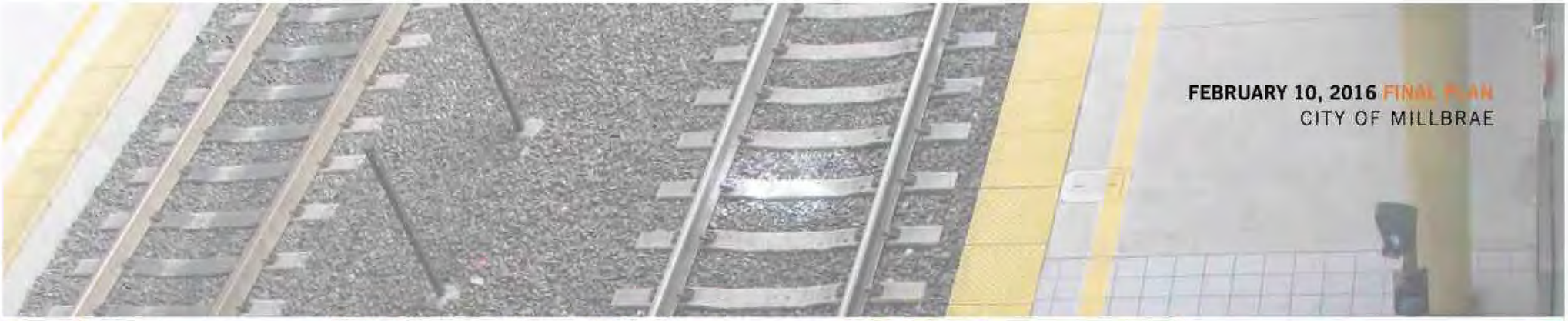

**FEBRUARY 10, 2016 FINAL PLAN**
CITY OF MILLBRAE


# MSASP

MILLBRAE STATION AREA SPECIFIC PLAN

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# CONTENTS

## LIST OF TABLES

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# 1

# INTRODUCTION

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# 1. INTRODUCTION

Millbrae's transit center is a seamless hub blending local transit services including Bay Area Rapid Transit (BART), Caltrain, SamTrans, Corporate shuttles, and a proposed station for the High-Speed Rail project to connect riders to San Francisco, Silicon Valley, the entire Bay Area and beyond. Additionally, the Millbrae BART/Caltrain Station is the only station with a global link for travelers through San Francisco International Airport (SFO). The core premise of the Millbrae Station is to create a compact, walkable area that is highly transit-oriented. The updated Millbrae Station Area Specific Plan provides the vision and strategies to guide in the creation of Millbrae's new economic center, including vibrant, diverse, and sustainable transit-oriented developments at and around the stations.

The Millbrae Station opened in June 2003 as part of the San Francisco International Airport extension. The Millbrae Station is a key intermodal connection between Caltrain's commuter rail system and BART's transit system near SFO. In advance of the Station's opening, the City of Millbrae (City) developed the Millbrae Station Area Specific Plan in 1998. The 1998 Millbrae Station Area Specific Plan (1998 MSASP) proposed a vision for the area around the Station, set development standards for new buildings, and identified implementation strategies. While some development has successfully occurred under the 1998 MSASP, new development pressures and economic shifts created a need to update the 1998 MSASP.[1] As market conditions and demand for future development have changed, the City decided to embark on an effort to update the 1998 MSASP. The MSASP Update process refined the vision for the Plan Area and multimodal and circulation improvements, as well as other infrastructure improvements required to accommodate new development. This document, the 2015 MSASP, is the result of this process.

This chapter describes the Plan Area location, summarizes the MSASP Plan Update process, and outlines other relevant planning documents and initiatives.

1 When we refer to the 1998 MSASP, our reference includes three amendments to the 1998 MSASP that were adopted by the City Council per Resolution 02-44 on April 23, 2002; Resolution 04-72 on November 29, 2004; and Resolution 05-4 on January 11, 2005.

## 1.1. PURPOSE AND INTENT OF THE SPECIFIC PLAN

As with the 1998 MSASP, the updated MSASP continues to provide a regulatory framework and guidance for future development and public improvements in the Plan Area. The MSASP Update process was specifically intended to:

- Revisit the objectives and policies in the 1998 MSASP.
- Respond to changing market conditions.
- Enhance Millbrae's economic sustainability by creating a new vibrant economic center to enhance the lives of Millbrae's residents and the region.
- Capitalize on major transit investment with appropriate land use in the transit center, with an eye toward long-term growth considerations.
- Ensure the Specific Plan Area is an example of comprehensive environmental sustainability in all regards.
- Ensure investments and developments maintain and enhance the intermodal aspects of the Specific Plan Area, focusing on commuters and travelers on all transit services, including BART, Caltrain, SamTrans, Shuttles, Taxis, SFO, and High-Speed Rail.
- Take planned transit into consideration, such as the Caltrain Modernization Program, increasing numbers of shuttle services and the proposed High-Speed Rail project.
- Work to reduce traffic and congestion into and out of the Specific Plan Area.
- Strengthen the pedestrian and bicycle policies to support current and future needs.

### STATUTORY REQUIREMENTS FOR THE SPECIFIC PLAN

Under California law, cities, and counties may complete Specific Plans to develop policies, programs, regulations, and guidelines to implement the jurisdiction's adopted General Plan. A Specific Plan effectively establishes a link between implementing policies of the General Plan and the individual development proposals in a defined area. As prescribed by Section 65451 of the Government Code, the MSASP includes text and diagrams that generally describe the following:

- The distribution, location, and extent of all land uses.
- The proposed distribution, location, extent, and intensity of major components of public infrastructure, such as transportation and drainage systems.
- The standards and criteria by which new development shall proceed.
- A program of implementation measures, such as financing measures, policies, regulations, and public works projects.

### STATEMENT OF RELATIONSHIP TO THE GENERAL PLAN

As required by Government Code Section 65454, the 2015 MSASP is consistent with and implements the City's General Plan. The City's General Plan, adopted in 1998, was prepared concurrently with the 1998 MSASP. The 1998 General Plan called for the Plan Area to develop into a pedestrian friendly transit-oriented area that takes advantage of its proximity to the BART/Caltrain Station. This 2015 MSASP remains consistent with these goals and policies from the City's General Plan. However, the 2015 MSASP update does make certain changes to the 1998 MSASP. These changes are summarized in the Appendix B of this specific plan. In order to adopt this Specific Plan update, the General Plan will be amended concurrently with the adoption of the Specific Plan, as described in Chapter 9 of this Specific Plan. General Plan amendments will ensure that land use designations and other pertinent policies are consistent between the MSASP and the General Plan.

## 1.2. PLAN AREA SETTING

### REGIONAL SETTING

Millbrae is located on the San Francisco Peninsula, about 14 miles south of central San Francisco. It is about 30 miles north of San Jose via Highway 101. Figure 1-1 shows Millbrae's location within the region.

### LOCAL SETTING

Millbrae is a 3.25 square-mile city within San Mateo County. The city is located on the San Francisco peninsula, bordered by San Bruno to the north, San Francisco International Airport (SFO) and the San Francisco Bay to the east, Burlingame to the south, and the San Andreas Lake and Interstate 280 to the west (see Figure 1-1).

Millbrae is accessed by Interstate 280 and Highway 101, which functions as the main north-south traffic route. El Camino Real (Highway 82) also provides a regional connection through Millbrae.

### SPECIFIC PLAN AREA

The Plan Area is composed of approximately 116 acres of land in one of the oldest areas of the city. As discussed above, transportation is a prominent component in this area's development. Touching the southeastern-edge of the city, the City of Burlingame


**FIGURE 1-1.** Regional and Local Setting

*Source: ESRI, 2014, PlaceWorks, 2014.*

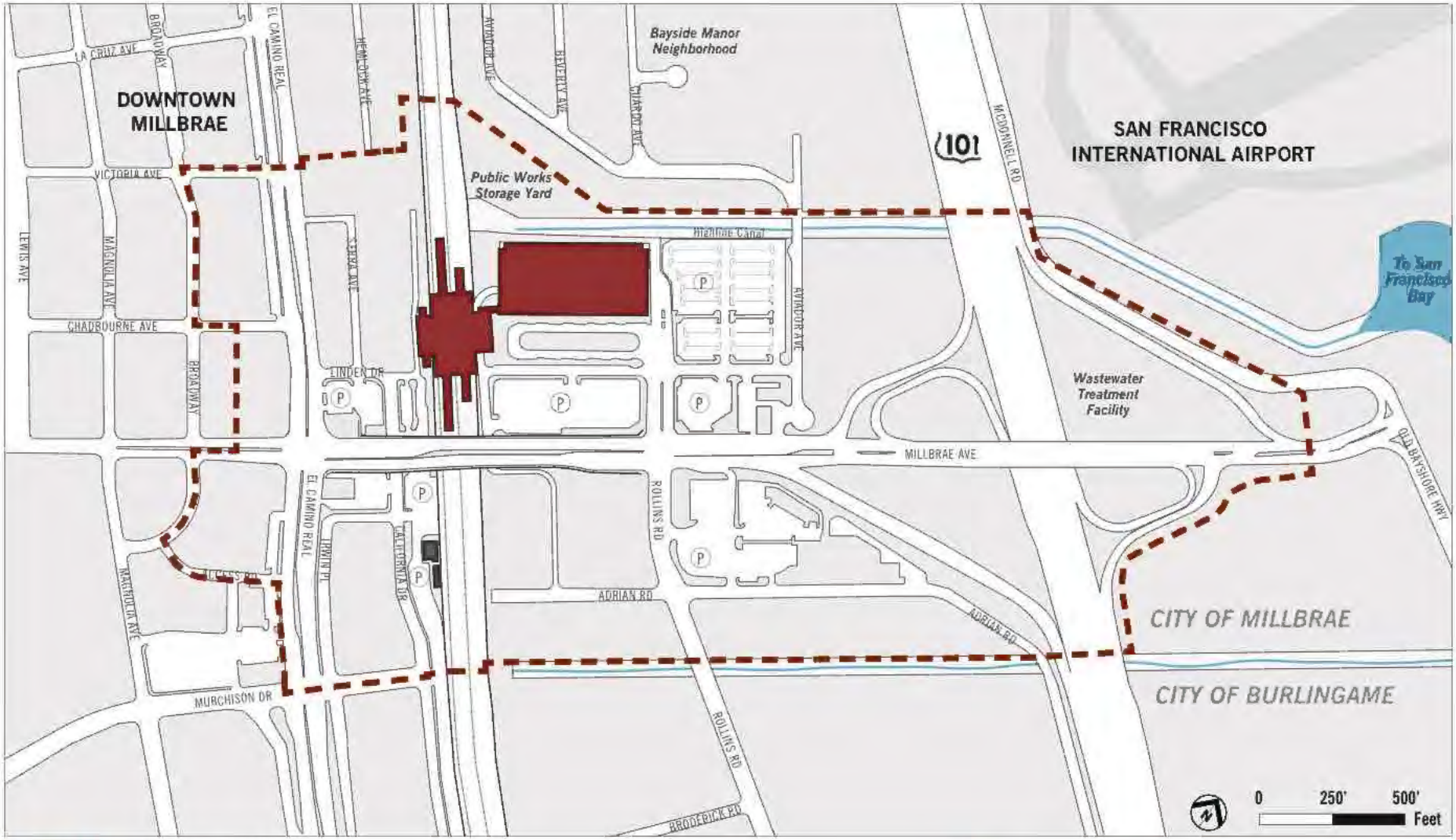



**FIGURE 1-2.** Millbrae Specific Plan Area

*Source: PlaceWorks, 2014.*

MSASP Boundary
Millbrae BART/Caltrain Station & Parking Structure
Railroad

borders the Plan Area. El Camino Real and Broadway bound the Plan Area to the west. Victoria Avenue, the City's Public Works storage yard, and the Highline Canal limit it to the north. The Highway 101 interchange bounds it to the east (see Figure 1-2).

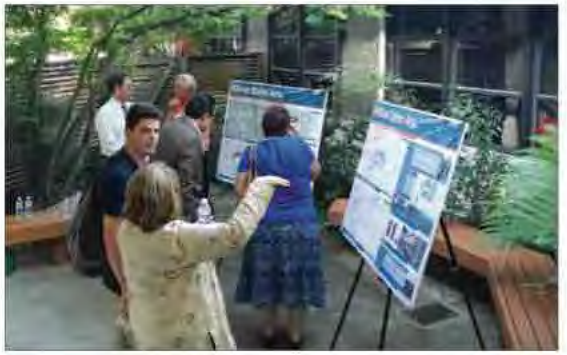
## 1.3. COMMUNITY PLANNING PROCESS

This section describes the community planning process undertaken for the Specific Plan in 2014. The community process included several interactive meetings with community members to identify goals and hopes for the area, consider future land uses and development opportunities, and identify character and circulation improvements.

### COMMUNITY WORKSHOPS

Two major community workshops were held during early 2014 to work with community members to identify a vision for the Plan Area.

- Community Workshop #1: Existing Conditions/ Visioning. A community workshop was held on May 15, 2014 to provide an introduction to the planning process and solicit community feedback on issues and opportunities for the MSASP Update. At the workshop, a presentation was given that provided an overview of the 1998 MSASP, existing Plan Area conditions, and market assessment findings. Key themes that emerged from the first community workshop were related to traffic and safety, the need for better bicycle and pedestrian connections, economic development, revenue-generating uses and businesses, and land use variety.
- Community Workshop #2: Alternatives Review and Selection. A second community workshop was held on June 26, 2014 to review land use alternatives for the Plan Area. Two options for future land uses in the Plan Area were presented to the workshop. Afterward, workshop participants broke into small groups to choose the alternative that their group felt was most appropriate for the Plan Area. In many cases, the groups edited and combined concepts from the two different alternatives to create one unique vision for the Plan Area.



*Community Workshop #1*

*Community Workshop #2*

## TECHNICAL ADVISORY COMMITTEE

As part of the planning process, a Technical Advisory Committee (TAC) met to review progress and provide technical comments during the process. The TAC included representatives from the City, BART, the San Mateo County Transit District (SamTrans), San Francisco International Airport (SFO), the California Department of Transportation (Caltrans), the California High Speed Rail Authority (CAHSRA), City/County Association of Governments of San Mateo County (C/CAG), Federal Aviation Administration (FAA), and the local development community. The TAC met three times during the planning process to identify critical issues, review technical studies and the market assessment, and review the preliminary preferred alternative.

- TAC Meeting #1: Process Overview and Issues Identification. The first TAC meeting was held on March 25, 2014 to provide TAC members with an introduction to the project team, the planning process, and objectives. At this meeting, the TAC expressed their concerns and identified critical issues pertaining to the MSASP Update.
- TAC Meeting #2: Technical Studies Review. This meeting was held on May 7, 2014 to solicit feedback on the technical studies, which provide an overview of existing conditions in the Plan Area, including circulation, development guidelines, infrastructure, and utilities, and a market analysis for the region.
- TAC Meeting #3: Draft Alternative. The third TAC meeting took place on August 5, 2014 to provide an update on the project's overall progress and have the TAC review a Draft Land Use and Circulation Alternative.

*TAC Meeting*

## PLANNING COMMISSION AND CITY COUNCIL MEETINGS

A joint Planning Commission/City Council meeting was held on July 22, 2014 to present the project progress, including community input from Community Workshop #2 on the development of draft alternatives, and to solicit feedback on a Draft Land Use and Circulation Alternative. Based on input received from this joint Planning Commission/City Council meeting, a final Draft Alternative, which promoted safe bicycle and pedestrian circulation systems along smaller interior streets, a wide range of uses near the station, and economic development in the greater area especially through office and hotel development, was selected as the basis for the MSASP Update.

On October 14, 2014, a special City Council meeting was held where the Council reviewed the project progress. A proposed development program was presented to Council and direction was given to proceed with the Specific Plan update and environmental review. At this meeting, a summary of an International Retail Study for the Plan Area was presented and received by the Council (The International Retail Study is included as Appendix D).

### PUBLIC HEARINGS

The Planning Commission and City Council public hearings were held from November 2015 to February 2016 to consider recommendation and adoption of this Specific Plan. The Council resolutions adopting this Specific Plan and certifying the associated Environmental Impact Report (EIR) are included as Appendix A.

## 1.4. PLANNING CONTEXT

This section describes the regulatory framework, planning studies, and other initiatives relevant to the Plan Area.

### GENERAL PLAN

The City's General Plan (General Plan), adopted in 1998, provides long-term planning goals and policies for the entire city. In light of having both plans prepared concurrently, the General Plan contains specific policies for the 1998 MSASP. The Plan Area is designated as a Special Land Use Policy Area (Policy LU3.5) in the General Plan. As discussed briefly above, the General Plan calls for new development to capitalize on the Millbrae BART/Caltrain Station while helping to realize economic development goals. The General Plan notes that the scale of new development in the Plan Area should be of an appropriate scale for a transit station area and also promote increased transit ridership. Finally, the General Plan calls for the Plan Area to be pedestrian- and auto-friendly and to provide an active area during the day and at night, while cohesively connecting to nearby parts of Millbrae (such as Downtown).

