILES)</i>
SR 1 – Mendocino County	9.4
US 101 – Mendocino County	48.4
SR 29 – Lake County	21.4
I-505 – Yolo County	101.2
SR 113 – Yolo County	12.9
I-80 – Yolo County	39.2

⁹ External stations are located on the major transportation routes into and out of the VTA Model boundary. These stations are used to load traffic generated from and/or destined to locations outside of the VTA Model boundary.

3.14 TRANSPORTATION AND CIRCULATION

<i>EXTERNAL STATION (CONNECTING COUNTY)</i>	<i>DISTANCE (MILES)</i>
SR 12 – San Joaquin County	No adjustment made to these external station distances because the VTA Model area includes San Joaquin County.
SR 4 – San Joaquin County	
I-205 – San Joaquin County	
SR 152 – Merced County	162.9
SR 25 – San Benito County	No adjustment made to these external station distances because the VTA Model area includes San Benito County.
US 101 – San Benito County	
SR 152 – Santa Cruz County	No adjustment made to these external station distances because the VTA Model area includes Santa Cruz County.
SR 17 – Santa Cruz County	
SR 9 – Santa Cruz County	
SR 1 – Santa Cruz County	

NOTES: EXTERNAL STATION ADJUSTMENTS ROUNDED TO NEAREST TENTH OF A MILE.

SOURCE: CALIFORNIA STATEWIDE TRAVEL DEMAND MODEL (CSTDM) WAS USED TO DEVELOP THE EXTERNAL STATION ADJUSTMENTS.

FEHR & PEERS, 2022.

Project Generated VMT Estimation Method

Project generated VMT is the VMT from all vehicle trips for all trip purposes and types. Project generated VMT per service population is the metric used to evaluate how the city VMT changes (increases or decreases) between the baseline and with Project scenario, considering both VMT increases due to land use growth and VMT changes due to changes in travel behavior. Project generated VMT values include VMT on all streets including centroid connectors¹⁰ and travel outside of the VTA Model area. It is calculated by summing the “VMT from” and “VMT to” a specified area, as follows:

$$\text{Project Generated VMT} = (II + IX) + (II + XI) = 2 * II + IX + XI$$

- Internal-internal (II): The full length of all trips made entirely within the geographic area limits.
- Internal-external (IX): The full length of all trips with an origin within the geographic area and destination outside of the area.
- External-internal (XI): The full length of all trips with an origin outside of the geographic area and destination within the area.

The intra-zonal VMT and VMT between traffic analysis zones, or TAZs, that are in the study area cause some double counting, which is an expected result when summing the trip end based VMT.

¹⁰ Centroids are points that identify the center of activity within a transportation analysis zone and connect that zone to the transportation network. A centroid connector is a feature of a travel model network that connects the centroid to the network and represents the local streets within a zone.

To ensure a VMT rate is expressed properly (i.e., that the numerator and denominator include the generators of both trip ends of the VMT), the proposed Project generated VMT is divided by the service population (residential population and employment population), the generator of both trip ends of the VMT. The VMT estimates are also presented on a per service population basis to account for both the effects of population and/or employment growth and the effects of changes in personal travel behavior. For example, population growth may cause an increase in VMT, while travelers changing their behavior by using different travel modes or decreasing their vehicle trip lengths (such as a higher percentage of Campbell residents working or shopping in Campbell) would cause decreases in VMT.

Project's Effect on VMT Estimation Method (Using Boundary VMT)

Project's effect on VMT (also referred to as "boundary VMT") is the VMT that occurs within a selected geographic boundary (e.g., city, county, or region) by any type of vehicle. Boundary VMT captures all on-road vehicle travel on a roadway network (i.e., VMT on the centroid connectors and all other streets and freeway segments in the travel model within the physical limits of the selected geographic boundary) for any purpose, and includes local trips as well as trips that pass through the area without stopping. The use of boundary VMT is a more complete evaluation of the potential effects of the proposed Project because it captures the combined effect of new VMT, shifting existing VMT to/from other jurisdictions, and/or shifts in existing traffic to alternate travel routes or modes.

The boundary VMT (within Santa Clara County) per service population is used to evaluate the proposed Project's effect on VMT between the Cumulative (2040) without Project Conditions and Cumulative (2040) with Project Conditions. The boundary VMT is divided by the service population (sum of residential population and employment population) to account for the effects of population and/or employment growth and the effects of changes in personal travel behavior within the specified geographic area between scenarios.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with transportation and circulation if it will result in the following categories of impacts:

- Plan Conflicts (i.e., impacts to transit, roadways, bicycle, and pedestrian systems)
- VMT Impacts
- Hazardous Conditions (i.e., safety)
- Emergency Access

These impact criteria are further discussed below.

Plan Conflict

To determine the Project's consistency with relevant transportation programs, plans, ordinances or policies, the following significance thresholds were applied to each respective mode of travel – transit, roadways, bicycle facilities, and pedestrians.

Transit System – The project would create a significant impact related to the transit system if any part of the proposed Project:

- Disrupts existing transit services or facilities;¹¹
- Interferes with the implementation of a planned transit facility;
- Creates physical or operational transportation outcomes that conflict with desired conditions expressed in transit policies adopted in Campbell, Santa Clara County, or VTA for their respective facilities in the study area.

Roadway System – The project would create a significant impact related to the roadway system if any part of the proposed Project:

- Disrupts existing facilities;
- Interferes with the implementation of a planned vehicle facility;
- Creates physical or operational transportation outcomes that conflicts with applicable program, plan, ordinance, or policy.

Bicycle System – The project would create a significant impact related to the bicycle system if the any part of the proposed Project:

- Disrupts existing bicycle programs or facilities;
- Interferes with planned bicycle facilities;
- Creates physical or operational transportation outcomes that conflict with applicable bicycle system plans, guidelines, policies, or standards.

Pedestrian System – The project would create a significant impact related to the pedestrian system if any part of the proposed Project:

- Disrupts existing pedestrian facilities;
- Interferes with implementation of a planned pedestrian facility;
- Creates physical or operational transportation outcomes that conflict with applicable pedestrian system plans, guidelines, policies, or standards.

VMT Impacts

The VMT analysis methods utilize the procedures and VMT thresholds of significance in the adopted City of Campbell *VMT Policy to Comply with California Senate Bill 743 (SB 743)*. While the City of

¹¹ This includes disruptions caused by the Project relative to transit street operations and transit stops/shelters.

Campbell's *VMT Policy* includes a CEQA threshold of significance for General Plan Amendments, it does not state the VMT metric (Project's effect on VMT using boundary VMT or Project generated VMT), geographic area, or how to assess the cumulative impacts between Cumulative without Project and with Project scenarios. Since the Campbell General Plan Update is proposing to increase the land use supply in the city and would likely have a relatively widespread effect on the total VMT within the City of Campbell, a comprehensive VMT assessment (i.e., VMT including all vehicle trips, vehicle types, and trip purposes without separation by land use) is presented in this analysis and considers both the Project's direct impacts relative to Project generated VMT per service population, as well as a cumulative analysis, which considers the Project's long-term effect on VMT using boundary VMT per service population. For illustrative purposes Figure 3.14-5 presents a representation of both Project generated VMT and boundary VMT. Both metrics are needed for a comprehensive view of a project's VMT effects. The VMT assessment methods and thresholds used for this analysis go beyond the City of Campbell's VMT thresholds due to the unique characteristics of this large land use project. Each analysis is addressed separately below.

Project Generated VMT

The VMT impact significance thresholds for determining the Project's direct impact under Cumulative Conditions are as follows:¹²

- A significant impact would occur if the total citywide VMT per service population for Cumulative with Projects Conditions would exceed a level 15% below the citywide total VMT per service population baseline rate. The threshold applied in this analysis is 15% below the existing citywide VMT rate of 33.4, which as shown in Table 3.14-7, is 28.4 (Existing Conditions City of Campbell total VMT per service population of 33.4 x 85% = **28.4**).
- A significant impact would occur if the citywide home-based VMT per resident for Cumulative with Project Conditions would exceed a level of 15% below the citywide baseline VMT rate. The threshold applied in this analysis is 15% below the existing citywide VMT rate of 14.3, which as shown in Table 3.14-7, is 12.1 (Existing Conditions City of Campbell home-based VMT per resident of 14.3 x 85% = **12.1**).
- A significant impact would occur if the citywide home-based work VMT per employee for Cumulative with Project Conditions would exceed a level of 15% below the citywide baseline VMT rate. The threshold applied in this analysis is 15% below the existing citywide VMT rate of 14.1, which as shown in Table 3.14-7, is 12.0 (Existing Conditions City of Campbell home-based VMT per resident of 14.1 x 85% = **12.0**).

¹² An induced VMT threshold is not presented because the Campbell General Plan Update is not adding roadway capacity.

3.14 TRANSPORTATION AND CIRCULATION

Therefore, the Project would cause a significant Project generated VMT impact if:

- The total citywide VMT per service population under Cumulative (2040) with Project Conditions is greater than **28.4**.
- The citywide home-based VMT per resident under Cumulative (2040) with Project Conditions is greater than **12.1**.
- The citywide home-based work VMT per employee under Cumulative (2040) with Project Conditions is greater than **12.0**.

TABLE 3.14-7: PROJECT GENERATED VMT THRESHOLDS BASED ON EXISTING CONDITIONS FOR THE CITY OF CAMPBELL

ITEM	AMOUNT ¹
City of Campbell Total VMT	
Total VMT (A)	2,446,780
Service Population (B) ²	73,300
Total VMT per Service Population (A/B=C)	33.4
Total VMT per Service Population Threshold (C*85%=D)	28.4
City of Campbell Home-Based VMT	
Home-Based VMT (E)	609,550
Resident Population (F)	42,730
Home-Based VMT per Resident (E/F=G)	14.3
Home-Based VMT per Resident Threshold (G*85%=H)	12.1
City of Campbell Home-Based Work VMT	
Home-Based Work VMT (I)	430,900
Employee Population (J)	30,570
Home-Based Work VMT per Employee (I/J=K)	14.1
Home-Based Work VMT per Employee Threshold (K*85%=L)	12.0

NOTES:

ROUNDED RESIDENT POPULATION, EMPLOYEE POPULATION, SERVICE POPULATION AND VMT TO NEAREST 10.

SERVICE POPULATION IS DEFINED AS THE SUM OF ALL EMPLOYEES AND RESIDENTS.

SOURCE: FEHR & PEERS, 2022.

Project's Effect on VMT (Using Boundary VMT)

The Project would result in a significant impact on VMT under Cumulative (2040) Conditions if growth in the plan area increases total boundary countywide VMT per service population compared to Cumulative (2040) without Project Conditions.

The impact threshold for the Project's effect on VMT is the Santa Clara County Boundary VMT per Service Population, or 12.7 (refer to Table 3.14-8 for how the 12.7 is calculated). The boundary VMT uses the Santa Clara County boundary VMT to evaluate the Project's effects on VMT because the Project effects are likely to be localized near the City of Campbell and within Santa Clara County.

Therefore, the Project would result in a significant impact on VMT if it causes the cumulative countywide daily boundary VMT per service population to be greater than **12.7**.

TABLE 3.14-8: PROJECT'S EFFECT ON VMT (USING BOUNDARY VMT) THRESHOLD BASED ON CUMULATIVE (2040) CONDITIONS FOR SANTA CLARA COUNTY

<i>ITEM</i>	<i>AMOUNT¹</i>
Santa Clara County	
Boundary VMT (A)	49,020,360
Service Population (B) ²	3,851,070
Boundary VMT per Service Population (A/B=C)	12.7
Boundary VMT per Service Population Threshold (C)	12.7

NOTES:

ROUNDED RESIDENT POPULATION, EMPLOYEE POPULATION, SERVICE POPULATION AND VMT TO NEAREST 10.

SERVICE POPULATION IS DEFINED AS THE SUM OF ALL EMPLOYEES AND RESIDENTS.

SOURCE: FEHR & PEERS, 2022.

IMPACTS AND MITIGATION MEASURES

Based on the potential transportation impacts as defined in Appendix G of the CEQA guidelines, the potential impacts of General Plan implementation were identified. Following the discussion of these impacts are the policies included in this General Plan that would fully or partially minimize these impacts.

Impact 3.14-1: General Plan implementation may conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Significant and Unavoidable)

This section provides an overview of the transit, roadway, bicycle, and pedestrian evaluations and identifications of potential impacts related to regional planning efforts.

Transit Evaluation

Implementation of the proposed Project will not result in modifications to the transit network that would disrupt existing facilities or services, or interfere with the implementation of planned facilities/services contained in adopted programs, plans, policies, or ordinances. However, the proposed Project would lead to increases in the city’s residential and employment populations, which would increase the demand for transit facilities and services, and would cause additional roadway traffic congestion that may affect several transit corridors by increasing travel times and decreasing headway reliability for transit vehicles. Potential increases in transit vehicle delay are a result of buses operating in mixed-flow lanes with other vehicles.

The VTA operates the bus and light rail transit system in Campbell and in partnership with Campbell and other member agencies will make service changes over time based on the equitable distribution of the following performance measures (VTA's Title VI: System-Wide Service Standards and Policies, OPS-PL-0059; November 2013):

- Vehicle Load
- Vehicle Headways
- On-Time Performance
- Service Availability
- Ridership Productivity

The increase in demand for transit service and transit vehicle delay caused by the proposed Project would be accommodated by existing and planned improvements to the transit system, such as improving access to transit for local residents and employees (e.g., transit stop enhancements, sidewalk widening, etc.), and improving how transit vehicles move in and around the City of Campbell (e.g., new and more frequent bus services, expansion of the VTA system, provision of transit-focused facilities, etc.). This effort to increase or modify transit service capacity and operations would be approved by a publicly appointed decision body (like the VTA board).

The City of Campbell's proposed General Plan includes Goal T-1 to create a complete street network that accommodates all users. Policy T-1.1 identifies the desired policy outcomes of a balanced transportation system in Campbell:

T-1.1 Develop and implement a connected multi-modal transportation network that balances transportation modes, encourages non-automobile travel, and reduces greenhouse gas emissions, while promoting healthier travel alternatives for all users and respecting context.

To meet the desired policy outcomes stated in Policy T-1.1, the multimodal improvements would need to address transit ridership trends¹³ and include access to transit and access by transit improvements, such as transit stop enhancements, direct bicycle and pedestrian network enhancements to transit stops, and street operational improvements (e.g., signal coordination, transit vehicle preemption, etc.) that enhance transit reliability and travel time. The improvements would be incorporated into a multimodal improvement plan to support the General Plan land use changes.

Further, the City of Campbell's proposed General Plan includes Goal T-2 to support a regional multimodal transportation system that meets regional transportation needs. Policy T-2.1 identifies Campbell's desired policy outcomes of the regional transportation system:

T-2.1 Participate in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell's local transportation system for local users.

To meet the desired policy outcomes stated in Policy T-2.1, the proposed General Plan includes policies and actions to participate in intergovernmental activities and coordinate with the VTA, the MTC, and other member agencies. These coordination efforts would need to address the potential increase in the number of transit users in Campbell and additional roadway congestion resulting from the proposed Project.

Consistent with the *VTP 2040 (2014)*, the existing transit circulation would be modified in the future and adjusted periodically based on VTA's latest transit service plan. The changes to the vehicle circulation system as part of the proposed Project would not be expected to interfere with existing transit facilities. The proposed changes would not conflict with planned transit facilities and services or conflict with adopted transit plans, guidelines, policies, or standards. Additionally, the proposed Project is supportive of the transit use and goals summarized in the Regulatory Setting. Therefore,

¹³ Santa Clara Valley Transportation Authority. Annual Report 2019. Available online at https://www.vta.org/sites/default/files/2020-04/AnnualReport2019_Accessible.pdf

the impact relative to disruption of existing or planned transit facilities or conflicts with transit program, plan, ordinance, or policy would be *less-than-significant*.

GENERAL PLAN MINIMIZATION MEASURES

Applicable goals, policies, and actions related to the transit system in the proposed Campbell General Plan Update are listed below.

LAND USE ELEMENT

- Goal LU-1: Maintain a well-balanced land use plan in Campbell that provides for a diverse, self-sufficient community that offers a variety of housing types, job opportunities, community facilities, and commercial services.

Policy LU-1.1: Provide for a full range of land uses within the City that are conveniently located in proximity to transit opportunities, and provide for commercial, public, and quasi-public uses that support and enhance the livability of residential neighborhoods and districts.

- Goal LU-2: Ensure that new development is compatible with existing development in order to maintain a high quality of life for Campbell residents.

Policy LU-2.9: In considering land use change requests, consider factors such as compatibility with the residential surroundings, privacy, noise, and changes in traffic levels on residential streets.

- Goal LU-5: Maintain and enhance Downtown Campbell as a vibrant, community-oriented district that serves as the retail, entertainment, civic, and cultural hub of the city.

Policy LU-5.5: Promote transit-oriented and mixed-use development near the light rail station in Downtown Campbell.

- Goal LU-6: Promote effective coordination with regional and local agencies on planning issues.

Policy LU-6.1: Coordinate with regional and local agencies on planning, transportation, economic development, and sustainability issues to ensure that regional decisions do not disproportionality affect Campbell in such a way as to degrade the fiscal health and quality of life for Campbell residents and businesses.

Action LU-6.a: Pursue a cooperative collaborative relationship during development of long-range plans and review of development proposals that may impact the City of Campbell. Coordinate with the cities of San José, Saratoga, and Los Gatos to establish mutually-agreed upon principles related to traffic generation, growth, infrastructure, and other relevant topics in order to ensure that planning and development decisions in adjacent jurisdictions do not result in adverse impacts to Campbell. Consider the establishment of Memorandums of Understanding (MOUs) with these cities to provide a formal structure and criteria for collaboration on the review of future projects and plans.

Action LU-6.c: Continue to monitor the status and progress of San José’s efforts to establish Urban Village Plans in areas immediately adjacent to Campbell. Encourage San José to incorporate measures into these plans that reduce cut-through traffic into Campbell and establish phased residential densities and development standards so that future development adjacent to Campbell is compatible with the desired density and urban form of Campbell.

TRANSPORTATION ELEMENT

- Goal T-1: Create a Complete Streets network that accommodates all users.

Policy T-1.1: Develop and implement a connected multimodal transportation network that balances transportation modes, encourages non-automobile travel, and reduces greenhouse gas emissions, while promoting healthier travel alternatives for all users and respecting context.

Action T-1b: Design roadway space and intersections for a variety of users, including motor vehicles, transit vehicles, bicycles, pedestrians, and future travel modes, when constructing or modifying these facilities.

Action T-1g: Support community efforts to develop and fund a shuttle system to serve transit needs within the City limits that is linked to and coordinated with other transit services, without the commitment of City funds.

Action T-1h: Improve pedestrian and bicycle access to bus and light rail stations when evaluating opportunities with new development proposals and capital improvement projects. In cooperation with VTA, evaluate transit-waiting environments to improve convenience and comfort.

- Goal T-2: Support a regional multimodal transportation system that meets regional transportation needs.

Policy T-2.1: Participate in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell’s local transportation system for local users.

Policy T-2.2: Support regional transportation funding measures.

Action T-2a: Participate in intergovernmental activities related to regional and sub-regional transportation planning to advance the City’s interests.

Action T-2b: Support the efforts of the Santa Clara Valley Transportation Authority (VTA), the Metropolitan Transportation Commission, and other agencies to coordinate transit planning and transit services in the South Bay and the entire Bay Area.

Action T-2d: Participate in regional initiatives to reduce traffic demand and construct infrastructure improvements to manage regional traffic (for example High Occupancy Vehicle “HOV” lanes and express lanes and freeway information systems) to reduce congestion on Campbell roadways.

- Goal T-3: Manage Traffic Demand and Reduce Vehicle Miles Traveled (VMT)

Policy T-3.3: Provide infrastructure improvements to manage regional traffic and to reduce congestion on area roadways.

- Goal T-4: Implement Best Transportation Practices in New Developments.

Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.

Action T-4a: Require developers to make public improvements related to their project to improve and enhance bicycle, pedestrian, and transit opportunities along the site's frontage consistent with City policy.

Action T-4c: Orient new development building entrances toward sidewalks and transit stops.

Roadway Evaluation

The goals, policies, and actions cited below focus on modifications to existing street facilities to provide for complete streets facilities to create more pedestrian and bicycle-oriented streets, and ensure the City's transportation network is improved over time to support the buildout of the General Plan. The expected influence on existing and future traffic is likely to be minimal because no through vehicle lanes are proposed to be removed within the proposed Project. Overall, the proposed Project would not conflict with existing or planned roadway facilities because the proposed Project is supporting of additional and improved pedestrian and bicycle facilities with few if any reduction in vehicle lanes. The proposed Project would not be expected to interfere with existing roadway facilities, conflict with planned roadway facilities, or conflict with adopted transportation plans, guidelines, policies, or standards. Therefore, the impact relative to disruption of existing or planned roadways or conflicts with program, plan, ordinance, or policy through the implementation of the proposed Project would be **less-than-significant** on roadway facilities, and no mitigation would be required.

GENERAL PLAN MINIMIZATION MEASURES

Applicable goals, policies, and actions related to the roadway system in the proposed Campbell General Plan Update are listed below. Goals, policies, and actions described in the **Transit Evaluation** section also apply to the roadway evaluation.

TRANSPORTATION ELEMENT

- Goal T-1: Create a Complete Streets network that accommodates all users.

Policy T-1.3: Ensure that the City's circulation network is improved over time to support buildout of the General Plan.

Action T-1a: Create a complete streets implementation guide to reflect General Plan complete street policies, including sidewalk standards, bike facility standards, Americans with Disabilities Act (ADA) requirements, lighting standards, and landscaping requirements. The guide shall include updated streetscape standards

for the City's image streets: Hamilton Avenue, Bascom Avenue, Winchester Boulevard, and parts of West Campbell Avenue.

Action T-1i: Prepare a multimodal improvement plan to support buildout of the General Plan, update the City's Capital Improvement Program (CIP) to include, as appropriate, the identified improvements, and create and adopt a multimodal transportation impact fee (TIF) program to provide funding for the remaining improvements.

- Goal T-3: Manage Traffic Demand and Reduce Vehicle Miles Traveled (VMT).

Policy T-3.3: Provide infrastructure improvements to manage regional traffic and to reduce congestion on area roadways.

Policy T-3.5: To the extent feasible, strive to maintain weekday AM and PM peak period level of service (LOS) D or better for local signalized intersections. Strive to achieve LOS standards identified in the Santa Clara County Congestion Management Plan (CMP) on intersections in Campbell identified in the CMP.

Policy T-3.6: At the discretion of the City Council or Planning Commission, certain intersections may be allowed to fall below the City's LOS standard established by T-3.5 under the following circumstances:

- a. Where constructing facilities with enough capacity to provide LOS D is found to be unreasonably expensive.
- b. Where conditions are worse than LOS D and caused primarily by traffic from adjacent jurisdictions.
- c. Where maintaining LOS D will be a disincentive to use transit and active transportation modes (i.e., walking and bicycling) or to the implementation of new transportation modes that would reduce vehicle travel. Examples include roadway or intersection widening in areas with substantial pedestrian activity or near major transit centers.

Action T-3c: Work with neighboring communities to coordinate traffic signals on arterials to maintain the movement of people, goods, and services and discourage cut-through traffic in residential neighborhoods.

Action T-3d: Identify and properly sign truck routes on arterials to regulate truck movements.

Action T-3e: Consider implementation of traffic calming measures to ensure safe and reasonable speeds in residential neighborhoods, consistent with the City's adopted Neighborhood Traffic Management Program (NTCP), as long as the measures do not impede emergency response, bicycle travel, or hinder the complete streets functionality of the roadway. Methods such as radar speed signs may be used to alert drivers on streets where speeding is prevalent.

Action T-3f: Facilitate between and within neighborhoods the construction of connected pedestrian and bicycle facilities (e.g. bridges, pathways, sidewalks, and bike lanes) that enhance community livability especially within one-half mile of major activity centers, schools, and parks.

Bicycle Evaluation

To accommodate future growth in the City of Campbell, the proposed Project includes a complete streets network and transportation policies and actions, which are listed below, to accommodate increased bicycle demands generated by the anticipated development. The proposed Project encourages bicycling by supporting the development and implementation of a forthcoming bicycle master plan, which will be prepared to achieve a bicycle network that eliminates gaps where possible and creates a safe, convenient, and low-stress comprehensive community-wide network of on-street and off-street bicycle facilities (Action T-1c and Action T-1d). Commuting by bicycle is supported with a street system that enhances bicycle connections by shortening bicycle distances and providing a higher quality bicycle network (with lower vehicle speeds and volumes where possible) within the City of Campbell.

Implementation of the proposed Project would not interfere with existing bicycle facilities or conflict with planned bicycle facilities or adopted bicycle system plans, guidelines, policies, or standards. Furthermore, implementation of the proposed Project will create new bicycle facilities consistent with the Campbell General Plan Update and all applicable City guidelines, standards, and specifications, which will have a beneficial effect on bicycle circulation and access. Therefore, the implementation of the proposed Project would be considered a **less-than-significant** impact on bicycle facilities, and no mitigation measures would be required.

GENERAL PLAN MINIMIZATION MEASURES

Applicable goals, policies, and actions related to the bicycle system in the proposed Campbell General Plan Update are listed below. Goals, policies, and actions described in the **Transit Evaluation** and **Roadway Evaluation** sections also apply to the bicycle evaluation.

TRANSPORTATION ELEMENT

- Goal T-1: Create a Complete Streets network that accommodates all users.
 - Policy T-1.2: Implement best practices to improve the pedestrian and bicycle environment.
 - Action T-1c: Prepare a Bicycle Master Plan to achieve a bike network that eliminates gaps where possible and creates a safe, convenient, low-stress system that connects bicyclists of all levels and abilities to destinations throughout the City.*
 - Action T-1d: Construct improvement projects identified in the Bicycle Master Plan.*
 - Action T-1e: Provide adequate public bike parking facilities throughout the City, including all public facilities and trail heads.*
 - Action T-1j: Seek opportunities to utilize light rail transit and railroad rights-of-way for enhanced bicycle and pedestrian connectivity.*
 - Action T-1k: Provide continuing education to members of the City's Bicycle and Pedestrian Advisory Committee (BPAC) on Complete Streets best practices and policies.*

- Goal T-2: Support a regional multimodal transportation system that meets regional transportation needs.

Policy T-2.1: Participate in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell's local transportation system for local users.

Action T-2c: Cooperate with the VTA, surrounding communities, and other agencies to establish and maintain regional bicycle and pedestrian facilities including off-road paths and trails utilizing creek, utility, and railroad rights-of-way that are safe and convenient for commuting and recreational use.

- Goal T-4: Implement Best Transportation Practices in New Developments.

Policy T-4.2: Require new developments and redevelopments to use best practices in providing pedestrian and bicycle connections between the sites and existing and planned facilities, including those identified in the Bicycle Master Plan, Pedestrian Master Plan, and other relevant plans and documents.

Action T-4f: Require new or redevelopment projects to provide logical, safe, and well-designed bicycle and pedestrian connections, with wayfinding signage, onsite between building entrances, parking areas, and walkways, and to existing or planned public right-of-way facilities that minimize public nuisance concerns as part of the Objective Standards update. Connect dead-end streets with pedestrian and bicycle paths in new developments.

Action T-4g: Require new or redevelopment projects to work with adjacent neighborhoods and jurisdictions to provide logical, safe, and well-designed bicycle and pedestrian connections that minimize public nuisance concerns.

Action T-4h: Maintain short-term and long-term bicycle parking standards over and above State minimum standards to provide ample bicycle parking in new developments as part of the City's efforts to facilitate multimodal transportation options and reduce vehicle miles traveled.

Pedestrian Evaluation

To accommodate future growth in the City of Campbell, the proposed Project includes a complete streets network, support for new and improved pedestrian facilities, and transportation policies, as cited above and listed below, to accommodate increased pedestrian demands generated by the anticipated land development. The proposed Project encourages walking by improving pedestrian facilities and connectivity with a safe and continuous pedestrian network to shorten walking distances and improve pedestrian connections to popular local destinations. Implementation of the proposed Project would not interfere with existing pedestrian facilities or conflict with planned pedestrian facilities or adopted pedestrian system plans, guidelines, policies, or standards. Furthermore, implementation of the proposed Project will create new pedestrian facilities and will have a beneficial effect on pedestrian circulation and access. Therefore, the implementation of the proposed Project would be considered a **less-than-significant** impact on pedestrian facilities, and no mitigation measures would be required.

GENERAL PLAN MINIMIZATION MEASURES

Applicable goals, policies, and actions related to the pedestrian system in the proposed Campbell General Plan Update are listed below. Goals, policies, and actions described in the **Transit Evaluation**, **Roadway Evaluation** and **Bicycle Evaluation** sections also apply to the pedestrian evaluation.

TRANSPORTATION ELEMENT

- Goal T-1: Create a Complete Streets network that accommodates all users.
 - Policy T-1.2: Implement best practices to improve the pedestrian and bicycle environment.
 - Action T-1f: Develop and implement a Pedestrian Master Plan to provide a safe and convenient pedestrian network connecting neighborhoods with destinations throughout the City and that is consistent with the City's ADA Implementation Plan. The Pedestrian Master Plan should include Safe Routes to School policies and procedures and evaluate enhancing Downtown public alleyways for pedestrian use.*
- Goal T-4: Implement Best Transportation Practices in New Developments.
 - Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.
 - Action T-4e: Incorporate pedestrian amenities such as plazas, landscaped areas with seating, and pedestrian walkways into new developments.*

Regional Transportation Plan/Sustainable Community Strategy Plan Consistency

The California Environmental Quality Act, Section 15125(d), requires an EIR to discuss inconsistencies between the proposed Project and applicable general and regional plans. The purpose of this section is to discuss the proposed Project's consistency with the local growth forecasts in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as *Plan Bay Area*,¹⁴ and to provide an analysis of the proposed Project's impacts on the housing and employment projections for the region. The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are the designated metropolitan

¹⁴ Metropolitan Transportation Commission, 2017. *Plan Bay Area 2040*. Available online at <http://2040.planbayarea.org/>.

planning organizations, and as such, are mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality.

As previously discussed, ABAG and MTC adopted an updated plan; *Plan Bay Area 2050* (October, 2021).¹⁵ While the plan has been adopted, it will take up to three years for the plan’s growth forecast to be integrated into MTC’s transportation model, after which updates to each county’s transportation model will take place. For these reasons, and for purposes of this analysis, *Plan Bay Area 2040* is the regional plan that forms the basis for population, housing, and employment forecasts in this analysis.

Population forecasts for the City of Campbell and surrounding area are provided by ABAG in the *Plan Bay Area Projections 2040* (November 2018) by jurisdiction. Table 3.14-9 shows the ABAG household population and employment forecasts for the City of Campbell for years 2020 and 2040.

TABLE 3.14-9: CITY OF CAMPBELL HOUSEHOLD POPULATION AND EMPLOYMENT GROWTH FORECASTS

FORECASTS	2020 [A]	2040 [B]	CHANGE [B-A=C]	PERCENT CHANGE [C/A]
Household Population	43,455	46,840	+3,385	+7.8%
Employment	29,870	32,745	+2,875	+9.6%

SOURCE: PLAN BAY AREA 2040 PROJECTIONS, NOVEMBER 2018.

The proposed Campbell General Plan Update includes land use designations that could accommodate up to 8,824 housing units by 2040, which is 7,185 more units than currently accommodated under the existing *City of Campbell General Plan*. This allocation of housing units will result in a projected household population increase of 22,203 in 2040. Further, the proposed Project is projected to generate approximately 6,194 employment opportunities by the buildout year. Table 3.14-10 identifies the change between Existing Conditions and the proposed Campbell General Plan Update compared to the ABAG household population and employment forecasts in *Plan Bay Area 2040*.

¹⁵ Metropolitan Transportation Commission, 2021. *Plan Bay Area 2050*. Available online at <https://www.planbayarea.org/finalplan2050>

3.14 TRANSPORTATION AND CIRCULATION

TABLE 3.14-10: CAMPBELL GENERAL PLAN BUILDOUT COMPARISON TO PLAN BAY AREA 2040 PROJECTIONS

FORECASTS	CAMPBELL GENERAL PLAN UPDATE		CITY OF CAMPBELL ABAG PLAN BAY AREA 2040 PROJECTIONS	
	EXISTING CONDITIONS ¹	CUMULATIVE (2040) WITH PROJECT CONDITIONS ¹	2020	2040
Household Population	42,730	64,930	43,455	46,840
Employment Population	30,570	36,760	29,870	32,745

NOTES:

HOUSEHOLD AND EMPLOYMENT POPULATIONS ROUNDED TO THE NEAREST 10.

SOURCE: FEHR & PEERS, 2022.

The proposed Project’s projected household and employment population will increase by 22,203 residents and 6,194 employees, respectively, compared to what is considered existing conditions. As identified in Table 3.14-10, the ABAG growth forecast for horizon year 2040 projected a household population increase of 3,385 residents and an employment population increase of 2,875 employees in the City of Campbell. Consequently, the Campbell General Plan Update will increase household and employment population by more than what is currently projected by ABAG. Therefore, the impact is ***significant-and-unavoidable***.

Other than the increased residential and employment projections associated with the proposed General Plan that exceed the assumptions and projections used by ABAG in Plan Bay Area 2040, the proposed General Plan would not otherwise conflict with this regional plan.

It is important to note that the proposed Project includes a Housing Element that was developed primarily in response to the Regional Housing Needs Allocation, or “RHNA”, allocated to the City of Campbell (via ABAG) to comply with California State planning law. The Housing Element portion of the General Plan addresses the City’s obligations and programs for the provision of its fair share of housing in California. The proposed Project would guide future residential growth consistent with Campbell’s RHNA obligations and would create opportunities to address the jobs/housing imbalance by providing a range of high-quality housing options and creating opportunities for affordable housing to be constructed. However, due to the fact that the General Plan projects residential and employment growth in excess of the projections for Campbell contained in Plan Bay Area 2040, the proposed project is in conflict with the projections contained in the relevant RTP/SCS, thus the impact is considered significant and unavoidable. The Campbell growth projections contained in Plan Bay Area 2040 were derived by ABAG from Campbell’s existing General Plan. Campbell is required to provide for adequate housing sites to meet its State-issued RHNA numbers, which necessitates that the City update its Land Use Map to provide for additional housing and growth potential in Campbell. This update to the Campbell Land Use Map, and the associated increase in growth potential is what is triggering this significant and unavoidable impact.

The only feasible mitigation to reduce this plan-level conflict would be to reduce future growth facilitated by the General Plan, which would fail to meet the requirements of State housing law, and would not meet the project objectives. As such, this approach is infeasible.