The Housing Element of the General Plan was adopted on November 24, 1998 and updated three times on January 24, 2006, May 28, 2013, and May 12, 2015. The Housing Element calls for the provision of safe and affordable housing for all segments of the community. The Housing Element encourages mixed-use development, small units, and higher density housing with affordable units, among many other policies and programs, to achieve its goal. In the Housing Element, the MSASP area is identified as a "Housing Opportunity Area" having potential for housing sites.

This MSASP has been prepared in accordance with the adopted goals and policies of the General Plan. The recommendations and policies contained in this MSASP are consistent with and further expand on these goals. However, the General Plan shall be amended alongside adoption of this MSASP, as described in Chapter 9 of this Specific Plan. General Plan amendments will ensure that land use designations and other pertinent policies are consistent between the MSASP and the General Plan.

### ZONING CODE

The City's Zoning Ordinance identifies specific zoning districts within the city and describes the development standards that apply to each district. The 1998 Specific Plan Area is one of these districts, and new development follows regulations from that Plan. As before, this Specific Plan includes standards and guidelines for new development. Requirements not specifically addressed in this plan will continue to be regulated by the Millbrae Zoning Code.

### SAN FRANCISCO AIRPORT LAND USE COMPATIBILITY PLAN

The San Francisco International Airport (SFO), the largest airport in the San Francisco Bay Area, is adjacent to the Plan Area. The Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport was prepared and adopted by the City/County Association of Governments' (C/CAG) Board of Directors, acting as the Airport Land Use Commission for San Mateo County, in July 2012. This document provides land use recommendations and other information relevant to development near SFO. The intent of the Plan is to ensure that development in the areas surrounding SFO is compatible with airport activities. Measures include limits on the height of structures in the path of the runways and restrictions on certain types of uses within these areas.

### BAY TRAIL

The Bay Trail is a regional network of trails that is planned to encircle San Francisco and San Pablo Bays. There are gaps in the Bay Trail network, and one of the gaps is around SFO, including the Plan Area. The Association of Bay Area Governments (ABAG) prepared the San Francisco International Airport Bay Trail Alignment Plan on November 20, 1998 to fill the gap in the area. However, this study was prepared prior to the completion of the Millbrae Station, and to date, no preferred alignment has been selected. As part of the efforts to close the gap around SFO, the City of Millbrae has worked with ABAG to engineer and prepare designs for a bike and pedestrian bridge overcrossing of Highway 101 at Millbrae Avenue. Building off this bike and pedestrian bridge, this MSASP recommends an alignment through the Plan Area that connects the Bayside Manor neighborhood to the existing Bay Trail in Bayfront Park.

### GRAND BOULEVARD INITIATIVE

The Grand Boulevard Initiative (GBI) is a regional collaboration, consisting of 19 cities, counties, and local and regional agencies, in order to improve the El Camino Real corridor, from Daly City to central San Jose. The Grand Boulevard Initiative scope encompasses one-half mile on each side of El Camino Real. The GBI seeks to transform El Camino Real into a more walkable, transit-friendly boulevard with mixed-use development. The vision is embodied in the Grand Boulevard Initiative Guiding Principles, which were adopted by the City of Millbrae in 2008 (Grand Boulevard Planning District, Ordinance 726).

The GBI Task Force, including the City of Millbrae, adopted the Grand Boulevard Multimodal Transportation Corridor Plan on September 15, 2010. The Grand Boulevard Multimodal Transportation Corridor Plan contains multimodal access strategies, street design guidelines, and prototypes for development along the corridor.

### BART TRANSIT-ORIENTED DEVELOPMENT POLICY

BART has developed a transit-oriented development (TOD) policy to promote high quality, more intensive development on and near BART-owned properties and to increase transit ridership. The policy was adopted on July 14, 2005.

### CALTRAIN STATIONS AND FACILITIES - SUSTAINABILITY DESIGN CRITERIA

Caltrain prepared sustainability design criteria for its stations and facilities on June 28, 2011. This document includes guidelines to support sustainable transit-oriented development adjacent to Caltrain facilities, energy-efficient site planning, and building design.

### CALIFORNIA HIGH SPEED RAIL URBAN DESIGN GUIDELINES

The Millbrae Station is identified as one of the stations in the California High Speed Rail (HSR) system, which is planned to link Los Angeles and San Francisco by 2029. The Millbrae Station is particularly important since it would provide access to SFO, BART, and Caltrain.

As the entity responsible for the planning, designing, and building of the California High-Speed Train, the California High-Speed Rail Authority (CAHSRA) prepared the Urban Design Guidelines in March 2011. These guidelines are intended to promote high quality mixed-use TOD development, improve access and connections around HSR stations, and emphasize the importance of the design and orientation of HSR stations.

## 1.5. PLAN CONTENTS

The following additional chapters follow Chapter 1:

**Chapter 2: Existing Conditions**. This chapter provides an overview of existing conditions in the Plan Area.

**Chapter 3: Vision and Goals.** This chapter provides a vision statement and goals, which build upon the vision.

**Chapter 4: Concepts and Policies.** This chapter describes the overall vision concepts and policies for land use, urban form, circulation, parking, housing, and utility infrastructure, which apply to the Plan Area as a whole.

**Chapter 5: Land Use Regulations and Development Standards.** This chapter stipulates permitted uses in the Plan Area and provides specific building and site design standards for new development in the Plan Area.

**Chapter 6: Design Standards and Guidelines.** This chapter provides design guidance for private development in the Plan Area. Design standards and guidelines prescribe various successful approaches to building and site design.

**Chapter 7: Circulation and Parking.** This chapter provides proposed vehicular, transit, pedestrian, and bicycle improvements and recommended parking strategies for the Plan Area and the area immediately surrounding the Millbrae Station. The chapter also provides streetscape standards for several major corridors.

**Chapter 8: Utilities and Public Services.** This chapter describes the potential impacts of development on utility infrastructure and public services, and improvements to accommodate future growth.

**Chapter 9: Implementation and Financing Plan.** This chapter provides a strategy for implementing the Specific Plan over the next 25 years, focusing on potential funding sources for new improvements identified in the Plan and the available.

**Chapter 10: Community Benefits Program.** This chapter describes how to participate in the Community Benefits Program and provides examples of benefits that may be implemented through a voluntary Community Benefits Agreement.

**Appendices.** The following technical appendices are located at the end of this Specific Plan:

- Appendix A –City Council Resolutions Adopting Update to MSASP and Certifying the EIR, including EIR Mitigation Monitoring Plan
- Appendix B – Summary of Key Changes from the 1998 Specific Plan
- Appendix C – Market Assessment Study
- Appendix D – Evaluation of International Serving Retail
- Appendix E – Airport Land Use Compatibility Plan Sections

# 1.6. ADMINISTRATION

## GENERAL PROVISIONS

### *Interpretation*

Any question regarding the interpretation of the provisions of this Specific Plan or the application of those provisions to any individual case or situation, the Community Development Director is authorized to interpret the intent of the provisions. Such a determination may be appealed to the Planning Commission, and the Planning Commission's decision may be appealed to the City Council. A determination by the City Council is final.

### *Development Standards*

The Development Standards set forth in Chapter 5 of this Specific Plan provide a comprehensive set of regulations governing the use and development of the land. While including references to specific provisions of the City of Millbrae Zoning Code, these Development Standards replace the City of Millbrae Zoning Code within the Plan Area. Should there be a conflict between this Specific Plan and the City of Millbrae Zoning Code, the provisions of this Specific Plan shall govern. Any issue not directly or specifically covered by this Specific Plan shall be subject to non-conflicting regulations and procedures of the City of Millbrae and Zoning Code.

***Permitting***

All applications for new construction, modifications to existing buildings, and changes in use shall follow the permitting and review procedures and processes established in the Millbrae Zoning Code. All applications for new construction, modifications to existing buildings, and changes in use shall be reviewed for conformance with the General Plan and the Millbrae Station Area Specific Plan, including policies, standards, and guidelines.

***Severability Clause***

If any term or provision of this Specific Plan, or the application of any provision of this Specific Plan to a particular situation, shall for any reason be found to be void, invalid, illegal or unenforceable by a court of competent jurisdiction, such term or provision shall remain in force and effect to the extent allowed by such ruling and all other terms and provisions of this Specific Plan or the application of this Specific Plan to other situations shall remain in full force or effect.

***Non-Conforming Structures and Uses***

Any lawfully existing land use occurring at the time of the effective date of this Specific Plan is allowed to be continued, notwithstanding any omission of a particular use in Table 5-1, Permitted and Conditionally Permitted Uses. Any use within the Specific Plan boundary that is nonconforming to the requirements and standards of this Plan shall be subject to Article XXIV, Nonconformities, of the Millbrae Zoning Code.

### ADJUSTMENTS TO THE DEVELOPMENT STANDARDS

In order to create the most beneficial outcome, a certain amount of flexibility is needed to respond to shifts in market demand and changes in construction practices. When needed, submittals for minor adjustments to development standards as shown in Table 5-2 (up to a 10 percent increase) shall be made to the City of Millbrae, and determinations shall be made at the administrative level by the Community Development Director.

Minor adjustments that pertain to building height increases within the maximum height range of 108 to 121 feet are also subject to compatibility and consistency determination with the Airport Land Use Compatibility Plan (ALUCP).

## 1.7. HOW TO USE THIS PLAN

This section describes the definitions of key planning terms and the ways the Specific Plan shall be used and implemented.

### DEFINITIONS OF KEY PLANNING TERMS

**Vision:** A vision represents an overall consensus for what the Specific Plan Area will become in the next 25 years based on the community's core values. The vision was developed with input from the community, City staff, and stakeholders during the Specific Plan Process. The vision statement for the Plan Area is included in Chapter 3.

**Goals**: Goals are more specific than the vision and consist of milestones and targets that are achievable. Accomplishing the set of goals included in Chapter 3 will bring the community close to realizing the vision. All future development and improvements within the Plan Area shall strive to achieve these goals to support the vision.

**Policies:** Policies are regulatory measures and procedures adopted by the City. The policies in Chapter 4 are developed to support the realization of the vision and goals. They will govern steps taken by staff and decision makers regarding plans and proposals for the Plan Area. All development and improvements shall be consistent with these policies.

**Concepts:** Concepts depict an application of the vision, goals, and policies described above. Concepts are presented with a number of illustrations and images in Chapter 4, to help the readers visualize potential development and improvements that could be built in support of the vision and goals. These concepts, however, do not have the power to govern actual development projects or improvements. Actual development and improvements can differ from the concepts described in this chapter, depending on timing, market trends, availability of opportunity sites, and other factors.

## FOR PROPERTY OWNERS AND DEVELOPERS

The following outlines the proposed steps for property owners and developers to take when consulting this MSASP.

- Read Chapters 2 and 3 to become familiar with the area's character and to understand the vision and goals for the area's future.
- Review the concepts in Chapter 4 that illustrate recommended development and improvements for the Plan Area to be familiar with the overarching themes for future projects within the Plan Area.
- Review the policies in Chapter 4 to make sure proposed development projects would be consistent with the policies.
- Carefully study Chapter 5, Land Use Regulations and Development Standards, and Chapter 6, Design Standards and Guidelines, before beginning architectural concept development. These chapters regulate development on private property. Confirm the property's location in respect to the Planning Zones and review permitted land uses, height and FAR minimums and maximums; parking requirements (automobile and bicycle); open space and other standards. Consult Chapter 10, Community Benefits Program, if interested in providing public benefits in exchange for higher development intensity.
- Chapter 7 provides circulation improvements for the Plan Area. While most of the improvements are required within the public right-of-way, some are closely related to private development and shall be financed and/or incorporated as part of the development. In particular, the streetscape improvements are related to the setback requirements in the Development Standards, so review them and confirm future development would contribute to, not conflict with the recommended streetscape improvements. Consult Chapter 9 as well, since it identifies which streetscape improvements shall be financed by private developers.

The most successful projects will be those that consult the MSASP and reflect the community's vision that the MSASP embodies.

## FOR THE CITY

The City will use this MSASP for two major purposes: evaluating development applications and planning for public improvements.

This MSASP provides the basis for evaluating applications for development within the Plan Area. This MSASP serves as a policy document and a regulatory document similar to a zoning ordinance. As with other regulations, the interpretation of the policies and intent of the MSASP will be made by the Community Development Director, subject to possible modification by the Planning Commission as needed.

This MSASP also provides guidance for planning public improvements, setting priorities, and outlining the implementation resources that may be pursued. The City shall consult the following key chapters - Chapter 7: Circulation and Parking, Chapter 8: Utilities and Public Services, and Chapter 9: Implementation and Financing Plan - as the City plans for capital improvements, grant applications, and other funding sources.

The City should monitor and annually report on the progress being made on public projects in the Plan Area.

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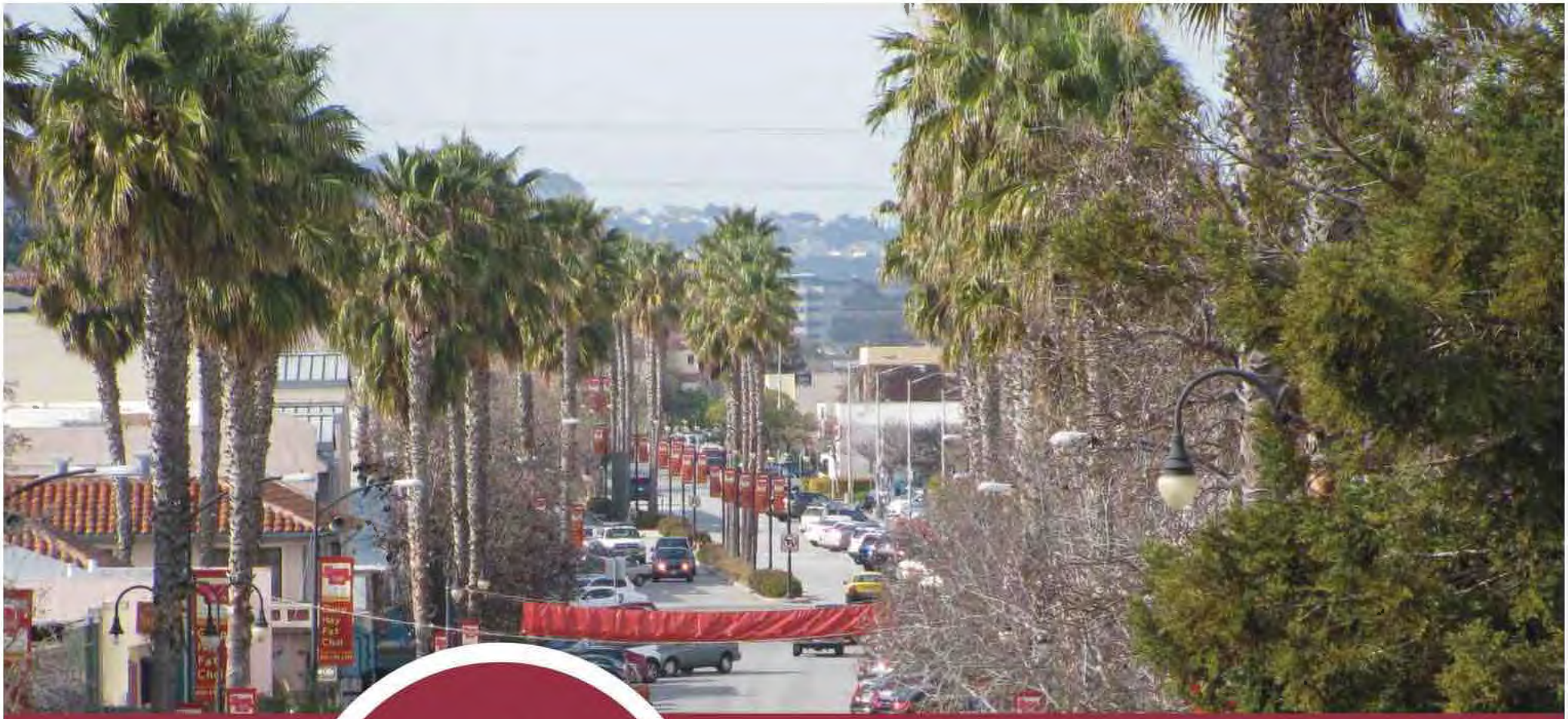

# 2

# EXISTING CONDITIONS

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# 2. EXISTING CONDITIONS

This chapter provides an overview of existing conditions in the vicinity of the Plan Area.

## 2.1. EXISTING LAND USE

The Plan Area is currently occupied by various land uses, including commercial, light industrial, and multi-family residential. The following describes the land uses throughout the Plan Area as shown in Figure 2-1:

- West of El Camino Real. The west side of the corridor includes two large mixed-use projects, containing residential and ground floor retail uses, and several service uses and restaurants.
- East of El Camino Real (west of railroad tracks). The east side of the corridor north of Millbrae Avenue is mainly light industrial, including an old Millbrae Lumberyard site and auto repair shops, with a few food establishments. Uses between El Camino Real and the railroad tracks are non-functional convalescent facility and transportation-related uses, such as a taxi waiting area and a public parking lot. Uses along the east side of the corridor south of Millbrae Avenue include service commercial, such as a bank, a motel, and restaurants.
- North of Millbrae Avenue (east of railroad tracks). This area mainly consists of a BART/Caltrain parking garage and surface parking lots. North of the parking garage is a city storage yard. The land between the parking lots and Highway 101 is currently vacant but occasionally used as a construction staging area by SFO.

- South of Millbrae Avenue (east of railroad tracks). The majority of this area is occupied by light industrial uses, which included storage structures, as well as some service and office uses. One exception is the Wilson Plaza that was recently completed on a site next to the freeway on-ramp, on the east side of Rollins Road, which includes a variety of retail and service uses, such as restaurants, a car wash, and a gas station.

The Plan Area is located a few blocks southeast of Downtown Millbrae. Other than the Bayside Manor neighborhood to the north, the majority of the area is surrounded by commercial and industrial uses. Medium- to high-density residential land uses are located near the downtown and immediately west of the Plan Area. El Camino Real and Millbrae Avenue operate as major commercial corridors that carry a lot of traffic.

Much of the Plan Area consists of low-rise commercial and industrial buildings. Except for the two 4- to 5-story mixed-use projects on El Camino Real, existing development in the Plan Area features one- to two-story buildings with large surface parking lots, located either to the front or side of the building.

Given the proximity to Highway 101, SFO, and Downtown Millbrae, as well as access to BART, Caltrain, and future High Speed Rail systems, the Plan Area presents great potential for redevelopment, especially around the Millbrae Station.

## 2.2. MARKET TRENDS

This section summarizes a market assessment study that evaluates the demand for various land uses in the vicinity of the Millbrae Station. For more information, see Appendix C, the Market Assessment memorandum, prepared by Strategic Economics on April 25, 2014.

### DEMOGRAPHIC OVERVIEW

Population growth in Millbrae has been slow compared to San Mateo County. Currently, Millbrae's population is approximately 21,500 with 8,000 households. The population increased 5.5 percent between 1990 and 2010, while San Mateo County as a whole increased its population by 10.6 percent during the same timeframe.

Millbrae has a higher percentage of family households than San Mateo County and the population tends to be older. In Millbrae, 71 percent of households are families, compared with 68 percent in San Mateo County. Over one third of households in Millbrae have at least one member aged 65 or over (35 percent), compared to 27 percent in San Mateo County.

The rapid growth of the Asian population is the most significant demographic trend in Millbrae. The racial mix of the city has been shifting rapidly as early as 1990, when over 80 percent of the population was white. Today, whites make up about 50 percent of the population, followed by Asians at 41 percent. As discussed below, this demographic change has had a significant effect on the housing and retail markets in Millbrae.

### EMPLOYMENT OVERVIEW

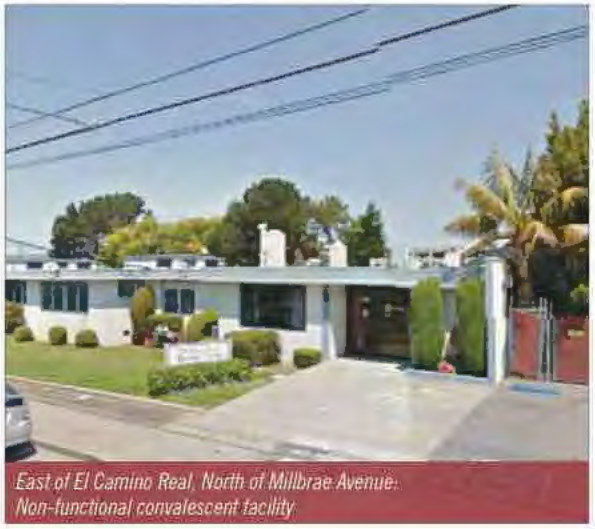
Millbrae serves as a "bedroom community" for nearby job centers. Approximately 94 percent of employed Millbrae residents commute to other cities, with San Francisco alone accounting for almost a quarter of residents' commute destinations.

Approximately 5,000 jobs are located in Millbrae and employment is concentrated in the Retail Trade and Accommodation and Food Services sectors (over 45 percent of the city's employment).

### HOUSING MARKET

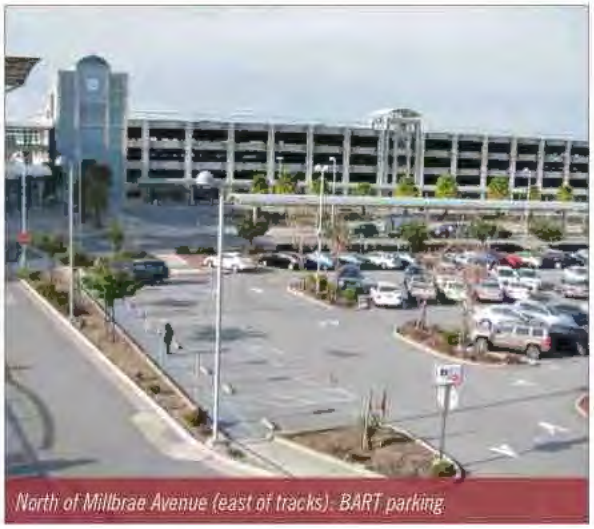
Demand for new housing in Millbrae is strong. Rising prices and low vacancy rates indicate that there is significant demand for new residential development in Millbrae and the broader market area. Based on recent trends in Millbrae, there is potential for the demand to include both apartment and condominium projects. While apartment development has led the recovery in other areas on the peninsula, recent housing construction in Millbrae has been dominated by condominiums. New multi-family development is likely to continue to take the form of three- to five story development.

West of El Camino Real: Mixed-use development



East of El Camino Real, North of Millbrae Avenue: Non-functional convalescent facility

East of El Camino Real: Taxi waiting area and public parking lot



North of Millbrae Avenue (east of tracks): BART parking

South of Millbrae Avenue: Light industrial uses

South of Millbrae Avenue (next to Highway 101 on-ramp): Retail uses

**FIGURE 2-1.** Existing Land Use

Millbrae has strong demand for housing. The Plan Area's proximity to the Millbrae Station makes the location convenient for households needing to access jobs in both San Francisco and the Silicon Valley. It also offers proximity to the airport for frequent business travelers.

## OFFICE MARKET

Within the Millbrae/San Bruno market area, the Plan Area is among the most desirable locations for office space given the Plan Area's unique access to Highway 101, BART, Caltrain, and SFO.

Demand for additional office space in Millbrae is projected to be between 110,000 and 330,000 square feet by 2040. This projection is largely based on past trends, and thus Millbrae has the potential to capture more office space depending on the pace of future job growth, competitive supply, land use regulations, amenities, and other factors.

## RETAIL MARKET

Millbrae residents spend a significant proportion of retail spending outside Millbrae. This reflects the lack of retail, especially regional retail and auto dealerships, in Millbrae relative to the rest of San Mateo County. In addition, the gap in retail sales in Millbrae appears to be growing.

Millbrae retail consists primarily of neighborhood-serving and convenience goods. The city is a less competitive location for "comparison goods," such as electronics, furniture, appliances, and clothing stores, which tend to locate in major regional retail centers, such as the San Bruno Towne Center in San Bruno and the Serramonte Center in Daly City.

Projected household growth and low vacancy rates in the Millbrae area suggest that there is demand for additional local-serving retail space. New household growth in Millbrae could generate total demand for between 68,000 and 360,000 square feet of new retail between 2010 and 2040. Millbrae is more likely to attract new retail space in the convenience retail categories, such as dry cleaners, coffee shops, restaurants, and grocery stores.

The Plan Area is an attractive location for travelers, commuters, neighborhood-serving, and convenience retail. The development of proposed new office, residential, and hotel space in the Plan Area is likely to contribute to attractiveness of the location for retail.

The Plan Area presents a strong market for international retail uses, such as premium outlets, due to the proximity to SFO. However, available properties are not big enough to achieve the needed mix and depth of retail tenants. A smaller, denser development could be viable if financial support is provided to offset higher parking and other costs. A market study on international retail market was prepared and accepted by the City Council on October 14, 2014.

## HOTEL MARKET

Market and economic indicators suggest strong demand for additional hotel rooms in the San Francisco/Northern San Mateo County market and SFO submarket. The SFO hotel submarket (which includes Millbrae) is currently very strong, with high occupancy rates and increasing revenue per available room. Construction and reinvestment activity is increasing in the submarket and market areas, suggesting that excess demand already exists in the short-term.

There is demand for an additional 2,400 to 3,000 hotel rooms between 2014 and 2040 in the SFO submarket area. This estimate assumes that the San Francisco/Northern San Mateo County market delivers an average of 450 rooms per year, matching long-term deliveries since 1990. It also assumes that the SFO submarket captures between 20 and 25 percent of new market area demand.

The Plan Area is easily accessible from SFO and provides excellent access to San Francisco and the Peninsula/Silicon Valley via Highway 101, BART, and Caltrain. Given these strengths, 25 to 30 percent of SFO submarket growth in demand (600 and 900 hotel rooms) could be captured within the Plan Area by 2040.

## 2.3. CIRCULATION

This section summarizes existing transit, vehicular, pedestrian, and bicycle conditions within the Plan Area.

### TRANSIT FACILITIES AND SERVICES

The area around the Millbrae Station is serviced by various transit providers, including BART, Caltrain, Samtrans, and commuter shuttles. The Millbrae Station also directly links to SFO via BART and is a future designated station for the proposed High-Speed Rail project. Figure 2-2 shows the locations of existing local transit stops and facilities.

#### *BART*

The Millbrae Station is the only BART station that provides a direct intermodal connection to the Caltrain commuter rail system and provides fast and frequent service to many parts of the Bay Area, including downtown San Francisco (29 minutes), downtown Oakland (42 minutes), and the San Francisco International Airport (12 minutes). Estimated average weekday boardings on BART from this station are approximately 6,430 riders. BART provides service as follows.

Photo Credit: Allan Chen, Flickr (CC BY-ND 2.0)

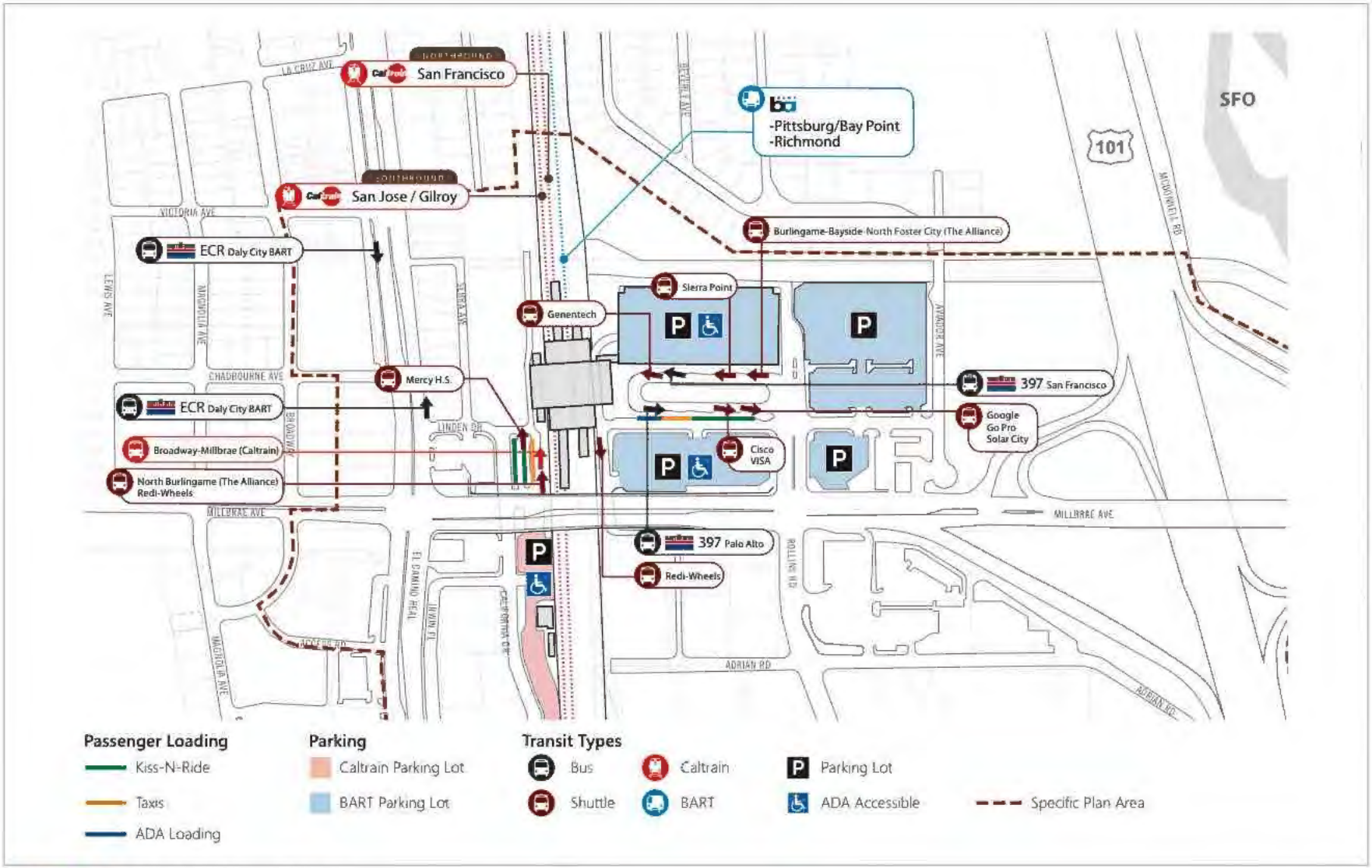



**FIGURE 2-2.** Existing Local Transit Facilities

| Line | Schedule | Headways |
|---|---|---|
| Richmond-Millbrae | 4:00 AM to 8:00 PM on weekdays | 15 minutes |
| Pittsburg/Bay Point-SFO-Millbrae | 8:00 PM to 12:00 AM on weekdays<br>6:00 AM (8:00 AM on Sundays) to 12:00 AM on weekends | 20 minutes |

### *Caltrain*

Caltrain currently operates 46 northbound and 46 southbound (for a total of 92) trains per day between San Jose and San Francisco during the week. Caltrain operates five trains per direction during the AM and PM peak periods and one train per hour per direction off-peak.

Caltrain provides service at the Millbrae Station from 5:15 AM to 12:00 AM on weekdays with eight limited and Baby Bullet trains in the AM peak and one local, seven limited, and six Baby Bullet trains in the PM peak hour. On weekends, Caltrain provides service from 8:30 AM to 10:00 PM with local trains arriving every hour and four Baby Bullet trains throughout the day.

### *San Mateo County Transit District (Samtrans)*

SamTrans operates 73 bus routes and paratransit service throughout San Mateo County and parts of San Francisco and Palo Alto. Two bus routes, ECR and 397, serve the Plan Area. The table below shows the schedules of the two routes.

| Route | Schedule | Headways |
|---|---|---|
| ECR | 4:00 AM to 2:00 AM on weekdays | 15 minutes (Peak Hours)<br>15 -30 minutes |
| | 5:00 AM to 2:00 AM on weekends | 20-30 minutes |
| 397 | 1:00 AM to 6:00 AM nightly | 60 minutes |

Route ECR is a north-south bus line that provides regional transit service between Daly City and Palo Alto via El Camino Real. The closest stop to the Millbrae Station is a far-side northbound ECR stop located at the intersection of Linden Avenue and El Camino Real. The closest southbound ECR stop is a far-side stop located between a frontage road and El Camino Real near the intersection of Victoria Avenue and El Camino Real. There is also a northbound stop located at the intersection of El Camino Real and Murchison Drive.

Route 397 is a north-south bus line that provides late night regional transit service between Downtown San Francisco and Palo Alto primarily via El Camino Real. The route stops in the eastern bus loop next to the Millbrae Station. There is also a northbound stop located at the intersection of El Camino Real and Murchison Drive.

### *Commuter and Employer-Based Shuttles*

Commuter shuttles, also known as First/Last Mile shuttles include the Sierra Point shuttle, the Broadway-Millbrae Caltrain shuttle, and three shuttles operated by the Peninsula Traffic Congestion Relief Alliance (The Alliance) – Burlingame-Bayside, North Foster City, and North Burlingame. Private shuttles serving the Millbrae station include Genentech, Google, Cisco, and Mercy High School.