Impact 3.14-2: General Plan implementation would result in a significant VMT impact or be inconsistent with CEQA Guidelines section 15064.3, subdivision (a) (Significant and Unavoidable)

This section presents an analysis of the proposed Project’s impacts relative to VMT, including the daily VMT estimates for the VMT analysis. Under Cumulative (2040) with Project Conditions, the Project generated VMT per service population is used to evaluate the direct effects of the Project, while the boundary VMT in Santa Clara County is used to evaluate the project’s effect on VMT.

The results of the Project generated VMT analysis is presented in Table 3.14-11 and determined as follows:

- For the Cumulative (2040) with Project Conditions, the total citywide VMT per service population of **34.1** is greater than the applicable VMT threshold of 28.4 and would, therefore, be considered a **significant** impact.
- For the Cumulative (2040) with Project Conditions, the citywide home-based VMT per resident of 14.5 is greater than the applicable VMT threshold of 12.1 and would, therefore, be considered a **significant** impact.
- For the Cumulative (2040) with Project Conditions, the citywide home-based work VMT per employee of 15.5 is greater than the applicable VMT threshold of 12.0 and would, therefore, be considered a **significant** impact.

TABLE 3.14-11: PROJECT GENERATED VMT FOR VMT ASSESSMENT

<i>ITEM¹</i>	<i>EXISTING CONDITIONS</i>	<i>CUMULATIVE (2040) WITH PROJECT CONDITIONS</i>
City of Campbell Total VMT		
Total VMT (A)	2,446,780	3,468,760
Service Population (B) ²	73,300	101,690
Total VMT per Service Population (A/B=C)	33.4	34.1
Impact Assessment		
Total VMT per Service Population Threshold (28.4) (Impact Conclusion)		34.1 (20% greater than threshold) (Significant)
City of Campbell Home-Based VMT		
Home-Based VMT (E)	609,550	943,270

3.14 TRANSPORTATION AND CIRCULATION

<i>ITEM¹</i>	<i>EXISTING CONDITIONS</i>	<i>CUMULATIVE (2040) WITH PROJECT CONDITIONS</i>
Resident Population (F)	42,730	64,930
Home-Based VMT per Resident (E/F=G)	14.3	14.5
Impact Assessment		
Home-Based VMT per Resident Threshold (12.1) (Impact Conclusion)		14.5 (20% greater than threshold) (Significant)
City of Campbell Home-Based Work VMT		
Home-Based Work VMT (I)	430,900	568,470
Employee Population (J)	30,570	36,760
Home-Based Work VMT per Employee (I/J=K)	14.1	15.5
Impact Assessment		
Home-Based Work VMT per Employee Threshold (12.0) (Impact Conclusion)		15.5 (29% greater than threshold) (Significant)

NOTES:

ROUNDED RESIDENT POPULATION, EMPLOYEE POPULATION, SERVICE POPULATION AND VMT TO NEAREST 10. ROUNDED TOTAL VMT PER SERVICE POPULATION, HOME-BASED VMT PER RESIDENT, AND HOME-BASED WORK VMT PER EMPLOYEE TO THE NEAREST ONE-TENTH.

SERVICE POPULATION IS DEFINED AS THE SUM OF ALL EMPLOYEES AND RESIDENTS.

SOURCE: FEHR & PEERS, 2022.

Implementation of the proposed Campbell General Plan would result in excessive total VMT per service population, home-based VMT per resident, and home-based work VMT per employee under Cumulative (2040) with Project Conditions due to population and employment growth planned within the city and would, therefore, be considered a potentially significant impact.

VMT Mitigation

As shown in Table 3.14-11, a 20% reduction in total VMT per service population, a 20% reduction in home-based VMT per resident, and a 29% reduction in home-based work VMT per employee would be required to achieve the City's thresholds.

A goal of the proposed General Plan is to manage traffic demand and reduce VMT (Goal T-3). As described below, the City has included several policies and actions in the General Plan to reduce VMT to the greatest extent feasible.

A VMT mitigation program’s effectiveness depends on its scale (how much VMT the mitigation acts on) and its ability to reduce VMT in different VMT reduction programs. The biggest effects of VMT mitigation actions (and resultant emissions reductions) derive from statewide or region-wide policies that increase the cost, or reduce the convenience, of using vehicles. Other region-wide actions include improving land use location efficiency and infrastructure investments that support transit, walking, and bicycling. While there are many VMT mitigation actions that can influence VMT and emissions, individual site level VMT mitigation actions (such as TDM measures) typically have the smallest effect on VMT reductions because they are applied to new VMT generated by new buildings, while region-wide level programs have the greatest effect on VMT reduction. Additionally, the available research indicates that the effectiveness of TDM measures varies substantially depending on the context in which they are applied. TDM is most effective in urban areas where urban character (land use and built environment) and land use mix are most supportive of vehicle trip reduction. TDM programs are less effective in suburban areas where the built environment and transportation network are more dispersed and where modes are typically limited to personal vehicles. **Chart 3.14-1 below** presents a conceptual illustration of the relative importance of scale of Transportation-Related GHG Reduction Measures.

CHART 3.14-1:



Due to these individual site level implementation barriers, ad-hoc project-by-project mitigation is less effective at reducing VMT compared with larger scale community-wide level and region-wide VMT mitigation actions. The City of Campbell would require implementation of individual site level, community-wide, and region-wide VMT mitigation actions to reduce VMT. These mitigation actions

3.14 TRANSPORTATION AND CIRCULATION

may be implemented through TDM programs, a transportation management association (TMA) that runs a community-wide VMT mitigation actions, VMT caps, a VMT-based impact fee program, a VMT mitigation bank, a VMT mitigation exchange, in-lieu fee programs, and other land use project conditions to reduce VMT.

The City of Campbell's proposed General Plan includes Goal T-3 to manage traffic demand and reduce VMT. Policy T-3.2 identifies the desired policy outcomes of VMT in Campbell:

T-3.2 Implement VMT reduction measures, such as Transportation Demand Management (TDM) measures, and other strategies to reduce VMT in Campbell.

The proposed Campbell General Plan includes Action T-1.i to *“prepare a multimodal improvement plan to support buildout of the General Plan, update the City’s Capital Improvement Plan (CIP) to include, as appropriate, the identified improvements, and create and adopt a multimodal transportation impact fee (TIF) program to provide funding for the remaining improvements.”*

Additionally, a community-wide multimodal TIF program can be complemented by the emergence of a regional VMT mitigation program (e.g., VMT cap, VMT-based impact fee program, VMT mitigation bank, VMT mitigation exchange); however, the measured effects of these programs (and their ability to reach desired long-term land use outcomes) are largely unknown. Currently, no regional VMT mitigation programs exist in Santa Clara County; however, the VTA is currently evaluating different VMT mitigation program frameworks which may lead to a countywide or sub-regional VMT mitigation program.

In addition, to meet the desired policy outcome stated in Policy T-3.2, the City of Campbell's proposed General Plan includes Action T-3h, which requires Campbell to *“[u]pdate Chapter 10.42 of the Campbell Municipal Code (TDM Ordinance) to include specific thresholds and trigger points for when traffic analyses and TDM measures are required for development projects.”* As part of the update, Campbell's TDM Ordinance will need to provide a plan to reduce the amount of vehicle traffic generated by new and existing development in Campbell by shifting residents, employees, students, and visitors from driving-alone to using transit, carpooling, cycling, and walking modes. To that end, Campbell's TDM Ordinance will need to be updated to manage and monitor vehicle traffic with the primary performance standards of reducing VMT to achieve the City's VMT thresholds. To further evaluate the effectiveness of the TDM Ordinance, the monitoring should also observe performance measures of mode share and average vehicle occupancy, which are needed to determine the effectiveness of the TDM Ordinance and help identify additional VMT reducing measures.

The City's proposed General Plan also includes Action T-3j, which requires Campbell to *“[c]reate and adopt a VMT reduction program and consider adoption of a VMT mitigation fee program to provide funding for the improvements identified in the VMT reduction program. The VMT reduction program should include strategies targeting VMT reductions at the site level, community level, and regional*

level; should be based on emerging best practices; and should leverage and compliment ongoing regional efforts to reduce VMT.”

In preparing the VMT reduction program identified under General Plan Action T-3j, the City could consider identifying a menu of built environment and TDM mitigation strategies contained in the California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (December 2021)¹⁶ based on how the land use context, and potential land use changes, in Campbell could influence each strategy’s effectiveness. Potential TDM mitigation strategies organized by their relative scale of for implementation (i.e., individual site level, community-wide level, region-wide level) from the *CAPCOA Handbook* that City could take to directly or in partnership with other jurisdictions in Santa Clara County or the Bay Area region include:

Individual Site Level

- Implement Commute Trip Reduction (CTR) Program (Mandatory Implementation and Monitoring): Employer program designed to discourage single-occupancy vehicle trips with mandatory trip reduction requirements, penalties for non-compliance, and regular monitoring and reporting. CTR programs must include a commute trip reduction marketing strategy, employer-provided service, infrastructure, and incentives for alternative modes such as ridesharing, discounted transit passes, end-of-trip bicycle facilities, employer-sponsored vanpool service, and guaranteed ride home program,
- Price Workplace Parking: Price onsite parking at workplaces.
- Implement Employee Parking Cash-Out: Employers provide employees with the option of forgoing their current subsidized/free parking for a cash payment equivalent to or greater than the cost of the parking space.

Community-Wide Level

- Implement On-Street Market Price Public Parking: Price all on-street parking in a given community, with a focus on parking near central business districts, employment centers, and retail centers.
- Unbundle Residential Parking and Property Cost: Sell or lease parking separately from the housing unit.
- Implement Transit-Supportive Roadway Treatments: Roadway infrastructure improvements and/or traffic signal modifications to improve transit travel times and reliability.

¹⁶ California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (December 2021). Available at: https://www.calemod.com/handbook/full_handbook.html

3.14 TRANSPORTATION AND CIRCULATION

- Implement Conventional Carshare Program: Increase carshare access in the community by deploying conventional carshare vehicles, which provide people convenient access to a vehicle for personal or commuting purposes.

Regional-Wide Level

- Increase Residential and Job Density: Increasing density of land uses affect the distance people travel and provide greater options for the mode of travel they choose.
- Extend Transit Network Coverage or Hours: Expand the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service.

When making a VMT impact determination, other available evidence related to VMT trends in California was considered. Specifically, CARB's *2017 Climate Change Scoping Plan Update*¹⁷ and *Draft 2022 Scoping Plan Update*¹⁸, which assumes that all of the regions in the state will meet the GHG reduction targets set in their Regional Transportation Plans and Sustainable Communities Strategies (RTP/SCS), thus far indicates that not all regions are meeting those targets, and vehicular travel in California (at least prior to the COVID-19 pandemic) has been increasing rather than decreasing over the past several years (see CARB's *Improved Program Measurement Would Help California Work More Strategically to Meet Its Climate Change Goals*, February 2021, and CARB's *2018 Progress Report: California's Sustainable Community and Climate Protection Act*, November 2018). Additionally, declining transit ridership trends¹⁹ in Santa Clara County (at least prior to the COVID-19 pandemic) suggest that the supportive policies at all levels may not be effective at increasing transit ridership and decreasing VMT. This is because limited facilities exist that prioritize travel by high occupancy vehicles and many of the vehicles (i.e., private vehicles and public transit) on the roadway in Santa Clara County have limited capacity since roadways are routinely filled up during peak periods by vehicles with poor seat utilization (i.e., most of the vehicle seats are empty). Therefore, public transit in Santa Clara County often experiences poor qualities of experience, which contributes to lower transit demand and higher demand for vehicle use contributing to higher VMT. Further, this VMT analysis does not account for any future increases in the use of TNCs (such as Uber and Lyft) or commercial delivery services, nor does it envision the potential for development of autonomous vehicles or any other emerging transportation innovations. These emerging transportation innovations will alter the effectiveness of VMT mitigation action, some increasing VMT reduction effectiveness while others decreasing VMT reduction effectiveness.

¹⁷ California Air Resources Board's *2017 Climate Change Scoping Plan Update: The Strategy for Achieving California's 2030 Greenhouse Gas Target* (January 2019)

¹⁸ California Air Resources Board's *Draft 2022 Scoping Plan Update* (May 2022)

¹⁹ Santa Clara Valley Transportation Authority. Annual Report 2019. Available online at https://www.vta.org/sites/default/files/2020-04/AnnualReport2019_Accessible.pdf

Based on the discussion above, there is growing evidence that demonstrates the challenge of reducing VMT when background conditions are contributing to higher VMT generation rates, suggesting greater action is needed by the state to meet the state's GHG and VMT reduction goals. Without further action by the state to discourage vehicle travel (i.e., increasing the cost of driving and providing provisions for bus services to avoid congestion delays) while reducing the barriers or constraints that prevent more efficient use of vehicles and greater use of transit, walking, and bicycling, VMT trends are unlikely to reverse, regardless of the steps and measures the City implements through its Land Use map and General Plan transportation policies.

In summary, the Campbell General Plan Update includes goals, policies, and actions, such as implementing a multimodal transportation impact fee (TIF) program, updating Campbell's TDM Ordinance, and establishing a new VMT fee and VMT reduction program. These goals, policies, and actions are designed to reduce VMT and would help to reduce the severity of these significant impacts to the greatest extent feasible.

Additionally, the City has prepared a new Land Use Map, which prioritizes notably higher residential densities than those currently allowed in Campbell, provides additional opportunities for more mixed use residential development, and prioritizes development near transit stations. From a land use planning perspective, the City has been very proactive in promoting a land use pattern that provides convenient access to transit, places jobs, services, and housing in close proximity, and establishes residential densities that provide for dense and walkable neighborhoods. These land use strategies represent some of the most effective tools available to Campbell to reduce VMT through sound land use planning.

The proposed General Plan policies, land use forecasts, and targeted areas for growth are the result of an extensive outreach process among staff, policymakers, and the public to arrive at a solution that balances competing concerns about accommodating housing growth, jobs growth, and quality of life. The General Plan goals, policies, and actions will achieve meaningful reductions in VMT generated by land uses within the City. However, as previously discussed, major reductions in VMT would be required to achieve thresholds shown in Table 3.14-11. The City at this time cannot demonstrate that VMT will be reduced to the degree that is needed to meet these thresholds.

VMT reduction depends on several factors such as demographic change, household preferences for housing types and locations, the cost of fuel, and the competitiveness of regional transit relative to driving. Improving regional transit relative to driving relates to congestion along vehicular commute routes that are not under the City's jurisdiction, as well as transit provided by agencies other than the City. Additionally, no county-wide or region-wide VMT mitigation program currently exist.

As described above, the City of Campbell's proposed General Plan includes a comprehensive approach to reducing VMT through the implementation of numerous policies and actions, and through the establishment of a Land Use Map that prioritizes higher density development near transit stations. However, in order to reduce VMT to a less than significant level, the City must rely on additional assistance from regional and state-level agencies to affect major changes in driving

patterns and behaviors throughout the greater Bay Area region. The biggest effects of VMT mitigation actions (and resultant emissions reductions) derive from statewide or region-wide policies that increase the cost, or reduce the convenience, of using vehicles. The City of Campbell cannot effectively or practically implement statewide or region-wide policies, other than to be supportive of and complimentary to these efforts in the City's General Plan, which the City has done, as described above. There are no additional feasible mitigation strategies available to the City to reduce this impact to a less than significant level. Therefore, implementation of the proposed Project would result in a VMT impact that would be considered ***significant-and-unavoidable***.

GENERAL PLAN MINIMIZATION MEASURES

Applicable goals, policies, and actions designed to reduce VMT in the proposed Campbell General Plan are listed below. Goals, policies, and actions described in the Plan Conflict Evaluation section also reduce VMT impacts.

TRANSPORTATION ELEMENT

- Goal T-3: Manage Traffic Demand and Reduce Vehicle Miles Traveled (VMT).

Policy T-3.1: Continue to use established vehicle miles traveled (VMT) metric(s), evaluation method(s), and significance threshold(s) that comply with state law such as SB 743.

Policy T-3.2: Implement VMT reduction measures, such as Transportation Demand Management (TDM) measures, and other strategies to reduce VMT in Campbell.

Policy T-3.4: Support programmatic Transportation Demand Management (TDM) measures to reduce traffic demand in Campbell. Examples include but are not limited to measures such as alternative work schedules, subsidized transit passes, and future measures as programs and technologies evolve.

Action T-3a: Maintain and implement vehicle miles traveled (VMT) metrics, evaluation methods, and significance thresholds consistent with the requirements of state law, such as SB 743. Apply these VMT standards during the CEQA review of future development projects in Campbell.

Action T-3b: Incentivize high-density transit-oriented developments, consistent with the Land Use Map, near light rail stations.

Action T-3g: Support and encourage effective programmatic Transportation Demand Management (TDM) measures for private developments consistent with proposed uses. These could include, but are not limited to, measures such as alternative work schedules, subsidized transit passes, and future measures as programs and technologies evolve. Encourage major employers (employers with over 100 employees) to develop shuttle services to transport employees to and from the worksite. Entities may form transportation management associations (TMAs) to pool resources to fund TDM measures.

Action T-3h: Update Chapter 10.42 of the Campbell Municipal Code (TDM Ordinance) to include specific thresholds and trigger points for when traffic analyses and TDM measures are required for development projects.

Action T-3i: Advertise ways to travel to and within Campbell via transit, biking, walking, and other modes that reduce traffic. Potential methods of advertisement may include, but are not limited to:

- *Information and links on the City's website;*
- *Wayfinding signs indicating routes and travel times by mode of transit;*
- *Postings and flyers at public buildings, parks facilities, and transit stops; and*
- *Other methods and strategies that the City determines will be successful and cost effective.*

Action T-3j: Create and adopt a VMT reduction program and consider adoption of a VMT mitigation fee program to provide funding for the improvements identified in the VMT reduction program. The VMT reduction program should include strategies targeting VMT reductions at the site level, community level, and regional level; should be based on emerging best practices; and should leverage and compliment ongoing regional efforts to reduce VMT.

- Goal T-4: Implement Best Transportation Practices in New Developments.

Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.

Action T-4j: For new businesses with 50 or more full-time employees, require Transportation Demand Management (TDM) related site design measures such as showers and changing facilities, designated carpool and van pool parking, and on-site amenities (e.g. food service, fitness center, ATM). Require TDM reports per the Campbell Municipal Code.

Project's Effect on VMT (Using Boundary VMT)

To evaluate the Project's effect on VMT between the Cumulative (2040) and Cumulative (2040) with Project Conditions, the boundary VMT is divided by the service population (sum of residential population, and employment population). The growth in boundary VMT captures the combined effect of:

- shifting existing VMT due to land use and transportation network changes in Santa Clara County,
- shifts in existing traffic to alternate travel routes or modes, and
- new VMT from additional land use development in Santa Clara County.

The results of the analysis addressing the Project's effect on VMT under Cumulative (2040) and Cumulative (2040) with Project Conditions are presented in Table 3.14-12. Under Cumulative (2040) with Project Conditions, the Santa Clara County boundary VMT per service population of 12.7 does

3.14 TRANSPORTATION AND CIRCULATION

not exceed the applicable VMT threshold of 12.7. The Project effects are likely to be localized near the City of Campbell and would have very little, if any, effects on Santa Clara County boundary VMT per service population. Therefore, the impact of the Project's effect on VMT under Cumulative (2040) with Project Conditions, using Boundary VMT, would be *less-than-significant*.

TABLE 3.14-12: PROJECT'S EFFECT ON VMT (USING BOUNDARY VMT) FOR VMT ASSESSMENT

Item	Cumulative (2040) without Project Conditions ¹	Cumulative (2040) with Project Conditions ¹
Santa Clara County		
Boundary VMT (A)	49,020,360	49,156,530
Service Population (B) ²	3,851,070	3,867,210
Boundary VMT per Service Population (A/B=C)	12.7	12.7
Impact Assessment		
Boundary VMT per Service Population Threshold (12.7)		12.7
	(Impact Conclusion)	(Less-Than-Significant)

NOTES:

ROUNDED RESIDENT POPULATION, EMPLOYEE POPULATION, SERVICE POPULATION AND VMT TO NEAREST 10. ROUNDED BOUNDARY VMT PER SERVICE POPULATION TO THE NEAREST ONE-TENTH.

SERVICE POPULATION IS DEFINED AS THE SUM OF ALL EMPLOYEES AND RESIDENTS.

SOURCE: FEHR & PEERS, 2022.

Impact 3.14-3: General Plan implementation would not substantially increase hazards due to a geometric design feature or incompatible use (Less than Significant)

The proposed Project would have a significant impact relative to hazards if it would substantially increase hazards due to a roadway geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Safety impacts may occur due to changes in the physical or operational conditions of the transportation network. Physical impacts may be related to changes in the land use context along a roadway such that the volume, mix, or speed of traffic was not anticipated as part of the original multimodal transportation network design. To address potential safety impacts, subsequent projects under the Campbell General Plan Update—including any new roadway, bicycle, pedestrian, and transit infrastructure improvements—would be subject to, and designed in accordance with, City standards and specifications, which address potential design hazards including sight distance, driveway placement, and signage and striping. Additionally, any new transportation facilities, or improvements to such facilities, associated with subsequent projects would be constructed based on industry design standards and best practices consistent with the City's zoning code and building design and inspection requirements. The City's evaluation of projects' access and circulation will incorporate analysis with respect to City standards

for vehicular level of service and queuing, as well as for service to pedestrians, bicyclists, and transit users. Therefore, the proposed Project would result in a ***less-than-significant*** impact to transportation hazards.

GENERAL PLAN MINIMIZATION MEASURES

Applicable goals, policies, and actions related to hazards and safety in the proposed General Plan are listed below. Goals, policies, and actions described in the Plan Conflict Evaluation and Vehicle Miles Traveled (VMT) Analysis sections also minimize the proposed Project's effects on hazards.

TRANSPORTATION ELEMENT

- Goal T-4: Implement Best Transportation Practices in New Developments.

Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.

Action T-4i: Design parking lots to minimize impacts on the street system by providing adequately sized driveways, sufficient queuing, and efficient circulation.

- Goal T-6: Provide well-maintained and safe streets.

Policy T-6.1: Ensure all City roads are maintained and repaired in a timely fashion.

Policy T-6.2: Consider all transportation improvements as opportunities to improve safety, access, and mobility for all roadway users.

Policy T-6.3: Coordinate pedestrian and bicycle facility improvements and "road diet" reconfigurations with pavement improvement projects (e.g. repaving and restriping) to the greatest extent feasible and while taking into consideration potential secondary effects or unintended impacts.

Policy T-6.4: Maximize the use of grant sources to provide ongoing maintenance, operation, and management of the City's circulation network.

Action T-6a: Develop and implement a traffic safety plan aimed at reducing roadway collisions to the greatest extent feasible. The traffic safety plan may include, but is not limited to, the use of radar speed signs, more aggressive road safety and speed enforcement, and other measures deemed effective by the City. The traffic safety plan should be coordinated with and consistent with the Neighborhood Traffic Calming Program (NTCP) to the greatest extent feasible, and may be integrated into other City plans and programs, as deemed appropriate.

Action T-6b: Promote and support Safe Routes to School policies and programs for all schools serving Campbell, including safe and convenient walking and bicycle connections.

Action T-6c: Assess street conditions and prioritize repairs while balancing the needs of the community using input from the City's Pavement Management System.

Action T-6d: Maintain a Pavement Condition Index (PCI) of 70 or better for all streets under Campbell's jurisdiction.

Action T-6e: Where feasible, coordinate pedestrian and bicycle facility improvements and “road diet” reconfigurations with roadway maintenance activities so that they can be implemented in a cost-effective manner.

Action T-6f: Limit unnecessary utility cuts and trenching in the public right of way and promote coordinated installation between multiple utility providers.

Action T-6g: Install, maintain, and repair city-wide street lighting as needed to provide a safe environment, without negatively impacting neighborhood character.

Action T-6h: Street maintenance should include upkeep and regular cleaning of bicycle routes to remove debris and repair poor pavement conditions that discourage bicycle riding.

Action T-6i: Continually seek opportunities to fund maintenance of the circulation network, including the active pursuit by the Public Works Department of a wide range of grant sources overseen by MTC and other agencies.

Impact 3.14-4: General Plan implementation would not result in inadequate emergency access (Less than Significant)

For this analysis, a significant impact would occur if the proposed Project or an element of the Project would result in inadequate emergency access. There are no specific development projects associated with the Campbell General Plan Update; thus, specific sites developed under the proposed Project cannot be analyzed for adequacy of emergency access at this time. However, since the City maintains the roadway network, emergency access to new development sites proposed under the Project would be subject to review by the City of Campbell (in accordance with industry design standards, including the City of Campbell Standard Specifications (2022) and responsible emergency service agencies, ensuring the projects would be designed to meet all emergency access and design standards. The City also requires the preparation of construction management plans that minimize temporary obstruction of traffic during site construction.

Additional vehicles associated with new development sites could increase delays for emergency response vehicles during peak commute hours. However, emergency responders maintain response plans which include use of alternate routes, sirens, and other methods to bypass congestion and minimize response times. In addition, California law requires drivers to yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicle passes to ensure the safe and timely passage of emergency vehicles.

Based on the above considerations, adequate emergency access would be provided to new development sites, and the impact would be *less-than-significant*.

General Plan Minimization Measures

Applicable goals, policies, and actions related to emergency access in the proposed General Plan are listed below. Goals, policies, and actions described in the Plan Conflict Evaluation, Vehicle Miles

Traveled (VMT) Analysis, and Hazard Impact Assessment sections also minimize the proposed Project's effects on emergency access.

TRANSPORTATION ELEMENT

- *Goal T-4: Implement Best Transportation Practices in New Developments.*

Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.

Action T-4k: Require all new developments to provide adequate emergency access.

This page left intentionally blank

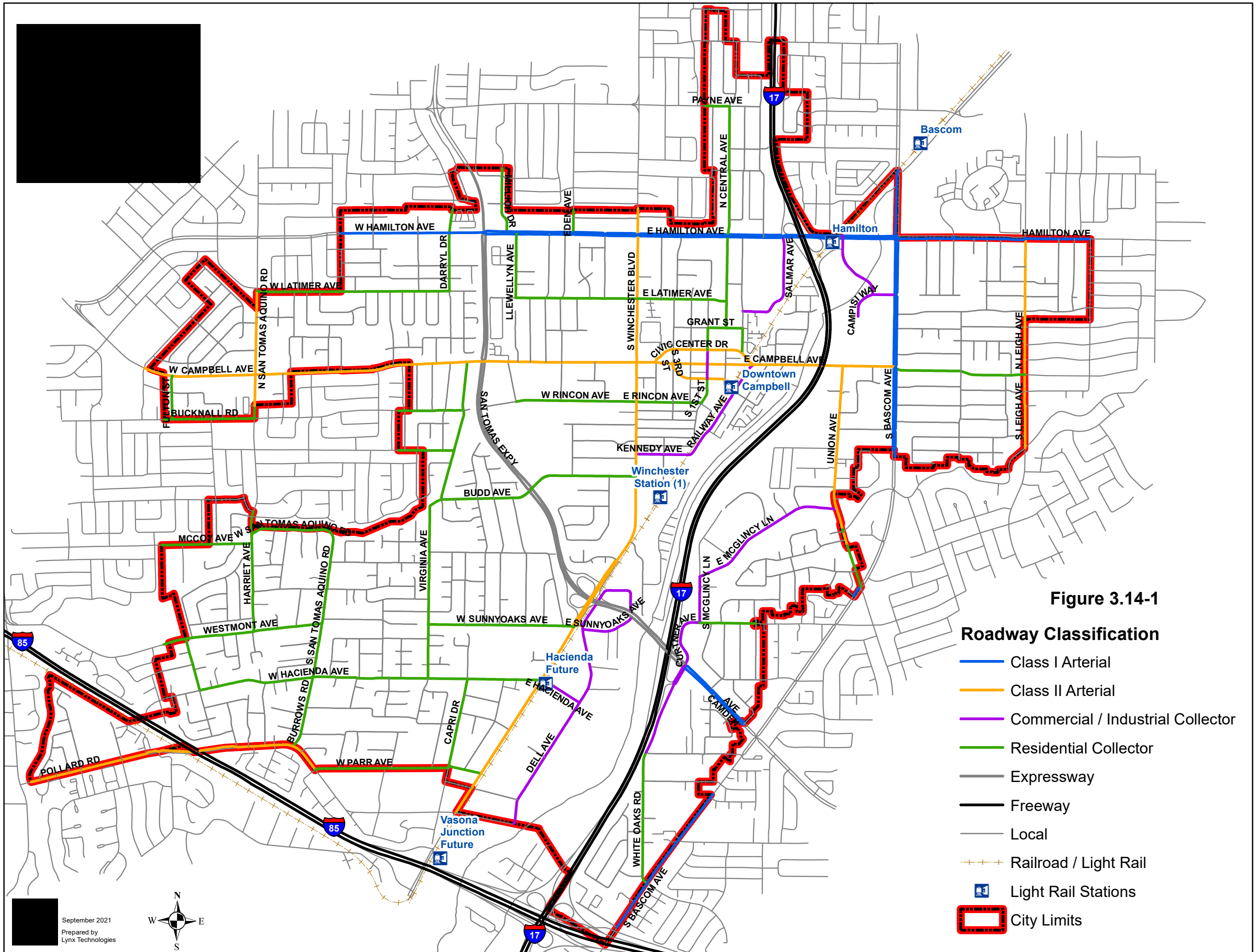


Figure 3.14-1

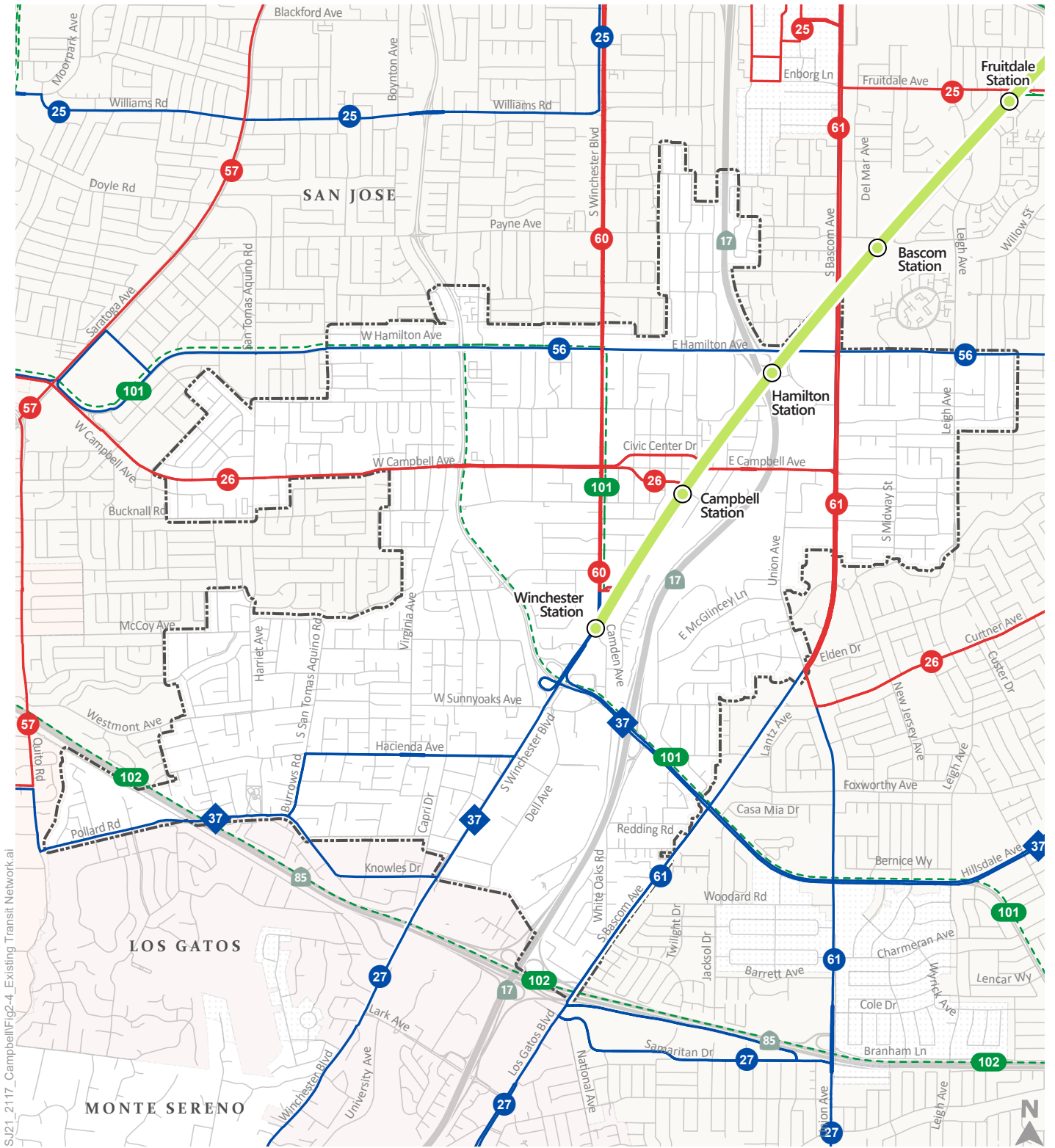
- Roadway Classification**
- Class I Arterial
 - Class II Arterial
 - Commercial / Industrial Collector
 - Residential Collector
 - Expressway
 - Freeway
 - Local
 - Railroad / Light Rail
 - 🚊 Light Rail Stations
 - 📐 City Limits