The private employer shuttles – Genentech, Google, and Cisco – utilize the eastern bus loop of the Millbrae Station, while Mercy High School utilizes the western bus loop. The Sierra Point shuttle, Burlingame-Bayside shuttle, and North Foster City shuttle utilize the eastern bus loop, while the Broadway-Millbrae Caltrain and North Burlingame Alliance shuttles utilize the western bus loop.

Based on field observations conducted outside the Millbrae Station in March 2014, during the AM peak hour, approximately 340 people utilize shuttles for travel to and from the station, the majority being departures from the eastern bus loop. During the PM peak hour, approximately 390 people utilize shuttles, the majority being arrivals to the station from the eastern bus loop.

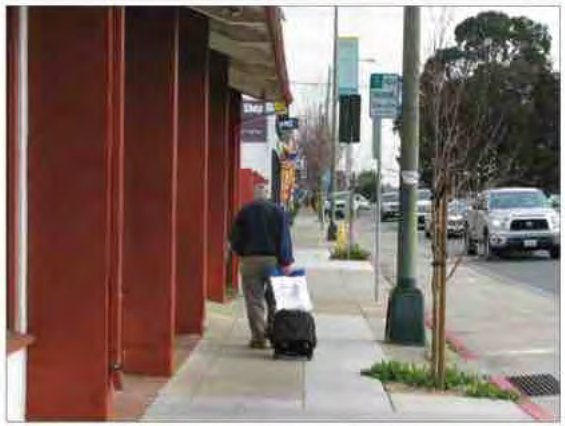
### *San Francisco International Airport*

The San Francisco International Airport (SFO) is directly linked to the Millbrae Station via limited BART services. BART's current direct service operates Monday to Friday after 9:00 p.m. and all

day Saturdays and Sundays. The number of BART riders that travel between SFO and Millbrae is not known at this time. In 2013, SFO had approximately 45 million travelers passing through the airport. SFO desires a high-quality connection between Millbrae Station and SFO to potentially include BART service or other types of transit connections.

### *High-Speed Rail*

Under the original legislation which was approved by California voters in 2008, the Millbrae Station is a designated stop and station for the proposed High-Speed Rail project. The Millbrae High-Speed Rail station would provide an important link to BART, Caltrain, and SFO.



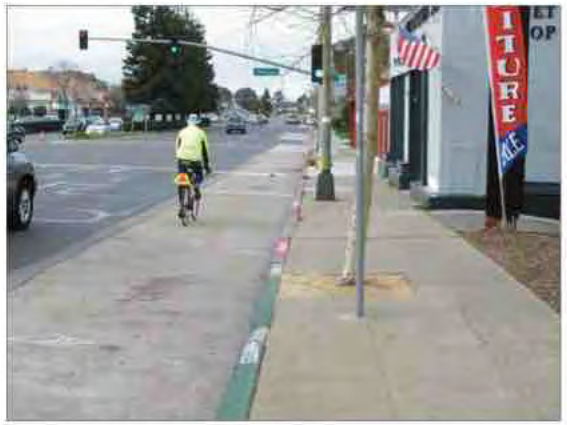
*Pedestrian walking south along El Camino Real*

## PEDESTRIAN FACILITIES

The pedestrian facilities surrounding the Millbrae Station are typical of an urban environment. The majority of the streets provide sidewalks and striped crosswalks at intersections with major roadways. However, the overall walkability of the sidewalks suffers from a lack of street plantings, pedestrian-level light fixtures, and pedestrian seating. In addition, the quality of pedestrian facilities in the Plan Area is not up to the Americans with Disabilities Act (ADA) standards. Sidewalks along the major arterial El Camino Real are narrow. The industrial uses to the east of the Millbrae Station generate limited pedestrian activity, and direct pedestrian connections to these areas are correspondingly sparse. In particular, the pedestrian facilities connecting Serra Avenue to the Millbrae Avenue overpass also need widening, better paving, and wayfinding. Millbrae Avenue, Rollins Road, and El Camino Real can be intimidating for pedestrians to walk along and cross the street because of a lack of buffer separation from fast-moving traffic and wide intersections spaced far apart.

## BICYCLE FACILITIES

Millbrae's temperate climate and flat terrain are very good for bicycling. However, the lack of continuous bicycle facilities and the heavily trafficked auto-oriented streets in the Plan Area make bicycling challenging and uncomfortable, even for the most confident riders. Busy roadways that dominate the



*Bicyclist riding on El Camino Real*

area, such as El Camino Real, Millbrae Avenue, Rollins Road, and Highway 101, create significant barriers to bicycling.

There are minimal existing bicycle facilities located in the Plan Area. El Camino Real is a Class III facility north of Millbrae Avenue, with shared lane markings ("sharrows") in its outside lanes. California Drive is also a Class III facility marked with sharrows where it extends south from the Millbrae Station. Even with the markings on El Camino Real, only experienced and confident bicyclists would ride in the wide, high volume, and high speed roadway. El Camino Real has no bicycle facilities south of Millbrae Avenue, where California Drive serves as a preferred alternate route.

*BART parking garage, carpool lot, and midday lot at the Millbrae Station.*

Bicycles are not prohibited from entering and exiting the Millbrae Station, but the entrances do not actively accommodate bicyclists. In addition, the lack of west-east connections between the downtown area and the Millbrae Station is a significant barrier.

The Millbrae Station is situated close to the Bay Trail, which runs along the entire length of the Bay coastline and provides regional bicycle access. The only existing route between the Millbrae Station and the Bay Trail is Millbrae Avenue. However, Millbrae Avenue is not a welcoming street for bicyclists. Bicyclists can either ride in a wide travel lane with fast-moving cars or on a narrow and poorly maintained sidewalk on the south side of the street. The connection between the Millbrae Station and the Bay Trail also lacks any signage guiding bicyclists.

## VEHICLE

Local traffic in the Plan Area currently operates at an acceptable level per the Millbrae General Plan except for the intersection of El Camino Real and Millbrae during the PM peak hour due to high turning movement traffic volumes. At several locations that operate at an acceptable level, there are backups that block through movements. El Camino Real (State Route 82) operates at an acceptable level of service during the AM and PM peak hours. However, two segments of Highway 101 operate at an unacceptable level of service, the one segment unacceptable during the AM peak hour and the other during the PM peak hour.

## ON-SITE PARKING FACILITIES

The Millbrae Station provides a total of 3,155 dedicated parking spaces over six facilities, of which five are operated by BART and one by Caltrain. The location, capacity, and occupancy of each of these parking facilities are shown in Figure 2-3. Based on parking occupancy observations conducted within the Millbrae Station parking lots in March 2014, most lots were 75 to 100 percent full by 10:00 a.m. The exception to this was the top level of the parking garage, which was approximately 40 percent occupied.


**FIGURE 2-3.** Existing Parking Facilities

## 2.4. UTILITY INFRASTRUCTURE

The Plan Area is located in one of the oldest areas of the City of Millbrae. As such, some of the existing infrastructure has been in service for over 70 years. Existing water, sanitary, and stormwater utilities as well as electricity and gas facilities are summarized below.

### WATER SUPPLY

Millbrae obtains all of its water through a contract with the San Francisco Public Utilities Commission (SFPUC). This water is delivered from the City and County of San Francisco's Regional Water System (RWS), operated by the SFPUC. SFPUC's supply is predominantly from the Sierra Nevada, delivered from the Hetch Hetchy Reservoir through the Hetch Hetchy aqueducts, but also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties. The SFPUC and the City (and the other wholesale customers) entered into a Water Supply Agreement (WSA) in July 2009, which has a 25-year term. Millbrae's Individual Supply Guarantee (ISG) is 3.15 mgd.

The Millbrae distribution system includes 11 pressure zones, 6 pumps (3 each at 2 stations), 5 storage tanks (only 4 are in operation; 1 is standby), 568 hydrants, and 69.7 miles of water mains. Water mains in the Specific Plan Area range from 6 to 12 inches in diameter, with a mix of materials such as asbestos-cement, cast iron, and PVC pipe. The Specific Plan Area is within the city's Pressure Zone #4. Tank storage has not yet been developed in this pressure zone due to the direct connection to the Hetch Hetchy transmission infrastructure through this area. While this combination of water supply and distribution is sufficient to accommodate current domestic water demands, fire water flows are restricted by undersized lines and loop limitations throughout the City's system.

### SANITARY SEWER

The City of Millbrae provides sewer services throughout its jurisdiction and for Capuchino High School. Sewage is collected primarily in gravity flow lines supplemented by three pumping stations and force mains that convey flows to the Millbrae Wastewater Treatment Plant, located in the northeast quadrant of the Highway 101 and Millbrae Avenue interchange. Most of the City's primary sewer lines pass immediately adjacent to or through the Plan Area. The main trunk sewer lines range in size from 10 inches to 36 inches as they convey flows west to east, with lines ranging from 6 inches to 18 inches in the Plan Area. Observed and monitored sanitary flows adjacent to the Plan Area have demonstrated limited capacity to accommodate additional peak flows.

The Millbrae Water Pollution Control Plant (WPCP) is also located in the northeast quadrant of the Highway 101 and Millbrae Avenue interchange. The WPCP provides primary and secondary treatment for all sanitary sewage generated within the city limits and Capuchino High School. Flows are then conveyed through the Joint Use Force Main (JUFM) to the South San Francisco Wastewater Treatment Plant for ultimate disposal through the deep water outfall at Oyster Point in San Francisco Bay. The JUFM is administered under a Joint Powers Agreement (JPA) with the Cities of Millbrae, Burlingame, San Bruno, South San Francisco, and the City and County of San Francisco. Under the JPA, the City of Millbrae has the right to discharge 9.0 million gallons per day (mgd) to the JUFM.

### STORMWATER

Stormwater in Millbrae is conveyed through three primary trunk lines consisting of storm drain pipes, open channels, and pump stations before discharging into the San Francisco Bay. The northern part of the system flows through to Spruce Street, where stormwater empties into Lomita Canal. The center part of the system empties into the Highline Canal, which conveys flows directly into the Bay. The canal has a floodgate to prevent high tides from backing up into the canal. The southern part of the City storm drain system enters a canal shared with the City of Burlingame. The canal is dewatered by a pump station in Burlingame.

The Plan Area is located at the downstream end of the southernmost system. The storm drain system in the Plan Area is composed of a network of 12-15 inch pipes that convey flows to larger trunk lines or directly discharge into the adjacent canals. According to current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the 100-year event zone is contained within the canals. However, FEMA is currently updating FIRMs for the Millbrae area, and according to Preliminary Flood Risk Review materials generated by FEMA, updated FIRMs could incorporate revisions that would significantly affect the Base Flood elevations in the area east of Rollins Avenue. Localized flooding in the Plan Area for those portions below elevation 8.2 feet National Geodetic Vertical Datum (NGVD) can occur under conditions of combined heavy storm events and high tides or pump station malfunctions.

## SOLID WASTE

South San Francisco Scavenger Company collects solid waste under franchise with the City of Millbrae. Millbrae's solid waste is processed at a transfer station at Oyster Point in South San Francisco, and from there is transported to the Ox Mountain sanitary landfill site in Half Moon Bay.

Millbrae residents participate in curbside recycling program for paper, aluminum, glass and plastic. The City operates a Source Reduction and Recycling program designed to meet state law requiring a 50 percent reduction of waste to landfills.

## ELECTRICITY AND GAS

Electricity and gas are provided to the city of Millbrae by Pacific Gas and Electric (PG&E). The existing electrical system consists of overhead and underground facilities. Four sets of 115-kilovolt (kV) electrical transmission lines traverse the eastern portion of the Plan Area in a north-south direction. Gas service is provided throughout the city through a system of underground gas mains.

# 3

# VISION & GOALS

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# 3. VISION AND GOALS

## 3.1. VISION STATEMENT

The Plan Area will transform into a vibrant daytime and evening activity district with a mixture of uses centered on the Millbrae BART/Caltrain Station (Millbrae Station), reinforcing its role as the most significant regional and local transit hub in the entire Bay Area. A series of public open spaces and a mix of uses, including offices, housing, hotels, shops, and restaurants, will draw residents, employees, and visitors. With an increase in intensity and diversity of uses, the Plan Area will become not just a place to live or work but a community destination.


*A vibrant activity center.*

*Public plaza in a mixed-use village.*

*Landscaped sidewalks lined with active building frontages.*

The Plan Area will also become better connected and integrated with Millbrae's Downtown and surrounding neighborhoods. The Plan Area will offer public amenities, such as plazas, pocket parks, and community meeting places. New buildings will exhibit high quality design and respect the existing character of the community and surrounding neighborhoods. Enhanced crossings, signage, and midblock paths will provide better and safer pedestrian connections to and within the station.

Public safety will be incorporated into the design and ongoing use of all development projects. The safety of the community and all members of the public who come to the city of Millbrae is essential.The light industrial area south of Millbrae Avenue and east of the rail tracks will transform into a mixed-use urban village complete with a state-of-the-art employment center, a transit-oriented residential complex, a new hotel, and a revitalized and expanded retail center (Wilson Plaza).

El Camino Real and Millbrae Avenue will be rebranded as welcoming gateways that convey a sense of arrival, featuring iconic architectural elements, landscaped plazas, intersection enhancements, and special signage. Stores, restaurants, and building entries will replace frontage surface parking, creating an inviting pedestrian and bicycle environment.

Streets and intersections in the Plan Area will be reconfigured to provide a safer and more pleasant walking and biking environment that can be enjoyed by children, the elderly, and people with disabilities. The street network will be punctuated by a series of open spaces that provide places for social interaction and relaxation. Under implementation of this Specific Plan, the Millbrae Station area will transform into a thriving community destination that provides memorable experiences.

## 3.2. GOALS

This section describes the key goals for the Plan Area. These goals support the vision described in the previous section. These goals were also emphasized by the City Council at two meetings as described in Chapter 1. They provide a foundation for concepts and policies described later in this Specific Plan.

### A VIBRANT DAYTIME AND EVENING ACTIVITY CENTER WHERE PEOPLE LIVE, WORK, AND VISIT

The Plan Area should be developed with a range of residential, employment, hotel, and retail uses that cultivate a lively community destination that is active both day and night. A variety of spaces should be offered for retail and entertainment uses. Housing should be provided at a wide range of affordability levels. Plan Area uses should complement Millbrae's downtown by creating new demand and providing further diversity in shopping, dining, and services.

*A lively open space that is active both day and night.*

### A SIGNIFICANT REGIONAL AND LOCAL TRANSIT HUB

The Millbrae Station should continue to serve as a significant regional transit hub where major rail transit systems meet and connect with other local and regional transit services, such as buses and private shuttles, and a future high-speed rail. New development in the Plan Area should provide transit-supportive uses and help facilitate safe multi-modal access to the station.

*Multi-modal Millbrae Station.*

### A BALANCED, SAFE, AND EFFICIENT CIRCULATION SYSTEM IN AND AROUND THE PLAN AREA

Future private and public investment in the Plan Area should help establish an integrated network of multi-modal circulation that balances the needs of pedestrians, bicyclists, transit users, and drivers.

### A WELL-DESIGNED DISTRICT THAT CREATES A SENSE OF PLACE FOR MILLBRAE

The Plan Area should be designed to be memorable and enjoyable to encourage people to return. Public areas and the buildings that frame them will play a vital role in shaping the image of the place. The physical design of new buildings and public spaces will be critical in creating a true community destination.

### A NETWORK OF PUBLIC OPEN SPACES

New development and public streetscape improvements should contribute to the creation of a network of open spaces in the Plan Area. New neighborhood parks, plazas, and small gathering and seating areas along streets will all provide places for residents and visitors to recreate, relax, and gather.

*Mid-block path to promote a better pedestrian connection.*

*Public plaza with interesting public art.*

*A linear park providing a place for residents and visitors to recreate, relax, and gather.*

## A STATION AREA WHERE NEW DEVELOPMENT IS SENSITIVE TO SURROUNDINGS

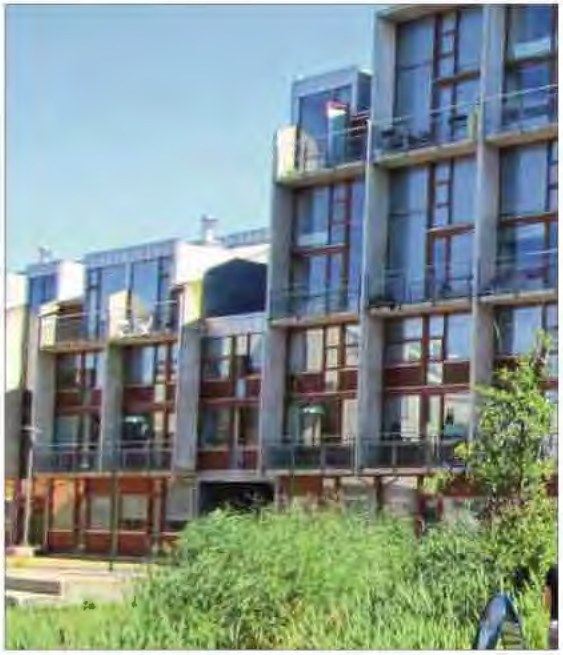
New development projects in the Plan Area should respect the context of adjacent areas. Building forms, massing, and designs should incorporate special transition elements when next to single family neighborhoods.