September 2021
Prepared by
Lynx Technologies



0 1,500 3,000 6,000 Feet

This page left intentionally blank



S:\J21_2117_Campbell\Fig2-4_Existing Transit Network.kat

City of Campbell





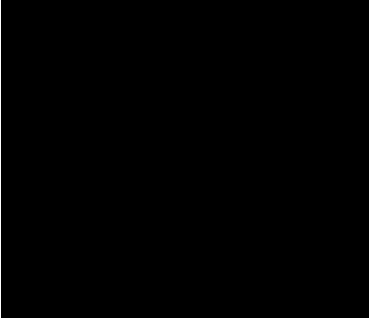
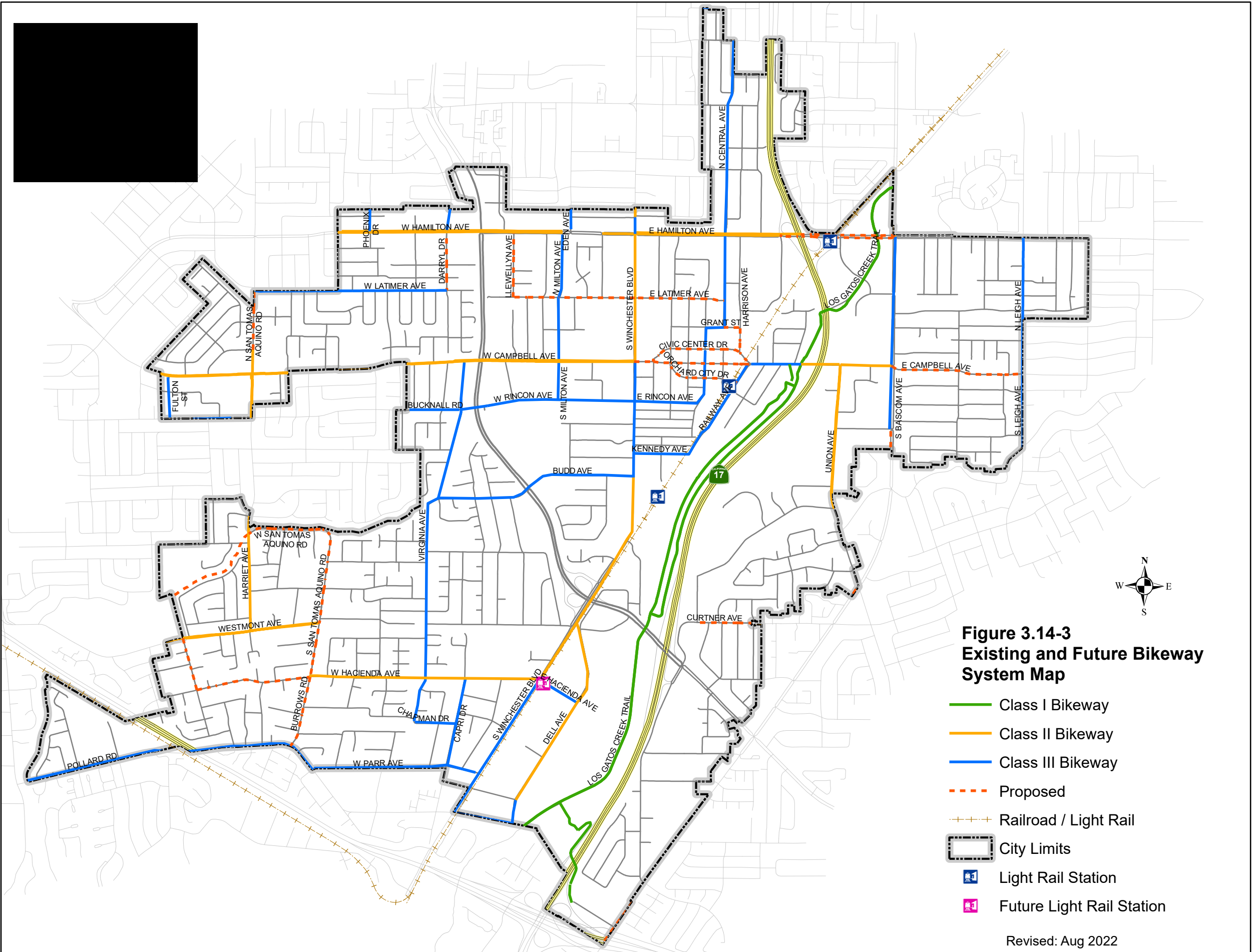
- Transit Type
-  Light Rail Train
 -  Community/Local Bus Service
 -  Express Bus Service
 -  Frequent Bus Service



Figure 3.14-2
Existing Transit Network

This page left intentionally blank

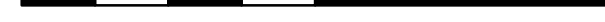


**Figure 3.14-3
Existing and Future Bikeway
System Map**

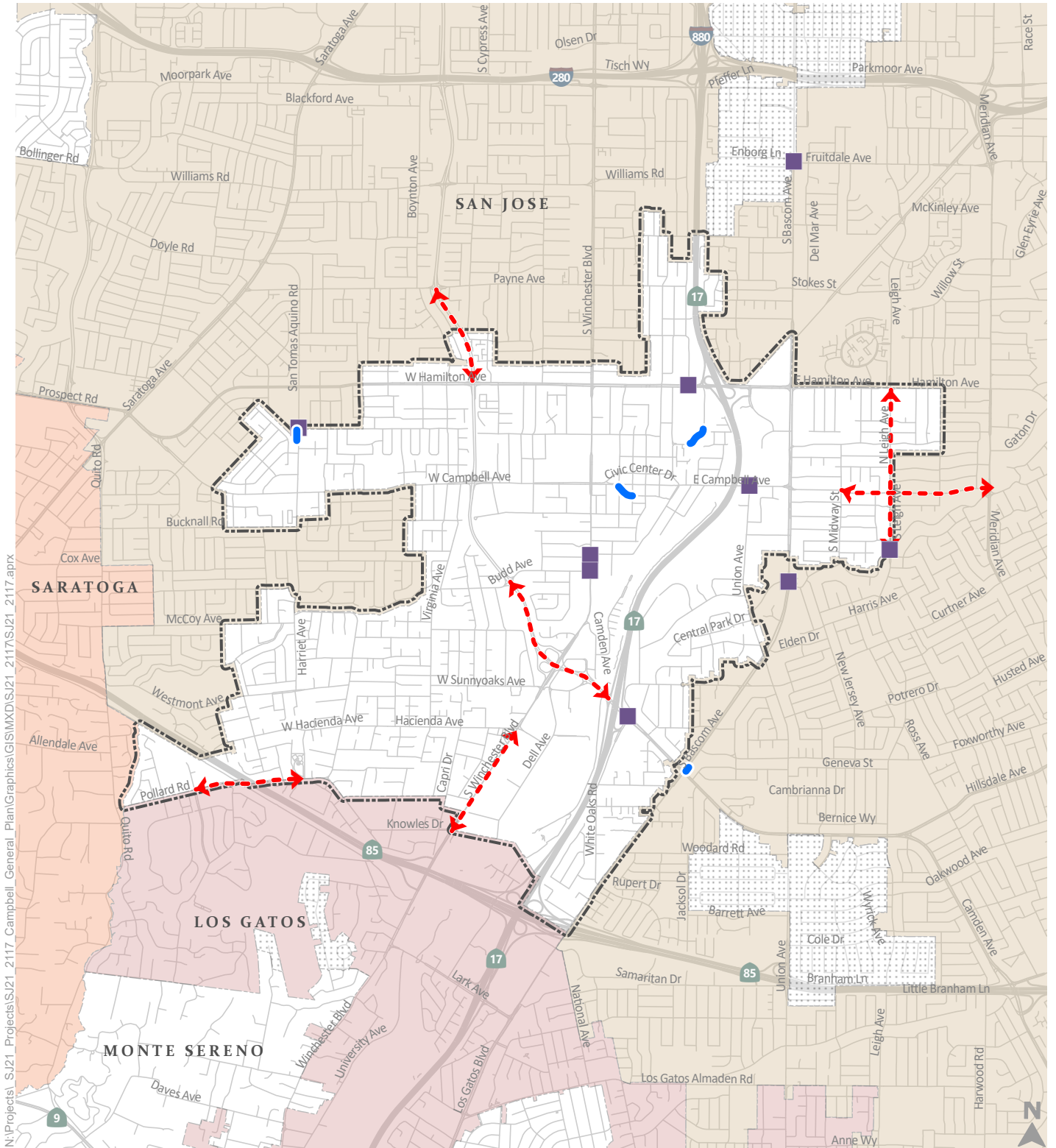
- Class I Bikeway
- Class II Bikeway
- Class III Bikeway
- - - Proposed
- - - - Railroad / Light Rail
- ⬡ City Limits
- 🚊 Light Rail Station
- 🚊 Future Light Rail Station

Revised: Aug 2022


0 1,500 3,000 6,000 Feet





This page left intentionally blank




N:\Projects\ SJ21 Projects\ SJ21 2117_Campbell_General_Plan\Graphics\GIS\MXD\SJ21_2117\SJ21_2117.aprx

 City of Campbell

 Sidewalk/Crosswalk Gaps

 Distance Between Marked Crosswalks Greater than 1/2 Mile

 Sidewalk Gaps



 Signalized Intersection
 Missing Marked Crosswalk on 1 or More Legs

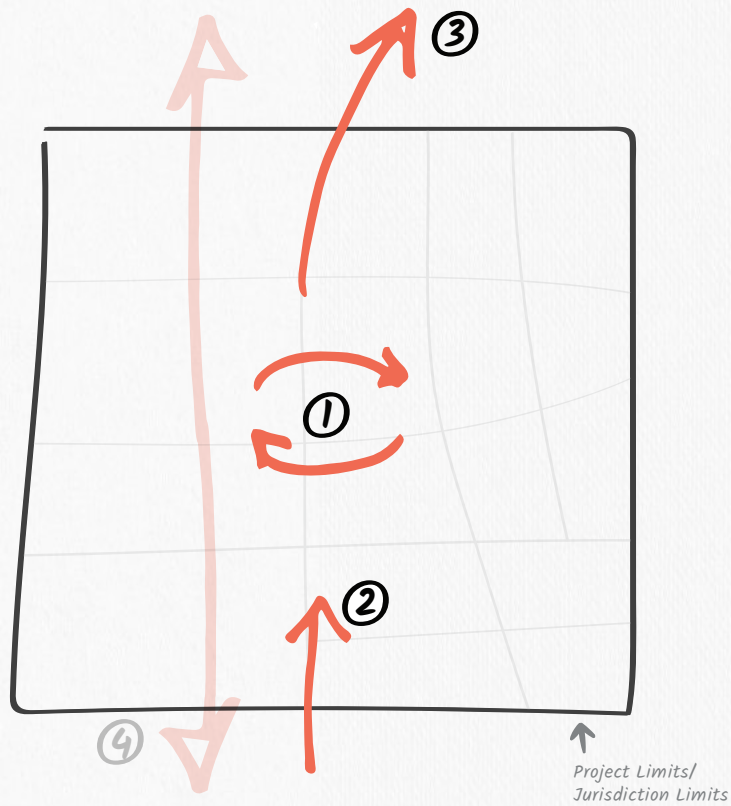


Figure 3.14-4

Gaps in Pedestrian Facilities

This page left intentionally blank

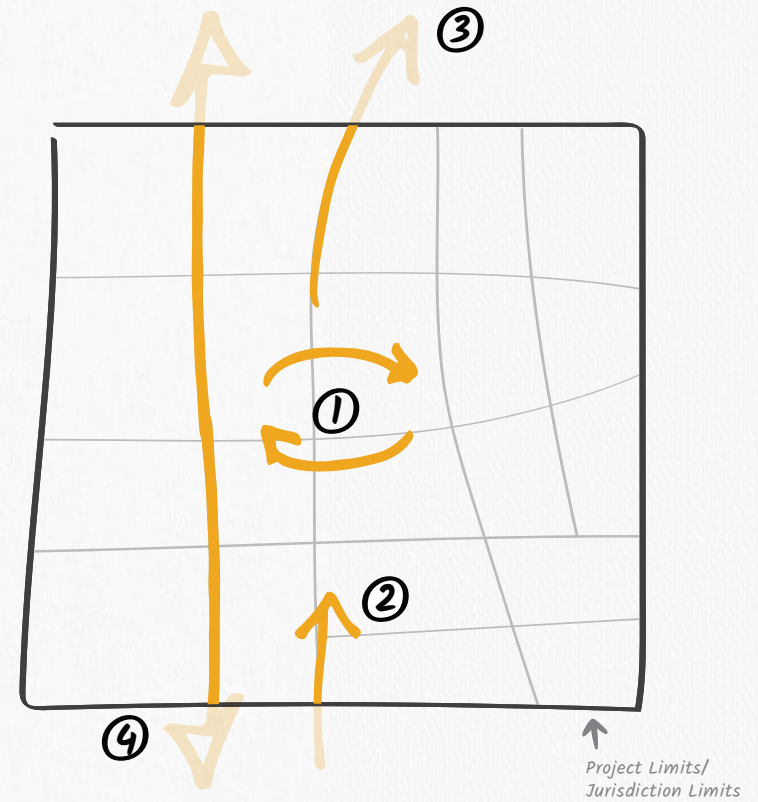
Project Generated VMT



- ① 2x Internal to Internal (2xII) VMT
- ② External to Internal (XI) VMT
- ③ Internal to External (IX) VMT
- ④ External to External (XX) VMT

Notes: External to External (XX) trips are excluded from this VMT metric.
Adjustments to project generated VMT made to include the full length of trips that leave the jurisdiction to capture inter-jurisdiction travel.

Project Effect on VMT (Boundary VMT)



- ① Internal to Internal VMT
- ② External to Internal (XI) VMT
- ③ Internal to External (IX) VMT
- ④ External to External (XX) VMT

Notes: Boundary VMT is all the VMT within the jurisdictional boundary. Transparent portions of arrows 2, 3 and 4 are not included in the VMT metric.



Figure 3.14-5

Measuring Vehicle Miles Traveled (VMT)

This page left intentionally blank

Utilities are critical to providing safe drinking water, disposal and treatment of wastewater, stormwater drainage, and solid waste disposal. This section provides a background discussion of the utility systems in Campbell including water supplies, wastewater, storm drainage, and solid waste. This section is organized with an existing setting, regulatory setting, and impact analysis.

Notice of Preparation (NOP) comments were received regarding this environmental topic. The San Jose Water Company (Valley Water) provided comments related to water supplies, groundwater recharge, storm water quality, and the need for future coordination to ensure that there are adequate water supplies to serve existing and future development. Additionally, verbal comments were received during the Planning Commission (PC) Scoping Meeting, including topics related to water resources and utilities. All comments received during the NOP comment period are included in Appendix A of this Draft EIR.

3.15.1 WATER SUPPLIES

This section describes the City of Campbell's water demands, water supplies, water quality, water distribution system, and relevant regional plans. Water supplies and water distribution infrastructure to the City of Campbell are provided by the San Jose Water Company (SJW). Much of the information and analysis contained in this section is derived from the May 2022 City of Campbell General Plan Update Water Supply Assessment (WSA), prepared by SJW, which is included as Appendix D.

KEY TERMS

Acre feet: The volume of one acre of water to a depth of one foot. Each acre-foot of water is equal to approximately 325,851.4 gallons.

BGS: Below ground surface.

GPD: Gallons per day.

GPM: Gallons per minute.

GPCD: gallons per capita per day

Groundwater: Water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth's surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called "aquifers" and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

MG: Million gallons

MGD: Million gallons per day

Surface water: Water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is replenished naturally through precipitation, but is lost naturally through evaporation and seepage into soil.

WATER DISTRIBUTION SYSTEM BY UTILITY DISTRICT

SJWC owns and operates its water distribution system consisting of a pipe network, which lies predominantly beneath the traveled roadways in the public street rights-of-way. SJWC's distribution system has interties with other water retailers in the San Jose area that serve as another potential supply source. However, in order for SJWC to meet projected supply, the SJWC 2020 UWMP identifies the need for construction of several future water facility projects, including:

- New, higher capacity, replacement groundwater wells are planned in order to meet the demands of planned developments within SJWC's service area. The SJWC UWMP proposes replacing two wells per year.
- Construction of desalination and water recycling projects.

The SCVWD's water supply system is comprised of storage, conveyance, recharge, treatment and distribution facilities that include local reservoirs, the groundwater basin, groundwater recharge facilities, treatment plants, imported supply, and raw and treated water conveyance facilities.

In early 2010, the District Board of Directors and the San Jose City Council executed a 40-year long-term agreement with the City of San Jose on the ownership of an advanced recycled water treatment facility, operation and maintenance of recycled water facilities, and future expansion that most effectively meets the needs of the community, and may include the proposed use of recycled water to replenish local groundwater aquifers¹.

Each year, the city prepares a comprehensive five-year capital improvement program (CIP) identifying all major City capital improvements to be implemented within the five-year horizon.

WATER DEMANDS

The SJWC provides the water supply for potable water and fire suppression in the City. SJWC's service area encompasses 139 square miles, including most of San Jose, most of Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, the Town of Los Gatos, and parts of unincorporated Santa Clara County. The SJWC provides water to about one million residents of Santa Clara County since established in 1866. Most of the service area is built out and new development is primarily urban infill projects. Additionally, the SJWC owns and operates the water distribution system serving the City. The regional wholesale supplier of water to the South Bay Area, which includes the SJWC, is the Santa Clara Valley Water District (SCVWD, or Valley Water), which derives water from local, recycled, and imported supplies.

¹ SCVWD. 2011. Urban Water Management Plan (2010), Chapter 7

Most of SJWC's customers within its 139-square-mile service territory are residential or commercial. SJWC also provides water to industrial, municipal, and private fire services and public fire protection services. SJWC's total demand is the sum of projected metered demand plus 7 percent of that amount for non-revenue water, which includes authorized unmetered uses for firefighting, main flushing and public use and unauthorized use due to meter reading discrepancies, reservoir cleaning, malfunctioning valves, leakage, and theft.

SJWC has developed demand projections from 2015 to 2040 primarily based on population and per capita usage projections. In projecting demands, all population growth after 2010 was assumed to be within new, high water efficiency developments with a demand of 100 gallons per capita per day (gpcd), which is the approximate per capita demand seen in newer developments in SJWC's service area.

For the already-existing population in 2010, per capita usage from 2015 to 2040 was assumed to be similar to that which was observed in 2010. Per capita usage in 2010 was slightly above 126 gpcd, which is much lower than the 10-year SB x7-7 baseline gpcd from 1995 to 2004 of 154 gpcd. It is not anticipated that the per capita usage can or will continue to decrease at such a rapid rate. However, due to ongoing conservation efforts such as the installation of low-flow showerheads, faucet aerators, high efficiency toilets and clothes washers, as well as changes in landscape plant choice and continual efforts to reduce leakage and runoff, it is expected that the per capita usage for the existing 2010 population will experience a steady decline of 0.2 percent per year until 2040.

Coupling projected demand increases due to population growth with anticipated demand decreases due to conservation efforts, it is estimated that in 2040 SJWC's demand will be approximately 114 gpcd, with a system-wide potable and raw water demand of approximately 144 million gallons per day (MGD).

SJWC's total water demand in 2015 was 35,729 million gallons (MG), or 109,648.3 acre-feet (AF). The predominant users were single family residential and industrial uses.

The projected 2040 demand is estimated to be an increase of 1,823 MG, or 5,594.6 AF, over the 2035 demand resulting in a total of 52,486 MG, or 161,073.6 AF. The projected increase in total demand between 2020 and 2040 is 8,069 MG, or 24,762.9 AF. The 2015 UWMP indicates SJWC has adequate water supply plans to meet the referenced demand forecasts.

WATER SUPPLIES

The SJWC has three sources of potable water supply: groundwater, imported treated surface water, and local surface water. Non-potable recycled water is a fourth and growing source of supply.

This section describes and quantifies the current and projected sources of water available to SJW. A description and quantification of recycled water supplies is also included.

Imported Treated Surface Water – On average, purchased water from Valley Water makes up over half of SJW's total water supply. This water originates from several sources including Valley Water's

local reservoirs, the State Water Project and the federally funded Central Valley Project San Felipe Division. Water is piped into SJW’s system at various turnouts after it is treated at one of three Valley Water-operated water treatment plants. In 1981, SJW entered into a 70-year master contract with Valley Water for the purchase of treated water. The contract provides for rolling three-year delivery schedules establishing fixed quantities of treated water to be delivered during each period. SJW and Valley Water currently have a three-year treated water contract for fiscal years 2020/2021 – 2022/2023, with contract supplies of 70,723 AF in 2020/2021, 70,723 AF in 2021/2022, and 71,858 AF in 2022/2023. The actual amount of water delivered depends on considerations including hydrologic variability, interruptions in Valley Water facility operations, and water quality.

Groundwater – SJW draws water from the Santa Clara Subbasin, which is part of the larger Santa Clara Valley Basin. The Santa Clara Subbasin consists of unconsolidated alluvial sediments and covers a surface area of 297 square miles in the northern part of Santa Clara County. The subbasin is not adjudicated. Valley Water is responsible for maintaining the subbasin and ensuring the subbasin does not become overdrafted. Aquifers in the subbasin are recharged naturally by rainfall and streams and artificially mainly by recharge ponds operated by Valley Water. Due to different land use and management characteristics, Valley Water further delineates the Santa Clara Subbasin into two groundwater management areas: the Santa Clara Plain and Coyote Valley. SJW draws groundwater from the Santa Clara Plain portion, which covers a surface area of 280 square miles and has an operational storage capacity estimated to be 350,000 AF.

On average, groundwater from the subbasin accounts for 30 to 40 percent of SJW’s total water supply. The following Table 3.15-1 shows the groundwater SJW pumped from 2016 to 2020.

TABLE 3.15-1: AMOUNT OF GROUNDWATER PUMPED BY SJW (AF/YR)

BASIN NAME	2016	2017	2018	2019	2020
Santa Clara Subbasin	32,644	42,194	36,075	32,825	53,276
Groundwater as a percent of total potable water supply	31%	37%	31%	28%	43%

Source: SJW City of Campbell General Plan Update Water Supply Assessment, May 2022

Surface Water – SJW has “pre-1914 water rights” to surface water in Saratoga Creek, Los Gatos Creek, and associated watersheds, totaling approximately 72 million gallons per day, based on capacity of diversion works from Initial Statements of Water Diversion and Use. SJW also filed for licenses in 1947 and was granted license number 4247 in 1956 by SWRCB to draw 1,419 AF/year (462 MG/year) from Saratoga Creek, and license number 10933 in 1979 to draw 6,240 AF/year (2,033 MG/year) from Los Gatos Creek.

Recycled Water – South Bay Water Recycling (SBWR) has been serving Silicon Valley communities since 1993 with a sustainable, high-quality recycled water supply. SBWR was created to reduce the environmental impact of freshwater effluent discharge into the salt marshes located at the south

end of the San Francisco Bay, and to help protect the California clapper rail and the salt marsh harvest mouse.

In 1997, SJW entered into a Wholesaler-Retailer Agreement with the City of San José to provide recycled water to SJW's existing and new customers nearby SBWR recycled water distribution facilities; whereas, the City of San José is the wholesaler and SJW is the retailer. At the time, the involvement of SJW was largely to assist the City in meeting its wastewater regulatory obligations. In accordance with the terms of this agreement, SJW allowed SBWR to construct recycled water pipelines in its service area, SJW would only own the recycled water meters, while SBWR would own, operate, and maintain the recycled water distribution system.

In 2010, this Wholesaler-Retailer Agreement was amended to allow SJW to construct recycled water infrastructure that would be owned, operated, and maintained by SJW. Then in 2012, this Wholesaler-Retailer Agreement was again amended to allow SJW to construct additional recycled water infrastructure.

Summary of Existing and Planned Sources of Water – SJW and Valley Water have worked to develop a variety of local and imported water supplies to meet demands. As demands increase with the region's growth, and imported water supplies potentially become more restricted, these planned supplies will increase in importance. In particular, groundwater, which has historically been a vital source of supply for SJW, was all the more critical during the recent drought. The following table shows the actual amount of water supplied to SJW's distribution system from each source in 2020 as well as projected amounts until 2045.

WATER SUPPLY RELIABILITY

SJW has three sources of potable water supply: purchased water, groundwater, and local surface water. These three sources of supply are constrained in one or more ways, driven by legal, environmental, water quality, climatic, and mechanical conditions. Additionally, there is a potential for interruption of supply caused by catastrophic events.

Purchased Water Supply Reliability – SJW relies on Valley Water for purchased water supplies, which make up over half of SJW’s total water supplies. Constraints to purchased water supplies from Valley Water include climate change impacts, reductions in imported water supplies, and threats to infrastructure, as detailed below.

- *Climate Change* – Climate change is anticipated to result in warming temperatures, shrinking snowpack, increasing weather extremes, and prolonged droughts. Valley Water’s water supply vulnerabilities to climate change include decreases in the quantity of Delta-conveyed imported water supplies, decreases in the ability to capture and use local surface water supplies due to shifts in the timing and intensity of rainfall and runoff, increases in irrigation and cooling water demands, decreases in water quality, and increases in the severity and duration of droughts.
- *Reductions in Imported Water Supplies* – Valley Water’s State Water Project and Central Valley Project water supplies are also subject to a number of additional constraints, including conveyance limitations and regulatory requirements to protect fisheries and water quality in the Delta. Delta-conveyed supplies are also at risk from Delta levee failures due to seismic threats and flooding, sea level rise and climate change, declining populations of protected fish species, and water quality variations (including algal blooms). Many water quality variations are addressed by blending sources and/or switching sources to Valley Water’s three water treatment plants. Algae and disinfection byproduct precursors have been especially challenging during recent drought conditions.
- *Threats to Infrastructure* – Valley Water’s imported supply infrastructure must travel large distances to reach turnouts. As California is a seismically active state, infrastructure could be damaged and the result would be a disruption to water supply availability. California’s water supply infrastructure is also potentially a target for acts of terrorism.

SJW actively worked with Valley Water during the development of their WSMP 2040 to ensure the following principles were considered:

- Promotion of additional sources of local water supply, such as indirect potable reuse, direct potable reuse, desalination, additional conservation, and an expanded recycled water distribution system
- Coordination of operations with all retailers and municipalities to ensure as much surplus water as possible is available for use in dry years

- Pursuit of innovative transfer and banking programs to secure more imported water for use in dry years

Valley Water's previous call for a 30 percent reduction during the 2012-2016 drought highlights that more investments in local water sources are necessary to ensure a reliable source of supply during multiple-dry water years. Valley Water plans short- and long-term investments with the goal of requiring no more than a 20 percent water use reduction from the community during a multi-year drought as outlined in its 2040 Water Supply Master Plan. Valley Water has sources of backup supply outside the County and has always relied on multiple supply sources, such as imported water contracts, to supplement existing long-term resources when necessary.

Groundwater Supply Reliability – Groundwater supplies are often a reliable supply during normal and short-term drought conditions because supplies are local and large aquifer storage capacity means that groundwater supplies will still be available when surface flows become limited. However, groundwater supply availability can become threatened when overdraft occurs and when recharge and inflow decrease. Water quality is another potential constraint of this source of supply. Threats to groundwater supplies are detailed below.

- *Overdraft* – Under extended supply pressures, groundwater basins can enter overdraft conditions, which can have a series of consequences including land subsidence. Threat of overdraft conditions were witnessed in the recent 2012-2016 drought when groundwater levels declined. However, groundwater levels in the Santa Clara Subbasin quickly recovered after the drought due to Valley Water's proactive response.
- *Climate Change* – Climate change could increase the potential for overdraft by increasing demand, reducing other sources of supply, and reducing natural recharge and inflows from surface water and precipitation.
- *Regional Growth* – Population growth could increase demands on groundwater supplies, potentially creating risk of overdraft. Regional growth could also increase the amount of contaminants entering groundwater basins as a result of increased urban runoff or industrial or other activities. Growth can also impact recharge areas by expanding impervious surfaces into areas that would otherwise represent entry points for surface water recharging local aquifers.
- *Aging Infrastructure and High Land Costs* – In 2020, SJW prepared a Groundwater Well Asset Management Plan. Findings from the plan showed that SJW's groundwater well system is vulnerable due to the age of the well infrastructure. Two-thirds of the wells are 50 years or older and were installed with low carbon steel casing using a cable tool drilling method. A low carbon steel casing is susceptible to corrosion and damage in the event of an earthquake. Furthermore, many of SJW's older cable tool drilled wells were installed without sanitary seals as newer wells are, and as such, are more vulnerable to acting as conduits for downward migration of surface contaminants into the aquifer. Space for replacement wells at SJW's existing groundwater stations is limited, and thus, the majority of future wells will need to be located on new properties. However, favorable sites are

3.15 UTILITIES AND SERVICE SYSTEMS

limited, as they must meet certain production yield and water quality requirements. Furthermore, land prices in the Bay Area are high and present another challenge for SJW to address its aging well infrastructure.

- *Water Quality* – The presence of per- and polyfluoroalkyl substances (PFAS) in groundwater supplies is prompting interest and concern nationwide. Out of an abundance of caution, SJW has been proactively notifying customers and removing wells from service where PFAS has been detected above the State-defined Notification Levels. SJW is in the process of studying its options for removing PFAS. In addition, because SJW depends on multiple sources of supply that use different disinfectants, maintaining a stable disinfectant residual is problematic when system operations require the blending of chlorinated water with chloraminated water to meet demands. Blending sources, depending on each source’s volume and residual concentration, can result in the loss or significant decrease in disinfectant residual levels.

The Santa Clara Subbasin is able to store the largest amount of local reserves and Valley Water, as the groundwater management agency for Santa Clara County, is tasked with maintaining adequate storage in this basin to optimize reliability during extended dry periods. As groundwater is pumped by SJW and other retailers and municipalities in Santa Clara County, Valley Water influences groundwater pumping reductions and thus reliability through financial and management practices to protect groundwater storage and minimize the risk of land subsidence.

Local Surface Water Supply Reliability – Local surface supplies are highly variable depending on hydrologic conditions. In years of limited local surface water supplies, SJW relies more heavily on groundwater. Threats to local surface water supplies are detailed below.

- *Climate Change* – SJW’s local surface water supplies are subject to the same climate change impacts as Delta-conveyed supplies and Valley Water’s local surface water supplies, which can result in decreased surface water supplies. During heavy rain events, the quantity of surface water that can be conveyed and treated may be limited by the raw water system hydraulics, high turbidity levels, and WTP capacity. Increased weather extremes and changing precipitation patterns as a result of climate change may prevent surface water supplies from being fully utilized during heavy rain events, and may result in lower surface water supplies during other times of the year.
- *Environmental Regulations* – SJW has bypass flow requirements at its surface water reservoirs and intakes. These requirements establish flow rates that must be released past diversion points to preserve downstream habitat. SJW also maintains minimum levels in reservoirs for habitat preservation. These environmental regulations limit the amount of surface water that SJW is able to divert for water supply.
- *Water Quality* – SJW owns approximately 6,000 acres of land in the watersheds and manages these watershed lands to protect water supplies. Contamination of surface water supplies from upstream activities (animal grazing, residential septic systems, stormwater

runoff) is a potential threat, although a low one as there is limited development in the watershed.

- *Aging Infrastructure* – Some of SJW’s raw water infrastructure was constructed in the late 1800s or early 1900s and is in need of renewal to ensure reliability of surface water supplies.

Supply Reliability by Type of Water Year – Valley Water’s Urban Water Management Plan identified average, single-dry, and multiple-dry years for water supply reliability planning. According to Valley Water, these years correspond to:

- Average Year (1922-2015): Average supply over the 94 years of 1922-2015.
- Single-Dry Year (1977): Within the historic hydrological record, this was the single driest year.
- Multiple-Dry Years (1988-1992): The 2012-2016 drought was the most recent multiple dry year period that put severe strain on Valley Water’s supplies. However, because imported water allocations are not currently available for the 2012-2016 drought from DWR’s modeling, Valley Water used the 1988-1992 drought, another severe multiple year drought in the historic hydrological record.

Water supplies presented below are based on Valley Water’s Water Evaluation and Planning system model. According to Valley Water, this model simulates their water supply system comprised of facilities to recharge the county’s groundwater basins, local water systems including the operation of reservoirs and creeks, treatment and distribution facilities, and raw water conveyance systems. The model also accounts for non-Valley Water sources and distribution of water in Santa Clara County such as imported water from San Francisco Public Utilities Commission, recycled water, and local water developed by other agencies.

TABLE 3.15-2: BASIS OF WATER YEAR DATA

YEAR TYPE	BASE YEAR	% OF AVERAGE SUPPLY
Average Year	1922-2015	100%
Single-Dry Year	1977	80%
Multiple-Dry Years 1 st Year	1988	78%
Multiple-Dry Years 2 nd Year	1989	83%
Multiple-Dry Years 3 rd Year	1990	77%
Multiple-Dry Years 4 th Year	1991	78%
Multiple-Dry Years 5 th Year	1992	77%

Source: SJW City of Campbell General Plan Update Water Supply Assessment, May 2022

Average Water Year – The average water year represents average supply over the hydrologic sequence of 1922 through 2015. SJW anticipates adequate supplies for years 2025 to 2045 to meet system demand under average year conditions.

3.15 UTILITIES AND SERVICE SYSTEMS

TABLE 3.15-3: SUPPLY AND DEMAND COMPARISON – AVERAGE WATER YEAR (AF/YR) (A)

	2025	2030	2035	2040	2045
Demand	135,648	135,875	136,961	138,579	139,957
Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957

Source: SJW City of Campbell General Plan Update Water Supply Assessment

^(a)Includes demands associated with the City of Campbell General Plan and Housing Element Update.

Single-Dry Water Year – The single-dry year was the year with the lowest amount of total supply. Table 3.15-4 shows that supplies, with the use of reserves, can meet demands during a single-dry year through 2045, assuming reserves are at healthy levels at the start of a year and projects and programs identified in Valley Water’s WSMP 2040 are implemented. If reserves are low at the beginning of a single-dry year, Valley Water may call for water use reductions in combination with using reserves. As later discussed within the Water Demand Management Measures section, SJW has filed with the California Public Utilities Commission (CPUC) water-waste provisions promoting conservation that would go into effect during a drought. These provisions would result in a reduction in anticipated demand due to conservation such that demand equals available water supplies.

TABLE 3.15-4: SUPPLY AND DEMAND COMPARISON – SINGLE-DRY WATER YEAR (AF/YR) (A)

	2025	2030	2035	2040	2045
Demand	135,648	135,875	136,961	138,579	139,957
Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
Demand Met by Conservation	0	0	0	0	0

Source: SJW City of Campbell General Plan Update Water Supply Assessment

^(a)Includes demands associated with the City of Campbell General Plan and Housing Element Update.

Multiple-Dry Water Years – The multiple-dry year period used in this analysis assumes a repetition of the hydrology that occurred in 1988 to 1992. During multiple-dry year droughts, a call for up to mandatory 20 percent conservation may be needed. Valley Water will continue to work on reducing multiple-dry year deficits by securing more reliable and/or diverse water supplies.

Valley Water has established a level of service goal of 100 percent during non-drought years and 80 percent during drought years to minimize water rates, and thus there can be up to a 20 percent call for mandatory conservation to meet this deficit (or more short-term conservation until additional water supplies are secured). Over the next 20 – 30 years, Valley Water is pursuing over \$1 billion in water supply projects to meet the 80 percent level of service goal for all drought years.

TABLE 3.15-5: SUPPLY AND DEMAND COMPARISON – MULTIPLE-DRY WATER YEARS (AF/YR)(A)

		2025	2030	2035	2040	2045
First Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0
Second Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0
Third Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0
Fourth Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0
Fifth Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0

Source: SJW City of Campbell General Plan Update Water Supply Assessment

^(a)Includes demands associated with the City of Campbell General Plan and Housing Element Update.

Regional Supply Reliability – Valley Water’s Ensure Sustainability water supply strategy has three key elements:

1. Secure existing supplies and facilities
2. Optimize the use of existing supplies and facilities
3. Expand water use efficiency efforts

As part of this strategy, Valley Water’s WSMP 2040 includes developing at least 24,000 AF/yr of additional recycled water (above and beyond the current target of 33,000 AF/yr of non-potable reuse) by 2040. Developing these local sources and managing demands reduces reliance on imported water supplies. In addition, Valley Water is working with multiple water agencies to

investigate regional opportunities for collaboration to enhance water supply reliability, leverage existing infrastructure investments, facilitate water transfers during critical shortages, and improve climate change resiliency. Projects to be considered will include interagency interties and pipelines; treatment plant improvements and expansion; groundwater management and recharge; potable reuse; desalination; and water transfers. This program may result in the addition of future supplies for Valley Water.