## A DISTRICT THAT BENEFITS MILLBRAE'S LOCAL ECONOMY

New development in the Plan Area should contribute to Millbrae's local economy by providing uses that attract new residents and visitors that will spend money in the Plan Area, Millbrae's Downtown, and citywide.

## AN ENVIRONMENTALLY SUSTAINABLE NEIGHBORHOOD

Private and public investments should contribute to the establishment of a sustainable urban environment by discouraging auto use and encourage walking and bicycling, thereby reducing greenhouse gas emissions and air pollutants. New development should incorporate green building features to minimize energy use and low impact development (LID) measures to manage stormwater runoff on-site and reduce flows into regional watersheds.



*Building stepback.*

*Active commercial area.*

*Landscaping with drought tolerant plants.*

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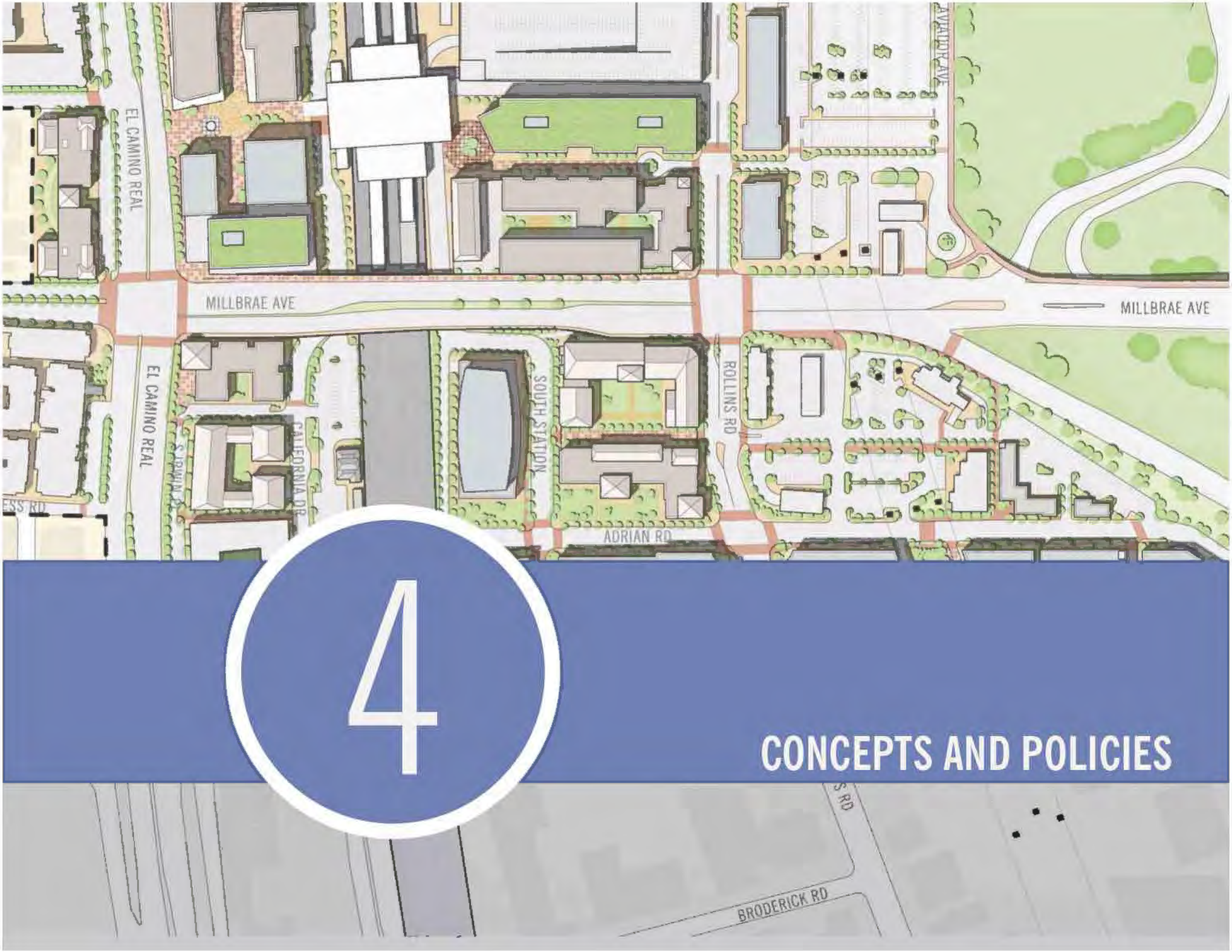


# 4

# CONCEPTS AND POLICIES

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# 4. PLAN CONCEPTS AND POLICIES

This chapter describes concepts for land use, urban design, placemaking, circulation, and utility infrastructure in the Plan Area. The concepts are intended to describe the application of the vision and goals, described in the previous chapter, to the Plan Area. While the concepts represent broader ideas for the Plan Area, including recommended development and improvements, the policies in the following section establish a regulatory framework for physical improvements in the Plan Area. All new development and public improvements shall be consistent with the policies in this chapter.

## 4.1. LAND USE PLAN

The Specific Plan seeks to transform the Plan Area from its current commercial and light industrial character into a vibrant mixed-use district that builds on the significant activity generated by the regional intermodal station. Figure 4-1 illustrates the land use concept for the Plan Area, which is described in more detail below.

### *Transit-Oriented Development (TOD)*

The Specific Plan envisions a wide variety of uses in areas closest to the Millbrae BART/Caltrain Station (Millbrae Station), including the current BART parking lots, that take advantage of station proximity. Transit-Oriented Development (TOD) is a compact, walkable, high-density mixed-use residential and commercial area located within one-quarter to one-half mile of a transit station, incorporating features to encourage transit use throughout the day such as a mix of uses, high-quality pedestrian and bicycle access, narrow streets, and reduced parking requirements. Development for this area includes land use types such as residential, office, hotel, and ground-floor retail. The Specific Plan promotes the integration of these uses on individual sites and within single projects. All new development will prioritize access to transit. The integration of residential and employment uses will ensure that there is activity in the station area during the day and in the evenings.

### *Residential Mixed Use*

The El Camino Real corridor is envisioned as a mixed-use corridor that primarily consists of multi-family residential development above ground floor retail and service uses within individual buildings, continuing the pattern of recent development along the corridor. The El Camino Real corridor will also function as a bridge between the existing residential uses west of the Plan Area and new intensive uses in the Transit-Oriented Development (TOD) area. Additional residential uses on El Camino Real will complement Downtown businesses without adding extensive vehicle trips and will provide additional life to central Millbrae.

### *Retail Center*

In the southeast quadrant of the Plan Area, the existing retail center (Wilson Plaza) will retain its commercial character and extend farther to the east to provide additional retail shopping, services, and dining opportunities that are appropriate for this freeway-proximate area.

### *Employment Center / Light Industrial*

The area south of Adrian Road will accommodate office uses in new Class A buildings as well as employment-generating light industrial uses that can take advantage of freeway proximity and transit service, and add valued economic development benefits. Light industrial uses shall include research and development (R&D), STEM (science, technology, engineering, and math), tech/biotech manufacturing, and high-tech services that involve a combination of assembling, warehousing, and/or sales. New housing development in the nearby TOD area will create opportunities for employees to live close to their workplaces, which is attractive to employers and creates further opportunities for walking and bicycling to work.

### *Hotels*

Hotels are envisioned in locations that take advantage of freeway frontage, airport proximity, and transit access. Hotels will benefit both visitors and local residents and also complement nearby retail and office uses. Hotels will provide a meeting place, as well as a place for special events, conferences, or banquets. Hotels will also diversify activities in the area, providing activity during the daytime and nighttime hours with lesser peak-hour traffic impacts. Hotels should be allowed flexibility and may be appropriate in TOD, Residential Mixed-Use, Retail Center, and Employment Center/Light Industrial areas.

### *Public Facilities*

Public Facilities are proposed to be used as public facilities. The area directly west of Highway 101 and north of Millbrae is restricted for development due to airport runway safety issues. As the Specific Plan is implemented, the area should be landscaped at its edges to provide for an attractive entry to the City from Highway 101. Potential uses for the area include stormwater treatment facilities (bio retention swales). The Wastewater Treatment Facility, shown in green, is proposed to continue its use as a public facility.

### *Multi-Family Residential Overlay*

As shown in Figure 4-1, the triangular-shaped area just north of the BART parking garage and south of the Bayside Manor neighborhood is envisioned for land uses that would provide a suitable land use transition between the BART station and the Bayside Manor neighborhood, including a city storage yard, parking, and/or multi-family residential uses.


**FIGURE 4-1.** Land Use Concept

- MSASP Boundary
- City Boundary
- Power Lines
- Transit-Oriented Development (TOD)
- Residential Mixed Use
- Public Facilities
- Residential Overlay
- Employment Center / Light Industrial
- Retail Center

## 4.2. URBAN DESIGN AND PLACEMAKING

This section describes seven urban design principles that should be considered when evaluating future development projects and public improvements in the Plan Area. Figure 4-2, the Urban Design Concept, illustrates many of these broad principles. The urban design principles presented here establish requirements that ensure new development will provide broad community benefits to ensure future growth improves the broader community. The principles focus on the physical form of future development and how that form can contribute to a pedestrian-friendly, active TOD for Millbrae that includes well-designed buildings and public spaces that are interconnected appropriately with key destinations and the surrounding urban context.

### PROVIDE APPROPORIATE-SCALE DEVELOPMENT

The Specific Plan envisions significant redevelopment of the existing low-intensity uses in the Plan Area with a concentration of higher intensity buildings. Accommodating more intensive structures will help to accommodate the concentrations of residents, jobs, and other uses appropriate for a major transit area. New buildings will be articulated and broken down into smaller masses to offer visual interest and open space, be compatible with the contextual setting, and avoid overwhelming scale.

### FACILITATE CONNECTIONS AND IMPROVE INTERCONNECTIVITY TO TRANSIT

New development in the Plan Area is expected to provide easy pedestrian and bicycle connections through sites in order to facilitate connections between the station, the Plan Area, Downtown, and the city as a whole. Projects will need to set aside space to accommodate publicly accessible pedestrian and bicycle pathways. Projects part of and immediately adjacent to the Millbrae Station must also consider transit access, including buses and shuttles, given the demand created by the BART/Caltrain Station. Priority access to transit is encouraged where possible. New or enhanced connections will help to break up large blocks into a more pedestrian-friendly environment. New connections through private development will compliment public investment in pedestrian and bicycle facilities in the public rights-of-way, such as new bike lanes, widened sidewalks, and improved intersection crossings. New on-street bicycle and pedestrian facilities will be concentrated on smaller interior streets to provide a safe and more comfortable alternative to Millbrae Avenue and El Camino Real.

### CREATE PUBLIC OPEN SPACES

Larger developments will be required to incorporate publicly accessible open spaces that provide relief from taller and more intensive buildings and provide public amenities for the Plan Area. Open spaces will be congregated within the expected paths of travel and should be varied in their character. Open spaces will be framed by buildings and may include hardscaped plazas, park spaces, linear open spaces and pedestrian paseos, and pocket parks. Public streetscape improvements and other alterations to public rights-of-way in the Plan Area will also seek to provide additional open spaces where possible.

### ACTIVATE STREETS AND OPEN SPACES

New development is expected to activate public streets and open spaces by providing uses and architectural treatments at the ground floor that generate foot traffic, provide interest to the pedestrian, and break down large building forms with smaller scale elements that are at a pedestrian scale. Development fronting the most widely traveled pedestrian routes, such as the connections leading to either side of the BART station and the El Camino Real corridor, will provide retail ground floors, such as restaurants, neighborhood services, or shops. When ground-floor retail uses are not feasible, the Plan requires attractive, inviting façade design, such as high frequency of windows and entries on the ground floor, modulation of building facades, architectural details and landscaping, and visible interior uses. Surface parking lots or blank facades should never front public streets and open spaces.


**FIGURE 4-2.** Urban Design Concept

- MSASP Boundary
- City Boundary
- Power Lines
- Transition to Surrounding Areas
- Higher Intensity Development
- Highway Frontage
- Plan Area Edges
- Gateway Streets
- Enhanced Connections
- Gateways
- Potential Public Open Space
- Gateway Treatment

### RETAIN AND ENHANCE GATEWAY STREETS

Millbrae Avenue and El Camino Real will continue to be the primary vehicular circulation routes as the Specific Plan is implemented. These two corridors provide the first visual impression to people coming from Highway 101 or from the south via Burlingame to Millbrae. As such, they should be attractive streets, fronted by well-designed buildings.

The Specific Plan identifies three key locations that require special gateway treatments: one on Millbrae Avenue and two on El Camino Real, as shown in Figure 4-2. The Specific Plan requires new development at these locations to create a visually pleasing gateway image, featuring special architectural elements like corner towers, unique landscaping treatments, special intersection paving, signage, corner development setbacks for open space, or other approaches. These gateway improvements shall be coordinated with and consistent with other city-wide efforts, including the City's Signage and Wayfinding Design Plan.

### TAKE ADVANTAGE OF HIGHWAY FRONTAGE

The Specific Plan is located immediately adjacent to Highway 101. To take advantage of this visibility, the Specific Plan envisions new hotel and office buildings in both the BART parking lot east of Rollins Road and the area south of Adrian Road adjacent to Highway 101. Buildings will integrate attractive signage and visual character that distinctly exhibits building uses for highway drivers, yet the ground floor of the buildings should remain oriented towards public streets.

### TRANSITION TO SURROUNDING AREAS

The scale and design of buildings should be in harmony with their surroundings. While buildings immediately next to the station will be relatively tall, buildings in the peripheral areas will need to transition in height in order to ensure an appropriate relationship to adjacent buildings. This will be critical for three key Plan Area edges, including the Bayside Manor neighborhood edge, the Hemlock Avenue neighborhood edge, and the Burlingame industrial edge. Safety and circulation shall be considered for all modes of travel on private development sites.

## 4.3. MULTI-MODAL CIRCULATION

The overarching premise of the Millbrae Station Area Specific Plan is to continue the connection of additional growth where it is most responsible and productive to do so - in proximity to San Mateo County's greatest concentration of public transit services, keeping public transit a priority. The creation of a vibrant high-density mixed-use district near the only transit station that serves two regional passenger rail operators, connecting SFO, San Francisco, and Silicon Valley; local and regional bus routes; local shuttle bus service, and is planned for a high-speed rail stop in the long-term will result in a range of users choosing a variety of travel modes. Given this multi-modal environment and the development that is expected to occur, pedestrians, bicyclists, transit providers, and vehicles will all need to be taken into account as development occurs to create a circulation system that is functional, inviting, and well integrated with the city, region, and all transit operators. Most of the circulation will need to be accommodated on the Plan Area's roadways through a "complete streets" approach. Providing successful streetscapes on the major roadways in the Plan Area will create an inviting environment, encourage economic development, and improve access and safety for all modes of travel whether it's by foot, bike, bus, or car. The term "complete streets" describes a comprehensive approach to the practice of mobility planning. The complete street concept recognizes that transportation corridors have multiple users with different abilities and mode preferences (e.g., walking, biking, driving and taking transit). Adjacent land use influences the functionality and character of the street environment. In the Plan Area, a well-integrated street system will consider the complementary relationship between land use, local and regional travel needs, and the context that it serves. Complete streets consider the range of users, including children, the disabled, and seniors.