REGULATORY SETTING – WATER SUPPLIES

STATE

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund (“SRF”) and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

Consumer Confidence Report Requirements

CCR Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminant levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

Urban Water Management Planning Act

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is

required to prepare and adopt an urban water management plan. An “urban water supplier” is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier’s water demand management measures. The urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Department of Water Resources must receive a copy of an adopted urban water management plan.

Senate Bill (SB) 610 and Assembly Bill (AB) 901

The State Legislature passed SB 610 and AB 901 in 2001. Both measures modified the Urban Water Management Planning Act.

SB 610 requires additional information in an urban water management plan if groundwater is identified as a source of water available to an urban water supplier. It also requires that the plan include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water to the project and to request identified public water systems to prepare a specified water supply assessment. The assessment must include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and water received in prior years pursuant to these entitlements, rights, and contracts.

AB 901 requires an urban water management plan to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the manner in which water quality affects water management strategies and supply reliability. The bill requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable. Additional findings and declarations relating to water quality are required.

Senate Bill (SB) 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a “sufficient water supply” exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

Executive Order N-7-22

In 2022, Governor Gavin Newsom issued an executive order to address the worsening western drought. The order includes numerous mandates for water conservation, permit streamlining, and modifications to current regulations to address the drought.

LOCAL

San Jose Water Company Urban Water Management Plan

The purpose of the San Jose Water Company (SJWC) 2020 Urban Water Management Plan (UWMP) is to ensure efficient use of urban water supplies in the SJWC service area and promote conservation. The UWMP discusses not only the availability of water but also water use, supply reliability, and water conservation activities. The UWMP complies with the Urban Water Management Planning Act (UWMP Act) (California Water Code [CWC] Section 10610 et seq.), the Water Conservation Act of 2009 (CWC Section 10608), and the 20x2020 Water Conservation Plan, which are being implemented by the California DWR.

Santa Clara Valley Water District Urban Water Management Plan

The purpose of the Santa Clara Valley Water District (SCVWD) 2020 UWMP is to ensure efficient use of urban water supplies in the SCVWD service area and promote conservation. The UWMP discusses not only the availability of water but also water use, supply reliability, and water conservation activities. The UWMP complies with the UWMP Act (CWC Section 10610 et seq.), the Water Conservation Act of 2009 (CWC Section 10608), and the 20x2020 Water Conservation Plan, which are being implemented by the California DWR.

Santa Clara Valley Water District Water Supply and Infrastructure Master Plan

The SCVWD's 2012 Water Supply and Infrastructure Master Plan includes a summary of the District's system-wide water demands, the District's water distribution system model, an analysis of the District's water system, and a summary of existing and future water system facilities.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the project will have a significant impact on the environment associated with Utilities if it will:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects; and/or
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-1: General Plan implementation would result in sufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years (Less than Significant)

Implementation of the General Plan would result in increased population and employment growth within the Planning Area, and a corresponding increase in the demand for additional water supplies.

As shown in Chapter 2.0 Table 2.0-2, buildout of the General Plan could yield a total of up to 26,224 housing units, a population of 64,929 people, 12,724,055 square feet of non-residential building square footage, and 36,908 jobs within the Planning Area. As shown in Table 2.0-2, this represents development growth over existing conditions of up to 8,824 new dwelling units, 22,203 people, 2,633,721 square feet of new non-residential building square footage and 6,194 new jobs.

As described in the WSA prepared for the proposed Project (SJW 2022) the total net potable water demand for the Project is estimated at 869 acre-feet per year and represents a 0.71 percent increase in total system usage when compared to SJW's 2020 potable water production. The increased demand is consistent with forecasted demands represented in SJW's 2020 Urban Water Management Plan, which projected a 12.2 percent increase in total system demand between 2020 demand and projected 2045 demand.

As described in the WSA, and based on Valley Water's water supply plans and Urban Water Management Plan projections, SJW expects to be able to meet the needs of the service area through at least 2045 for average and single-dry years without a call for water use reductions. The impact of this project is not consequential and SJW has the capacity to serve this project through buildout based on current water supply capacity and Valley Water's proposed water supply projects. Valley Water is pursuing water supply solutions to meet the established level of service goal to provide 80 percent of annual water demand for drought years. SJW is committed to working with Valley Water to meet future demands and mitigate shortages. After comparing estimated demand associated with this project to water supplies, based on both the SJW and Valley Water Urban Water Management Plans, SJW has determined that the water quantity needed is within normal growth projections and expects for there to be sufficient water available to serve the Project. However, due to factors that affect water supply and demand projections including climate change, there is no guarantee that the projections provided in Valley Water's Urban Water Management Plan will be met, nor is there a guarantee that the water supply projects and programs identified by Valley Water will be implemented.

The proposed General Plan includes a range of policies designed to ensure an adequate water supply for development and to minimize the potential adverse effects of increased water use. It is important to note that the City of Campbell does not provide water services within the Planning Area. As such, responsibility for the ongoing provision of water supplies and services within Campbell fall to the respective water districts, as described above. Given that projected water demands associated with General Plan buildout would not exceed the projected available water

supplies, and that the proposed General Plan includes a comprehensive set of goals and policies to ensure an adequate and reliable source of clean potable water, impacts associated with water supplies are **less than significant**. The policies listed below would further assist in ensuring that adequate water supplies are available to serve new growth projected under the proposed General Plan.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY SERVICED AND FACILITIES POLICIES

CSF-3.1 Coordinate with the local water purveyor to ensure safe drinking water standards are met.

CSF-3.2 Coordinate with local water districts to ensure the water system and supply adequately meets the needs of existing and future development and is utilized in a sustainable manner.

CSF-3.3 Prior to the approval of major new development, Specific Plans, major infrastructure improvements, or other projects that would result in increased demand for public water conveyance and treatment in excess of the demands contemplated by this General Plan, such projects must demonstrate proof of adequate water supply (e.g., that existing services are adequate to accommodate the increased demand, or improvements to the capacity of the system to meet increased demand will be made prior to project implementation) and that potential cumulative impacts to water users and the environment will be addressed.

CSF-3.4 Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate water capacity to accommodate future growth.

CSF-3.5 Ensure that all new development provides for and funds its fair share of the costs for adequate water distribution, including line extensions, easements, and dedications.

CSF-3.6 Encourage service providers to explore the use of new technologies in the acquisition, treatment, distribution, and consumption of water including monitoring technologies, and other best practices.

CSF-3.7 Work collaboratively with local water districts to encourage the use of recycled water for irrigation.

CSF-3.8 Support water conservation measures that comply with the State and Federal legislation and that are consistent with measures adopted in all applicable Urban Water Management Plans.

CSF-3.9 Reduce potable water use and increase water conservation.

CSF-3.10 Educate the public on water issues and conservation strategies, in partnership with water districts and regional partners; focus on business activities with the potential to pollute and distribute Best Management Practices (BMP) guidance for business activities.

COMMUNITY SERVICED AND FACILITIES ACTIONS

CSF-3.a Continue to require, as part of the development review process, project applicants to demonstrate sufficient access to water resources to service the project area.

CSF-3.b Continue to maintain, and periodically review and renew, Water Supply Agreements with the San Francisco Public Utilities Commission (SFPUUC) and the Santa Clara Valley Water District (SCVWD). The Water Supply Agreements shall provide for adequate supplies to meet the 20-year General Plan buildout projections for the City.

CSF-3.c Regularly review and update the City's water conservation measures to be consistent with current best management practices for water conservation, considering measures recommended by the State Department of Water Resources, the California Urban Water Conservation Council, and the Bay Area Water Supply and Conservation Agency.

CSF-3.d Aggressively pursue expansions to the treatment and distribution capacity of recycled water supplies and coordinate with the City of San Jose South Bay Water Recycling Program to increase recycled water supplies available to Campbell.

CSF-3.e Continuously monitor water flows through the City's water system to identify areas of potential water loss and instances of under-billing for water services, and make improvements to the system and billing assessments as necessary.

CSF-3.f Continue educational outreach designed to increase public participation in water conservation and water quality awareness through printed material and the City's website and social media accounts.

CSF-3.g Consider amending the Municipal Code to prohibit the construction of new outdoor pools.

Impact 3.15-2: General Plan implementation may require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (Less than Significant)

Development and growth in the City under the proposed General Plan would result in increased demand for water supplies, including water conveyance and treatment infrastructure. The proposed General Plan includes policies and actions to ensure that water supplies are provided at acceptable levels and to ensure that development and growth does not outpace the provision of available water supplies.

As described under Impact 3.15-1, the projected water supplies are adequate to meet demand that would be generated by buildout of the General Plan. As such, implementation and buildout of the General Plan would not result in the need to construct or expand water supply and treatment facilities that have not already been described and accounted for in the relevant water master plans, which include the SJWC UWMP, SCVWD UWMP, and Santa Clara Valley Water District Water Supply and Infrastructure Master Plan.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The proposed General Plan includes a range of policies (listed above under Impact 3.15-1) to ensure that water providers serving the city are consulted with during future land use changes in order to ensure that future supply levels meet demands.

Future development in the Planning Area would be required to connect to existing water distribution infrastructure in the vicinity of each site, pay the applicable water system connection fees, and pay the applicable water usage rates. Future projects may be required to implement site specific and limited off-site improvements to the water distribution system in order to connect new project sites to the existing water infrastructure network. The specific impacts of providing new and expanded water distribution infrastructure cannot be determined at this time, as the General Plan does not propose or authorize any specific development projects or include details on any future development projects. However, any future improvements to the existing water distribution infrastructure would be primarily provided on sites with land use designations that allow for urbanized land uses, and the environmental impacts of constructing and operating the new water distribution infrastructure would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the proposed General Plan. Therefore, this impact is considered **less than significant** and no additional mitigation is necessary.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY SERVICES AND FACILITIES POLICIES

CSF-1.1 Ensure that new growth and development participates in the provision and expansion of community services and facilities, and does not exceed Campbell's ability to provide them.

CSF-1.2 Require new development to demonstrate that the City's community services and facilities can accommodate the increased demand for said services and facilities associated with the project.

CSF-1.3 Require new development to offset or mitigate impacts to community services and facilities to ensure that service levels for existing users are not degraded or impaired by new development, to the satisfaction of the City.

COMMUNITY SERVICES AND FACILITIES ACTIONS

CSF-1.a Require new development to pay its fair share of the cost of onsite and offsite community services and facilities that are necessary to serve the new development project, as determined by a nexus study.

CSF-1.b Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

CSF-1.c Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

3.15.2 WASTEWATER

This section describes the City of Campbell's wastewater infrastructure, wastewater flows, treatment plant permit requirements, and previous infrastructure planning. Wastewater services in Campbell require a system of pipes and facilities owned and maintained by several entities, including private landowners, the City of Campbell, the West Valley Sanitation District (WVSD), and the San Jose-Santa Clara Regional Wastewater Facility (RWF). In total, the WVSD provides approximately 44,500 connections serving a population of nearly 108,000 people. The wastewater collection system is comprised of 415 miles of sewer main and 210 miles of sewer lateral.

KEY TERMS

Effluent: In the context of wastewater treatment plants, effluent is wastewater that has been through a treatment process to remove pollution and undesirable constituents from the water.

NPDES: Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

RWF: Regional Wastewater Facility. Treatment of wastewater may include the following processes: screening to remove large waste items; grit removal to allow sand, gravel, and sediment to settle out; primary sedimentation where sludge can settle out of the wastewater; secondary treatment to substantially degrade the biological content of the sewage; tertiary treatment to raise the quality of the effluent before it is discharged; and, discharge.

WASTEWATER TREATMENT AND FLOWS

The WVSD provides wastewater collection and disposal services to the City of Campbell. The WVSD contracts with the San Jose-Santa Clara RWF for wastewater treatment and disposal. Located in north San Jose, the plant treats wastewater from local municipalities and sanitation districts and discharges the treated wastewater into San Francisco Bay. The WVSD accounts for about seven percent of plant treatment capacity. The District's current allocation is 13 mgd.

The RWF has been in operation since 1956 and aging pipes, pumps, concrete and electrical systems are all in need of immediate and long-term improvements to ensure current and future needs are met. The 2013 Wastewater Treatment Plant Master Plan (San Jose, 2013) indicates the cost of capital improvements through 2040 will be \$2.2 billion. Despite a steady increase in the population served by the RWF, influent wastewater flows have decreased over the past 15 years due to the loss of industry and increased water conservation. This same trend is common throughout the Bay Area. However, flows are expected to increase in the future as new homes are built to house the 400,000 new residents in San José over the next 30 years. While the RWF has over 70 mgd of remaining

3.15 UTILITIES AND SERVICE SYSTEMS

capacity, it is expected to reach capacity between 2035 and 2040, according to the Wastewater Treatment Plant Master Plan (San Jose, 2013).

The WVSD sewer collection system directs wastewater to the San Jose-Santa Clara RWF. The WVSD is one of six additional satellite collection systems that discharge into the San Jose-Santa Clara RWF. Each satellite collection system is responsible for an ongoing program of maintenance and capital improvements for sewer lines and pump stations within its respective jurisdiction in order to ensure adequate capacity and reliability of the collection system. The responsibilities include managing overflows, controlling infiltration and inflow, and implementing collection system maintenance.

Currently, all wastewater collected from the City is treated at the RWF, which has a wastewater treatment capacity of 167 mgd. The City of Campbell contributes 3 percent of the RWF’s total sewer connections. Current flows to the plant are about 110 mgd (San Jose, 2015a). The RWF receives and treats wastewater from a total of eight municipalities in the South Bay, including San Jose (via the Burbank Sanitary District and County Sanitation District 23); Saratoga, Campbell, Los Gatos, and Monte Sereno (via the West Valley Sanitation District), and the Cities of Santa Clara, Milpitas, and Cupertino. The RWF’s treatment capacity is allocated to each tributary agency on the basis of the peak fiveday dry weather flow, also referred to as the peak week flow. As shown on Table 3.15-6, the 2015 peak dry weather flow to the plant was 96.15 mgd, with 10.26 mgd attributed to the WVSD (San Jose, 2015b).

TABLE 3.15-6: 2015 SAN JOSE-SANTA CLARA RWF FLOWS AND AVAILABLE CAPACITIES

AGENCY	2015 PLANT CAPACITY, MGD	2015 PEAK WEEK FLOW, MGD	AVAILABLE CAPACITY, MGD
San Jose	108.89	61.18	47.71
Santa Clara	22.94	12.89	10.05
West Valley Sanitation District	11.70	10.26	1.44
Cupertino Sanitary District	7.85	3.9	3.95
City of Milpitas	14.25	6.71	7.54
County Sanitation District 23	0.98	0.98	0.00
Burbank Sanitary District	0.40	0.24	0.16
Total	167.00	96.15	70.85

SOURCE: WEST YOST. TECHNICAL MEMORANDUM RE: MILPITAS GENERAL PLAN UPDATE BACKGROUND. OCTOBER 2016.

The San Jose-Santa Clara RWF receives and treats wastewater from a total of eight municipalities in the South Bay, including San Jose (via the Burbank Sanitary District and County Sanitation District 2-3), Saratoga, Campbell, Los Gatos, Monte Sereno (via the WVSD), Santa Clara, Milpitas, and Cupertino. The WPCP’s treatment capacity is allocated to each tributary agency on the basis of the peak five-day dry weather flow, also referred to as the peak week flow.

The WVSDs regional interceptor conveys wastewater to the San Jose-Santa Clara RWF through the sanitary sewer system of the City of San Jose. In the fiscal year 2014-2015, WVSD collected and conveyed 10.26 mgd of wastewater to the treatment plant, which represents about 10 percent of the plant’s average daily treatment flow. According to flow data published in the WVSD Annual Report (2012-2013), Campbell accounts for about 3 percent of the San Jose-Santa Clara RWF’s total

incoming wastewater. The majority of wastewater coming into the plant is from the cities of San Jose and Santa Clara.

The San Jose-Santa Clara RWF includes the following major processes/facilities (San Jose, 2016):

- Headworks and Grit Chambers – The screening facilities remove the larger trash and grit from the raw wastewater. The wastewater enters the headworks in sewers that are buried underground, and the headworks area is also below the ground level. From the headworks, the wastewater is pumped into pipes that flow to the primary settling tanks.
- Primary Settling Tanks – These tanks allow finer sediment to settle out of the effluent and skim fats, oils, and grease from the top. The treatment occurs over an hour-long period and results in effluent that is 50 percent cleaner than the raw wastewater entering the WPCP. Wastewater leaving the settling tanks is called primary effluent, and flows to the aeration and clarification system.
- Aeration and Clarification – The aeration tanks pump air into the wastewater to increase the growth of bacteria and other micro-organisms that consume organic waste. These bacteria and micro-organisms then settle out of the wastewater in the clarifiers. The flow leaving the clarifiers is called secondary effluent, and it is 95 percent cleaner than the raw wastewater entering the WPCP. At this point, the majority of secondary treated effluent continues to tertiary treatment (filters), while around 7 percent is diverted to the new SVAWPC.
- Filters – The filters remove small suspended solids from the secondary effluent. Flow from the filters goes to the Chlorine Contact Basin.
- Chlorine Contact Basin – This basin uses chlorine to kill any remaining viruses and bacteria. The chlorine is then neutralized to protect aquatic life in the receiving water (Coyote Creek). Effluent leaving the Chlorine Contact Basin is called tertiary effluent and is 99 percent cleaner than wastewater entering the WPCP.
- Distribution – The ultimate disposal of the fully treated effluent is divided, with 90 percent piped to the outfall channel leading to Coyote Creek and then into the South San Francisco Bay, while 10 percent flows to the SBWR system.

Solids Treatment – The bacteria and micro-organisms that settle out of the wastewater in the clarifiers are called the solids. Flotation thickeners, digesters, lagoons, and drying beds are used to extract liquid from the solids. The liquid is returned to the primary settling tanks. The remaining solids are treated in a digester that stabilizes the solids. The stable solids are then dried in the sun and trucked to the Newby Island Landfill to be used as daily cover. The full solids handling process takes over 3½ years to complete.

WASTEWATER COLLECTION SYSTEM

Campbell's wastewater collection system includes a network of pipes connecting individual residential and non-residential buildings to a wastewater treatment plant, as discussed below. The sewer pipes are owned and maintained by the WVSD, whose service area encompasses 28.4 square miles. Private landowners own and maintain on-site laterals that connect wastewater to laterals and sewer mains owned and operated by the WVSD. The sewer pipes typically run along City-owned rights-of-way.

The gravity sewer wastewater collection system, owned and maintained by WVSD, serves the populations of the cities of Campbell, Monte Sereno, Town of Los Gatos, portions of the City of Saratoga, and intervening unincorporated portions of the County of Santa Clara. In total, there are approximately 44,500 connections serving a population of nearly 108,000 people. The wastewater collection system is comprised of 415 miles of sewer main and 210 miles of sewer lateral primarily located within the public right-of-way (lower lateral). The WVSDs sewer mains range in diameter from 6 to 39 inches, with nearly 90 percent of these lines being 8 inches in diameter or smaller. A majority of the sewer laterals are 4 inches in diameter, while 6-inch laterals are utilized for some commercial and multiple residential properties.

The WVSD sewer financing program, the District Participation Program, provides funds for extension of the WVSD sanitary system to new development. Under the District Participation Program, also known as the Sewer Extension Revolving Fund, or SERF program, WVSD participates with the installer in the costs of extending the sewer, and recovers costs by collection of connection fees from benefiting property owners. Under this program, WVSD designs and constructs the main and lateral sewers and recovers the costs from property owners when they connect to the system.

PLANNED FUTURE INFRASTRUCTURE

To address existing and future capacity deficiencies, the WVSD maintains a 5-Year CIP and a forecasted 10-year CIP which identify future system upgrades. The most recent CIP (March 2016) does not include any projects within the City of Campbell.

REGULATORY SETTING - WASTEWATER

STATE

State Water Resources Control Board/Regional Water Quality Control Board

In California, all wastewater treatment and disposal systems fall under the overall regulatory authority of the State Water Resources Control Board (SWRCB) and the nine California Regional Water Quality Control Boards (RWQCBs), who are charged with the responsibility of protecting beneficial uses of State waters (ground and surface) from a variety of waste discharges, including wastewater from individual and municipal systems. The City of Campbell falls within the jurisdiction of the San Francisco Bay RWQCB.

The RWQCB's regulatory role often involves the formation and implementation of basic water protection policies. These are reflected in the individual RWQCB's Basin Plan, generally in the form of guidelines, criteria and/or prohibitions related to the siting, design, construction, and maintenance of on-site sewage disposal systems. The SWRCB's role has historically been one of providing overall policy direction, organizational and technical assistance, and a communications link to the State legislature.

The RWQCBs may waive or delegate regulatory authority for on-site sewage disposal systems to counties, cities or special districts. Although not mandatory, it is commonly done and has proven to be administratively efficient. In some cases, this is accomplished through a Memorandum of Understanding (MOU), whereby the local agency commits to enforcing the Basin Plan requirements or other specified standards that may be more restrictive. The RWQCBs generally elect to retain permitting authority over large and/or commercial or industrial on-site sewage disposal systems, depending on the volume and character of the wastewater.

LOCAL

San Jose-Santa Clara Water Pollution Control Plant – The Plant Master Plan (2013)

The 2013 Water Pollution Control Plan Master Plan provides both a roadmap to help determine the projects and funding needed to repair and replace the Plant's aging facilities and processes, as well as a land use plan that defines the future treatment needs along with zoning designations and guidelines for the future development, restoration, and use of the Plant's four-and-a-half square mile site.

West Valley Sanitation District of Santa Clara County Sewer System Management Plan (2015)

In April 2015, the SWRCB implemented Order No. 2006-0003-DWQ. Any municipality that owns or operates a sanitary sewer system greater than 1.0 mile in length and that collects and/or conveys untreated or partially treated wastewater to publicly owned treatment plants in the State of California is required to comply with the terms of this order. This order requires the development and implementation of a system-specific Sanitary Sewer Management Plan (SSMP). The District's SSMP facilitates the overall management of the District's sewer system.

The SSMP is intended to meet the requirements of the Statewide General Waste Discharge Requirements (GWDR). The SSMP includes eleven elements, as listed below:

1. Missions, Goals, and Objectives
2. Organization
3. Legal Authority
4. Operation and Maintenance Program

3.15 UTILITIES AND SERVICE SYSTEMS

5. Design and Construction Standards
6. Overflow Emergency Response Plan
7. Fats, Oils and Grease (FOG) Control Program
8. Capacity Management
9. Monitoring, Measurement, and Program Modification
10. SSMP Program Audits
11. Communication Program.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it would:

- Require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects; and/or
- Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-3: General Plan implementation has the potential to result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (Less than Significant)

Wastewater services in Campbell require a system of pipes and facilities owned and maintained by several entities, including private landowners, the City of Campbell, the West Valley Sanitation District (WVSD), and the San Jose-Santa Clara Regional Wastewater Facility (RWF). In total, the WVSD provides approximately 44,500 connections serving a population of nearly 108,000 people. The wastewater collection system is comprised of 415 miles of sewer main and 210 miles of sewer lateral.

The WVSD provides wastewater collection and disposal services to the City of Campbell. The WVSD contracts with the San Jose-Santa Clara RWF for wastewater treatment and disposal. Located in north San Jose, the plant treats wastewater from local municipalities and sanitation districts and discharges the treated wastewater into San Francisco Bay. The WVSD accounts for about seven percent of plant treatment capacity. The District's current allocation is 13 mgd.

Currently, all wastewater collected from the City is treated at the RWF, which has a wastewater treatment capacity of 167 mgd. The City of Campbell contributes 3 percent of the RWF's total sewer connections. Current flows to the plant are about 110 mgd. The RWF receives and treats wastewater from a total of eight municipalities in the South Bay, including San Jose (via the Burbank Sanitary District and County Sanitation District 23); Saratoga, Campbell, Los Gatos, and Monte Sereno (via the West Valley Sanitation District), and the Cities of Santa Clara, Milpitas, and Cupertino.

According to the San Jose-Santa Clara RWF Master Plan, the San Jose-Santa Clara RWF has an existing plant rated capacity of 167 mgd during the dry season. Annual average effluent flows of approximately 94 mgd and 89 mgd, with daily maximum flows of approximately 132 mgd and 108 mgd. Current flows to the plant are about of 110 mgd. The Wastewater Treatment Plant Master Plan indicates that the RWF will reach its rated capacity of 167 mgd between 2035 and 2040, and dry weather flows are projected to reach 172 mgd by 2040, triggering the need for a modification the RWF's NPDES permit.

As Campbell continues to develop in the future, there will be an increased need for water and wastewater services. These needs have been addressed in the three utility districts' master plans and will require that the districts, in coordination with the City, continue to implement phased improvements to some pump stations, sewer mains, and the various wastewater treatment plants when triggered by growth. To address existing and future capacity deficiencies, the WVSD maintains a 5-Year CIP and a forecasted 10-year CIP which identify future system upgrades.

While full buildout of the development contemplated in the proposed General Plan would increase the existing treatment demand at the treatment plant, the proposed General Plan includes a range of policies designed to ensure an adequate wastewater treatment capacity for development. As described above, the districts must also periodically review and update their Master Plans, and as growth continues to occur within the Planning Area, the district, in coordination with the City, will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development.

The proposed General Plan includes a comprehensive set of goals, policies, and actions to ensure an adequate and reliable wastewater collection and treatment system. The policies and actions listed below would further assist in ensuring that adequate wastewater treatment and conveyance infrastructure is available to serve new growth projected under the proposed General Plan. For example, Policy CSF-4.1 ensures safe and reliable sewer and wastewater collection and treatment infrastructure to serve the existing and future development. Additionally Policy CSF-4.2 calls for the continued coordinate with the West Valley Sanitation District and San Jose-Santa Clara Regional Wastewater Facility when reviewing new development applications in order to ensure that new growth does not exceed the availability of adequate sewage treatment capacity or predate the presence of necessary infrastructure, while Policy CSF-4.4 ensures that all new developments provide for and fund their fair share of the costs for adequate sewer collection and treatment, including line extensions, easements, and dedications.

As described above, the City and service providers will periodically review and update their applicable master plans, and as growth continues to occur within the Planning Area, the City will

3.15 UTILITIES AND SERVICE SYSTEMS

identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development. Given that projected wastewater generation volumes associated with General Plan buildout will be required to demonstrate adequate capacity and are not anticipated to exceed the capacity of the wastewater treatment provider, this impact would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY SERVICED AND FACILITIES POLICIES

CSF-4.1 Ensure safe and reliable sewer and wastewater collection and treatment infrastructure to serve the existing and future development.

CSF-4.2 Continue to coordinate with the West Valley Sanitation District and San Jose-Santa Clara Regional Wastewater Facility when reviewing new development applications in order to ensure that new growth does not exceed the availability of adequate sewage treatment capacity or predate the presence of necessary infrastructure.

CSF-4.3 Work with the West Valley Sanitation District to assist in the maintenance and monitoring of the existing wastewater collection infrastructure to increase the lifespan of the system and ensure public safety.

CSF-4.4 Ensure that all new developments provide for and fund their fair share of the costs for adequate sewer collection and treatment, including line extensions, easements, and dedications.

CSF-4.5 Reduce wastewater system demand by encouraging water conserving designs and equipment and designing wastewater systems to minimize inflow and infiltration.

CSF-4.6 Coordinate with West Valley Sanitation District, the San Jose-Santa Clara Regional Wastewater Facility, and end users to increase the use of recycled wastewater for existing and future needs as new technology, funding, and infrastructure is available.

CSF-4.7 Encourage existing septic tank users to connect to sanitary sewer systems and explore methods to require all existing septic tank users to convert to sanitary sewer systems, such as prohibiting additions of installation of new plumbing fixtures.

COMMUNITY SERVICED AND FACILITIES ACTIONS

CSF-4.a Require new development to provide for and fund a fair share of the costs for adequate sewer distribution, including line extensions, easements, and plant expansions.

CSF-4.b Work with the West Valley Sanitation District and San Jose-Santa Clara Regional Wastewater Facility to assist in the maintenance of an adequate sewage treatment and disposal system.

CSF-4.c Encourage an industrial pretreatment program for business parks and other industrial uses in accordance with State and Federal standards.

CSF-4.d Continue to monitor the effluent generation rates citywide, and ensure that Campbell retains adequate capacity allocations at the San Jose-Santa Clara Regional Wastewater Facility to meet existing and projected demand.

CSF-4.e Explore the viability of alternative uses of recycled wastewater, including irrigation, dust control, soil compaction, fire protection, and investigate new technology for the use of recycled water as it is being developed.

CSF-4.f Update the Municipal Code to require existing septic tank users to connect to sanitary sewer systems with the construction of a new home or addition.

Impact 3.15-4: General Plan implementation may require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects (Less than Significant)

Development contemplated under the proposed General Plan would result in increased wastewater flows, resulting in the need for additional or expanded wastewater treatment facilities and conveyance infrastructure, as described above.

The infrastructure and facilities necessary to serve new growth would involve development of some facilities on new development sites, some facilities off-site, such as at existing wastewater treatment infrastructure, on appropriately designated land, and may also involve improvements to other existing facilities and disturbance of existing rights-of-way. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan does not propose or approve development nor does it designate specific sites for new or expanded public facilities.

Wastewater treatment and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. As such, this impact would be **less than significant**.

The proposed General Plan includes policies and actions designed to ensure adequate wastewater treatment capacity is available to serve development and to minimize the potential adverse effects of wastewater treatment. These policies are listed in Impact 3.15-3.

3.15.3 STORMWATER DRAINAGE

The information in this section focuses on the potential for the General Plan to result in the demand for new or expanded stormwater drainage facilities. Section 3.10 (Hydrology) includes an expanded analysis of water quality, flooding, and other stormwater related issues.

STORMWATER AND FLOOD CONTROL FACILITIES

The SCVWD is responsible for balancing flood protection needs with the protection of natural watercourses and habitat in the Santa Clara Valley. The SCVWD serves 16 cities and 1.8 million residents, provides flood protection along the creeks and rivers within the county. The Clean, Safe Creeks and Natural Flood Protection (CSC) Plan was approved by Santa Clara County voters in November 2000 to create a countywide special parcel tax to accomplish the following four goals:

- 100-year flood protection for homes, schools, businesses, and transportation;
- Clean, safe water in Santa Clara County creeks and bays;
- Healthy creek and bay ecosystems; and
- Trails, parks, and open space along waterways.

The SCVWD reviews plans for development projects near streams to ensure that the proposed storm drain systems and wastewater disposal systems will not adversely impact water quality in the streams. In addition, the SCVWD reviews projects for conformance to SCVWD flood control design criteria, stream maintenance and protection plans, and groundwater protection programs.

Los Gatos Creek runs 24 miles from the Santa Cruz Mountains through the Santa Clara Valley until its confluence with the Guadalupe River in downtown San Jose. It flows from Loma Prieta northwesterly to Lake Elsmán, then northward into the Lexington Reservoir, through Los Gatos Canyon and through the town of Los Gatos and the Vasona Reservoir, and then northeasterly through Campbell and San Jose. The Los Gatos Creek Trail runs along the river from Lexington Reservoir to the Guadalupe River near downtown San Jose and is popular among local hikers and bicyclists.

FLOODPLAIN MAPPING

The Federal Emergency Management Agency (FEMA) identifies Special Flood Hazard Areas (SFHA). FEMA publishes Flood Insurance Rate Maps that depict the floodplains. Within the City of Campbell, areas of undetermined flood hazard are located along the eastern and southern city boundaries. Additionally, a small portion of the city along Pollard Road is located within the 0.2% annual chance flood hazard (500-year flood). Flooding and flood hazards are addressed in greater detail in Section 4.0.

STORMWATER QUALITY

Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures,

contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminants in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

303(d) Impaired Water Bodies: Section 303(d) of the Federal Clean Water Act requires states to identify waters that do not meet water quality standards or objectives and, thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the states to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

The only impaired water body in the vicinity of the Planning Area is Los Gatos Creek, which was listed as impaired for diazinon, a commonly used household pesticide. The TMDL for diazinon in Los Gatos Creek was approved by the EPA in 2007.

REGULATORY SETTING - STORMWATER DRAINAGE

FEDERAL

Clean Water Act (CWA)

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The SWRCB is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ)

for small Municipal Separate Storm Sewer Systems (MS4s) covered under the CWA to efficiently regulate numerous storm water discharges under a single permit.

Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharge in the City of Campbell is subject to the Waste Discharge Requirements (WDRs) of the MS4 Permit (Order Number R2-2009-0074) and NPDES Permit Number CAS612008, as amended by Order Number R2-2011-0083.42

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and therefore must be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the RWQCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from construction sites statewide. Stormwater discharges from industrial and construction activities in the San Francisco Bay can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

Construction throughout the City could disturb more than one acre of land surface for centralized and regional structural Best Management Practices (BMPs) (and possibly for those distributed structural BMPs larger than one acre), affecting the quality of stormwater discharges into waters of the United States. The City would therefore be subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities. The Construction General Permit (CGP) regulates discharges of pollutants in stormwater associated with construction activity to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface.

The CGP requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific BMPs designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off-site into receiving waters. The SWPPP BMPs are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area.

STATE

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)

The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number

of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

LOCAL

West Valley Clean Water Program

The West Valley Clean Water Program (WVCWP) was established in 1994 as a collaborative effort between the smaller west valley communities (Campbell, Monte Sereno, Saratoga, and Los Gatos) to implement stormwater pollution control and management efforts. The WVCWP goal is to reduce pollutants in storm drain discharges, comply with MRP regulations and requirements, and maximize the effectiveness of pollution prevention efforts. The Santa Clara Valley Water District (SCVWD) administers an Urban Runoff Management Plan to reduce stormwater pollution, which includes the following specific actions:

- Municipal controls such as storm drain stenciling, storm drain operation and maintenance (O&M), street sweeping, street/public facilities maintenance, and illegal discharge response.
- Construction and development measures including on-site inspections, grading and erosion controls, and educating developers.
- Commercial and industrial facility inspections to prevent wastes from discharging into the storm drain system.
- Public education activities to increase awareness and change behavior.

By agreement with the participating cities and towns, the WVSD collects an additional surcharge from residences and commercial properties to fund the WVCWP. The SCVWD complies with the requirements of the MRP for urban runoff pollution control.