## CREATE A PLAN-WIDE PEDESTRIAN CIRCULATION SYSTEM

Pedestrian circulation is one of the critical priorities of the Specific Plan. Both public improvements and private development projects will seek to include facilities that make it easy and comfortable for pedestrians to get around and remove barriers to circulation. Connections between the Plan Area's public streets, Downtown Millbrae, and the Millbrae Station should be emphasized as the Specific Plan is implemented. The following pedestrian circulation elements must be considered as part of a complete streets approach to the pedestrian circulation system:

- **Directness and speed of route.** Access to Millbrae Station and pedestrian connections among the surrounding land uses should be improved through a continuous sidewalk network and new pedestrian paseos and walkways along pedestrian desire lines (i.e., where most pedestrians prefer to walk). Pedestrians will be able to enter and exit all buildings, transit facilities, and garages directly onto the street sidewalk without needing to pass through a parking area or bus center. Buildings and transit facilities should provide street access at multiple locations to allow pedestrians to enter and exit where most convenient and shorten walking distances.
- **Safety and security.** Pedestrian security and visibility to other road users within the Plan Area must also be considered. Sidewalks should be provided on both sides of most streets and widened to a minimum of ten to twelve feet, with even wider sidewalks provided at key connections and heavily used transit stops. Safety accommodations are especially important at crossings of busy arterials. Pedestrian crossings at El Camino Real, Rollins Road, and Millbrae Avenue should be improved by requiring pedestrian countdown signals, signal timing optimized to shorten pedestrian wait times and lengthened pedestrian crossing times, a crosswalk at all intersection approaches, continental and/or high-visibility crosswalk striping, bulbouts on appropriate corners, perpendicular ADA-standard curb cuts on all corners, and median refuges. Lighting must also be designed to increase pedestrian safety.
- **Pedestrian-friendly design.** "Human scale" design elements that are sized to relate to the size and visual level of pedestrians should be encouraged, including pedestrian-scaled lighting, street trees, seating, other street furniture, and public art.
- **Information and connectivity.** Enhanced wayfinding information must be provided to help pedestrians reach local destinations. Signage must be added in the Station Area to direct pedestrians to bus transfer facilities and to key Millbrae and Plan Area destinations, including Downtown Millbrae, Mills High School, Millbrae Central Park, Millbrae Library, and City Hall. Signage directing pedestrians to and from the Bay Trail should be provided to enhance connectivity to regional trails and the new multi-use path on Millbrae Avenue (discussed later) will provide a comfortable route for pedestrian access.

*A lively sidewalk with a pedestrian-friendly environment.*

The Pedestrian Circulation Concept is shown in Figure 4-3. More detail about specific pedestrian recommendations for individual streets and intersections are provided in Chapter 7, Circulation, of this Specific Plan.


**FIGURE 4-3.** Pedestrian Circulation Concept

- MSASP Boundary
- City Boundary
- Power Lines

Suggested Pedestrian Facilities

- Continuous Sidewalk Network
- Multi-Use Path
- Alternative Route to South Station Road (Long Term)
- Bay Trail
- Potential Bike/Ped Bridge
- Potential Pedestrian Paseo
- Improved Crossing (Controlled)
- Improved Crossing (Uncontrolled)

## CREATE A PLAN-WIDE BICYCLE CIRCULATION SYSTEM

Bicycles will be incorporated into the existing and future circulation system to establish an inviting network for bicyclists. The Specific Plan vision for bicycle connectivity is to focus initially on improving the bicycle network on the smaller streets in the Plan Area instead of Millbrae Avenue and El Camino Real. While these two streets provide the most direct connectivity, they are wide and currently inhospitable to cyclists. As such, a bicycle network should be established as shown in Figure 4-4, with bicycle improvements to be explored in the long term for Millbrae Avenue and El Camino Real. For El Camino Real, the improvements need to be coordinated along the ECR corridor with adjacent communities to be effective. The issues for this corridor are city-wide and are best addressed in the context of the General Plan Update process or other city-wide transportation planning process. Bicycle facilities are identified by "class" based on their configuration, location, and specific features. The Specific Plan proposes a variety of bicycle facility types, depending on the specific location. The facilities are defined as follows:

- **Class I Bikeways/Bicycle Paths.** A fully-dedicated, off-street facility separated from vehicular traffic. This could be a multi-use path that is shared by pedestrians and bicycles or a path exclusively for bicycle use.
- **Class II Bicycle Lane.** A striped bike lane provided within roadways that are not physically separated from vehicles, but where the lane is exclusively provided for bicyclists and vehicles and pedestrians are prohibited.
- **Class III Bicycle Route.** A street that is specifically designated as a shared route for bicycles and vehicles. Class III Bicycle Routes typically include enhanced "sharrows" or brightly marked shared lane markings prominently featured in the travel lane to alert drivers to the presence of bicyclists. Sharrows are bicycle shaped symbols painted on the roadway surface. Class III bike routes can also be indicated with signage or designed with traffic calming measures.

The following bicycle circulation elements as part of the establishment of an integrated bicycle circulation system in the Plan Area:

- **Directness and speed of route.** Bicycle access to Millbrae Station and bicycle connections among the surrounding land uses through a system of on-street and off-street bicycle facilities should be prioritized. Bicycle entrances to the transit center should be provided at all adjacent intersections and some mid-block locations. Stair channels should be provided to allow riders to wheel bicycles up and down all stairways.
- **Safety and security.** The Plan seeks to strengthen bicyclist comfort through increased separation from other road users with Class I bicycle paths and Class II bicycle lanes. The Plan also seeks to increase bicycle visibility to other road users through enhanced treatments at intersections, including bicycle signal detection and colored pavement markings. Special design consideration should be given to the future design of the intersection of Millbrae Avenue and El Camino Real, where eastbound bicyclists will need to cross El Camino Real

*Class I Bike Path*

*Class II Bike Lane*

*Class III bike Route*

and then cross Millbrae Avenue to reach the proposed multi-use path on the north side of Millbrae Avenue. All bicycle routes through the transit center should minimize conflicts between bicyclists and pedestrians, autos, and buses.

- **Convenient and secure parking.** Sufficient Class I and Class II bicycle parking should be provided to meet demand. Class I bicycle parking includes high-quality long-term facilities, such as lockers or storage rooms, and Class II bicycle parking includes short-term facilities such as free-standing racks. Parking should be secure and sheltered to instill confidence that bicycles will not be stolen, vandalized, or exposed to rain. Bicycle parking should be located near building and station entrances, in well-lit areas along major bicycle "desire lines" and in areas with high pedestrian flows for informal surveillance.
- **Information and connectivity.** Bicyclists in the Plan Area should be alerted to the most direct, safest route and be able to quickly locate parking areas through on-site wayfinding signage and web-available maps. Bicycle facilities should be consistent with and enhance existing and planned citywide and regional bicycle facilities, including the Bay Trail. Directional signage and the proposed multi-use path on Millbrae Avenue will improve connectivity from the Plan Area to regional trails.

More detail about specific bicycle facility recommendations for individual streets and Plan Area locations are provided in Chapter 7 of this Specific Plan.


*A multi-modal street designed to accommodate pedestrians, cyclists, and cars.*

## PRIORITIZE TRANSIT CONNECTIVITY

The Plan Area is centered on the Millbrae Station, which is the preeminent Bay Area intermodal station connecting SFO, San Francisco, and Silicon Valley with BART (heavy rail) and Caltrain (commuter rail). In addition, rubber-tired transit bus and shuttle connections provide access to and from the Plan Area. These include bus transit, which is operated by SamTrans, and first/last mile commuter shuttles (both publicly and privately operated). Additionally, the Millbrae Station is planned to be a stop for the proposed High-Speed Rail project, and SFO desires a high-quality connection between the Millbrae Station and SFO to potentially include BART service or other types of transit connections. Transit will play an increasing role in how people travel to and from the Plan Area as it transforms from primarily an origin station today (users arrive and go elsewhere) to both an origin and destination (users arrive to Millbrae from elsewhere) in the future. Today's ridership is largely comprised of transfers between BART and Caltrain, transfers to first/last mile commuter shuttles, and boardings generated by the station's adjacent park-and-ride facilities. With Specific Plan buildout, more transit trips will begin or end in the Plan Area, necessitating a focus on convenient, proximate and safe access to all the transit modes that serve it. The following transit providers are considered as part of the Plan:

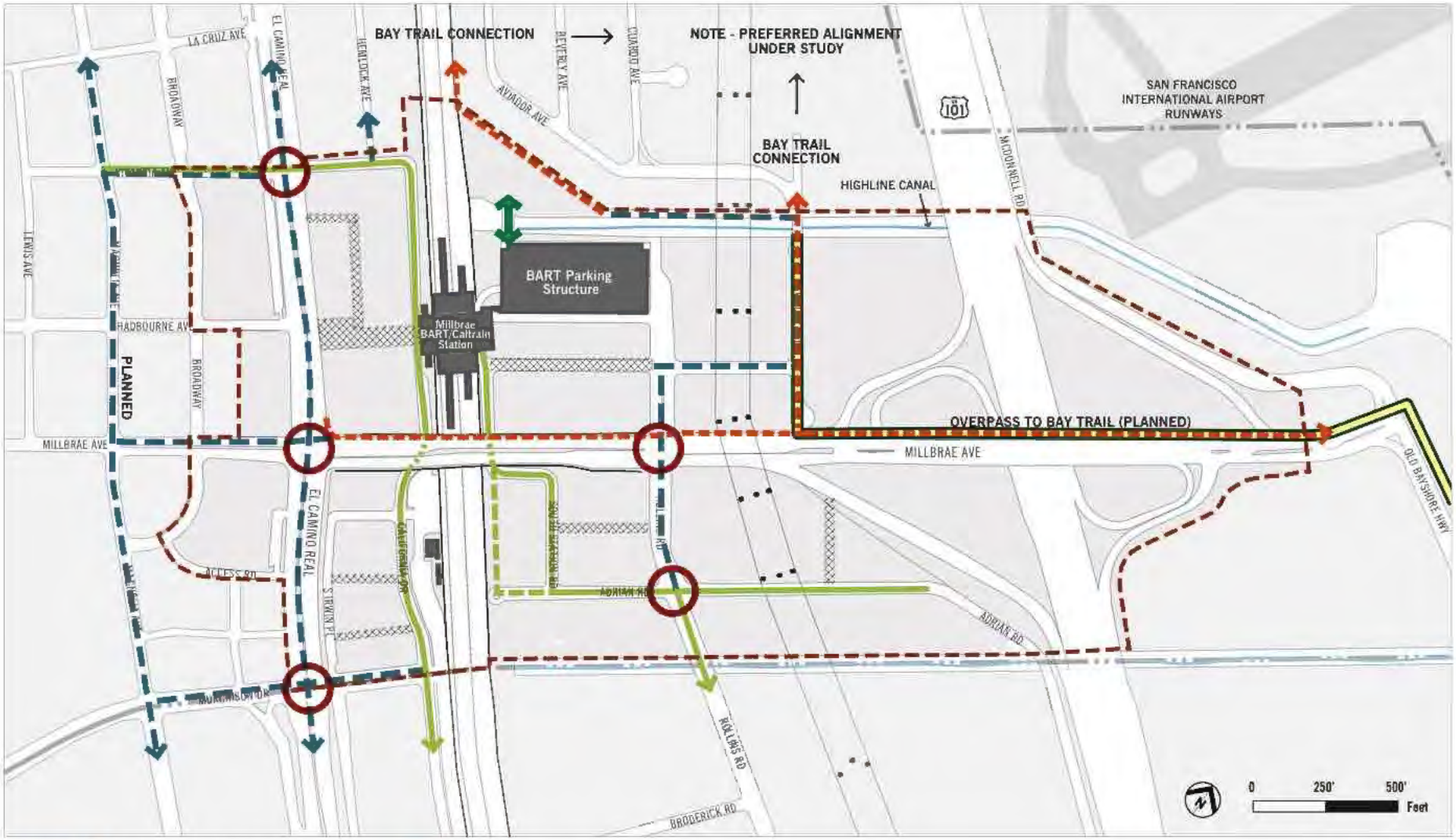



**FIGURE 4-4.** Bicycle Circulation Concept

- MSASP Boundary
- City Boundary
- Power Lines

Suggested Bike Facilities

- Class I Multi-Use Path
- Class II Bike Lane
- Class III Bike Route
- Potential Pedestrian Paseo
- Potential Bike/Ped Bridge
- Alternative Route to South Station Road (Long Term)
- Intersection Enhancement
- Bay Trail

- **BART** currently operates over 100 miles of double track rapid rail service, serving 44 stations and over three million people in four densely populated Bay Area Counties. The Millbrae Station is the southern terminus of the Richmond-Millbrae Line (on weekdays before 8:00 PM) and the Pittsburg/Bay Point-SFO Airport-Millbrae Line (after 8:00 PM on weekdays and on weekends).
- **Caltrain** provides commuter rail service on the Peninsula between San Francisco and San Jose (continuing to Gilroy during commute periods) with stops throughout San Mateo and Santa Clara Counties. The Millbrae station is served by all Caltrain service lines, including local, limited, and Baby Bullet trains.
- **SamTrans** operates 73 bus routes and paratransit service throughout San Mateo County and parts of San Francisco and Palo Alto with Routes ECR and 397 providing access to the Plan Area. Route ECR is a north-south bus line that provides regional transit service between Daly City and Palo Alto via El Camino Real stopping near the Millbrae Station.
- **Commuter shuttles** provide important first/last mile access for commuters to jobs from regional transit connections (BART and Caltrain stations). These shuttles typically pick up commuters at the Millbrae Station in the morning and drop them off at or in the vicinity of their employer. The trip is reversed in the evening. Some of the employers with shuttle service at the Millbrae Station at the time of the publishing of this Specific Plan include Visa, Google, Cisco Systems, and Genentech.
- **The San Francisco International Airport (SFO)** is directly linked to the Millbrae Station via limited services from BART. BART's current direct service is only Monday to Friday after 9:00 p.m., and all day Saturdays and Sundays. The number of BART riders to and from SFO to Millbrae is not known at this time. In 2013, SFO had approximately 45 million travelers passing through the airport. SFO has future plans to establish efficient connections from SFO to the Millbrae Station.
- **High-Speed Rail** is expected to route through Millbrae. The High-Speed Rail Authority has designated the Millbrae Station as a future stop and station for the proposed High-Speed Rail project. The Millbrae High-Speed Rail station will provide an efficient link to SFO.

Daily BART and Caltrain boardings at the Millbrae Station combined are projected to increase 70 percent, from roughly 10,000 boardings in 2013 to 17,000 by 2040 with Specific Plan buildout. Of the total increase, BART ridership is projected to increase by 40 percent (2,650 daily boardings). Caltrain will experience a greater net increase in ridership for reasons that include increasing Caltrain speeds and frequencies through electrification and extending Caltrain to the Transbay Terminal Station for direct access to the financial district in San Francisco. Plan Area development will also contribute to the BART and Caltrain ridership increases, accounting for about 8,000 (4,500 more than today) of the 17,000 projected weekday boardings.

*A SamTrans bus stop on El Camino Real.*

Figure 4-5 shows a proposed transit network. Specific proposals related to transit in the Plan Area are provided in Chapter 7.

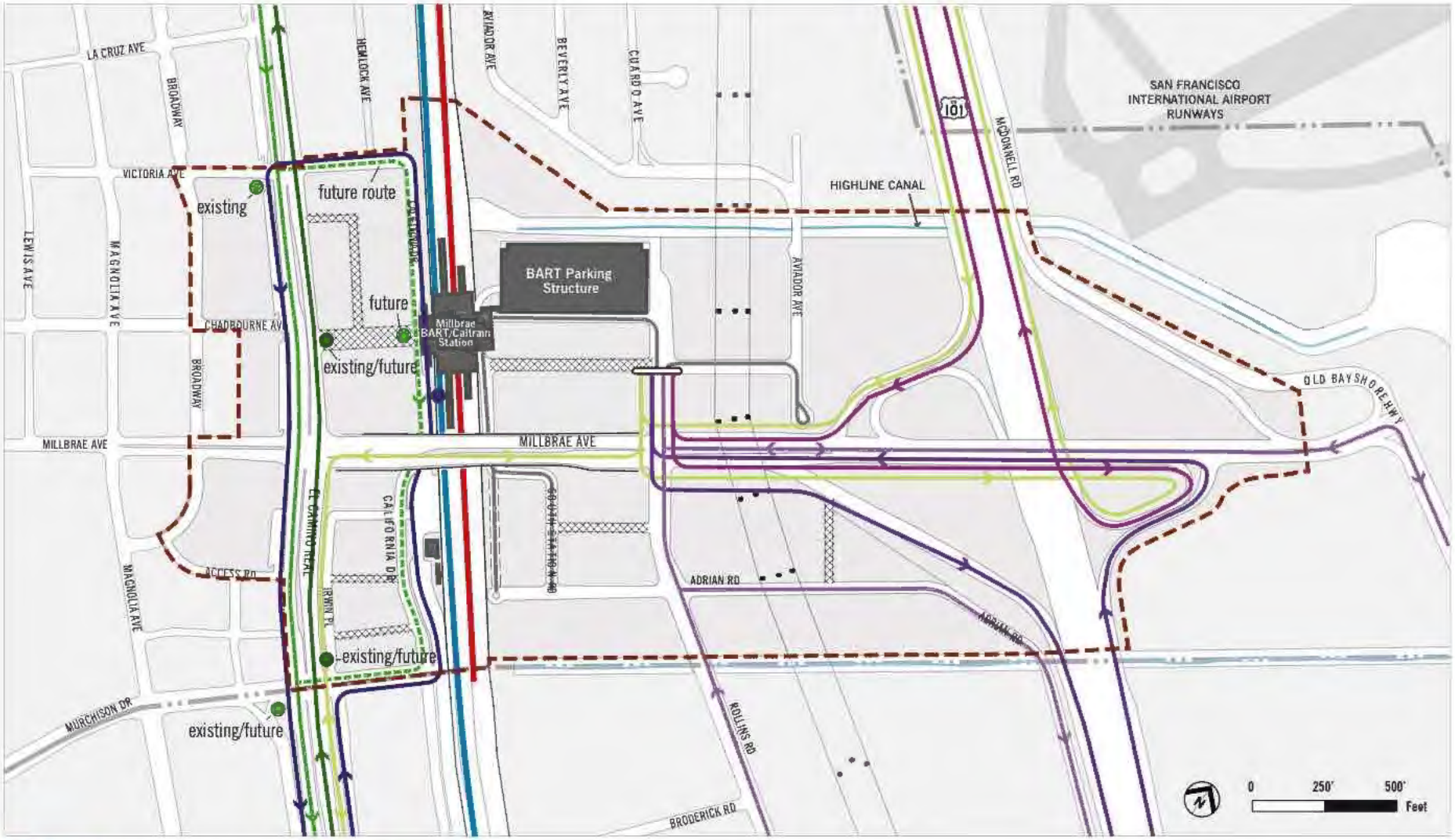



**FIGURE 4-5.** Transit Circulation Concept

- MSASP Boundary
- City Boundary
- Power Lines
- Potential Pedestrian Paseo
- Bus Stop

Fixed Route (Rail/Bus)

- SamTrans ECR Northbound
- SamTrans ECR Southbound
- SamTrans 397
- BART
- Caltrain

Westside Shuttles

- Local

Eastside Shuttles

- Local
- US 101 (North)
- US 101 (South)
- Shuttle Circulation Options for Transit Access

## ENSURE SAFE VEHICULAR ACCESS

The Plan Area's vehicle circulation network is centered on the intersection of El Camino Real and Millbrae Avenue, which are two major arterial roadways providing east-west and north-south access. El Camino Real extends throughout the length of the San Francisco Peninsula as a four to six-lane arterial connecting Peninsula communities to each other. It is six lanes wide in the Plan Area with added turn lanes at major intersections to accommodate the approximately 33,000 daily vehicle trips. Millbrae Avenue extends from I-280 to US 101 and serves as a major vehicle access to US 101 with an interchange just east of the Plan Area. It is also a six-lane arterial roadway in the Plan Area and carries approximately 36,000 vehicles a day.

East-west roadway connections in the Plan Area are limited due to the Caltrain right-of-way which is shared by BART. BART tracks are electrified with a third-rail and must be fully grade separated. For this reason, Millbrae Avenue will remain the only east-west vehicle access route in the Specific Plan Area that connects from one side of the Plan Area to the other. The Specific Plan's strategy is to improve existing roadways and intersections where feasible to maximize efficiency in vehicle access and circulation to the Plan Area taking into account the need to accommodate all travel modes. Any changes to intersections along El Camino Real (SR 82) or at US 101 on/off ramps must be coordinated through Caltrans.

The two key roadways serving the Plan Area, El Camino Real and Millbrae Avenue, are built out and cannot be widened to accommodate added traffic volumes without negatively affecting pedestrian and bicycle access and adjacent land uses. Therefore traffic operational improvements will be focused on lane reassignments and traffic signal phasing and timing changes. For intersections along these roadways as well as for internal signalized intersections, existing intersection signal timing information should be updated to adjust green time to most effectively serve future volumes with the addition of new land uses and resulting vehicle trips. Intersection coordination will be especially important along El Camino Real and along Millbrae Avenue and existing intersection signal coordination plans should be updated to reduce delay to future volumes.

The Specific Plan includes the following proposals that will improve vehicular access and circulation within the Plan Area, shown in Figure 4-6:

» **California Drive Extension.** New development west of the station should accommodate a northward extension of California Drive that turns left at the northern boundary of the Plan Area to meet Victoria Avenue at El Camino Real. The extension of California Drive should accommodate vehicle, transit, shuttle, and taxi services, while also safely accommodating pedestrians and bicyclists.

*A frontage road with a bulbout on El Camino Real.*

» **South Station Road Improvements.** In the short-term, South Station Road remains as a one-way southbound connection for vehicles, with added northbound and southbound bike lanes as shown in Figure 7-8. In the future, new development located south of Garden Lane to Millbrae Avenue and near the station should allow for consideration of a) improvements to South Station Road to establish a two-way public street that connects Adrian Road to the new development project near the station just south of Garden Lane, and b) north of Garden Lane, improvements that facilitate access options for transit vehicles.


**FIGURE 4-6.** Vehicle Circulation Concept

- MSASP Boundary
- City Boundary
- Power Lines

Suggested Vehicle Improvements

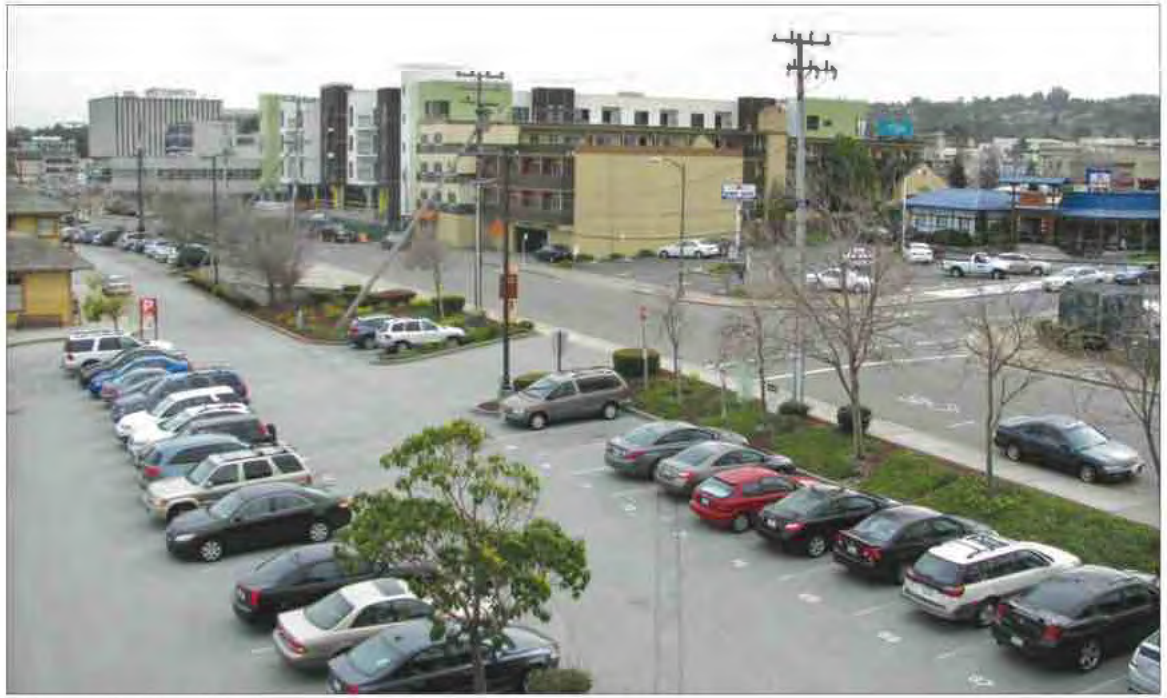
- Convert Road to Two-Way Traffic
- New Roadway Configuration
- Alternative Route for South Station Road (Long Term)
- Interim Connection
- New Signal
- Update Existing Timing & Coordination Along El Camino Real and Millbrae Ave
- Update Signal to Include New Eastern Leg

- **Conversion of Victoria Avenue to Two-Way Street.** The Specific Plan proposes that Victoria Avenue between El Camino Real and Magnolia Avenue be converted from a one-way to a two-way street to establish increased connectivity for all modes, particularly between Downtown Millbrae and the Station.
- **Intersection Mitigations.** New development that occurs under the Specific Plan will trigger the need for several intersection geometry and signalization improvements to accommodate traffic generated by the development, including at the Murchison Drive/California Drive, Millbrae Avenue/El Camino Real, and Victoria Avenue/El Camino Real intersections.

Specific proposals related to vehicular access in the Plan Area are provided in Chapter 7.

## ACCOMMODATE AN APPROPRIATE AMOUNT OF VEHICULAR PARKING

The Specific Plan seeks to balance parking demand and supply. New development will provide the minimum amount of parking necessary to accommodate the anticipated demand. Providing appropriate parking supply, given alternative transit modes, will help lessen reliance on automobiles, reduce potential conflicts with other modes, and discourage auto use. Within public rights-of-way, bicycle and pedestrian facilities should be prioritized over on-street parallel parking. Future development must seek to employ programs and strategies that reduce parking supply and demand, such as shared parking arrangements and transportation demand management programs, respectively. Updated parking requirement ratios for new developments and a combination of parking management techniques provided in this Specific Plan will address the station area parking demand to minimize any impacts to adjacent neighborhoods. Parking standards are found in Chapter 5 of this Specific Plan and parking management strategies can be found in Chapter 7.



*Caltrain parking lot on California Drive.*

### TRANSPORTATION DEMAND MANAGEMENT (TDM)

The wide variety of transportation services in the Plan Area, primarily Caltrain and BART, means that dependence on private vehicles will be at a much lower level than in surrounding areas of the City. Therefore new development will be designed to maximize the use of these other modes and reduce their traffic impacts through locations and orientation of building entrances, close proximity to other land uses, on-site showers and changing facilities, and adequate levels of bicycle storage. Further, employers in the Plan Area will be encouraged to provide programs to their employees such as subsidized transit passes and a guaranteed ride home program. TDM strategies for the Plan Area are covered in more detail in Chapter 7 of the Specific Plan.

## 4.4. AFFORDABLE HOUSING

The Plan Area's close proximity to transit services makes it an excellent location for affordable housing. Since families with limited income may not be able to afford private automobiles, living in a transit-connected neighborhood can provide mobility opportunities that other neighborhoods may not offer. The City of Millbrae maintains a Housing Element as part of its General Plan, which is updated every seven years and provides citywide policies regarding the provision of affordable housing. The Housing Element identifies the Plan Area as a Housing Opportunity Area. Implementation Program HIP-15 calls for achieving entitlement of at least 600 new dwelling units by 2023 with 15 percent of those affordable to the extent compatible with prevailing law. Developers, the City, and non-profit groups are encouraged to provide affordable housing opportunities near the Station.

## 4.5. UTILITY INFRASTRUCTURE

Infrastructure improvements will need to be phased with private development to ensure that sewer, water, drainage, fiber-optic cable, and energy services are provided, and that developers contribute their fair share to the costs of facility upgrades. The phasing of utilities will be critical to ensure that citywide systems retain sufficient capacity to meet demands. More information on anticipated improvements to the utility infrastructure system is provided in Chapter 8, Utilities and Public Services, of this Specific Plan.

## 4.6. COMMUNITY BENEFITS PROGRAM

The Plan Area seeks to accomplish broad public benefits through new development. New development that seeks greater or lesser residential densities or floor area ratios outside the Baseline FAR and Residential Density as established in Table 5-2 of this plan shall provide public benefits to ensure future growth improves the broader community. Development that requests such increases or decreases in residential densities or floor area ratios shall enter into an agreement with the City specifying required public benefit contributions as described in Chapter 10. The Community Benefits Program implements several of the Plan Policies of Chapter 4, as well as the land use policies of the City's General Plan.

## 4.7. DEVELOPMENT PROGRAM

A conceptual development program, shown in Table 4-1, presents a high-end estimate of the amount of development that could occur over the next 20 years in the Plan Area. This development program is based on the vision, goals, and concepts described in this Specific Plan. Since this is a conceptual and conservative estimate, actual buildout in the year 2035 is likely to be less than the estimate and will depend on the individual choices of the Plan Area property owners, market conditions, and other factors.

**TABLE 4-1. CONCEPTUAL DEVELOPMENT PROGRAM**

| | Office/R&D (Sq Ft) | Retail (Sq Ft) | Residential (DU) | Hotel Rooms |
|---|---|---|---|---|
| Existing To Remain | 8,500 | 94,480 | 310 | 59 |
| New Development | 1,644,840 | 180,640 | 1,440 | 324 |
| Total at Buildout | 1,653,340 | 275,110 | 1,750 | 383 |

Note: Numbers may not add up due to rounding. Sq Ft = Square Feet; DU= Dwelling Units

## 4.8. POLICIES

The following policies are set forth to help achieve the vision and goals of the Specific Plan. The following policies shall be observed in all development.

### LAND USE

P-LU 1. Encourage a rich mix of transit-supportive land uses in the Plan Area in close proximity to one another to encourage transit use, walking, and bicycling.

P-LU 2. Promote a mix of uses that support a day and evening environment in the immediate vicinity of the Millbrae Station. Uses that bring evening and weekend activity include retail shopping and services, food stores, restaurants and cafes, hotels, health clubs, and other similar uses.

P-LU 3. Encourage residential mixed-use development with ground-floor retail spaces facing El Camino Real that support transit and downtown businesses.

P-LU 4. Encourage the development of hotels in the Plan Area, especially near highway frontage.

P-LU 5. Strive to concentrate active ground-level uses along major pedestrian routes and at key nodes to contribute to a safe and lively pedestrian environment.

P-LU 6. Provide public gathering places directly adjacent to the Millbrae Station that are pedestrian friendly and minimize conflict with automobiles.

P-LU 7. Preserve the historic Millbrae Depot for public-oriented uses.

P-LU 8. Ensure that proposed land uses are compatible with the noise environment, including rail, freeway, road traffic, and aircraft.

P-LU 9. Encourage the development of uses that contribute to the quality of life of residents and employees, such as childcare facilities, community centers, plazas, playgrounds, and parks.

P-LU 10. Promote Class A office development near the station and along Adrian Road to take advantage of its proximity to Highway 101, transit, and new residential development.

P-LU 11. Encourage land assemblage to create parcels that are attractive to mixed use and office development.

P-LU 12. Ensure new development includes appropriate buffers for land use compatibility between new uses and existing uses.

P-LU 13. Ensure new uses contribute to a balanced mix of uses in the Plan Area consistent with the land use regulations set forth in Chapter 5.

P-LU 14. Ensure the build out of the Plan Area advances the social, economic, environmental, and physical goals of the community and results in a series of community benefits that address the needs of existing and future Millbrae residents.

### URBAN DESIGN

P-UD 1. Allow for more intensive and taller development in the immediate vicinity of the Millbrae Station as a means to bring vitality to the area and increase transit ridership.

P-UD 2. Require building heights of new development to comply with FAA standards and the San Francisco International Airport Land Use Compatibility Plan.

P-UD 3. Ensure new development includes varying and visually engaging facades to promote a pedestrian-friendly environment.

P-UD 4. Require new development to employ sustainable building and site design principles, such as Leadership in Energy and Environmental Design (LEED), as promulgated by the U.S. Green Building Council, or other acceptable standards. Sustainable building and site design principles include minimizing impervious surfaces, orienting toward solar access, and incorporating energy-efficient elements.

P-UD 5. Ensure that new buildings use high quality materials, visually interesting physical elements, and building modulation.

P-UD 6. Ensure new development adjacent to residential neighborhoods provides appropriate transitions that respect the scale and character of the adjacent residential neighborhoods.

P-UD 7. Require that new buildings orient toward public spaces with entries and frontages.

P-UD 8. Ensure that new development provides visual interest at the ground floor to provide pedestrian interest. Blank walls and non-transparent street frontages should be minimized.

P-UD 9. Create gateway features at the intersections of Victoria/El Camino Real, Murchison/El Camino Real, and Millbrae Avenue/Rollins Road to enhance the identity of Millbrae and the Plan Area. Gateway features include special architectural elements like corner towers, unique landscaping treatments, special intersection paving, signage, enhanced lighting, and corner development setbacks for open space. Ensure that new development buildings located at the three gateway intersections provide such features.

P-UD 10. Require all development projects provide appropriate landscaping between the street and buildings to soften the hardscape and along the edges of open spaces to define the space.

P-UD 11. Ensure all landscaping plans conform with the City's Water Efficient Landscape Ordinance.

P-UD 12. Enhance streetscapes along El Camino Real and Millbrae Avenue to enhance the gateway role and appearance of the street.

P-UD 13. Ensure new buildings that can be seen from Highway 101 include a visually pleasing building envelope and signage.

P-UD 14. Encourage office development with state-of-the-art design techniques to maximize space, flexibility, and functionality. Ensure office buildings are oriented towards public streets or open space.

P-UD 15. Ensure parking structures are screened from pedestrian views and/or wrapped with active uses. Pay attention to design of the upper portions of parking structures to ensure attractive architecture.

## HOUSING

P-H 1. Require the provision of housing for people of all incomes in new development projects in the Plan Area.

P-H 2. Develop housing consistent with the goals, policies, and programs specified in the City's adopted Housing Element.

P-H 3. Designate the Plan Area as a Housing Opportunity Site consistent with the Housing Element and require at least 15 percent affordability for residential projects to the extent consistent with prevailing law. The 15 percent affordable

housing shall include at least five percent of the units affordable to very-low income households or ten percent affordable to low income households. The maximum of affordability shall be County median income or less.