Municipal NPDES Permit Waste Discharge Requirements Order R2-2009-0074 NPDES Permit No. CAS612008 (As Amended by Order R2-2011-0083)

In response to the Federal Clean Water Act, the West Valley Clean Water Program regulates waste dischargers under a National Pollutant Discharge Elimination System (NPDES) Permit administered by the appropriate Regional Water Quality Control Board. Specifically, the municipalities are regulated with regard to their jurisdiction over and/or maintenance responsibility for municipal storm drain systems and watercourses that they own or operate. The NPDES Permit is concerned primarily with regulating trash, pollutants of concern, and excessive hydrologic runoff which can carry sediment and cause flooding.

As stated above, pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharge in the City of Campbell is subject to the WDRs of the MS4 Permit (Order Number R2-2009-0074) and NPDES Permit Number CAS612008, as amended by Order Number R2-2011-0083.42

Provision C.3 of the Municipal Regional Stormwater NPDES Permit (MRP) addresses post-construction stormwater requirements for new development and redevelopment projects that add

and/or replace 10,000 square feet or more of impervious area. Provision C.3 of the MRP also mandates that new development projects that meet certain criteria: 1) incorporate site design, source control, and stormwater treatment measures into the project design; 2) minimize the discharge of pollutants in stormwater runoff and non-stormwater discharge; and 3) prevent increases in runoff flows as compared to pre-development conditions. Low-impact development (LID) methods are the primary mechanisms for implementing such controls.

Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)

The SCVURPPP is an association of 15 municipal agencies in the Santa Clara Valley that discharge stormwater to the lower South San Francisco Bay. Member agencies (Co-permittees) include the cities of Campbell, Cupertino, Los Altos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale, the towns of Los Altos Hills and Los Gatos, the County of Santa Clara, and the SCVWD. The SCVURPPP and member agencies implement pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers. The SCVURPPP also promotes valuing stormwater as an important resource.

The member agencies of the SCVURPPP share a common NPDES permit to discharge stormwater to the South San Francisco Bay. Total population within the SCVURPPP area is approximately 1.7 million people. The SCVURPPP incorporates regulatory, monitoring and outreach measures aimed at reducing pollution in urban runoff to the "maximum extent practicable" to improve the water quality of South San Francisco Bay and the streams of Santa Clara Valley.

C.3 Stormwater Handbook

The C.3 Stormwater Handbook was written to help developers, builders, and project applicants include appropriate post-construction stormwater controls in their projects, to meet local municipal requirements and requirements of the Bay Area Municipal Regional Stormwater Permit (MRP). Municipalities covered by the MRP include: Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Saratoga, Sunnyvale, Santa Clara County, and the Santa Clara Valley Water District. These municipalities must require post-construction stormwater controls on development projects as part of their obligations under Provision C.3 of the MRP. This permit is a NPDES permit issued by the San Francisco Bay RWQCB, allowing municipal stormwater systems to discharge stormwater to local creeks, San Francisco Bay, and other water bodies if municipalities conduct prescribed actions to control pollutants.

The term "post-construction stormwater control" refers to permanent features included in a development project to reduce pollutants in stormwater and/or erosive flows during the life of the project – after construction is completed. The term "post-construction stormwater control" encompasses Low Impact Development (LID) site design, source control, and treatment measures as well as hydromodification management measures. LID techniques reduce water quality impacts by preserving and re-creating natural landscape features, minimizing imperviousness, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource.

As noted above, provision C.3 of the MRP addresses post-construction stormwater requirements for new development and redevelopment projects that add and/or replace 10,000 square feet or more of impervious area, or 5,000 square feet for "special projects" such as restaurant, and gas stations. Provision C.3 of the MRP also mandates that new development projects that meet certain criteria: 1) incorporate site design, source control, and stormwater treatment measures into the project design; 2) minimize the discharge of pollutants in stormwater runoff and non-stormwater discharge; and 3) prevent increases in runoff flows as compared to pre-development conditions. LID methods are the primary mechanisms for implementing such controls.

City of Campbell Stormwater Regulations

In order to comply with Provision C.3 of the MRP, project applicants are required to submit a Stormwater Management Plan (SWMP) with building plans, to be reviewed and approved by the City of Campbell's Public Works Department. The SWMP must be prepared under the direction of and certified by a licensed and qualified professional, which includes civil engineers, architects, or landscape architects. Conditions of approval for development projects include the installation and maintenance of Best Management Practices (BMPs) for site design and stormwater treatment, which must be designed per approved numeric sizing criteria.

Each development project mandated to implement stormwater treatment will also require a Certification of Engineered Stormwater Treatment for New and Redevelopment Projects. The Certification of Engineered Stormwater Treatment for New and Redevelopment Projects may be obtained at the City's Public Works Department. Owners of properties with treatment BMPs will also be required to certify on-going operation and maintenance by filing and recording a covenant submitted to the City.

In addition to implementing LID measures, the MRP also includes a provision to mitigate for hydromodification caused by increases in the volume and frequency of runoff discharges to creeks and streams. Generally, projects in highly developed urban areas are less likely to cause hydromodification. Consequently, projects located in catchment/watersheds that are already more than 65 percent impervious are exempt from this requirement. For projects in these areas that create or replace one acre or more of impervious surfaces, flow controls are required so that post-project runoff does not exceed pre-project runoff rates and durations.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it would:

- Require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-5: General Plan implementation may require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects (Less than Significant)

Development under the proposed General Plan would result in increased areas of impervious surfaces throughout the Planning Area, resulting in the need for additional or expanded stormwater drainage, conveyance, and retention infrastructure. The infrastructure and facilities necessary to serve new growth would involve development of some facilities on-site within new development projects, some facilities off-site on appropriately designated land, and may also involve improvements to existing facilities and disturbance of existing rights-of-way. The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the General Plan does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities.

To comply with the City's regional stormwater permit requirements, Project applicants are required to submit a Stormwater Management Plan (SWMP). Each future subsequent Project would be evaluated and reviewed for impacts from stormwater and runoff including:

- The evaluation of a project's compliance with water quality standards should consider the project's potential effect on water bodies on the Section 303(d) list, as well as the potential for conflict with applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses.
- The evaluation of a project's potential to degrade water quality should consider whether a project has the potential to result in a significant impact to surface water quality, marine, fresh, or wetland waters, or to groundwater quality. As with every category of environmental impact, effects must be considered both during and after construction. The evaluation of water quality impacts should include a description of how the project will comply with the requirements of SCVURPPP's Municipal Regional Stormwater NPDES Permit and the State's Construction General Permit. The description should also include a statement that the project should avoid creation of mosquito larval sources that would subsequently require chemical treatment to protect human and animal health.

3.15 UTILITIES AND SERVICE SYSTEMS

- The evaluation of a project's effect on drainage patterns should refer to the SCVURPPP Hydromodification Management Plan (2005), where applicable, to assess the significance of altering existing drainage patterns and to develop any mitigation measures. The evaluation of hydromodification effects should also consider any potential for streambed or bank erosion downstream from the project.
- The evaluation of a project's potential to create or contribute runoff should consider whether the project meets or exceeds the size thresholds for regulation under Provision C.3 (i.e., projects that create and/or replace 10,000 square feet of impervious surface, or 5,000 square feet for certain land uses²). The response to this question will indicate how Provision C.3 requirements will be met. Applicants must address Provision C.3 requirements in environmental documents for projects that meet or exceed the impervious surface thresholds.

Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. As such, this is a **less than significant** impact and no additional mitigation is required.

The policies and actions listed below would further ensure that there is adequate stormwater drainage and flood control infrastructure to serve future development under the General Plan, and would ensure that future drainage and flood control infrastructure projects do not result in adverse environmental impacts.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY SERVICED AND FACILITIES POLICIES

CSF-5.1 Maintain and improve Campbell's storm drainage facilities.

CSF-5.2 Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

CSF-5.3 Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

CSF-5.4 Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

CSF-5.5 Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and trees, and maintain natural drainage patterns.

CSF-5.6 Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

CSF-5.7 Where possible, avoid new outfalls to natural or earthen channels.

CSF-5.8 Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

CSF-5.9 Encourage dual-use detention basins for parks, ball fields, and other appropriate uses.

COMMUNITY SERVICED AND FACILITIES ACTIONS

CSF-5.a Regularly review and update the City of Campbell's Green Stormwater Infrastructure Plan.

CSF-5.b Continue to complete gaps in the drainage system in areas of existing development through the implementation of drainage improvement projects identified in the Green Stormwater Infrastructure Plan.

CSF-5.c Continue to review development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

CSF-5.d Require project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

CSF-5.e Identify which stormwater drainage facilities are in need of repair and address these needs through the City's Capital Improvement Program.

CSF-5.f Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the C.3 Stormwater Handbook.

CSF-5.g Work cooperatively with local, State, and Federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

3.15.4 SOLID WASTE

West Valley Collection and Recycling, LLC, a private garbage collection company, provides residential (single family and multi-family) and commercial garbage, recycling, and green waste collection services within and outside of the city limits. Residents may also haul their own refuse directly to the Guadalupe Rubbish Company, located at 15999 Guadalupe Mines Road, San Jose.

KEY TERMS

Class I landfill: A landfill that accepts for disposal 20 tons or more of municipal solid waste daily (based on an annual average); or one that does not qualify as a Class II or Class III municipal solid waste landfill.

Class II landfill: A landfill that (1) accepts less than 20 tons daily of municipal solid waste (based on an annual average); (2) is located on a site where there is no evidence of groundwater pollution caused or contributed by the landfill; (3) is not connected by road to a Class I municipal solid waste landfill, or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill; and (4) serves a community that experiences (for at least three months each year) an interruption in access to surface transportation, preventing access to a Class I landfill, or a community with no practicable waste management alternative.

Class III landfill: A landfill that is not connected by road to a Class I landfill or a landfill that is located at least 50 miles from a Class I landfill. Class III landfills can accept no more than an average of one ton daily of ash from incinerated municipal solid waste or less than five tons daily of municipal solid waste.

Transfer station: A facility for the temporary deposition of some wastes. Transfer stations are often used as places where local waste collection vehicles will deposit their waste cargo prior to loading into larger vehicles. These larger vehicles will transport the waste to the end point of disposal or treatment.

WASTE DISPOSAL FACILITIES

In 2013, CalRecycle reported that more than 97 percent of the City’s solid waste disposal waste went to two landfills: the Guadalupe Sanitary Landfill and the Monterey Peninsula Landfill. Table 3.15-7 compares the maximum daily capacity and estimated closure date for these two facilities.

TABLE 3.15-7: LANDFILLS EXISTING DAILY CAPACITY AND ESTIMATES CLOSURE DATE

LANDFILL	DAILY CAPACITY (TONS/DAY)	ESTIMATED CLOSURE DATE
Guadalupe Sanitary Landfill	1,300	1/1/2048
Monterey Peninsula Landfill	3,500	2/28/2107

SOURCE:

[HTTP://WWW.CALRECYCLE.CA.GOV/LGCENTRAL/REPORTS/JURISDICTION/REVIEWREPORTS.ASP](http://www.calrecycle.ca.gov/LGCENTRAL/REPORTS/JURISDICTION/REVIEWREPORTS.ASP)
 X ACCESSED APRIL 2016.

The two landfills that receive the majority of the City’s solid waste are likely to reach their permitted maximum capacities between 2048 and 2107, respectively, as shown in Table 3.15-7. In addition, there are 13 other landfills that received waste from the City of Campbell in 2013.

Guadalupe Sanitary Landfill

The Guadalupe Sanitary Landfill opened on March 2, 1999 operating under permit number 43-AN-0015. The Guadalupe Sanitary Landfill is owned and operated by Guadalupe Rubbish Disposal Co, Inc., and is located on a 411-acre site at 15999 Guadalupe Mines Road, San Jose, California. It is a Class III (i.e., municipal solid waste) landfill and features a disposal area of approximately 111 acres. The facility can receive up to 1,300 tons of solid waste for disposal per day, with a maximum permitted capacity of approximately 28.6 million cubic yards. As of 2011, the facility has approximately 11 million cubic yards of remaining capacity, with an estimated closure date of January 1, 2048.

The facility accepts municipal solid waste, construction and demolition debris, non-liquid industrial waste, and green materials. The Guadalupe Sanitary Landfill is open to the public.

Monterey Peninsula Landfill

The Monterey Peninsula Landfill opened on August 23, 2005 operating under permit number 27-AA-01010. The Monterey Peninsula Landfill is owned and operated by the Monterey Regional Waste Management District, and is located at 14201 Del Monte Boulevard, Marina, California. It is a Class III landfill (i.e., municipal solid waste). There are three Units listed by CalRecycle. Unit 01 has a 315-acre disposal area. It can receive up to 3,500 tons/day, with a total permitted capacity of 49.7 million cubic yards and an estimated remaining capacity of 48.6 million cubic yards (as of 2004). The Monterey Peninsula Landfill currently receives approximately 300,000 tons per year (less than 1,000 tons per day) of municipal solid waste for disposal.² The estimated closure date for Unit 01 is February 28, 2107. The estimated closure date for the Monterey Peninsula Landfill 2161.³

The facility accepts municipal solid waste, construction and demolition debris, agricultural waste, and sludges (biosolids). The Monterey Peninsula Landfill is open to the public.

SOLID WASTE GENERATION RATES AND VOLUMES

The California Department of Resources Recycling and Recovery (CalRecycle) tracks and monitors solid waste generation rates on a per capita basis. Per capita solid waste generation rates and total annual solid waste disposal volumes for the City of Campbell between 2010 and 2015 are shown in Table 3.15-8 below.

TABLE 3.15-8: SOLID WASTE GENERATION RATES

YEAR *	WASTE GENERATION RATES (LBS/PERSON/DAY)	TOTAL DISPOSAL TONNAGE (TONS/YEAR)
--------	--	---------------------------------------

² Monterey Regional Waste Management District. 2016. Monterey Peninsula Landfill Accessed July 21, 2016. Available at: <<http://www.mrwmd.org/programs-services/disposal/monterey-peninsula-landfill/>>.

³ *Ibid.*

3.15 UTILITIES AND SERVICE SYSTEMS

	PER RESIDENT	PER EMPLOYEE	
2010	3.9	8.1	27,981
2011	3.8	7.3	27,781
2012	4.0	7.1	28,861
2013	4.1	7.0	30,072
2014	4.1	6.8	31,498
2015	4.2	6.6	32,132

SOURCE: [HTTPS://WWW2.CALRECYCLE.CA.GOV/LGCENTRAL/DIVERSIONPROGRAM/SLCP/CAPACITYPLANNING/RECYCLING/JURISDICTIONDIVERSIONPOST2006](https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/SLCP/CapacityPlanning/Recycling/JurisdictionDiversionPost2006)

NOTE * 2015 WAS THE MOST RECENT YEAR OF AN APPROVED JURISDICTIONAL REVIEW. THE PER RESIDENT DISPOSAL RATE IS ESTIMATED AT 4.7 FOR 2019 AND 4.2 FOR 2020, WHICH IS BELOW THE PER RESIDENT DISPOSAL RATE TARGET (PPD) OF 5.2.

As shown in the table above, both the per capita waste generation rate and the total annual disposal tonnage in Campbell has been trending upward consistently from 2010 through 2015. The City of Campbell has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City's per capita disposal target rates are 5.2 and 8.3 pounds per person per day for residents and employees, respectively. The City's per capita disposal rate is below the target rate established by CalRecycle.

HAZARDOUS WASTE DISPOSAL

Household hazardous waste is any hazardous waste generated incidental to owning or maintaining a residence, including paints, solvents, varnishes, acids, flammables, acrylics, and resins. The most affordable and convenient way for City of Campbell residents to dispose of these wastes is to take them to either of the two local drop-off centers. The countywide Household Hazardous Waste (HHW) drop-off program is offered by the Santa Clara County Department of Environmental Health, and is available for all Campbell residents to dispose of HHW.

Business hazardous waste is any hazardous waste generated incidental to owning or maintaining a business, including paint, solvents, motor oil, fixer and developer, cleaners, and other chemicals.

Conditionally Exempt Small Quantity Generator (CESQG) businesses located within Santa Clara County may use the Santa Clara County CESQG Program for disposal of hazardous waste. A CESQG generates less than 100 kilograms (approximately 27 gallons or 220 pounds) of hazardous waste per month, or less than one kilogram of extremely hazardous waste per month. There is a fee for businesses to use the drop-off facility based on the type and quantity of the waste. All businesses will need either a temporary or permanent EPA ID number.

REGULATORY SETTING – SOLID WASTE

FEDERAL

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to address the huge volumes of municipal and industrial solid waste generated nationwide. After several amendments, the current Act governs the management of solid and hazardous waste and underground storage tanks (USTs). RCRA was an amendment to the Solid Waste Disposal Act of 1965. RCRA has been amended several times, most significantly by the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA is a combination of the first solid waste statutes and all subsequent amendments. RCRA authorizes the Environmental Protection Agency (EPA) to regulate waste management activities. RCRA authorizes states to develop and enforce their own waste management programs, in lieu of the Federal program, if a state's waste management program is substantially equivalent to, consistent with, and no less stringent than the Federal program.

STATE

California Integrated Waste Management Act (AB 939 and SB 1322)

The California Integrated Waste Management Act of 1989 (AB 939 and SB 1322) requires every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25% by 1995 and 50% by 2000. The purpose of AB 939 and SB 1322 is to “reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible.” The term “integrated waste management” refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. The Act has established a waste management hierarchy, as follows: Source Reduction; Recycling; Composting; Transformation; and Disposal.

California Integrated Waste Management Board Model Ordinance

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a “model ordinance” relating to adequate areas for collecting and loading recyclable materials in development projects. The model ordinance requires that any new development project, for which an application is submitted on or after September 1, 1994, include “adequate, accessible, and convenient areas for collecting and loading recyclable materials.” For subdivisions of single family detached homes, recycling areas are required to serve only the needs of the homes within that subdivision.

California Mandatory Commercial Recycling Law (AB 341)

Assembly Bill (AB) 341 directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning Oct. 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste

to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California.

Beginning on July 1, 2012, businesses have been required to recycle, and each jurisdiction has implemented programs that include education, outreach, and monitoring. Jurisdictions were required to start reporting on their 2012 Electronic Annual Report (due August 1, 2013) on their initial education, outreach, and monitoring efforts, and, if applicable, on any enforcement activities or exemptions implemented by the jurisdiction.

In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020. This is not written as a 75 percent diversion mandate for each jurisdiction. The 50 percent disposal reduction mandate still stands for cities, counties, and State agencies (including community colleges) under AB 939. CalRecycle continues to evaluate program implementation as it has in the past through the Annual Report review process for entities subject to either AB 939.

Assembly Bill 1826 Mandatory Commercial Organics Recycling

In October 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units (please note, however, that multi-family dwellings are not required to have a food waste diversion program). Organic waste (also referred to as organics) means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Starting on January 1, 2019, businesses that generate 4 cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services. By Summer/Fall 2021, if CalRecycle determines that the statewide disposal of organic waste in 2020 has not been reduced by 50 percent of the level of disposal during 2014, the organic recycling requirements on businesses will expand to cover businesses that generate 2 cubic yards or more of commercial solid waste per week. Additionally, certain exemptions may no longer be available if this target is not met.

Senate Bill 1383 Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reductions

In September 2016, Governor Brown signed SB 1383, establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP) in various sectors of California's economy. The bill codifies the California Air Resources Board's Short-Lived Climate Pollutant Reduction Strategy, established pursuant to SB 605, in order to achieve reductions

in the statewide emissions of short-lived climate pollutants. Actions to reduce short-lived climate pollutants are essential to address the many impacts of climate change on human health, especially in California's most at-risk communities, and on the environment.

As it pertains to solid waste, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it would:

- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; and/or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-6: General Plan implementation would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, and would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals (Less than Significant)

As described in Chapter 2.0 (Project Description) future development of projects as contemplated under the proposed General Plan may increase the population within the Planning Area by 22,203 persons. As of 2020, the City of Campbell achieved a disposal rate of 4.2 PPD per resident. Assuming these disposal rates remain constant throughout the life of the General Plan, the new growth under General Plan buildout would result in an increase of approximately 93,253 pounds per day of solid waste, which equals 46.6 tons per day or 17,019 tons of solid waste per year.

As noted previously, the vast majority (97%) of landfill disposed from the City's solid waste went to two landfills: the Guadalupe Sanitary Landfill and the Monterey Peninsula Landfill.⁴ The two landfills that receive the majority of the City's solid waste are likely to reach their permitted maximum capacities between 2048 and 2107, respectively. In addition, there are 13 other landfills that receive relatively small volumes waste from the City of Campbell. The City's projected increase in solid waste

⁴ Note: data provided by CalRecycle, based on information provided by County disposal reports.

generation associated with future buildout of the proposed General Plan is well within the permitted capacity of the Monterey Peninsula Landfill and Guadalupe Sanitary Landfill.

Guadalupe Sanitary Landfill has a remaining capacity of 11,055,000 million cubic yards, and has a current maximum permitted throughput of 1,300 tons of solid waste for disposal per day. This landfill has an estimated cease operation date of January 1st, 2048. Monterey Peninsula Landfill has a remaining capacity of 48,560,000 cubic yards, and has a current maximum permitted throughput of 3,500 tons per day. This landfill has an estimated cease operation date of February 28th, 2107. Future projects within the Planning Area would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. While there is adequate permitted landfill capacity to accommodate future growth, the proposed General Plan includes actions to further reduce the project's impact on solid waste services, as identified below. The General Plan would not exceed the permitted capacity of the landfill serving the city, and the General Plan complies with regulations related to solid waste. Therefore, because adequate capacity exists and the cease of operation at the receiving landfills extends beyond the General Plan Buildout this is considered a **less than significant** impact relative to this environmental topic.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY SERVICED AND FACILITIES POLICIES

CSF-6.1 Provide adequate waste disposal, recycling, and reuse services, including programs that improve public access to solid waste collection and recycling facilities.

CSF-6.2 Maximize source reduction and recycling to reduce the amount of solid waste sent to the landfill.

CSF-6.3 Reduce municipal waste generation by increasing recycling, on-site composting, and mulching, where feasible, at municipal facilities, as well as using resource efficient landscaping techniques in new or renovated medians and parks.

CSF-6.4 Support and encourage residential, commercial, and industrial source reduction, recycling, and reuse programs and techniques.

CSF-6.5 Locate waste collection, transfer, and processing facilities in areas that minimize impacts to the surrounding community.

CSF-6.6 When feasible, minimize the potential impacts of waste collection, transportation, and the location of potential disposal facilities upon the residents of Campbell.

COMMUNITY SERVICED AND FACILITIES ACTIONS

CSF-6.a Regularly monitor the level of service provided by garbage and recycling collection contractors to ensure that the service levels are adequate.

CSF-6.b Implement recycling and waste reduction education programs for City employees. The education program will disseminate information on what and how much is recycled by the City.

CSF-6.c Enforce and periodically update the Recycling and Salvaging of Construction and Demolition Debris Chapter (6.12) of the Campbell Municipal Code.

CSF-6.d Include standard language in requests for services and in City agreements requiring contractors to use best management practices to maximize diversion of waste from the landfill.

CSF-6.e Pursue public funding sources, such as grants, to implement recycling and reuse programs.

CSF-6.f Encourage recycling, reuse, and appropriate disposal of hazardous materials, including the following:

- Increase participation in single-family and multi-family residential curbside recycling programs;
- Increase participation in commercial and industrial recycling programs for organics, fiber, and containers;
- Reduce yard and landscaping waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques;
- Encourage local businesses to provide electronic waste (e-waste) drop-off services and encourage residents and businesses to properly dispose of, or recycle, e-waste; and
- Consider sponsoring a scheduled household waste collection program.

This page left intentionally blank

This section provides a background discussion of the hazards associated with wildfires in the Planning Area. Additional information related to fire hazards is included in Chapter 3.8 (Hazards and Hazardous Materials), and discussions including the discussion of fire suppression resources is located within Chapter 3.13 (Public Services and Recreation) of this report.

No comments were received during the NOP comment period regarding this environmental topic.

3.16.1 ENVIRONMENTAL SETTING

FIRE HAZARD SEVERITY ZONES

The state has charged the California Department of Forestry and Fire Protection (CalFire) with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas (SRAs). In addition, CalFire must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas (LRAs). The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards.

The Planning Area includes LRAs. No State or Federal Responsibility Areas are included within city boundaries.

Local Responsibility Areas

The Planning Area is located within a LRA. The City of Campbell and areas immediately surrounding the city are not categorized as a "Very High" FHSZ by CalFire. Figure 3.8-1 in Chapter 3.8 (Hazardous Materials) shows Fire Hazard Severity Zones within the general vicinity of Campbell.

State Responsibility Areas

There are no SRAs within the vicinity of the Planning Area.

Federal Responsibility Areas

There are no Federal Responsibility Areas (FRAs) within the Planning Area.

3.16.2 REGULATORY SETTING

FEDERAL

FY 2001 Appropriations Act

Title IV of the Appropriations Act required the identification of “Urban Wildland Interface Communities in the Vicinity of Federal Lands that are at High Risk from Wildfire” by the U.S. Departments of the Interior and Agriculture.

Disaster Mitigation Act (2000)

Section 104 of the Disaster Mitigation Act of 2000 (Public Law 106-390) enacted Section 322, Mitigation Planning of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, which created incentives for state and local entities to coordinate hazard mitigation planning and implementation efforts, and is an important source of funding for fuels mitigation efforts through hazard mitigation grants.

National Fire Plan 2000

The summer of 2000 marked a historic milestone in wildland fire records for the United States. Dry conditions (across the western United States), led to destructive wildfire events on an estimated 7.2 million acres, nearly double the 10-year average. Costs in damages including fire suppression activities were approximately 2.1 billion dollars. Congressional direction called for substantial new appropriations for wildland fire management. This resulted in action plans, interagency strategies, and the Western Governor’s Association’s “A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment - A 10-Year Comprehensive Strategy - Implementation Plan”, which collectively became known as the National Fire Plan. This plan places a priority on collaborative work within communities to reduce their risk from large-scale wildfires.

Healthy Forest Initiative 2002/Healthy Forest Restoration ACT 2003

In August 2002, the Healthy Forests Initiative (HFI) was launched with the intent to reduce the severe wildfires risks that threaten people, communities, and the environment. Congress then passed the Healthy Forests Restoration Act (HFRA) on December 3, 2003 to provide the additional administrative tools needed to implement the HFI. The HFRA strengthened efforts to restore healthy forest conditions near communities by authorizing measures such as expedited environmental assessments for hazardous fuels projects on federal land. This Act emphasized the need for federal agencies to work collaboratively with communities in developing hazardous fuel reduction projects and places priority on fuel treatments identified by communities themselves in their Community Wildfire Protection Plans.

Department of the Interior Department Manual Part 620

Wildland Fire Management. Part 620 of the Department of the Interior Departmental Manual pertains to wildland fire management policies, with the goal of providing an integrated approach to wildland fire management. The guiding principles of the plan emphasize the need for public health

and safety considerations, risk management protocols, inter-agency collaboration, and economic feasibility of wildfire management practices, as well as the ecological role of wildfires.

STATE

California Strategic Fire Plan

This statewide plan is a strategic document, which guides fire policy for much of California. The plan is aimed at reducing wildfire risk through pre-fire mitigation efforts tailored to local areas through assessments of fuels, hazards, and risks.

California State Multi-Hazard Mitigation Plan

The purpose of the State Multi-Hazard Mitigation Plan (SHMP) is to significantly reduce deaths, injuries, and other losses attributed to natural- and human-caused hazards in California. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, state, and federal agencies as well as the private sector.

California Government Code

California Government Code Section 65302.5 requires the State Board of Forestry and Fire Protection to provide recommendations for a local jurisdiction's General Plan fire safety element when the jurisdiction amends its general plan. While not a direct and binding fire prevention requirement for individuals, general plans that adopt the Board's recommendations will include goals and policies that provide for contemporary fire prevention standards for the jurisdiction. While the State Board of Forestry and Fire Protection has not specifically commented on the Proposed General Plan at the time that this EIR was written, the Proposed General Plan has been developed to include best practices to ensure contemporary fire prevention standards, as described in greater detail under the impact discussions below.

California Government Code Section 51175 defines Very High Fire Hazard Severity Zones and designates lands considered by the State to be a very high fire hazard.

California Government Code Section 51189 directs the Office of the State Fire Marshal to create building standards for wildland fire resistance. The code includes measures that increase the likelihood of a structure withstanding intrusion by fire (such as building design and construction requirements that use fire-resistant building materials) and provides protection of structure projections (such as porches, decks, balconies and eaves), and structure openings (such as attics, eave vents, and windows).

California Public Resource Code

The State's Fire Safe Regulations are set forth in Public Resources Code Section 4290, which include the establishment of SRAs.

Public Resources Code Section 4291 sets forth defensible space requirements, which are applicable to anyone that ...owns, leases, controls, operates, or maintains a building or structure in, upon, or

adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material (§4291(a)).

Public Resources Code Sections 4292-4296 and 14 CCR 1256, Fire Prevention for Electrical Utilities, address the vegetation clearance standards for electrical utilities. They include the standards for clearing around energy lines and conductors such as power-line hardware and power poles. These regulations are critical to wildland fire safety because of the substantial number of power lines in wildlands, the historic source of fire ignitions associated with power lines, and the extensive damage that results from power line caused wildfires in severe wind conditions.

Assembly Bill 337

Per Assembly Bill 337, local fire prevention authorities and CalFire are required to identify VHFHSZs in LRAs. Standards related to brush clearance and the use of fire resistant materials in fire hazard severity zones are also established.

Uniform Fire Code

The Uniform Fire Code (UFC) establishes standards related to the design, construction, and maintenance of buildings. The standards set forth in the UFC range from designing for access by firefighters and equipment and minimum requirements for automatic sprinklers and fire hydrants to the appropriate storage and use of combustible materials.

Senate Bill No. 1241

California Senate Bill No. 1241 requires that the Safety Element component of city or county general plans to incorporate fire risk related to SRAs and Very High Fire Hazard Severity Zones.

Code of Regulations Title 8 (Cal/OSHA)

In accordance with CCR, Title 8, Section 1270 and Section 6773 (Fire Prevention and Fire Protection and Fire Equipment), the Occupational Safety and Health Administration (Cal OSHA) establishes fire suppression service standards. The standards range from fire hose size requirements to the design of emergency access roads.

Code of Regulations Title 14 (Natural Resources)

Division 1.5 (Department of Forestry and Fire Protection), Title 14 of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

Code of Regulations Title 19 (Public Safety)

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

3.16.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact related to wildfires if:

- Located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, the project would:
 - Substantially impair an adopted emergency response plan or emergency evacuation plan.
 - Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
 - Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
 - Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

IMPACTS AND MITIGATION MEASURES

Impact 3.16-1: General Plan implementation would not have a significant impact related to wildfire risks associated with lands in or near State Responsibility Areas or lands classified as very high fire hazard severity zones (No Impact)

The Planning Area is not located in or near any State Responsibility Areas and there are no lands classified as very high fire hazard severity zones (VHFHSZ) within or near the Planning Area. Therefore, the General Plan would have *no impact* related to wildfire risks associated with lands in or near State Responsibility Areas or lands classified as very high fire hazard severity zones.

CEQA requires an EIR to evaluate a project's effects in relationship to broader changes that are occurring or that may foreseeably occur, in the surrounding environment. Accordingly, this chapter presents discussion of CEQA-mandated analysis for cumulative impacts, irreversible impacts, and growth inducement associated with the proposed General Plan.

4.1 CUMULATIVE SETTING AND IMPACT ANALYSIS

INTRODUCTION

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the General Plan. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively Considerable," as defined in section 15065(a)(3), means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

...the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,

(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

CUMULATIVE SETTING

Under CEQA, the discussion of cumulative impacts should focus on the severity of the impacts and the likelihood of their occurrence. The geographic scope for the cumulative analysis covers the entire Campbell Planning Area, as shown on Figure 2.0-2 (see Chapter 2.0: Project Description). It should be noted that, for some environmental topics, the geographic scope for the cumulative analysis also covers the boundaries of Santa Clara County, the San Francisco Bay Area Air Basin, and/or other jurisdictional boundaries that are relevant to the particular environmental topic.

In most cases in this EIR, the buildout analysis utilizes a 20-year horizon, and 2040 is assumed to be the buildout year of the General Plan. The year 2040 is used as the benchmark year for the cumulative analysis contained in this EIR. This year was chosen based on the fact that the General Plan was developed as a 20-year plan for Campbell, and the General Plan is scheduled for adoption in late 2022.

Land Use/Growth Projections

Existing and proposed land uses in the Campbell Planning Area can be characterized in broad terms of residential, mixed use, institutional, commercial and office, manufacturing and industrial, and open space. Table 4.0-1 describes the existing and proposed land uses.

Table 4.0-1: Proposed and Existing General Plan – Acreage by Land Use Designation

General Plan Land Use	Proposed GP (Acres)	Existing GP (Acres)	Change (Acres)
Commercial, Office, and Industrial			
Commercial/Light Industrial (C/LI)	24.42	24.42	0.00
Central Commercial (CC)	37.53	59.46	-21.93
General Commercial (GC)	98.08	195.57	-97.49
Neighborhood Commercial (NC)	49.30	34.30	15.00
Light Industrial (LI)	104.86	104.86	0.00
Professional Office (P-O)	33.55	36.05	-2.50
Research and Development (R&D)	85.49	102.89	-17.39
Residential			
Low Density Residential <4.5 (LDR 4.5)	142.40	144.00	-1.60
Low Density Residential <5.5 (LDR 5.5)	211.25	211.25	0.00
Low Density Residential <7.5 (LDR 7.5)	1039.87	1042.27	-2.41
Low-Medium Density Residential (LMDR)	161.99	162.95	-0.95
Medium Density Residential (MDR)	191.28	184.48	6.80
High Density Residential (HDR)	170.54	177.75	-7.21
Mobile Home Park (MHP)	29.66	29.66	0.00
Mixed-Use			
Office/Low-Medium Density Residential (LMDR/O)	4.16	4.16	0.00
Commercial/High-Medium Density Residential (MHDR/C)	0.00	16.37	-16.37
Commercial/Prof. Office/Residential (RCPO)	57.11	54.96	2.15
Commercial-Corridor Mixed-Use (CC-MU)	60.03	0.00	60.03
High Density Mixed-Use (HD-MU)	20.58	0.00	20.58
Medium-High Density Mixed-Use (MHDR-MU)	27.20	0.00	27.20
Neighborhood Mixed-Use (N-MU)	8.12	0.00	8.12
Transit-Oriented Mixed-Use (TO-MU)	44.75	0.00	44.75
Limited Development Public/Quasi Public and ROW Uses			
Institutional (I)	155.66	166.57	-10.91
Open Space (OS)	263.61	269.48	-5.87
Right-of-Way Parcels	39.22	39.22	0.00
Total Acres	3,060.65	3,060.65	0

SOURCE: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP 2022.

4.0 OTHER CEQA-REQUIRED TOPICS

While no specific development projects are proposed as part of the Campbell General Plan Update, the General Plan will accommodate future growth in Campbell, including new businesses, expansion of existing businesses, and new residential uses. The buildout analysis assumes an approximate 20-year horizon, and 2040 is assumed to be the buildout year of the General Plan.

Table 4.0-2 below summarizes the range of new growth, including residential units, and non-residential square footage that could occur upon full buildout of the proposed General Plan. It is noted that there are very few vacant parcels in Campbell. As such, most of the new growth projected through General Plan buildout would occur as existing developed parcels redevelop with new or modified uses over time. The projections shown in the table below represent good-faith estimates of growth that could potentially occur following adoption of the General Plan.

Table 4.0-2: Growth Projections - Proposed Land Use Map

	Population	Dwelling Units	Non-Residential Square Feet	Jobs	Jobs per Housing Unit
Existing Conditions					
	42,726	17,400	10,090,334	30,568	1.76
New Growth Potential					
Existing General Plan	4,123	1,640	2,098,014	4,633	2.83
Proposed General Plan	22,203	8,824*	2,633,721	6,194	0.70
Total Growth: Existing Plus New Growth Potential					
Existing General Plan	46,849	19,040	12,188,348	35,199	1.85
Proposed General Plan	64,929	26,224	12,724,055	36,762	1.40

SOURCES: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP 2022. Santa Clara County Assessor 2017; California Department of Finance 2017; U.S Census ONTHEMAP; ESRI 2017,

*NOTE: APPROXIMATELY 6,644 NEW DWELLING UNITS ARE ASSUMED TO BE ACCOMMODATED UNDER THE PROPOSED HOUSING ELEMENT OPPORTUNITY SITES, AND THE ADDITIONAL 2,180 NEW DWELLING UNITS ARE ASSUMED TO OCCUR AS NEW DEVELOPMENT AND REDEVELOPMENT THROUGHOUT THE BALANCE OF THE CITY.

Growth projections should not be considered a prediction for growth, as the actual amount of development that will occur throughout the planning horizon of the General Plan is based on many factors outside of the City's control. Actual future development would depend on future real estate and labor market conditions, property owner preferences and decisions, site-specific constraints, land turnover, and other factors. Additionally, new development and growth are largely dictated by existing development conditions. Very few communities in California actually develop to the full potential allowed in their respective General Plans during the planning horizon.

Tables 4.0-3 provides detailed growth under the Proposed General Plan (broken down by land use type) in terms additional new growth potential including housing units, population growth, non-residential building square footage, and additional jobs estimates at buildout.

TABLE 4.0-3: POTENTIAL NEW GROWTH IN PLANNING AREA OVER EXISTING CONDITIONS

LAND USES	NEW NON-RESIDENTIAL SQUARE FOOTAGE AT BUILDOUT	NEW JOBS AT BUILDOUT	NEW HOUSING UNITS AT BUILDOUT	NEW POPULATION GROWTH AT BUILDOUT
Commercial, Office, Industrial, and Mixed-Use				
Commercial/ Light Industrial - (C/LI); (LI)	264,516	369	-	-
Mixed Use / Commercial Uses - (GC); (NC); (CC); (MHDR/C); (RCPO); (CC-MU); (HD-MU); (MHDR-MU); (N-MU); (TO-MU)	1,561,181	3,159	7,823	19,682
Office/ R&D - (R&D); (P-O)	808,024	2,666	-	-
Residential Only				
Single Family Residential - (LDR 4.5), (LDR 5.5), (LDR 7), (LMDR)	-	-	89	223
Multifamily Residential - (MDR); (HDR)	-	-	913	2,298
Totals				
	2,633,721	6,194	8,824	22,203

SOURCE: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP 2022. SANTA CLARA COUNTY ASSESSOR 2017.

CUMULATIVE EFFECTS OF THE PROJECT

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. Section 15130 of the CEQA Guidelines requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). Cumulative impact analysis may be less detailed than the analysis of the project's individual effects (State CEQA Guidelines 15130[b]).

In order to assess cumulative impacts, an EIR must analyze either a list of past, present, and probable future projects (referred to as the "list approach") or a summary of projections contained in an adopted general plan or related planning document (referred to as the "projection method"). Because of the programmatic nature of the Campbell General Plan, this Draft EIR uses the **projection method** for the cumulative analysis and considers buildout of the proposed General Plan in addition to buildout of the other General Plans within Santa Clara County. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency for that specific project. The General Plans considered as part of this cumulative analysis include those for all jurisdictions in the County of Santa Clara, including:

- County of Santa Clara
- City of Santa Clara
- City of San Jose
- City of Sunnyvale
- City of Palo Alto
- City of Cupertino
- City of Gilroy
- City of Mountain View
- City of Morgan Hill
- City of Los Gatos
- City of Los Altos
- City of Los Altos Hills
- City of Milpitas
- City of Saratoga
- City of Monte Sereno

The Projection Method serves as a guide to determine if the General Plan Update is consistent with the long-term population, employment, and household projections of the region. If the proposed General Plan Update is generally consistent with regional projections, then it would also generally be consistent with regional efforts to address environment problems such as air quality and traffic.

Cumulative Impacts

Cumulative impacts for most issue areas are not quantifiable and are therefore discussed in general qualitative terms as they pertain to development patterns in the surrounding region. An exception to this is a topic like traffic, which may be quantified by estimating future traffic patterns, pollutant emitters, etc. and determining the combined effects that may result. In consideration of the cumulative scenario described above, the proposed project may result in the following cumulative impacts.

AESTHETICS AND VISUAL RESOURCES

Impact 4.1: Cumulative degradation of the existing visual character of the region (Less than Cumulatively Considerable)

While the Planning Area is substantially developed and within an urban area, some areas of the city may contain areas and viewsheds with relatively high scenic value, however there are no officially designated scenic vista points in the Planning Area. Additionally, as described above, there are no officially designated scenic highways located in the vicinity of Campbell. Significant visual resources in the Planning Area include prominent waterways, including Los Gatos Creek. Other prominent visual features throughout the Planning area may include views of ridgelines and Santa Cruz Mountain Range to the west.

However, as noted in greater detail in the Project Description (Chapter 2.0), implementation of the proposed General Plan could lead to new and expanded urban development including increased densities throughout the city. This new development may result in changes to the skyline throughout the Planning Area, which may obstruct or interfere with views of visual features surrounding the Planning Area.

While growth is anticipated to occur in the Campbell Planning Area and within the other cities within Santa Clara County, the majority of growth is anticipated to occur in and around existing urban development. Development of land uses and associated infrastructure is planned to occur in the future to accommodate growth envisioned in the general plans that are effective within the cumulative analysis area, including Santa Clara County and the cities of San Jose, Milpitas, Los Gatos, Saratoga, and Cupertino.

Regional growth has and will continue to result in a cumulative aesthetic effect by converting undeveloped land into developed and occupied areas and increasing overall levels of nighttime lighting. Cumulative development entails grading/landform alteration, the development of structures, and the installation of roadways and other infrastructure that has altered and will continue to permanently alter the region's existing visual character. This is considered a potentially significant cumulative impact. Subsequent projects implemented under the proposed General Plan would be required to be consistent with the policies and actions of the proposed General Plan and adopted regulations pertaining to aesthetics and lighting in Campbell. With implementation of adopted policies and regulations provided in Section 3.1 (Aesthetics and Visual Resources), the proposed General Plan would not considerably contribute to permanent changes in visual character, such as obstruction of scenic views, conversion of existing visual character, and increased lighting.

The policies and actions included within the General Plan would reduce the cumulative effect of the General Plan on visual character, to minimize the proposed project's contribution to a less-than-significant level. Therefore, the proposed General Plan's incremental contribution to this cumulative impact would be **less than cumulatively considerable**.

AGRICULTURAL AND FOREST RESOURCES

Impact 4.2: Cumulative impact to agricultural lands and resources (Less Than Cumulatively Considerable)

There are no lands within the Planning Area that are designated for agricultural use on the existing or proposed Campbell Land Use Map. There are no agricultural lands identified by the CA Department Conservation's Farmland Mapping and Monitoring Program within the Campbell Planning Area. Furthermore, there are no lands within the Campbell Planning Area that are currently under a Williamson Act contract. Additionally, there are no forest lands or timber lands located within the Campbell Planning Area.

Because there are no lands within the Planning Area that are designated by the existing or proposed General Plan for agricultural uses, and there are no forest lands or timber lands located within the Campbell Planning Area, the proposed General Plan's incremental contribution to this cumulative impact would be **less than cumulatively considerable**.

AIR QUALITY

Impact 4.3: Cumulative impact on the region's air quality (Less Than Cumulatively Considerable)

With respect to local air quality emissions, toxic air contaminant emissions, and health impacts, future development under the General Plan would be required to comply with CARB, BAAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan policies and actions. The BAAQMD's most current plan is the 2017 Clean Air Plan. The 2017 Clean Air Plan includes a multi-pollutant strategy to reduce emissions and ambient concentrations of ozone, fine particulate matter, toxic air contaminants, as well as greenhouse gases. A primary goal of the 2017 Clean Air Plan is to address public health. The 2017 Clean Air Plan addresses public health through identifying control measures to maximize the reduction in population exposure to air pollutants and by including a category titled *Land Use and Local Impacts Measures* that is intended to address localized impacts of air pollution and to help local jurisdictions to pursue transit-oriented infill development in priority areas.

The policies and actions included throughout the proposed General Plan cover the full breadth of air quality issues as recommended in the 2017 Clean Air Plan. For example, Policy COS-10.3 requires the siting of sensitive receptors with the potential for exposure to criteria pollutants and significant health risks are assessed at the project-level. Therefore, compliance with the applicable goals, policies, and actions in the proposed General Plan as well applicable BAAQMD rules and regulations, would further assist in minimizing the proposed project's contribution to air quality emissions, TACs, and health impacts. As a result, this is considered a **less than cumulatively considerable** impact.

BIOLOGICAL RESOURCES

Impact 4.4: Cumulative loss of biological resources, including habitats and special status species (Less than Cumulatively Considerable)

Cumulative development anticipated throughout the greater Santa Clara County region will result in impacts to biological resources, including the permanent loss of habitat for special status species, corridor fragmentation, direct and indirect impacts to special status species, and reduction and degradation of sensitive habitat. Biological resources are a limited resource and the cumulative loss is considered significant. In order to facilitate a cohesive and regional approach to species protection and habitat management, the Santa Clara Valley Habitat Agency leads the implementation of the Santa Clara Valley Habitat Plan (Habitat Plan). The Habitat Plan is a 50-year regional plan to protect endangered species and natural resources while allowing for future development in Santa Clara County. In 2013 the Habitat Plan was adopted by all local participating agencies and permits were issued from the US Fish and Wildlife Service and California Department of Fish and Wildlife. It is both a habitat conservation plan and natural community conservation plan, or HCP/NCCP. This planning document:

- Helps private and public entities plan and conduct projects and activities in ways that lessen impacts on natural resources, including specific threatened and endangered species.
- Identifies regional lands—called reserves—to be preserved or restored to benefit those species.
- Describes how reserves will be managed and monitored to ensure that they benefit those species.

In providing a long-term, coordinated program for habitat restoration and conservation, the Habitat Plan aims to enhance the viability of threatened and endangered species throughout the Santa Clara Valley.

Subsequent projects implemented under the proposed General Plan would be required to be consistent with the policies and actions of the proposed General Plan, and if located in a covered area, the Habitat Plan. The implementation of an individual project would require a detailed and site-specific review of the site to determine the presence or absence of movement corridors, special-status species, and sensitive habitat on a given project site. If movement corridors, special-status species, or sensitive habitat are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process. However, as provided under Section 3.4 (Biological Resources), with implementation of the policies and actions included within the General Plan, implementation of the General Plan would not generate a significant impact on biological resources. Therefore, the proposed General Plan's incremental contribution to this cumulative impact would be **less than cumulatively considerable**.

CULTURAL AND TRIBAL RESOURCES

Impact 4.5: Cumulative impacts on known and undiscovered cultural resources (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the proposed General Plan may result in the discovery and removal of cultural resources, including archaeological, historical, and Native American resources and human remains. The proposed General Plan policies and actions, as well as State and Federal regulations, will reduce the risk to resources in the region. As discussed in Section 3.5 (Cultural and Tribal Cultural Resources), each project would require specific surveys for potential resources and the evaluation of any resources discovered during construction activities. Other policies and actions designed to reduce impacts to cultural and tribal cultural resources within the Planning Area and the region as a whole are also provided in Section 3.5 (Cultural and Tribal Cultural Resources). Adherence to these policies, actions, and regulations will avoid and/or minimize a cumulative loss of these important resources if they are found during project-specific surveys or construction. Therefore, the proposed General Plan's incremental contribution to cumulative cultural resource impacts would be **less than cumulatively considerable**.

GEOLOGY AND SOILS

Impact 4.6: Cumulative impacts related to geology and soils (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the proposed General Plan may result in risks associated with geology and soils. For example, there is an ongoing possibility that a fault located anywhere in the state (or region) could rupture and cause seismic ground shaking. Additionally, grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Other geologic risks such as liquefaction, landsliding, lateral spreading, and soil expansion are also geologic risks that are present.

While some cumulative impacts will occur in the region as individual projects are constructed, the proposed General Plan policies and actions, as well as State and Federal regulations, will reduce the risk to people in the region. Considering the protection granted by local, State, and Federal agencies and their requirements for seismic design, as discussed in Section 3.6 (Geology and Soils), the overall cumulative impact would not be significant. As a result, the proposed General Plan's incremental contribution to cumulative geologic and soil impacts would be **less than cumulatively considerable**.

GREENHOUSE GASES, CLIMATE CHANGE, AND ENERGY

Impact 4.7: Cumulative impacts related to greenhouse gases, climate change, and energy (Considerable Contribution and Significant and Unavoidable)

Implementation of the Campbell General Plan would not directly result in the creation of GHG or energy emissions. However, subsequent development allowed under the General Plan would result in new projects that would increase GHG and energy emissions in the Campbell Planning Area.

There are a variety of ways in which a general plan could contribute to climate change and result in the generation of GHGs and energy. Sprawling land use patterns that place residences far from employment and retail centers can result in increased vehicle miles traveled (VMT), which increase GHG generation. The conversion of forest lands and open space areas into urbanized uses removes vegetation and trees that have positive carbon sequestration value. Imbalances between local jobs and housing can result in increased commute times and increased VMT associated with longer travel distances between home and work.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. GHG emissions are cumulative by nature, given that they spread throughout the atmosphere on a global scale. In determining the significance of a project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

Through the adoption and implementation of Action COS-10.c, the City has committed to the preparation and adoption of a Climate Action Plan that establishes GHG reduction targets that are consistent with Statewide GHG reduction goals, and includes an implementation program to achieve the reduction targets. However, there is no guarantee that implementation of the General Plan Update would ensure that the City of Campbell would be consistent with California's long-term climate goal of achieving carbon neutrality by 2045. As a result, the proposed General Plan's incremental contribution to cumulative greenhouse gas, climate change, and energy impacts would be considered a **cumulatively considerable and significant and unavoidable** impact.

HAZARDS AND HAZARDOUS MATERIALS

Impact 4.8: Cumulative impacts related to hazardous materials and human health risks (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the proposed General Plan may involve the transportation, use, and/or disposal of hazardous materials, which may involve the use of equipment that contains hazardous materials (e.g., solvents and fuels or diesel-fueled equipment), or the transportation of excavated soil and/or groundwater containing contaminants from areas that are identified as being contaminated. Furthermore, because of the

regional nature of the General Plan, some future land uses will inevitably transport or use hazardous materials within ¼ mile of a school, or other sensitive receptors such as hospitals and residences.

As shown in Figure 3.8-1, the City of Campbell and general vicinity are not categorized as “Very High” FHSZ by CalFire or located within a State Responsibility area or Federal Responsibility area. Local Responsibility Areas (LRA) are concentrated in the unincorporated areas of Santa Clara County. CalFire data for the foothill and mountain areas to the west of the Planning Area include a preponderance of “moderate” and “high” fuel ranks.

The proposed General Plan includes requirements for adequate water supply and water flow availability, ensuring adequate emergency access, adequate fire protection services, fire safe design site standards, and ensuring public awareness regarding fire safety. All future projects allowed under the General Plan would be required to comply with the provisions of Federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements.

While some cumulative impacts will occur in the region as individual projects are constructed, the proposed General Plan policies and actions, as well as State and Federal regulations, will reduce the risk to people in the region. Considering the protection granted by local, State, and Federal agencies and their requirements for the use of hazardous materials in the region, as discussed in Section 3.8 (Hazards and Hazardous Materials), the overall cumulative impact for hazards impacts would not be significant. Therefore, the proposed General Plan’s incremental contribution to cumulative hazards and hazardous materials impacts would be **less than cumulatively considerable**.

HYDROLOGY AND WATER QUALITY

Impact 4.9: Cumulative impacts related to hydrology and water quality. (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the proposed General Plan has the potential to result in construction-related water quality impacts, impacts to groundwater recharge, and cause flooding, erosion, or siltation from the alteration of drainage patterns.

While some cumulative impacts will occur in the region as individual projects are constructed, the proposed General Plan policies and actions, as well as State and Federal regulations, will substantially reduce the impacts. Considering the protection granted by local, State, and Federal agencies and their permit and monitoring requirements, as discussed in Section 3.9 (Hydrology and Water Quality), and with implementation of the policies and actions included within the General Plan, the overall cumulative impact would not be significant. As a result, the General Plan’s incremental contribution to cumulative hydrology impacts would be **less than cumulatively considerable**.

LAND USE, POPULATION, AND HOUSING

Impact 4.10: Cumulative impacts related to local land use, population, and housing (Less than Cumulatively Considerable)

Cumulative land use and planning impacts, such as the potential for conflicts with adjacent land uses and consistency with adopted plans and regulations, are typically site and project-specific. It may be determined in the project-specific design phase of a development project that an individual project may require removal of homes and result in the displacement of people and housing; however, these effects are not cumulatively considerable because there is adequate replacement housing available under the proposed General Plan. Additionally, any removal of homes would require adequate compensation to the homeowner in accordance with Federal and State laws.

The land uses allowed under the proposed General Plan provide opportunities for cohesive new growth at in-fill locations within existing urbanized areas, as well as limited new growth within the Planning Area, but would not create physical division within existing communities. New development and redevelopment projects would be designed to complement the character of existing neighborhoods and provide connectivity between existing development and new development within the cumulative analysis area. The proposed General Plan does not include any new roadways, infrastructure, or other features that would divide existing communities. Moreover, with implementation of General Plan policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds. Lastly, General Plan implementation would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, the proposed General Plan's incremental contribution to cumulative land use and population impacts would be **less than cumulatively considerable**.

MINERAL RESOURCES

Impact 4.11: Cumulative impacts related to mineral resources (Less than Cumulatively Considerable)

Mineral resources of significance found and extracted in Santa Clara County include construction aggregate deposits and, to a lesser extent, salts derived from evaporation ponds at the edge of San Francisco Bay.

The Planning Area does not contain any known significant mineral resources or mineral extraction operations. The entire Planning Area is developed with urban uses, and there are no opportunities for mineral resource extraction within Campbell.

Additionally, the Planning Area does not contain sites designated as a locally important mineral resource recovery site by the City's General Plan. The Santa Clara County General Plan identifies important mineral resources within its Planning Area and outside of the City of Campbell. Implementation of the proposed General Plan would not result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use

plan. As a result, the General Plan's incremental contribution to cumulative mineral resource impacts would be **less than cumulatively considerable**.

NOISE

Impact 4.12: Cumulative impacts related to noise (Less than Cumulatively Considerable)

Buildout of the General Plan may contribute to an exceedance of the City's transportation noise standards and/or result in significant increases in traffic noise levels at existing sensitive receptors. As indicated by Tables 3.12-11 in Section 3.12 (Noise), the related traffic noise level increases with a circulation system buildout of the proposed 2040 General Plan are predicted to increase between 0.4 to 3.2 dB versus the existing (2016) conditions.

General Plan Policies N-1.1 through N-1.10, and Action N-1a are intended to minimize exposure to excessive noise, including noise associated with traffic. Specifically, Policies N-1.1 through N-1.8 support noise-compatible land uses in the vicinity of traffic noise sources and require that new development and infrastructure projects be reviewed for consistency with the noise standards established in Tables N-1 and N-2 in Section 3.12 (Noise). The proposed General Plan standards required under Policy N-1.3, for exposure to traffic noise meet or exceed the noise level standards of the adopted General Plan.

Table 3.12-4 in Section 3.12 (Noise) indicates that the 60 dBA L_{dn} railroad noise contours for the VTA line may extend up to 75 feet from the railroad centerline. Future development located along these railroad lines could therefore be exposed to unacceptable exterior noise levels. However, Policies N-1.1 and N-1.5 support noise-compatible land uses in the vicinity of railroad noise sources and require that new development and infrastructure projects be reviewed for consistency with the noise standards established in Tables N-1 and N-2 in Section 3.12 (Noise). The proposed General Plan standards required under Policy N-1.2, for exposure to railroad noise meet or exceed the noise level standards of the adopted General Plan.

Implementation of the General Plan could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. Such land uses may include commercial area loading docks, industrial uses, HVAC equipment, car washes, daycare facilities, auto repair, and recreational uses. While the General Plan does not specifically propose any new noise generating uses, the Land Use Map includes light industrial land use designations, which may result in new noise sources. Specific land uses that would be located in the city are not known at this time. Additionally, noise from existing stationary sources, as identified in the background section of this chapter, will continue to impact noise-sensitive land uses in the vicinity. New projects which may include stationary noise sources such as automotive and truck repair facilities, tire installation centers, car washes, loading docks, corporation yards, parks, and play fields may create noise levels in excess of the City's standards.

However, the General Plan includes policies and actions that are intended to reduce noise associated with stationary sources. Specifically, Policies N-1.1 through N-1.8, Policies N-2.1 through Policies N-2.4, and Action N-1a Action N-2a would reduce noise associated with stationary sources.

Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction could result in periods of significant ambient noise level increases and the potential for annoyance. However, the proposed General Plan includes policies and actions that are intended to reduce noise associated with construction noise (listed below). Specifically, Policies N-1.13, N-1.15, and N-1.17 and Actions N-1e and N-1f would reduce noise associated with construction noise. As a result, the General Plan's incremental contribution to cumulative noise impacts would be **less than cumulatively considerable**.

PUBLIC SERVICES AND RECREATION

Impact 4.13: Cumulative impacts to public services and recreation (Less than Cumulatively Considerable)

Development accommodated under the General Plan would result in additional residents and businesses in the City, including new residential, industrial, office, and commercial uses. As described in Chapter 2.0, buildout of the General Plan could yield a total of up to 26,224 housing units, a population of 64,929 people, 12,724,055 square feet of non-residential building square footage, and 36,762 jobs within the Planning Area. As shown in Table 2.0-2 of Chapter 2.0 (Project Description), this represents development growth over existing conditions of up to 8,824 new housing units, 22,203 people, 2,633,721 square feet of new non-residential building square footage and 6,194 jobs.

Development and growth facilitated by the General Plan would result in increased demand for public services, including fire protection, law enforcement, schools, parks, libraries, and other public and governmental services. The General Plan includes policies and actions to ensure that public services are provided at acceptable levels and that the City will maintain and implement public facility master plans, in collaboration with appropriate service providers and other agencies, to ensure compliance with appropriate regional, state, and federal laws and to provide efficient public facilities and services to Campbell.

Cumulative growth that would occur within Santa Clara County and other cities within Santa Clara County over the life of the proposed General Plan will result in increased demand for public services, including fire protection, law enforcement, schools, parks, libraries, and other public and governmental services. As the demand for public services and recreation increases, there will likely be a need to address acceptable service ratios, response times, and other performance standards. New or expanded service structures (e.g., offices, maintenance and administrative buildings, schools, parks, fire facilities, libraries, etc.) will be needed to provide for adequate staffing, equipment, and appropriate facilities to serve growth within the cumulative analysis area.

New facilities will be needed to serve growth contemplated in the General Plan. The environmental effect of providing the public services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental

impacts of constructing and operating the governmental facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. These impacts are described in the relevant chapters (Chapters 3.1 through 3.16, and 4.0) of this Draft EIR. Any future development under the General Plan would be required to comply with regulations, policies, and standards included in the General Plan, and would be subject to CEQA review as appropriate.

The General Plan includes a range of policies and actions that would ensure that public services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development funds its fair share of services. The General Plan includes policies to ensure that fire protection and law enforcement services keep pace with new development and that school, library, and governmental services are adequately planned and provided. Payment of applicable impact fees, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the future projects, would ensure that the City maintains acceptable service ratios. The proposed General Plan's incremental contribution to cumulative public services and recreation impacts would be **less than cumulatively considerable**.

TRANSPORTATION AND CIRCULATION

Impact 4.14: Cumulative impacts on the transportation network (Considerable Contribution and Significant and Unavoidable)

The California Environmental Quality Act, Section 15125(d), requires an EIR to discuss inconsistencies between the proposed Project and applicable general and regional plans. The purpose of this section is to discuss the proposed Project's consistency with the local growth forecasts in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as *Plan Bay Area*,¹ and to provide an analysis of the proposed Project's impacts on the housing and employment projections for the region. The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are the designated metropolitan planning organizations, and as such, are mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality.

ABAG and MTC adopted an updated plan; *Plan Bay Area 2050* (October, 2021).² While the plan has been adopted, it will take up to three years for the plan's growth forecast to be integrated into MTC's transportation model, after which updates to each county's transportation model will take place. For these reasons, and for purposes of this analysis, *Plan Bay Area 2040* is the regional plan that forms the basis for population, housing, and employment forecasts in this analysis.

Population forecasts for the City of Campbell and surrounding area are provided by ABAG in the *Plan Bay Area Projections 2040* (November 2018) by jurisdiction. Table 4.0-4 shows the ABAG household population and employment forecasts for the City of Campbell for years 2020 and 2040.

¹ Metropolitan Transportation Commission, 2017. *Plan Bay Area 2040*. Available online at <http://2040.planbayarea.org/>.

² Metropolitan Transportation Commission, 2021. *Plan Bay Area 2050*. Available online at <https://www.planbayarea.org/finalplan2050>

TABLE 4.0-4: CITY OF CAMPBELL HOUSEHOLD POPULATION AND EMPLOYMENT GROWTH FORECASTS

FORECASTS	2020 [A]	2040 [B]	CHANGE [B-A=C]	PERCENT CHANGE [C/A]
Household Population	43,455	46,840	+3,385	+7.8%
Employment	29,870	32,745	+2,875	+9.6%

SOURCE: PLAN BAY AREA 2040 PROJECTIONS, NOVEMBER 2018.

The proposed Campbell General Plan Update includes land use designations that could accommodate up to 8,824 housing units by 2040, which is 7,185 more units than currently accommodated under the existing *City of Campbell General Plan*. This allocation of housing units will result in a projected household population increase of 22,203 in 2040. Further, the proposed Project is projected to generate approximately 6,194 employment opportunities by the buildout year. Table 4.0-5 identifies the change between Existing Conditions and the proposed Campbell General Plan Update compared to the ABAG household population and employment forecasts in *Plan Bay Area 2040*.

TABLE 4.0-5: CAMPBELL GENERAL PLAN BUILDOUT COMPARISON TO PLAN BAY AREA 2040 PROJECTIONS

FORECASTS	CAMPBELL GENERAL PLAN UPDATE		CITY OF CAMPBELL ABAG PLAN BAY AREA 2040 PROJECTIONS	
	EXISTING CONDITIONS ¹	CUMULATIVE (2040) WITH PROJECT CONDITIONS ¹	2020	2040
Household Population	42,730	64,930	43,455	46,840
Employment Population	30,570	36,760	29,870	32,745

NOTES:

- HOUSEHOLD AND EMPLOYMENT POPULATIONS ROUNDED TO THE NEAREST 10.

SOURCE: FEHR & PEERS, 2022.

The proposed Project's projected household and employment population will increase by 22,200 residents and 6,190 employees, respectively, compared to what is considered existing conditions. As identified in Table 4.0-5, the ABAG growth forecast for horizon year 2040 projected a household population increase of 3,385 residents and an employment population increase of 2,875 employees in the City of Campbell. Consequently, the Campbell General Plan Update will increase household and employment population by more than what is currently projected by ABAG.

Therefore, cumulative impacts on the transportation network would be significant and unavoidable. As a result, this is considered a **cumulatively considerable and significant and unavoidable** impact.

UTILITIES

Impact 4.15: Cumulative impacts related to utilities (Less than Cumulatively Considerable)

Cumulative growth that would occur within the service areas for the SFPUC and the SCVWD over the life of the proposed General Plan will result in increased demand for water service, sewer service, and solid waste disposal services.

Water: Development and growth in the City under the proposed General Plan would result in increased demand for water supplies, including water conveyance and treatment infrastructure. The proposed General Plan includes policies and actions to ensure that water supplies are provided at acceptable levels and to ensure that development and growth does not outpace the provision of available water supplies.

As described under Impact 3.15-1, the projected water supplies are adequate to meet demand that would be generated by buildout of the General Plan. As such, implementation and buildout of the General Plan would not result in the need to construct or expand water supply and treatment facilities that have not already been described and accounted for in the relevant water master plans, which include the SJWC UWMP, SCVWD UWMP, and Santa Clara Valley Water District Water Supply and Infrastructure Master Plan.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The proposed General Plan includes a range of policies (listed under Impact 3.15-1) to ensure that water providers serving the city are consulted with during future land use changes in order to ensure that future supply levels meet demands.

Future development in the Planning Area would be required to connect to existing water distribution infrastructure in the vicinity of each site, pay the applicable water system connection fees, and pay the applicable water usage rates. Future projects may be required to implement site specific and limited off-site improvements to the water distribution system in order to connect new project sites to the existing water infrastructure network. The specific impacts of providing new and expanded water distribution infrastructure cannot be determined at this time, as the General Plan does not propose or authorize any specific development projects or include details on any future development projects. However, any future improvements to the existing water distribution infrastructure would be primarily provided on sites with land use designations that allow for urbanized land uses, and the environmental impacts of constructing and operating the new water distribution infrastructure would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the proposed General Plan.

Given that projected water demands associated with General Plan buildout would not exceed the projected water supplies, and that the proposed General Plan includes a comprehensive set of goals,

policies, and actions to ensure an adequate and reliable source of clean potable water, impacts associated with water supplies are **less than cumulatively considerable**.

Wastewater: Wastewater services in Campbell require a system of pipes and facilities owned and maintained by several entities, including private landowners, the City of Campbell, the West Valley Sanitation District (WVSD), and the San Jose-Santa Clara Regional Wastewater Facility (RWF). In total, the WVSD provides approximately 44,500 connections serving a population of nearly 108,000 people. The wastewater collection system is comprised of 415 miles of sewer main and 210 miles of sewer lateral.

The WVSD provides wastewater collection and disposal services to the City of Campbell. The WVSD contracts with the San Jose-Santa Clara RWF for wastewater treatment and disposal. Located in north San Jose, the plant treats wastewater from local municipalities and sanitation districts and discharges the treated wastewater into San Francisco Bay. The WVSD accounts for about seven percent of plant treatment capacity. The District's current allocation is 13 mgd.

Currently, all wastewater collected from the City is treated at the RWF, which has a wastewater treatment capacity of 167 mgd. The City of Campbell contributes 3 percent of the RWF's total sewer connections. Current flows to the plant are about 110 mgd. The RWF receives and treats wastewater from a total of eight municipalities in the South Bay, including San Jose (via the Burbank Sanitary District and County Sanitation District 23); Saratoga, Campbell, Los Gatos, and Monte Sereno (via the West Valley Sanitation District), and the Cities of Santa Clara, Milpitas, and Cupertino.

According to the San Jose-Santa Clara RWF Master Plan, the San Jose-Santa Clara RWF has an existing plant rated capacity of 167 mgd during the dry season. Annual average effluent flows of approximately 94 mgd and 89 mgd, with daily maximum flows of approximately 132 mgd and 108 mgd. Current flows to the plant are about of 110 mgd. The Wastewater Treatment Plant Master Plan indicates that the RWF will reach its rated capacity of 167 mgd between 2035 and 2040, and dry weather flows are projected to reach 172 mgd by 2040, triggering the need for a modification the RWF's NPDES permit.

As Campbell continues to develop in the future, there will be an increased need for water and wastewater services. These needs have been addressed in the three utility districts' master plans and will require that the districts, in coordination with the City, continue to implement phased improvements to some pump stations, sewer mains, and the various wastewater treatment plants when triggered by growth. To address existing and future capacity deficiencies, the WVSD maintains a 5-Year CIP and a forecasted 10-year CIP which identify future system upgrades.

While full buildout of the development contemplated in the proposed General Plan would increase the existing treatment demand at the treatment plant, the proposed General Plan includes a range of policies designed to ensure an adequate wastewater treatment capacity for development. As described above, the districts must also periodically review and update their Master Plans, and as growth continues to occur within the Planning Area, the district, in coordination with the City, will

identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development.

The proposed General Plan includes a comprehensive set of goals, policies, and actions to ensure an adequate and reliable wastewater collection and treatment system. The policies and actions listed below would further assist in ensuring that adequate wastewater treatment and conveyance infrastructure is available to serve new growth projected under the proposed General Plan. For example, Policy CSF-4.1 ensures safe and reliable sewer and wastewater collection and treatment infrastructure to serve the existing and future development. Additionally Policy CSF-4.2 calls for the continued coordinate with the West Valley Sanitation District and San Jose-Santa Clara Regional Wastewater Facility when reviewing new development applications in order to ensure that new growth does not exceed the availability of adequate sewage treatment capacity or predate the presence of necessary infrastructure, while Policy CSF-4.4 ensures that all new developments provide for and fund their fair share of the costs for adequate sewer collection and treatment, including line extensions, easements, and dedications. Therefore, the proposed General Plan's incremental contribution to cumulative wastewater impacts would be **less than cumulatively considerable**.

Stormwater: Development under the proposed General Plan would result in increased areas of impervious surfaces throughout the Planning Area, resulting in the need for additional or expanded stormwater drainage, conveyance, and retention infrastructure. The infrastructure and facilities necessary to serve new growth would involve development of some facilities on-site within new development projects, some facilities off-site on appropriately designated land, and may also involve improvements to existing facilities and disturbance of existing rights-of-way. The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the General Plan does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities.

Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. As such, this is a less than significant impact and no additional mitigation is required.

The policies and actions listed below would further ensure that there is adequate stormwater drainage and flood control infrastructure to serve future development under the General Plan, and would ensure that future drainage and flood control infrastructure projects do not result in adverse

environmental impacts. The proposed General Plan's incremental contribution to cumulative wastewater impacts would be **less than cumulatively considerable**.

Solid Waste: Future development of projects as contemplated under the proposed General Plan may increase the population within the Planning Area by 22,203 persons. As of 2020 the City of Campbell achieved a disposal rate of 4.2 PPD per resident. Assuming these disposal rates remain constant throughout the life of the General Plan, the new growth under General Plan buildout would result in an increase of approximately 93,253 pounds per day of solid waste, which equals 46.6 tons per day or 17,019 tons of solid waste per year.

As noted previously, the vast majority (97%) of landfill disposed from the City's solid waste went to two landfills: the Guadalupe Sanitary Landfill and the Monterey Peninsula Landfill.³ The two landfills that receive the majority of the City's solid waste are likely to reach their permitted maximum capacities between 2048 and 2107, respectively. In addition, there are 13 other landfills receive relatively small waste from the City of Campbell. The City's projected increase in solid waste generation associated with future buildout of the proposed General Plan is well within the permitted capacity of the Monterey Peninsula Landfill and Guadalupe Sanitary Landfill.

Guadalupe Sanitary Landfill has a remaining capacity of 11,055,000 million cubic yards, and has a current maximum permitted throughput of 1,300 tons of solid waste for disposal per day. This landfill has an estimated cease operation date of January 1st, 2048. Monterey Peninsula Landfill has a remaining capacity of 48,560,000 cubic yards, and has a current maximum permitted throughput of 3,500 tons per day. This landfill has an estimated cease operation date of February 28th, 2107. Future projects within the Planning Area would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. While there is adequate permitted landfill capacity to accommodate future growth, the proposed General Plan includes actions to further reduce the project's impact on solid waste services, as identified below. The General Plan would not exceed the permitted capacity of the landfill serving the city, and the General Plan complies with regulations related to solid waste. The proposed General Plan's incremental contribution to cumulative solid waste impacts would be **less than cumulatively considerable**.

WILDFIRE

Impact 4.16: Cumulative impact related to wildfire (Less than Cumulatively Considerable)

The Planning Area is not located in or near any State Responsibility Areas and there are no lands classified as very high fire hazard severity zones (VHFHSZ) within or near the Planning Area. Implementation of the policies and actions provided in Section 3.16 (Wildfire) would ensure that the proposed General Plan's incremental contribution to cumulative wildfire impacts would be **less than cumulatively considerable**.

³ Note: data provided by CalRecycle, based on information provided by County disposal reports.

4.2 GROWTH-INDUCING EFFECTS

INTRODUCTION

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

Based on the CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand (*Napa Citizens for Honest Government v. Napa County Board of Supervisors*). Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply in an area where water service historically limited growth could be considered growth-inducing.

The CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

The General Plan is a long-term plan intended to accommodate projected population, housing, and employment growth, including the appropriate balance among these factors with the necessary public services and infrastructure. The proposed General Plan would serve as a comprehensive, long-term plan for the physical development of Campbell. Projected growth is described in Section 3.10

(Land Use and Population), and the environmental consequences related to the potential growth are fully assessed in each topical section. By definition, the proposed Campbell General Plan is intended to provide for and address future growth in the City.

Because the proposed General Plan provides a framework for development through its Land Use Map, land use designations, goals, policies, and actions, it would directly induce population and employment growth in the Campbell Planning Area by designating land for development that is more intense, in some instances, than current designations allow. The analysis of the indirect growth-inducing impacts for the proposed General Plan focuses on the following factors: inducement of unanticipated population growth; encouragement of economic growth that leads to jobs and housing growth; elimination of obstacles to population growth; and resulting service, facility, or infrastructure demands in excess of existing and planned growth.

The proposed General Plan accommodates future growth in Campbell, including new businesses, expansion of existing businesses, and new residential uses. Infrastructure and services would need to accommodate future growth. The General Plan is oriented toward the economic growth of the City, with emphasis given to encouraging development of a broader array of businesses, increasing local employment opportunities, and providing residential development as necessary to serve economic growth and comply with State housing requirements. The cumulative development scenario addressed in this Draft EIR is the maximum projected development that could occur within the existing city limits and the Planning Area, if every parcel in the city and the Planning Area developed at or near the higher end of densities and intensities allowed under the proposed General Plan.

As shown in Table 2.0-3 (see Section 2.0: Project Description), buildout of the General Plan could yield up to 8,824 new housing units, and 2,633,721 new square feet of new non-residential building square footage within the Planning Area. Depending on growth rates, the actual growth during the life of the General Plan could be lower or higher, but would not exceed the theoretical maximum buildout described in Chapter 2.0.

Given the historical and current population, housing, and employment trends, growth in the City, as well as the entire state, is inevitable. The primary factors that account for population growth are natural increase and net migration. The average annual birth rate for California is expected to be 20 births per 1,000 population. Additionally, California is expected to attract more than one third of the country's immigrants. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. While these factors would likely result in growth in Campbell during the planning period of the proposed General Plan, growth will continue to occur based primarily on the demand of the housing market and demand for new commercial, industrial, and other non-residential uses. As future development occurs under the proposed General Plan, new roads, infrastructure, and services would be necessary to serve the development and this infrastructure would accommodate planned growth. However, growth under the proposed General Plan would remain within the general growth levels projected statewide and would not be anticipated to exceed any applicable growth projections or limitations that have been adopted to avoid an environmental effect. The proposed General Plan is intended to accommodate the City's

fair share of statewide housing needs, based on regional numbers provided by the California Department of Housing and Community Development on a regular basis (every five to eight years).

The proposed General Plan includes policies and actions that mitigate environmental impacts associated with growth, such as air quality, noise, traffic, water supply, and water quality. Additionally, this Draft EIR identifies General Plan policies and actions, where appropriate, that would serve to reduce or eliminate potentially significant impacts associated with specific environmental issues associated with growth. Chapters 3.1 through 4.0 provide a discussion of environmental effects associated with development allowed under the proposed General Plan.

With implementation of General Plan policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds. Therefore, population and housing growth associated with the proposed General Plan would result in a **less than significant** impact.

4.3 SIGNIFICANT IRREVERSIBLE EFFECTS

LEGAL CONSIDERATIONS

CEQA Section 15126.2(c) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), requires that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Consumption of Nonrenewable Resources

Consumption of nonrenewable resources refers to the loss of physical features within the natural environment, including the conversion of agricultural lands, loss of access to mining reserves, and nonrenewable energy use. The Campbell Planning Area has multiple nonrenewable resources, including biological resources, water resources, and energy resources.

One of the objectives of the proposed General Plan is to conserve natural resources within the Planning Area. Many of these policies and actions, aimed at preserving natural resources, are contained within the Conservation and Sustainability Element, and have been identified throughout this EIR. Additionally, the proposed General Plan directs most new development to infill areas, and areas surrounding existing neighborhoods and urbanized areas. As a result, the proposed General Plan will minimize the potential for impacts to the nonrenewable resources in the Planning Area, including biological resources, water resources, and energy resources, to the greatest extent feasible. More detailed and focused discussions of potential impacts to these nonrenewable resources are contained throughout this Draft EIR.

Nonrenewable energy resources such as electricity, natural gas, propane, gasoline, and diesel would be consumed during the construction and operation of development projects contemplated under the General Plan buildout. The proposed General Plan includes a variety of policies that seek to conserve, protect, and enhance energy resources. These policies focus on energy efficiency in the design, materials, construction, and use of buildings, the use of alternative energy systems, and alternative transportation modes.

Irretrievable Commitments/Irreversible Physical Changes

Implementation of the proposed General Plan would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the General Plan would result in irretrievable commitments by introducing development onto sites that are presently undeveloped or developed at lower densities/intensities. Additionally, development will physically change the environment in terms of aesthetics, air emission, noise, traffic, open space, and natural resources. These physical changes are irreversible after development occurs. Therefore, the proposed General Plan would result in changes in land use within the Planning Area that would commit future generations to these uses.

Impact 4.17: Irreversible effects (Less than Significant)

In summary, the proposed General Plan includes an extensive policy framework that is designed to address land use and environmental issues to the greatest extent feasible, while allowing growth and economic prosperity for the City. The City has developed a General Plan policy framework and Land Use Map that would optimize the City's resources, promote infill development, and reduce impacts to natural resources to the greatest extent feasible. While the project would lead to changes in Campbell over time, this impact is considered **less than significant**.

4.4 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the General Plan are discussed in Chapter 3 and previously in this chapter (cumulative-level). Refer to those discussions for further details and analysis of the significant and unavoidable impacts identified below:

- **Impact 3.3-3:** General Plan implementation would expose sensitive receptors to substantial pollutant concentrations (Significant and Unavoidable)
- **Impact 3.7-1:** Project implementation could generate greenhouse gas emissions that could have a significant impact on the environment and could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Significant and Unavoidable)
- **Impact 3.14-1:** General Plan implementation may conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Significant and Unavoidable)
- **Impact 3.14-2:** General Plan implementation would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (a) (Significant and Unavoidable)
- **Impact 4.7:** Cumulative impacts related to greenhouse gases, climate change, and energy (Considerable Contribution and Significant and Unavoidable)
- **Impact 4.14:** Cumulative impacts on the transportation network (Considerable Contribution and Significant and Unavoidable)

5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all of the project objectives while potentially reducing or avoiding one or more environmental effects of the project. The range of alternatives required in an EIR is governed by a “rule of reason” that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

Alternatives that are evaluated in the EIR must be potentially feasible alternatives. However, not all possible alternatives need to be analyzed. An EIR must “set forth only those alternatives necessary to permit a reasoned choice.” (CEQA Guidelines, Section 15126.6(f).) The CEQA Guidelines provide a definition for a “range of reasonable alternatives” and, thus limit the number and type of alternatives that need to be evaluated in an EIR. An EIR need not include any action alternatives inconsistent with the lead agency’s fundamental underlying purpose in proposing a project. (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1166.)

First and foremost, alternatives in an EIR must be potentially feasible. In the context of CEQA, “feasible” is defined as:

... capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. (CEQA Guidelines 15364)

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

FACTORS GUIDING SELECTION OF ALTERNATIVES

A Notice of Preparation was circulated to the public to solicit comments and recommendations for a reasonable range of alternatives to the proposed project. Additionally, a public scoping meeting was held during the public review period to solicit recommendations for a reasonable range of alternatives to the proposed project. No specific alternatives were recommended by commenting agencies or the general public during the NOP public review and comment period.

The alternatives to the General Plan Update selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic objectives of the project, and address public, City staff, and elected officials’ input with respect to potential land use and growth scenarios that may be appropriate for consideration as part of the General Plan Update. Significant impacts are summarized in Chapter 4.0 and described in greater detail in Sections 3.1 through 3.16 and 4.0. As described in Chapter 2.0 (Project Description), the following objectives have been identified for the proposed project:

5.0 ALTERNATIVES

1. Reflect the current goals and vision expressed by city residents, businesses, decision-makers, and other stakeholders;
2. Address issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders;
3. Capitalize on Campbell's location within the Silicon Valley to provide high tech jobs that enable Campbell to be a live/work community while maintaining Campbell's small town community identity;
4. Protect and enhance Campbell community character, and sense of community;
5. Ensure Campbell remains a safe, vibrant, and family-friendly community;
6. Proactively plan for and accommodate local and regional growth in a balanced and sustainable manner, with an emphasis on maintaining Campbell's unique character;
7. Provide a range of high-quality housing options, including housing resources and programs that comply with State Planning Law;
8. Attract and retain businesses and industries that provide high-quality and high-paying jobs;
9. Continue to maintain and improve multimodal transportation opportunities;
10. Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
11. Support and enhance Campbell's small business community to sustain a vibrant city with a strong downtown core and community identity;
12. Emphasize sustainability and environmental stewardship in future planning decisions
13. Address new requirements of State law;
14. Address emerging transportation, housing, and employment trends;
15. Promote alternative transportation and community connectivity; and
16. Encourage mixed use corridors that promote vibrant commercial and residential areas.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

The proposed General Plan Update would result in the following significant and unavoidable impacts, which are described in Sections 3.1 through 3.16 and Chapter 4.0:

- **Impact 3.3-3:** General Plan implementation would expose sensitive receptors to substantial pollutant concentrations (Significant and Unavoidable)
- **Impact 3.7-1:** Project implementation could generate greenhouse gas emissions that could have a significant impact on the environment and could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Significant and Unavoidable)
- **Impact 3.14-1:** General Plan implementation may conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Significant and Unavoidable)
- **Impact 3.14-2:** General Plan implementation would result in a significant VMT impact or be inconsistent with CEQA Guidelines section 15064.3, subdivision (a) (Significant and Unavoidable)
- **Impact 4.7:** Cumulative impacts related to greenhouse gases, climate change, and energy (Considerable Contribution and Significant and Unavoidable)

- **Impact 4.14:** Cumulative impacts on the transportation network (Considerable Contribution and Significant and Unavoidable)

ALTERNATIVES TO THE GENERAL PLAN UPDATE

Three alternatives to the General Plan Update were considered based on the analysis performed to identify the environmental effects of the proposed Project. Since the General Plan Update was prepared with the intent to be a self-mitigating document, project alternatives focused on amending land uses to potentially address impacts. The alternatives analyzed in this EIR include the following:

- **Alternative 1: No Project Alternative.** Under Alternative 1, the City would not adopt the General Plan Update. The existing Campbell General Plan would continue to be implemented and no changes to the General Plan, including the Land Use Map, Circulation Diagram, goals, policies, or actions would occur. Subsequent projects, such as amending the Municipal Code (including the zoning map), would not occur. The Existing General Plan Land Use Map is shown on Figure 5.0-1.
- **Alternative 2: Modified Project Alternative.** Under Alternative 2, the City would adopt the updated General Plan policy document, but would retain the existing land use map. This alternative would result in the same growth as the existing General Plan Alternative 1, but would implement the updated goals, policies, and actions found in the General Plan Update. This Alternative would result in less residential growth than the proposed Project or Alternative 3.
- **Alternative 3: Corridor Enhancements:** Alternative 3 is a residential and employment growth-oriented option, which identifies the Bascom and Hamilton corridors for mixed use development, revitalization, and appropriate transitions from the more intense urban development densities located adjacent to Campbell in the City of San Jose. This alternative also promotes and encourages additional high tech and office uses within the Research and Development land use designation. This alternative would allow for more residential and employment growth than the existing General Plan and Alternative 2. Figure 5.0-2 depicts the Land Use Map proposed for Alternative 3. This alternative was developed as part of the City's review of potential growth strategies and land use changes during development of the Preferred Land Use Map.

A summary of the growth projections, including population growth, housing units, jobs, and the resultant job/housing balance for the project and each alternative is shown in Table 5.0-1. Each alternative is described in detail below.

5.0 ALTERNATIVES

TABLE 5.0-1: GROWTH PROJECTIONS BY ALTERNATIVE

ALTERNATIVE	POPULATION	DWELLING UNITS	NON-RESIDENTIAL SQUARE FEET OF DEVELOPMENT	JOBS	JOBS PER HOUSING UNIT
<i>EXISTING CONDITIONS</i>					
City/Planning Area	42,726	17,400	10,090,334	30,568	1.76
<i>NEW GROWTH</i>					
Proposed General Plan	22,203	8,824	2,633,721	6,194	0.70
Alternative 1: Existing General Plan/No Project	4,123	1,640	2,098,014	4,633	2.83
Alternative 2: Modified Project Alternative	4,123	1,640	2,098,014	4,633	2.83
Alternative 3: Corridor Enhancement	8,221	3,268	3,161,780	7,710	2.36
<i>TOTAL BUILDOUT GROWTH: EXISTING PLUS NEW GROWTH</i>					
Proposed General Plan	64,929	26,224	12,724,055	36,762	1.40
Alternative 1: Existing General Plan/No Project	46,849	19,040	12,188,348	35,199	1.85
Alternative 2: Modified Project Alternative	46,849	19,040	12,188,348	35,199	1.85
Alternative 3: Corridor Enhancement	50,947	20,668	13,252,114	38,278	1.85

SOURCE: DE NOVO PLANNING GROUP, 2022

ALTERNATIVE 1 - NO PROJECT

Under Alternative 1, the City would continue to implement the existing General Plan and no changes would be made to address updated General Plan Guidelines, or the requirements of State law. Since adoption of the existing General Plan, State legislation has been passed requiring the City to address new safety and circulation requirements in the General Plan and to further address greenhouse gas emissions. Additionally, the City currently has an obligation to update and adopt its Housing Element to meet the latest RHNA requirements, and receive new State certification. The existing General Plan does not conform to state requirements regarding planning for future housing growth. Additionally, The General Plan goals, policies, and actions, as well as the Land Use Map, would not be updated to address the vision and concerns of the City's residents, property owners, decision-makers, and other stakeholders that actively participated in the visioning and goal and policy development process.

Alternative 1 would result in the continuation of existing conditions and development levels. New growth would be allowed as envisioned under the existing General Plan, with land uses required to be consistent with the existing General Plan Land Use Map. Table 5.0-2 shows the acreages of each land use designation for the existing General Plan Land Use Map compared to the proposed Land Use Map.

The Existing General Plan Alternative would maintain the City's land use map with its present land use designations and associated standards. Figure 5.0-1 depicts Campbell's existing Land Use Map. The Existing General Plan Land Use Map is characterized by the following features:

- A centrally located commercial downtown core provides opportunities for pedestrian-oriented mixed use retail and office space.
- Residential development is accommodated at a range of densities (3.5 to 27 dwelling units per gross acre) throughout the city.
- Large areas of low density single family residential development are located in the exterior portions of the city.
- Campbell has several major land use plans, and special planning areas that guide development patterns within their respective planning areas. These plans act as tools for implementing the goals and policies of the General Plan through the regulation of use, density, height and other design standards to achieve the overall vision for the selected area.
- Many opportunities for future residential uses are accommodated within the city's mixed use areas and special planning areas.
- Industrial uses are generally accommodated in the southern portions of the planning area, east of Winchester Boulevard, and east of Highway 17.
- Open space lands are located along drainage areas and creek corridors.

Table 5.0-2 summarizes land use designations under the Existing General Plan Land Use Map Alternative.

Growth projections shown in Table 5.0-1 represent estimates of new growth potential under the existing General Plan Alternative, and are based on several factors, including the availability of vacant and underutilized parcels and historical growth trends in Campbell and the region. Given that actual development rates and growth rates in Campbell are likely to be significantly lower than the maximum allowed development under the General Plan over a 20-year planning horizon, these growth projections were developed in order to provide a meaningful and realistic estimate of the level of growth that could potentially occur. New development and growth is largely dictated by existing development conditions, market conditions, and land turnover rates. Very few communities in California actually develop to the full potential allowed in their respective General Plans during the planning horizon.

5.0 ALTERNATIVES

TABLE 5.0-2: EXISTING GENERAL PLAN ALTERNATIVE – ACREAGE BY LAND USE DESIGNATIONS

GENERAL PLAN DESIGNATION	ACRES	% OF TOTAL ACRES
Commercial, Office, and Industrial		
Commercial/Light Industrial (C/LI)	24.42	0.8%
Central Commercial (CC)	63.67	2.1%
General Commercial (GC)	192.95	6.3%
Light Industrial (LI)	104.88	3.4%
Neighborhood Commercial (NC)	33.65	1.1%
Professional Office (P-O)	36.69	1.2%
Research and Development (R&D)	103.49	3.4%
Residential		
Low Density Residential (LDR<3.5)	143.63	4.7%
Low Density Residential (LDR<4.5)	212.90	6.9%
Low Density Residential (LDR<6)	1,042.79	34.0%
Low-Medium Density Residential (LMDR)	160.77	5.2%
Medium Density Residential (MDR)	184.39	6.0%
High Density Residential (HDR)	175.36	5.7%
Mobile Home Park (MHP)	29.66	1.0%
Mixed-Use		
Office/Low-Medium Density Residential (LMDR/O)	4.16	0.1%
Commercial/High-Medium Density Residential (MHDR/C)	16.78	0.5%
Commercial/Prof. Office/Residential (RCPO)	55.40	1.8%
Conservation		
Open Space (OS)	272.92	8.9%
Public and Semi-Public		
Institutional (I)	167.11	5.5%
Right-of-Way Parcels	39.32	1.3%
Total	3,064.64	100.00%

SOURCE: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP.

ALTERNATIVE 2 – MODIFIED PROJECT ALTERNATIVE

Alternative 2 (Modified Project Alternative) would result in the same growth under the existing General Plan, which is notably reduced when compared to the proposed project. Under Alternative 2, the City would adopt the updated General Plan policy document, including the revised goals, policies, and actions; however, the City would retain the existing land use map. Alternative 2 would result in less residential and nonresidential growth than the proposed General Plan and Alternative 3, but it would result in the same growth as Alternative 1. Land use designations are summarized in Table 5.0-2.

The goals, policies, and actions of the General Plan Update would apply to subsequent development, planning, and infrastructure projects under this alternative. As shown previously in Table 5.0-1, Alternative 2 would result in fewer housing units and fewer jobs within Campbell when compared to the proposed General Plan.

ALTERNATIVE 3 – CORRIDOR ENHANCEMENT

Alternative 3 would allow for more residential and employment growth than the existing General Plan and Alternative 2, but would result in less residential growth than the proposed General Plan. Alternative 3 would result in increased housing when compared to the existing General Plan, but at a lower rate than the proposed Project. Potential job growth under this alternative would be increased when compared to the proposed General Plan. This alternative focuses additional mixed-use commercial and residential development along key city corridors, and near surrounding future development anticipated in San Jose’s Urban Village plans. This alternative provided the most nonresidential square footage and the most jobs when compared to all other alternatives. This alternative was reviewed and considered by the General Plan Advisory Committee (GPAC) during development of the General Plan Update. This alternative was also presented to the community during a series of public workshops conducted during the General Plan Update process.

Figure 5.0-2 depicts the Land Use Map proposed for Alternative 3. Alternative 3 is characterized by the following features. These features are also noted graphically on Figure 5.0-3:

- Create an extension of Campbell’s Downtown Central Commercial land use designation along Hamilton and Bascom Avenues to provide enhanced and revitalized shopping, services, entertainment, and office uses within mixed-use residential areas that are pedestrian oriented. The maximum allowed FAR in these areas would be increased to 1.25, consistent with the City’s Central Commercial Zoning designation. Residential uses would be allowed on the upper floors of new development, at densities up to 27 dwelling units per gross acre. Implementation of this alternative would necessitate revisions to the zoning code to establish new zoning districts for these corridors, and/or the development of one or more Area Plans for the Hamilton and Bascom corridors.
- Provide for additional multi-family housing opportunities that create transitional residential densities to serve as a buffer between established single-family residential neighborhoods in Campbell and the recently-adopted San Jose Urban Villages to the north and east of Campbell, which allow for residential densities that are significantly higher

than the densities allowed within Campbell. This alternative would also provide for additional housing opportunities within close proximity to existing and future services and retail uses located along the Bascom and Hamilton corridors.

- Retain the Existing Research and Development (R&D) General Plan Land Use Designation, and Update the General Plan R&D land use description to reflect the desire for R&D uses to promote high tech jobs and industries. Create an action item in the General Plan to establish a new zoning district (research and development) that promotes high tech uses, or the development of an area plan to guide future development within areas designated R&D. The maximum allowed FAR in areas designated R&D would be increased to 1.0 in order to provide additional employment opportunities.

Table 5.0-3 summarizes land use designations under Alternative 3. Table 5.0-1 summarizes new residential and non-residential growth that could occur under Alternative 3.

TABLE 5.0-3: ALTERNATIVE 3 – ACREAGE BY LAND USE DESIGNATION

<i>GENERAL PLAN LAND USE</i>	<i>(ACRES)</i>	<i>% OF TOTAL ACRES</i>
Commercial, Office, and Industrial		
Commercial/Light Industrial (C/LI)	24.42	0.8%
Central Commercial (CC)	143.16	4.7%
General Commercial (GC)	113.46	3.7%
Neighborhood Commercial (NC)	33.65	1.1%
Light Industrial (LI)	104.88	3.4%
Professional Office (P-O)	36.69	1.2%
Research and Development (R&D)	103.49	3.4%
Residential		
Low Density Residential <3.5 (LDR<3.5)	143.63	4.7%
Low Density Residential <4.5 (LDR<4.5)	212.90	6.9%
Low Density Residential <6 (LDR<6)	1,033.29	33.7%
Low-Medium Density Residential (LMDR)	160.45	5.2%
Medium Density Residential (MDR)	184.39	6.0%
Mobile Home Park (MHP)	29.66	1.0%
High Density Residential (HDR)	184.86	6.0%
Mixed-Use		
Office/Low-Medium Density Residential (LMDR/O)	4.16	0.1%
Commercial/High-Medium Density Residential (MHDR/C)	16.78	0.5%
Commercial/Prof. Office/Residential (RCPO)	55.40	1.8%
Conservation		
Open Space (OS)	272.92	8.9%
Public/Semi-Public		
Institutional (I)	167.11	5.5%
Right-of-Way Parcels	39.32	1.3%
Total Acres	3,064.64	

SOURCE: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR that were found to be significant. Following the analysis of each alternative, Table 5.0-4 summarizes the comparative effects of each alternative.

Air Quality

The proposed General Plan includes a range of goals and policies that cover the full breadth of air quality issues as recommended in the BAAQMD's 2017 Clean Air Plan. While implementation of the goals, policies, and actions would reduce criteria pollutant emissions, the extent of future project-specific impacts would need to be determined on a project-by-project basis, as necessary. The potential for cumulatively considerable net increases in criteria pollutants would remain. As described in Chapter 3.3 (Air Quality), the proposed General Plan implementation would result significant and unavoidable impacts to air quality.

Implementation of the General Plan Update would result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips.

Additionally, implementation of the General Plan Update would result in long-term area and mobile source emissions from operation and use of subsequent development. Implementation of the General Plan Update could include stationary sources of pollutants that would be required to obtain permits to operate in compliance with BAAQMD rules. These sources include, but are not limited to, gasoline stations, dry cleaners, internal combustion engines, and surface coating operations.

Alternative 1

The General Plan Update and Alternative 1 would permit and facilitate the development of new sensitive receptors, such as new homes, in locations near arterial and collector roadways, highways, rail lines, and stationary sources of TAC emissions. Adherence to BAAQMD guidelines and rules would reduce this impact. However, it is not possible to determine at this stage of the planning process that all impacts could be reduced to a less-than-significant level from larger sources and individual projects. Under both Alternative 1 and the proposed Project, future projects that would generate criteria pollutants, TACs or place sensitive receptors in the vicinity of existing uses that generate emissions, would be subject to BAAQMD requirements for permitting and screening. Alternative 1 would reduce the total amount of residential and non-residential development, which would reduce overall construction and operational emissions throughout the Study area. As such, this alternative would be **slightly better** with regard to these impacts when compared to the proposed Project. However it should be noted that the proposed General Plan includes a range of goals and policies that cover the full breadth of air quality issues

as recommended in the BAAQMD's 2017 Clean Air Plan, and also promotes higher density development near transit and along mixed use corridors the further support trip reductions and operational air quality goals.

Alternative 2

Under Alternative 2, the Planning Area would be developed with the existing General Plan Land Use Map, but would be required to adhere to the same policy guidance and local, state, and regional air quality measures as the Proposed General Plan. The proposed General Plan and Alternative 2 include a range of goals and policies that would reduce air quality and toxic air contaminant emissions, consistent with BAAQMD's 2017 Clean Air Plan. Maximum densities under Alternative 2 would be the same as the No Project Alternative, and buildout of Alternative 2 would result in fewer housing units, residents, and jobs within Campbell when compared to the proposed General Plan Land Use Map. The decrease in total residential unit count, population, and jobs may decrease the total air quality emissions from both construction and operation of developed uses. Therefore, this alternative would be **better** when compared to the Proposed General Plan.

Alternative 3

The General Plan Update and Alternative 3 would permit and facilitate the development of new sensitive receptors, such as new homes, in locations near arterial and collector roadways, highways, rail lines, and stationary sources of TAC emissions.

Overall, development levels under Alternative 3 would include less residential development and more job generating uses when compared to the Proposed General Plan Update. Implementation of the General Plan Update goals, plans policies, and actions, and adherence to BAAQMD guidelines and rules would reduce air quality impacts. However, it is not possible to determine at this stage of the planning process that all impacts could be reduced to a less-than-significant level from larger sources and individual projects. Under both Alternative 3 and the proposed Project, future projects that would generate criteria pollutants, TACs or place sensitive receptors in the vicinity of existing uses that generate emissions, would be subject to BAAQMD requirements for permitting and screening. However, under both Alternative 3 and the proposed Project, these impacts may would remain significant and unavoidable. The added development potential under the proposed General Plan would generate the most amount of overall traffic and constriction-related air quality impacts, while Alternative 3 would generate increased traffic levels due to the increased amount of non-residential development accommodated under this alternative. Placing more residential development along key corridors within the city may promote alternative transit and walkability, however, placing the bulk of residential development along high volume corridors which could also impact existing air quality, and expose new residents to increases TAC levels. Impacts would be **substantially similar** to the Proposed General Plan.

Greenhouse Gas Emissions and Energy

There are numerous General Plan goals, policies and implementing actions that would minimize potential impacts associated with GHG emissions in the Study Area, and subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the reduction of GHG emissions. However, as described in Chapter 3.7 (Greenhouse Gas Emissions and Energy), the proposed General Plan would result in a significant impact to Greenhouse Gases, and Climate Change as there is no guarantee that implementation of the General Plan Update would ensure that the City of Campbell would be consistent with California's long-term climate goal of achieving carbon neutrality by 2045.

Alternative 1

Under Alternative 1, the Planning Area would be developed with the existing General Plan Land Use Map, and policy guidance. New local, state, and regional greenhouse gas measures that are included in the Proposed General Plan would not be updated or implemented. Maximum buildout under Alternative 1 would be lower than the proposed General Plan, and buildout of Alternative 1 would result in fewer housing units, fewer residents, and fewer jobs within Campbell when compared to the proposed General Plan Land Use Map as shown in Table 5.0-1. The decrease in total residential unit count and population may decrease the total greenhouse gas emissions and energy use within the city, however, density reductions would generally be seen to increase per capita GHG emissions levels. Additionally, the Land Use Map and updated designations including in the Proposed General Plan were developed to support smart planning principals to create mixed use areas near transit that facilitate transit ridership and reduce VMT. These increased densities are supportive of regional development needs and also support GHG and VMT reduction strategies. As such, the greenhouse gas emissions impact would be **increased** under Alternative 1 when compared to the proposed General Plan.

Alternative 2

Under Alternative 2, the Planning Area would be developed with the existing General Plan Land Use Map, but would be required to adhere to the same policy guidance and local, state, and regional greenhouse gas measures as the Proposed General Plan. Maximum densities under Alternative 2 would be the same as the No Project Alternative, and buildout of Alternative 2 would result in fewer housing units, fewer residents, and fewer jobs within Campbell when compared to the proposed General Plan Land Use Map as shown in Table 5.0-1. The decrease in total residential unit count and population may decrease the total greenhouse gas emissions and energy use, however, density reductions would generally be seen to increase per capita GHG emissions levels. The proposed General Plan would be superior to Alternative 2 because the updated land use map presents substantially more opportunities for trip internalization and increased opportunities for walking and bicycling due to their proposed mix of higher density residential, office, retail, and other uses under increased mixed-use designations.

As such, the greenhouse gas emissions impact would be **worse** under Alternative 2 when compared to the proposed General Plan.

Alternative 3

Under Alternative 3, the Planning Area would be required to adhere to the same policy guidance and local, state, and regional greenhouse gas measures as the Proposed General Plan. Maximum densities under Alternative 3 would be increased compared to Alternatives 1 and 2 and reduced when compared to the Proposed General Plan as shown in Table 5.0-1. The decrease in total residential unit count and population may decrease the total greenhouse gas emissions and energy use, however, density reductions would generally be seen to increase per capita GHG emissions levels, and would result in less mixed use development and development located near transit. The proposed General Plan would be superior to Alternative 3 because the updated land use map presents substantially more opportunities for trip reductions and increased opportunities for walking and bicycling and transit use due to the proposed mix of higher density residential mixed-use designations. As such, the greenhouse gas emissions impact would be **increased slightly** under Alternative 3 when compared to the proposed General Plan.

Transportation

As described in Chapter 3.14 (Transportation and Circulation), the proposed General Plan would result in significant and unavoidable impacts to the circulation network. The Campbell General Plan Update includes goals, policies, and actions, such as implementing a multimodal transportation impact fee (TIF) program and updating Campbell's TDM Ordinance, are designed to reduce VMT and would help to reduce the severity of these significant impacts to the greatest extent feasible. The proposed Campbell General Plan policies, land use forecasts, and targeted areas for growth are the result of an extensive outreach process among staff, policymakers, and the public to arrive at a solution that balances competing concerns about accommodating housing growth, jobs growth, and quality of life. The General Plan goals, policies, and actions will achieve meaningful reductions in VMT generated by land uses within the City. The Daily VMT / Per Service Population under the no project alternative is estimated at 36.72, which is greater than under the Proposed General Plan (34.11).

Alternative 1 and Alternative 2

Alternative 1 and Alternative 2 would result in development of the existing General Plan Land Use Map; therefore, as stated above, the average residential VMT Per Service Population would be 36.72. Under Alternative 2 and Alternative 1, the VMT impacts associated with VMT would still be considered significant and unavoidable. Without an updated land use plan which placed emphasis on higher density infill development near transit stations and as part of mixed use developments, Impacts related to transportation under Alternative 1 and Alternative 2 would be **increased** when compared to the proposed General Plan. However, it should be noted that under Alternative 2, the updated policy document would be adopted and future developments would be required to adhere to the same policy guidance and local, state, and regional air quality measures as the Proposed General Plan, and therefore Alternative 2 would be superior to Alternative 1 which does not include updated policy guidance.

Alternative 3

Alternative 3 would include an updated policy document and would be required to adhere to the same policy guidance and local, state, and regional air quality measures as the proposed General Plan. The land use map updates included in Alternative 3 would place emphasis on infill development along key corridors within the city, which would promote mixed-use developments and would be superior to Alternatives 1 and 2. However the reduced densities and less development allowed near transit lines under Alternative 3 would likely result in greater VMT per service population when compared to the proposed General Plan. As such, impacts under Alternative 3 would be **slightly increased** when compared to the proposed General Plan. However, it should be noted that growth allowed under Alternative 3 would be more consistent with growth identified by Plan Bay Area in 2040.

Irreversible Effects

The proposed project would have a significant and unavoidable impact associated with irreversible environmental effects as described under Impact 4.17. Implementation of the proposed General Plan would result in a commitment of land uses and resources for the foreseeable future. Land use and development consistent with the General Plan would result in irretrievable commitments by introducing development onto sites that are presently undeveloped. Additionally, development will physically change the environment in terms of, air emission, noise, traffic, natural resources ect. These physical changes are irreversible after development occurs. Therefore, the proposed General Plan would result in changes in land use within the Planning Area that would commit future generations to these uses.

During the planning horizon, development under Alternatives 1 and 2 would be reduced in comparison to the proposed General Plan. Under cumulative conditions, Alternatives 1 and 2 would result in less residential and less non-residential floor area (see Table 5.0-1). These Alternatives would all use nonrenewable resources, including metals, stone, and other materials related to construction, and result in on-going demand for fossil fuels and other resources associated with energy production at levels greater than the proposed project. The associated irretrievable commitment of nonrenewable resources and permanent conversion of other undeveloped lands under Alternatives 1 and 2 would remain a significant impact. Alternative 2 would have **slightly reduced** impact in comparison the No Project Alternative as the updated policy document includes goals policies and actions related the protection of environmental resources an and conservation., Additionally, Alternative 1 would have **slightly reduced** impact in comparison to the proposed General Plan due to the overall reduced development levels.

Alternative 3 provides for job-creating and residential development land uses within the City. Alternative 3 and the proposed project would allow substantially more non-residential and residential development when compared to the existing General Plan, but Alternative 3 would providing for less residential development than the proposed Project. As described previously, Alternative 3 would implement the General Plan Land Use Map as shown in Figure 5.0-2 and would result in 5,556 fewer dwelling units than the proposed Project. The goals, policies, and actions of the General Plan Update would also apply to subsequent development, planning and

infrastructure projects under this alternative. Alternative 3 would use nonrenewable resources, including metals, stone, and other materials related to construction, and result in on-going demand for fossil fuels and other resources associated with energy production at levels greater than the proposed project. The associated irretrievable commitment of nonrenewable resources and permanent conversion of undeveloped lands under Alternative 3 would remain a significant impact. Alternative 3 would have **slightly reduced** impacts in comparison to the proposed General Plan due to the overall reduced development levels.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed General Plan.

A comparative analysis of the proposed General Plan and each of the Project alternatives is provided in Table 5.0-4 below. The table includes a numerical scoring system, which assigns a score of 1 to 5 to each of the alternatives with respect to how each alternative compares to the proposed project in terms of the severity of the environmental topics addressed in this EIR. A score of “3” indicates that the alternative would have the same level of impact when compared to the proposed project. A score of “1” indicates that the alternative would have a better (or reduced) impact when compared to the proposed project. A Score of “2” indicates that the alternative would have a slightly better (or slightly reduced) impact when compared to the proposed project. A score of “4” indicates that the alternative would have a slightly worse (or slightly increased) impact when compared to the proposed project. A score of “5” indicates that the alternative would have a worse (or increased) impact when compared to the proposed project. The project alternative with the lowest total score is considered the environmentally superior alternative.

As shown in Table 5.0-4, the proposed Project is the environmentally superior alternative when looked at in terms of the potential to reduce significant environmental impacts identified throughout this EIR. All of the alternatives fail to reduce any significant and unavoidable impacts to a less than significant level. Throughout the preparation of the General Plan Update, the City Council, Planning Commission, and GPAC all expressed a desire and commitment to ensuring that the General Plan not only reflect the community’s values and priorities, but also serve as a self-mitigating document and avoid significant environmental impacts to the greatest extent feasible. To that end, the proposed General Plan includes the fully range of feasible minimization policies and actions to reduce potential impacts to the greatest extent possible. The General Plan Update provides for high density mixed-use areas consistent with transit oriented development principles. It should be noted that other impacts that were identified as less than significant throughout the Draft EIR such as noise and aesthetics may be slightly increased when comparing the proposed Project to alternatives with less overall development potential, however this would

5.0 ALTERNATIVES

not outweigh the overall benefit of the proposed Projects Land Use Map and updated policy guidance ability to reduce significant impacts to the greatest extent feasible when compared to all other alternatives.

TABLE 5.0-4: COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

<i>ENVIRONMENTAL ISSUE</i>	<i>PROPOSED PROJECT</i>	<i>ALTERNATIVE 1 (NO PROJECT)</i>	<i>ALTERNATIVE 2 (MODIFIED)</i>	<i>ALTERNATIVE 3 (CORRIDOR ENHANCEMENTS)</i>
Air Quality	3 – Same	2 – Slightly Better	1 – Better	3 – Same
Greenhouse Gases, Climate Change, and Energy	3 – Same	5 – Worse	5 – Worse	4 – Slightly Worse
Transportation and Circulation	3 – Same	5 –Worse	5 –Worse	4 – Slightly Worse
Irreversible Effects	3 – Same	2 – Slightly Better	2 – Slightly Better	2 – Slightly Better
SUMMARY	12	14	13	13

Overall, the proposed General Plan is the environmentally superior alternative as it is the most effective in terms of overall reductions of the most significant impacts compared to all other alternatives. As such, is the environmentally superior alternative for the purposes of this EIR analysis.

SATISFACTION OF PROJECT OBJECTIVES

Alternative 1

As described previously Alternative 1 fails to meet the most basic Project Objectives and thus was not further considered. Alternative 1 fails to meet several of the basic Project Objective as no changes would be made to address updated General Plan Guidelines, or the requirements of State law. Since adoption of the existing General Plan, State legislation has been passed requiring the City to address new safety and circulation requirements in the General Plan and to further address greenhouse gas emissions. Additionally, the City currently has an obligation to update and adopt its Housing Element, and receive new State certification. The existing General Plan does not conform to state requirements regarding planning for future housing growth.

Alternative 2

Like the Proposed Project, Alternative 2 reflects the current goals and vision expressed by city residents, businesses, decision-makers, and other stakeholders; through the updated policy document, and addresses new requirements of State law, including climate resiliency planning, complete streets, etc. Alternative 2 meets most Project Objectives. However, without the updated Land Use Map, Alternative 2 provides less high-quality housing options; and does not meet the General Plan’s Objectives to provide a range of high-quality housing options, including housing resources and programs that comply with State Planning Law. Based on the methodology adopted by ABAG, the City must plan for at least 2,977 new housing units between 2023 and 2031. This alternative identifies a maximum buildout of 1,640 units by 2040 and would not provide for the amount of housing that has been identified by ABAG. Thus, Alternative 2 fails to meet several Project Objectives as it retains the existing Land Use Map and designations and does not implement the new land uses that are central to meeting the proposed Project’s Objectives.

Alternative 3

Like the proposed Project, Alternative 3 would satisfy most Project Objectives as it would adopt the updated policy document as well as the updated Land Use Map. This alternative would update the land use map to allow more mixed use residential areas along key corridors and would allow for more growth that would be allowed under Alternatives 1 and 2 but substantially less overall housing development than the proposed Project. Although Alternative 3 meets most Project Objectives, without the updated Land Use descriptions and new mixed use and higher density designations, Alternative 3 provides less high-quality housing options; and does not meet the General Plan's Objectives to provide a range of high-quality housing options, including housing resources and programs that comply with State Planning Law. As described previously, the City must plan for at least 2,977 new housing units between 2023 and 2031. Although this alternative identifies a maximum buildout of 3,268 units by 2040 this alternative would not be anticipated to provide for the amount of housing that has been identified by ABAG over the next 8 years as many sites would require substantial re-development of existing parcels and lot consolidation, and would not be anticipated to provide the type of development levels over the shorter 8-year Housing Element planning period. Additionally, without the updated land uses and land use development standards that allow for higher density ranges the City's ability to ensure the RHNA for the extremely low and low income categories could not be met. Thus, Alternative 3 fails to meet the Project Objective to meet all housing needs as it does not implement the new higher density land uses identified during the Land Use and Housing Element update to ensure regional housing needs are met which is central to meeting the proposed Project's Objectives of meeting housing needs and complying with State law.

This page left intentionally blank

**CITY OF CAMPBELL
GENERAL PLAN UPDATE**

**Figure 5.0-1.
Existing General Plan Land Use Map**

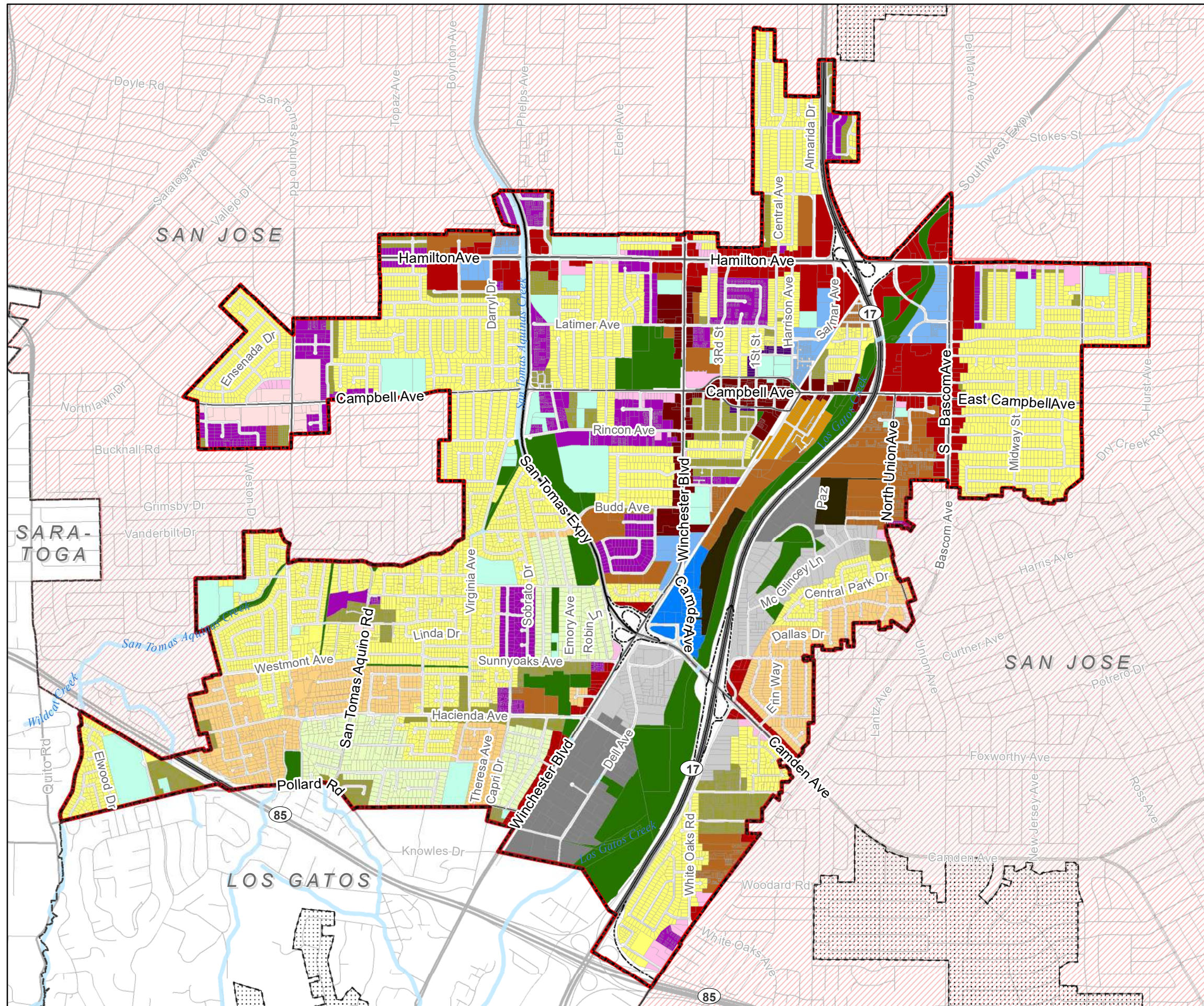
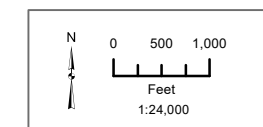
Legend

General Plan Land Use Designations

- Low Density Residential <3.5
- Low Density Residential <4.5
- Low Density Residential <6
- Low-Medium Density Residential
- Medium Density Residential
- High Density Residential
- Mobile Home Park
- Neighborhood Commercial
- General Commercial
- Central Commercial
- Professional Office
- Light Industrial
- Research and Development
- Commercial/Light Industrial
- Office/Low-Medium Density Residential
- Commercial/High-Medium Density Residential
- Commercial/Prof. Office/Residential
- Institutional
- Open Space

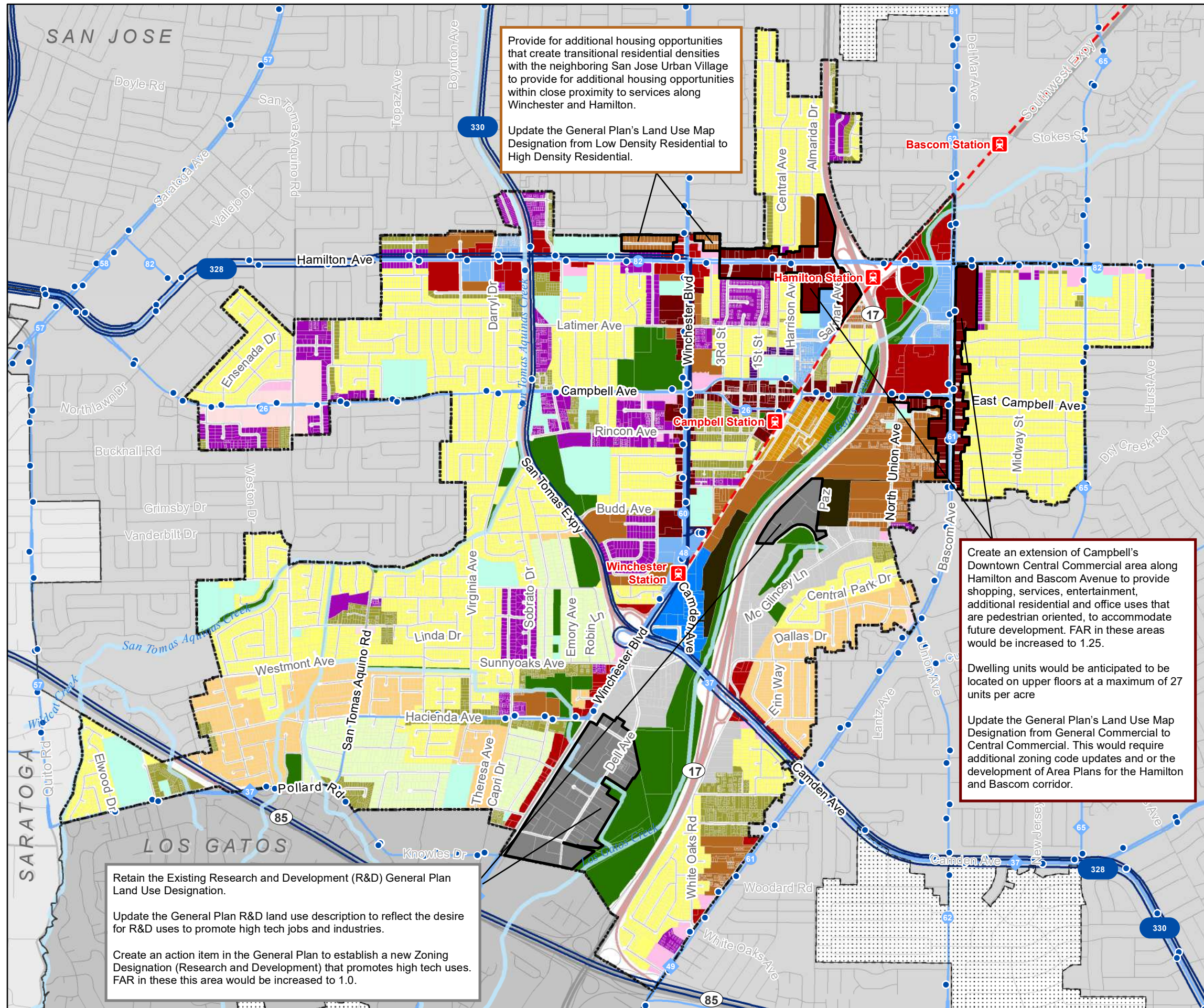
Planning Areas

- City of Campbell
- Surrounding Cities
- Unincorporated Santa Clara County
- Campbell Urban Service Areas
- San Jose Planning Limit of Urban Growth



This page left intentionally blank

City of Campbell
Figure 5.0-2: ALTERNATIVE 3
General Plan Land Use Map



Land Use Designations

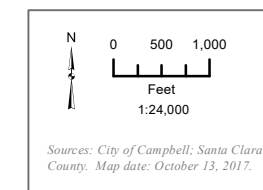
- Low Density Residential
- Low Density Residential
- Low Density Residential
- Low-Medium Density Residential
- Medium Density Residential
- High Density Residential
- Mobile Home Park
- Neighborhood Commercial
- General Commercial
- Central Commercial
- Professional Office
- Light Industrial
- Research and Development
- Commercial/Light Industrial
- Office/Low-Medium Density Residential
- Commercial/High-Medium Density Residential
- Commercial/Prof. Office/Residential
- Institutional
- Open Space

Municipalities

- City of Campbell
- City of San Jose
- City of Saratoga
- City of Los Gatos
- Unincorporated Santa Clara County

VTA Bus and Rail Service

- Community/Local Bus Service
- Limited/Express Bus Service
- Light Rail Train
- Limited/Express Bus Stops
- Light Rail Stations



This page left intentionally blank

CITY OF CAMPBELL

Rob Eastwood Community Development Director

Stephen RoseSenior Planner

DE NOVO PLANNING GROUP

Ben Richie Principal Planner/Project Manager

William CrenshawSenior Planner

Josh SmithSenior Planner

Jennifer DeMartino,GIS and Mapping

Peak and Associates – Cultural Resources Consultant

Melinda Peak Principal Archeologist

Saxelby Acoustics – Noise Consultant

Luke Saxelby..... Principal

Fehr & Peers – Transportation Consultant

Charlie Coles Associate

West Yost – Utilities Consultant

Elizabeth Drayer..... Vice President

This page left intentionally blank.

- Association of Bay Area Governments (ABAG). 2017. Plan Bay Area 2040. Available at: <http://2040.planbayarea.org>
- Association of Bay Area Governments (ABAG). Plan Bay Area 2050. Available at: <http://planbayarea.org>
- Association of Bay Area Governments, Metropolitan Transportation Commission, 2021. *Draft Plan Bay Area Environmental Impact Report*. State Clearinghouse No. 2020090519. June.
- Association of Bay Area Governments. 2001. The Real Dirt on Liquefaction-A Guide to the Liquefaction Hazard in Future Earthquakes Affecting the San Francisco Bay Area.
- Association of Bay Area Governments. 2010. Multi-Jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area.
- Association of Bay Area Governments. 2010. Multi-Jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area. Available at: <https://abag.ca.gov/our-work/resilience/planning/hazard-mitigation-adaptation-plans>
- Association of Bay Area Governments. 2010. On Shaky Ground. The San Francisco Bay Area – Documentation for 2003 Mapping Updated in 2010 Association of Bay Area Governments Earthquake and Hazards Program
- Auditor of the State of California. 2021 (February). California Air Resources Board Improved Program Measurement Would Help California Work More Strategically to Meet Its Climate Change Goals, Report Number 2020-114. Available: <http://auditor.ca.gov/reports/2020-114/summary.html>. Accessed December 21, 2021.
- Barbour and Major. 1988. Terrestrial vegetation of California.
- Baumhoff, Martin A. 1963 Ecological Determinants of Aboriginal California Populations. University of California Publications in American Archaeology and Ethnology 49(2):155-236. Berkeley.
- Bay Area Air Quality Management District, 2017. *California Environmental Quality Act Air Quality Guidelines*. May 2017.
- Bay Area Air Quality Management District. 2017. *Bay Area 2017 Clean Air Plan*. Adopted April 19, 2017.
- Bay Area Air Quality Management District. 2022. Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. Available at: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en>
- Bay Area Stormwater Management Agencies Association. 1999. Start at the Source: Design Guidance Manual for Stormwater Quality Protection.
- Beardsley, Richard K. 1954 Temporal and Areal Relationships in Central California Archeology (parts 1 and 11). University of California Archaeological Survey Reports 24, 25. Berkeley.

7.0 REFERENCES

- C Donald Ahrens. 2006. Meteorology Today: An Introduction to Weather, Climate, & the Environment.
- California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf
- California Air Resources Board (CARB). 2019. EMFAC2017 Web Database (v.1.0.2). Available at: <https://www.arb.ca.gov/emfac/2017/>
- California Air Resources Board. 2010. 13 CCR, Section 2449, Final Regulation Order: Regulation for In-Use Off-Road
- California Air Resources Board. 2013. ARB Almanac. Chapter 4: Regional Trends. Available at: <https://ww3.arb.ca.gov/aqd/almanac/almanac13/pdf/chap413.pdf>
- California Air Resources Board. 2015. 2020 Statewide Greenhouse Gas Emissions and the 2020 Target. https://www.arb.ca.gov/cc/inventory/data/misc/2020_forecast_base0911_2015-01-22.pdf
- California Air Resources Board. 2017. California's 2017 Climate Change Scoping Plan. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf
- California Air Resources Board. 2017a. California Ambient Air Quality Standards (CAAQS). Available at: <http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>
- California Air Resources Board. 2018 (November). Progress Report, California's Sustainable Communities and Climate Protection Act. Available at: ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf. Accessed July 18, 2022.
- California Air Resources Board. 2018 (November). Progress Report, California's Sustainable Communities and Climate Protection Act. Available: https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf. Accessed December 2, 2020.
- California Air Resources Board. 2020. California Ambient Air Quality Standards (CAAQS). Available at: <http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>
- California Air Resources Board. 2020. Maps of State and Federal Area Designations. Available at: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>
- California Air Resources Board. 2020b. Maps of State and Federal Area Designations. Available: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>
- California Air Resources Board. 2020c. GHG Current California Emission Inventory Data. Available: <https://ww2.arb.ca.gov/ghg-inventory-data>
- California Air Resources Board. 2022. GHG Current California Emission Inventory Data. Available: <https://ww2.arb.ca.gov/ghg-inventory-data>.

- California Air Resources Board. 2022a. California Ambient Air Quality Standards. Available: <https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards>
- California Air Resources Board. 2022b. iADAM Trends Summary. Available: <https://www.arb.ca.gov/adam/trends/trends1.php>
- California Air Resources Board. 2022c. State and Federal Area Designations. Available: <https://ww2.arb.ca.gov/our-work/programs/state-and-federal-area-designations>
- California Air Resources Board. 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals. Available: <https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate>. Accessed February 4, 2020.
- California Department of Conservation, Division of Land Resources Protection, Farmland Mapping and Monitoring Program. 2014-2016. Table A-24: Santa Clara County 2014-2016 Land Use Conversion.
- California Department of Conservation. 2002. California Geological Survey, Note 36.
- California Department of Conservation. 2014. California Important Farmlands Map. Farmland Mapping and Monitoring Program.
- California Department of Conservation. 2016. California Important Farmlands Map.
- California Department of Conservation. 2016. California Land Conservation (Williamson) Act Status Report.
- California Department of Finance. 2007. State of California, Department of Finance, E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 1990-2000.
- California Department of Finance. 2017. Table E-5, Population and Housing Estimates for Cities, Counties and the State, January 1, 2010-2017, with 2010 Benchmark.
- California Department of Finance. 2021 (January 1). Table 2: E-5 City/County Population and Housing Estimates. Available: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>. Accessed November 9, 2021.
- California Department of Fish and Wildlife. CNDDDB BIOS viewer. Version 5.65.02,
- California Department of Forestry and Fire Protection and State Board of Forestry and Fire Protection. 2010. Strategic Fire Plan for California.
- California Department of Forestry and Fire Protection. 2016. <http://www.fire.ca.gov>
- California Department of Forestry and Fire Protection. November 2007. Santa Clara County Fire Hazard Severity Zones in State Responsibility Areas. Accessed August 2020.
- California Department of Forestry and Fire Protection. October 2008. Santa Clara County Fire Hazard Severity Zones in Local Responsibility Areas. Accessed August 2020.

7.0 REFERENCES

- California Department of Resources Recycling and Recovery. 2020. <http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx>
- California Department of Toxic Substances Control. 2020. Envirostor Database. <http://www.envirostor.dtsc.ca.gov/public/>
- California Department of Toxic Substances Control. 2022. Envirostor Database. <http://www.envirostor.dtsc.ca.gov/public/>.
- California Department of Transportation, Division of Aeronautics. 2011. California Airport Land Use Planning Handbook.
- California Department of Water Resources (DWR). 2016. Bulletin 118, California's Groundwater, 2016 Update.
- California Department of Water Resources. 1980. Groundwater Basins in California – A Report to the Legislature in Response to Water Code Section 12924. Bulletin 118 – 80.
- California Department of Water Resources. 2003. California's Groundwater Bulletin 118-Update. October.
- California Department of Water Resources. 2015. 2012 California Integrated Report, Clean Water Act Sections 303(d) and 305(b). April 8, 2015. Available: http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/ir_staffreport_final.pdf.
- California Department of Water Resources. 2017. Dams within the Jurisdiction of the State of California. Available: http://www.water.ca.gov/damsafety/docs/Dams%20by%20County_Sept%202017.pdf.
- California Dept. of Fish and Game. 2020. "Special Animals List." Natural Diversity Database.
- California Dept. of Fish and Wildlife. 2020. "Special Vascular Plants, Bryophytes, and Lichens List." Natural Diversity Database.
- California Dept. of Fish and Wildlife. 2020. "State and Federally Listed Endangered, Threatened, and Rare Plants of California."
- California Dept. of Fish and Wildlife. California Natural Diversity Database (CNDDDB)
- California Dept. of Water Resources. 2010. Final 2010 Integrated Report (CWA Section 303(d) List / 305(b) Report).
- California Dept. of Water Resources. 2012. Final 2012 Integrated Report (CWA Section 303(d) List / 305(b) Report).
- California Dept. of Water Resources. 2016. Dams Owned and Operated by a Federal Agency and Dams within the Jurisdiction of the State of California. [http://www.water.ca.gov/damsafety/docs/Juris%20\(H-M\)2012.pdf](http://www.water.ca.gov/damsafety/docs/Juris%20(H-M)2012.pdf)

- California Dept. of Water Resources. 2016. Integrated Report (CWA Section 303(d) List / 305(b) Report).
- California Division of Mines and Geology. 1997. Guidelines for Evaluating Seismic Hazards in California. CDMG Special Publication 117.
- California Energy Commission (CEC). 2018. Tracking Overview. Renewable Energy – Overview. Available: <https://www.energy.ca.gov/data-reports/tracking-progress>
- California Energy Commission (CEC). 2019a. Energy Almanac. Retrieved August 2012, from <http://energyalmanac.ca.gov/overview/index.html>
- California Energy Commission (CEC). 2019b. GHG Current California Emission Inventory Data. Available at: <https://ww2.arb.ca.gov/ghg-inventory-data>
- California Energy Commission, 2017. 2016 Power Content Label. Pacific Gas and Electric Company. September 2017. http://www.energy.ca.gov/pcl/labels/2016_labels/Pacific_Gas__and__Electric.pdf
- California Energy Commission. 2012. Energy Almanac. Retrieved August 2012, from <http://energyalmanac.ca.gov/overview/index.html>
- California Energy Commission. 2022. Energy Almanac. Available: <http://energyalmanac.ca.gov/overview/index.html>.
- California Environmental Protection Agency. 2010. Climate Action Team Report to Governor Schwarzenegger and the Legislature. December 2010. http://www.climatechange.ca.gov/climate_action_team/reports/.
- California Geological Survey. 1992. Fault Rupture Hazard Zones in California, Alquist-Priolo Special Studies Zone Act of 1972 with Index to Special Studies Zones Maps. California Geological Survey (formerly California Division of Mines and Geology, CDMG) Special Publication 42, Revised 1992. State of California Department of Conservation.
- California Geological Survey. 1999, Revised 2002. Simplified Fault Activity Map of California. Compiled by Charles W. Jennings and George J. Saucedo.
- California Geological Survey. 2003. The Revised 2002 California Probabilistic Seismic Hazard Maps. Prepared by T. Cao, W.A. Bryant, B. Rowshandel, D. Branum, and C.J. Willis. California Geological Survey. June 2003.
- California Geological Survey. 2013. Seismic Shaking Hazards in California Based on the USGS/CGS Probabilistic Seismic Hazards Assessment (PSHA) Model. Available at: <http://www.conservation.ca.gov>
- California Governor's Office of Planning and Research. General Plan Guidelines. Available: <https://opr.ca.gov/planning/general-plan/guidelines.html>. Accessed December 2, 2020.
- California Natural Resources Agency (2012) updated mineral land classification map.

7.0 REFERENCES

- California Natural Resources Agency. 2018. State of California Sea-Level Rise Guidance. Available at: https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A OPC_SLR_Guidance-rd3.pdf.
- California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard (RPS) Program. Available at: <https://www.cpuc.ca.gov/rps/>
- California Water Resources Control Board. 2017. <https://geotracker.waterboards.ca.gov/>.
- California Water Resources Control Board. 2020. <https://geotracker.waterboards.ca.gov/>
- CalRecycle, 2018. SWIS Facility/Site Search. <http://www.calrecycle.ca.gov/swfacilities/directory/search.aspx>
- Castillo, Edward D. 1978. The Impact of Euro-American Exploration and Settlement. In California, edited by Robert F. Heizer, pp. 99-127. Handbook of North American Indians. vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- City of Campbell. 2001. City of Campbell General Plan. Adopted November 6, 2001.
- City of Campbell. 2008. NPDES Stormwater Runoff. March 2008.
- City of Campbell. 2015. Dell Avenue Area Plan Public Review Draft EIR for the City of Campbell. June 22, 2015.
- City of San Jose General Plan 2040 Identified Growth Areas. Available At: <http://www.sanjoseca.gov/index.aspx?NID=1737>
- City of San Jose, Santa Clara Valley Water District. 2014. South Bay Water Recycling Strategic and Master Planning Report. December 2014.
- County of Santa Clara. Santa Clara County General Plan, 1995-2010. Adopted December 20, 1994.
- Department of Water Resources (DWR) Best Available Mapping 2016 (BAM). <http://gis.bam.water.ca.gov/bam/>
- Hickman, James C. 1993. Jepson Manual: Higher Plants of California.
- Holland, R.F., 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, Nongame Heritage Program, Dept. Fish & Game, Sacramento, Calif. 156 pp.
- Intergovernmental Panel on Climate Change (IPCC). 2013. "Climate Change 2013: The Physical Science Basis, Summary for Policymakers." Available at: http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf
- International Energy Agency. 2018. FAQs: Oil. Available at: <https://www.iea.org/about/faqs/oil/>
- Local Agency Formation Commission of Santa Clara County. 2015. Cities Service Review, Final Report. Adopted December 2, 2015.

- National Resources Defense Council (NRDC). 2014. NRDC Fact Sheet: California Snowpack and the Drought. April 2014. Available at: <https://www.nrdc.org/sites/default/files/ca-snowpack-and-drought-FS.pdf>
- San Francisco Regional Water Quality Control Board. 2009. Order No. R2-2009-0038, NPDES No. CA0037842.
- San Francisco Regional Water Quality Control Board. 2014. Order No. R2-2014-0034, NPDES No. CA0037842.
- San Jose Water Company. 2010. San Jose Water Company Urban Water Management Plan 2010.
- San Jose Water Company. 2012. San Jose Water Company Urban Water Management Plan 2020.
- San Jose Water Company. 2016. San Jose Water Company Urban Water Management Plan 2015.
- San Jose/Santa Clara Water Pollution Control Plant. The Plant Master Plan. November 2013.
- Santa Carla County, 2016. Parcel Data provided by the County Assessor's Office. April 2016.
- Santa Clara County Airport Land-Use Commission (ALUC) 2011, Comprehensive Land Use Plans (CLUP). Available At: <https://www.sccgov.org/sites/dpd/Commissions/ALUC/Pages/ALUC.aspx>
- Santa Clara County Habitat Agency. August 2012. Santa Clara Valley Habitat Conservation Plan.
- Santa Clara County, 1994. Santa Carla County General Plan. Adopted: December 20, 1994.
- Santa Clara County, 2016. Santa Clara County Airport Land Use Compatibility Plans. Airport Land Use Commission. Accessed November 2016. Available At: <https://www.sccgov.org/sites/dpd/Commissions/ALUC/Pages/ALUC.aspx>.
- Santa Clara Valley Urban Runoff Pollution Prevention Program. 2020. <https://scvurppp.org/>
- Santa Clara Valley Urban Runoff Pollution Prevention Program. June 2016. C.3 Stormwater Handbook.
https://www.sccgov.org/sites/cwp/Documents/SCVURPPP_C.3_Technical_Guidance_Handbook_2016_Chapters.pdf
- Santa Clara Valley Water District (SCVWD) Act, Water Code Appendix, Chapter 60
- Santa Clara Valley Water District 2016. <http://www.valleywater.org>
- Santa Clara Valley Water District. 2010. Urban Water Management Plan 2010.
- Santa Clara Valley Water District. 2016. Urban Water Management Plan 2015. May 2016
- Silicon Valley Clean Energy. 2021. City of Campbell Community Impact Summary. Available at: <https://www.svcleanenergy.org/community-impact>
- U.S. Census Bureau. 2000. 2000 U.S. Census Population, Household, and Housing Unit Counts.

7.0 REFERENCES

- U.S. Census Bureau. 2010. 2010 U.S. Census Population, Housing, and Housing Unit Counts.
- U.S. Department of Agriculture and Natural Resources Conservation Service. 2010. Soil Survey Geographic (SSURGO) Database for Santa Clara Area, California, Western Part.
- U.S. Department of Agriculture and Natural Resources Conservation Service. 2016. Web Site for Official Soil Series Descriptions and Series Classification, Official Soil Series Descriptions (OSD). Available at: <<https://soilseries.sc.egov.usda.gov/>>.
- U.S. Department of Transportation National Highway Traffic Safety Administration 2014. Fatality Analysis Reporting System (FARS) Available At: <http://www-fars.nhtsa.dot.gov/> and <http://www.nhtsa.gov/FARS>
- United States Army Corps of Engineers. 1987. Wetland Delineation Manual.
- United States Energy Information Administration (U.S. EIA). 2022. California State Energy Profile. Last updated March 17, 2022. Available at: <https://www.eia.gov/state/print.php?sid=CA>.
- United States Environmental Protection Agency (U.S. EPA). 2018. Greenhouse Gas Emissions from a Typical Passenger Vehicle. Available at: <https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>
- US Census Bureau. 2019. Inflow/Outflow Counts of All Jobs for Selection Area in 2019. Available: <https://onthemap.ces.census.gov/>. Accessed November 9, 2021.
- US Geologic Survey; CalAtlas; Open Street Data Map date: January 17, 2018.
- USEPA. 2017. My WATERS Mapper. Available: <http://map24.epa.gov/mwm/mwm.html?fromUrl=18040003>
- West Valley Sanitation District of Santa Clara County. 2014. Annual Report 2014-2015.
- West Valley Sanitation District of Santa Clara County. 2015. Sewer System Management Plan. Adopted April 8, 2015.
- Wong, Lana. 2011. A Review of Transmission Losses in Planning Studies. California Energy Commission. CEC-200-2011-009. Available at: <https://ww2.energy.ca.gov/2011publications/CEC-200-2011-009/CEC-200-2011-009.pdf>