P-H 4. The 15 percent housing affordability requirement shall not be satisfied by the payment of in-lieu affordable housing fees but shall be satisfied by the construction of affordable housing units in or nearby the Plan Area. "Nearby" is defined as being within a 10 minute walk or one-half mile, and/or a 15 minute ride on transit with 15 minute headways.

## OPEN SPACE

P-OS 1. Provide a variety of public and private open spaces, pedestrian-oriented streetscapes, and gathering spaces to meet the needs of new and existing residents, visitors, workers and businesses.

P-OS 2. Require the development of new publicly accessible open space and necessary pedestrian connections as part of new development projects or the payment of in-lieu fees.

P-OS 3. Frame potential open spaces with buildings or structures to provide a sense of enclosure to the open spaces and their users.

P-OS 4. Streetscape improvements should incorporate open spaces, such as pocket parks in bulbouts, to the extent feasible.

P-OS 5. Require open spaces and parks to incorporate sustainability measures, such as including native plant species, drought tolerant plants that require minimal irrigation, permeable paving, solar-powered lighting, and other similar features.

P-OS 6. Integrate public art into public space design consistent with the City's Public Art Policy.

P-OS 7. In light of the identified absence of parklands in the Plan Area and no specific requirement for private open space in new residential development, all new residential development shall provide a parkland dedication of 5 acres per 1,000 persons or payment of a development impact fee. The preference is for these fees to be used on parks and recreation facilities.

## CIRCULATION AND PARKING

P-CP 1. Provide superior pedestrian access and circulation in the Plan Area, especially to Millbrae Station, by providing sidewalks on all roadways and adding new routes where feasible.

P-CP 2. Accommodate projected pedestrian volumes by increasing sidewalk widths to a minimum of 6 to 10 feet.

P-CP 3. Create a direct pedestrian connection between El Camino Real (including the northbound bus stop on El Camino Real) and the west side Millbrae Station entrance through a pedestrian paseo or similar.

P-CP 4. Enhance pedestrian safety at signalized intersections with pedestrian countdown signals, signal timing that minimizes pedestrian wait times and provides adequate crossing times (3.5 feet per second), crosswalks at all approaches, continental and/or high-visibility crosswalk striping, corner bulbouts, and perpendicular ADA-standard curb cuts on all corners.

P-CP 5. Design all streets to provide an attractive pedestrian and visual environment, including by adding pedestrian-scale lighting, benches, and street furniture.

P-CP 6. Improve bicycle access to Millbrae Station and bicycle connections among the surrounding Plan Area land uses through a system of on-street and off-street bicycle facilities including Class I bicycle paths and Class II bicycle lanes.

P-CP 7. Increase bicycle visibility to other road users through enhanced treatments at intersections, including bicycle signal detection (using bicycle-oriented loop detectors or push buttons) and colored pavement markings.

P-CP 8. Provide secure, short- and long-term bicycle parking facilities at the Millbrae Station and at all developments.

P-CP 9. Provide wayfinding signage in the Plan Area for all modes, with emphasis at the nearest entrances and exits, and web-available maps for users, as required in Chapters 6 and 7 of this Specific Plan.

P-CP 10. Require development projects in the vicinity of the station to provide wayfinding signage along wayfinding paths, which include all streets and paseos within the Plan Area, major intersections, and designated bicycle routes.

P-CP 11. Accommodate kiss-n-ride (passenger pick-up and drop-off) and taxis near station entrances on both the east side and west side of the Millbrae Station.

P-CP 12. Provide bus and shuttle transfer facilities near station entrances on both the east side and west side of the Millbrae Station to accommodate the peak projected vehicles to support bus and shuttle as a priority access mode to BART, Caltrain, and future rail service, such as High-Speed Rail (HSR).

P-CP 13. Accommodate SamTrans Route ECR bus service by enhancing stops at Linden Avenue (El Camino Real) northbound at pedestrian paseo) and Murchison Drive (El Camino Real) northbound and southbound) and by providing a deviated route southbound (off El Camino Real) on California Drive Extension with a stop at the pedestrian paseo near the station entrance.

P-CP 14. Coordinate with SamTrans, the Peninsula Corridor Joint Powers Board and BART to ensure implementation of all Millbrae station area improvements.

P-CP 15. Extend California Drive from Linden Avenue north to intersect El Camino Real at Victoria Ave.

P-CP 16. Expand the South Station Road as a two-way public street connecting from the station entrance to Adrian Road.

P-CP 17. Operate Victoria Avenue between El Camino Real and Broadway as a two-way roadway. Add special paving treatments and pedestrian and bicycle facilities to emphasize this critical connection between Downtown and Millbrae Station.

P-CP 18. Encourage the shared use of station area parking facilities for off-peak users. For example, drivers visiting restaurants in the evening could use station area parking during evening hours.

P-CP 19. Establish parking standards that are adequate to serve new development but encourage the use of transit and alternate modes.

P-CP 20. Explore and implement a residential permit parking program to manage potential spillover parking from the Millbrae Station in the residential areas immediately adjacent to the Plan Area, as defined in Municipal Code Section 4.80, Preferential Parking Permit Program.

P-CP 21. Design and locate parking facilities to be compatible with adjacent areas and to reinforce the pedestrian environment.

P-CP 22. Require new developments within the Plan Area to accommodate alternative modes of transportation and to provide support facilities for bicyclists, such as showers and changing areas.

P-CP 23. Require Plan Area employers, property managers, and housing providers to prepare Transportation Demand Management (TDM) Plans that include measures to increase the number of residents and employees walking, biking, using transit, or ridesharing (using carpools and vanpools) as commute modes and to reduce vehicle congestion. Where future projects have the potential to impact facilities under the Congestion Management Plan, the TDM Plan shall meet the current City/County Association of Governments of San Mateo County (C/CAG) requirements to reduce the number of trips on the Congestion Management Plan roadway network and be approved by both the City and C/CAG. TDM Plans shall achieve at least a 20 percent reduction in trip generation, and the Plan shall include provisions for monitoring, enforcement, and assessment of financial penalties for non-compliance.

P-CP 24. Require site-specific transportation studies to address on-site circulation, driveway designs, loading, access, and safety for all modes as part of the development review process.

P-CP 25. Plan for and implement public parking on the west side of the BART/Caltrain Station should transit parking be lost due to the development of the BART parking lot on the east side of the station.

P-CP 26. The City shall work with Caltrans to modify the existing El Camino Real/Millbrae Avenue intersection footprint through restriping, with a preference for two right-turn lanes from westbound Millbrae Avenue onto northbound El Camino Real.

P-CP 27. The City shall work with Caltrans to determine if it is feasible to construct an additional mixed flow and/or HOV lane on northbound and southbound US 101.

P-CP 28. The City of Millbrae shall work with the City of Burlingame to modify the El Camino Real/Murchison Drive intersection footprint. The modified intersection footprint can be accommodated within the existing right of way.

P-CP 29. The City of Millbrae shall work with the City of Burlingame to conduct a full signal warrant analysis at the California Drive/Murchison Drive intersection and determine feasibility.

P-CP 30. The City shall work with the City of Burlingame to improve the El Camino Real/Millbrae Avenue intersection lane configurations, as appropriate.

P-CP 31. Development projects shall participate in funding and implementing a comprehensive, multi-agency, multi-modal access plan to the Millbrae Transit Station. The Plan shall provide sufficient multimodal access to and from the station to support expected growth in transit ridership. In the event the access plan is not complete at the time of application for projects within the TOD zone, applicants shall submit a plan of how multi-modal access and circulation to the transit station will be accomplished. All transit operators serving the Millbrae Station, including BART, California High-Speed Rail Authority, Caltrain, and SamTrans, shall have an opportunity to review and provide comments on the developer proposed multi-modal access and circulation plan prior to City entitlement approval. In addition, private shuttle

operators and pedestrian and cyclist communities shall also have an opportunity to review and provide comments.

P-CP 32. Because the station is located within a reasonable walking distance from the General Plan designated Downtown (Broadway) core area, the City should work to "extend" the downtown toward the BART station, including pedestrian-friendly links enhanced by bus or shuttle service. Structured parking in the downtown area served by bus or shuttle connections to the station would strengthen the downtown area by providing parking for retail and entertainment activities and meet additional parking needs in support of the station.

P-CP 33. Work with Caltrans to explore the potential of adding a separate entry for shuttles or other transit into BART parking/ TOD 2 site, either from the southbound US 101 off ramp directly, or from Millbrae Avenue where Aviador could be extended to intersect Millbrae Avenue. It is likely that either of these measures will require a design exception from Caltrans.

## UTILITIES AND PUBLIC SERVICES

P-UTIL 1. Establish a water supply distribution system that is adequate to serve the potable and fire protection needs of new development.

P-UTIL 2. Conduct a hydraulic study to determine necessary system upgrades.

P-UTIL 3. Reduce water consumption through a program of water conservation measures.

P-UTIL 4. Encourage use of gray water where available.

P-UTIL 5. Provide improvements to the Millbrae treatment plant in order to accommodate planned new growth within the Plan Area and the city as a whole.

P-UTIL 6. Improve the wastewater collection system to accommodate demands from new development.

P-UTIL 7. Provide necessary storm drainage facilities as new development is constructed.

P-UTIL 8. Incorporate sustainable stormwater management features in new development and public improvements, including low impact development (LID) features and swales, permeable pavers, and other similar features to manage stormwater runoff from public streets.

P-UTIL 9. Provide adequate electrical, gas, and telecommunications services to support new development.

P-UTIL 10. Incorporate energy conserving design and equipment into new development in order to promote energy conservation.

P-UTIL 11. Allow co-generation systems utilizing all methods of alternative energy production where feasible.

P-UTIL 12. Promote recycling of construction and demolition debris.

P-UTIL 13. Encourage the use of recycled content building materials.

P-UTIL 14. Cooperate with the Millbrae Elementary School District and the San Mateo Union High School District in planning for adequate public school facilities. Coordinate with affected school districts to consider the impacts of

residential development on school facilities and services. Help facilitate the school districts and developers in determining school related needs that result from development, and in addressing impacts through the imposition of development fees and other mitigation measures to the extent permitted by law.

P-UTIL 15. Ensure the San Mateo County Sherriff's Office and BART Police Department work together to determine the boundary of each department's primary jurisdiction, and explore the potential need for a police substation at the station, through a Memorandum of Understanding or other means when development projects come forward in the areas near the Millbrae Station.

P UTIL 16. Require installation of infrastructure for "purple pipes" for future use of recycled water when available.

P-UTIL 17. The City shall require future project applicants to clearly demonstrate how the project complies with the water conservation and water efficiency ordinances adopted by the City and any other applicable regulations.

P-UTIL 18. The City shall work with the San Francisco Public Utilities Commission (SFPUC) to ensure that supplemental water supply sources for the 2035 buildout year of the Plan are identified and developed by SFPUC.

P-UTIL 19. Ensure that measures are taken by all new developments to address requirements for recycling and disposal of solid waste. These requirements include AB 341 covering separation of reuse, recycling, and composting, AB 1826 for commercial organics recycling, and AB 1594 to eliminate the ability for cities to use organics as landfill daily cover as part of their recycling goals.

## TELECOMMUNICATIONS

P-TEL 20. Develop a plan to expand current fiber optic networks throughout the Plan Area to attract new high-tech businesses and provide new hotel development with a significant amenity to business travelers.

P-TEL 21. Require all new development projects to incorporate broadband infrastructure in their planning and construction. All development projects shall install telecommunications conduits in all streets that are affected by the development.

P-TEL 22. Ensure street improvement projects incorporate the laying of fiber and conduit.

## IMPLEMENTATION

P-IMP 1. Implement the Specific Plan through coordination and/or outreach to all City departments, landowners, Plan Area developers, advocates, and other stakeholders.

P-IMP 2. Continue to carry out design review procedures to ensure that new development is of a high quality and consistent with Specific Plan vision and goals.

P-IMP 3. Ensure all future development projects are compatible and consistent with the vision, goals, policies, and requirements set forth in this Specific Plan.

P-IMP 4. Require all new development projects pay their fair share for any needed infrastructure improvements, including all pedestrian/bicycle path facilities identified in this Plan and park acquisition or improvements, as well as their fair share of any increased operational costs, such as costs for police and fire services.

P-IMP 5. Monitor future development and public improvements to reconsider and reevaluate phasing, financing, and funding strategies.

P-IMP 6. Ensure the timely construction of circulation improvements necessary to support the Millbrae BART/Caltrain Station.

P-IMP 7. Pursue State and federal grants for station area improvements.

P-IMP 8. Initiate studies as necessary to further the vision, concepts, and principles outlined in this Specific Plan.

P-IMP 9. Complete a nexus study to apportion fair share costs of all necessary infrastructure in the Plan Area.

P-IMP 10. Require applicants for new development to prepare a technical assessment evaluating potential project construction-related air quality impacts in conformance with current Bay Area Air Quality Management District's methodology.

P-IMP 11. Require applicants for new development to prepare and implement construction management plans to control construction-related impacts from fugitive dust, emissions, noise, and traffic. Project construction management plans shall include, but are not limited to, the following:

- Current Bay Area Air Quality Control Management District (BAAQMD) basic control measures for fugitive dust control in addition to other feasible measures that may be identified in project-level technical air quality assessments, when required;
- A list of all construction equipment to be used during construction that identifies the make, model, and number of each piece of equipment;
- Location of construction staging areas for materials, equipment, and vehicles;
- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur;
- Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project sponsors;
- Provisions for pedestrian and bicycle circulation through the congestion zone;
- Provisions for removal of trash generated by project construction activity; and
- A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an on-site complaint manager.

P-IMP 12. All new development projects that take advantage of the Community Benefits Program shall enter into a Development Agreement that specifies the types of community benefits.

P-IMP 13. Major mixed-use development proposals having a lot area of one acre or more; or which include more than 75,000 square feet of development shall submit as part of the project application a fiscal impact analysis study for City Council approval.

# 5

# LAND USE REGULATIONS AND DEVELOPMENT STANDARDS

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# 5. LAND USE REGULATIONS AND DEVELOPMENT STANDARDS

This chapter sets forth land use regulations and development standards to ensure that all proposed development in the Plan Area supports the vision, goals, and concepts of the Specific Plan as described in Chapters 3 and 4. This chapter consists of the following four sections:

- Planning Zones and Overlay Zone
- Land Use Regulations (permitted and conditional uses)
- Development Standards (height, density, setbacks, open space, and parking)
- Land Use Definitions

The following provisions apply to all new development within the Millbrae Station Area Specific Plan (MSASP) boundary. If provisions in the MSASP and the Millbrae Zoning Code (Chapter 10.5 of Millbrae Municipal Code) are in conflict, the provisions in the MSASP shall be applied. For any zoning provisions not specifically addressed by the MSASP, the City's Zoning Code shall be applied.

The procedures for securing use permits and site development plans within the Plan Area are established in Article XVII, Millbrae Station Area Planned Development District, of the Millbrae Zoning Code. In particular, all proposed uses involving any new structure or exterior alterations to an existing structure shall be subject to design review as provided in Article XXV of the Millbrae Zoning Code and site development plan review as provided in Section 10.05.1715.

# 5.1. PLANNING ZONES AND OVERLAY ZONE

As shown in Figure 5-1, the Plan Area is divided into five Planning Zones with one Overlay Zone, which are based off of the Land Use Plan and concepts described in Chapter 4. Overlay Zone regulations shall be applied in addition to those in the underlying base zone.

***Transit-Oriented Development (TOD) Zone***

This Zone supports a variety of uses at higher intensities in order to create a vibrant day and evening activity center immediately adjacent to the Millbrae Station. In order to make the higher intensities of TOD enjoyable and convenient, all TOD developments shall have a mix of uses.

***Residential Mixed Use Zone***

The El Camino Real corridor, except for the area immediately west of the Millbrae Station, is designated Residential Mixed Use. This Zone accommodates and encourages medium- to high-density residential development above ground floor retail uses that face El Camino Real. Land use regulations and standards for this zone are also intended to ensure an appropriate transition in use and scale between new high density development in the TOD Zone and the existing single family residential neighborhoods to the west.

***Employment Center / Light Industrial Zone***

This Zone is intended to promote the development of an employment-oriented corridor with new Class A office buildings and light industrial uses that front Adrian Road.

***Retail Commercial Zone***

The Retail Commercial Zone is intended to retain and enhance existing retail and shopping development close to Highway 101.

***Public Facilities Zone***

This Zone is applied to portions of the Plan Area that are reserved for utility-related uses or public services, including a City storage yard, and parking.

***Residential Overlay Zone***

The Residential Overlay Zone is intended to accommodate multi-family homes, with the provision of housing available to people of all incomes, in close proximity to the Millbrae Station, including townhomes, apartments, and condominiums, that thoughtfully transition in scale to the Bayside Manor neighborhood to the north.

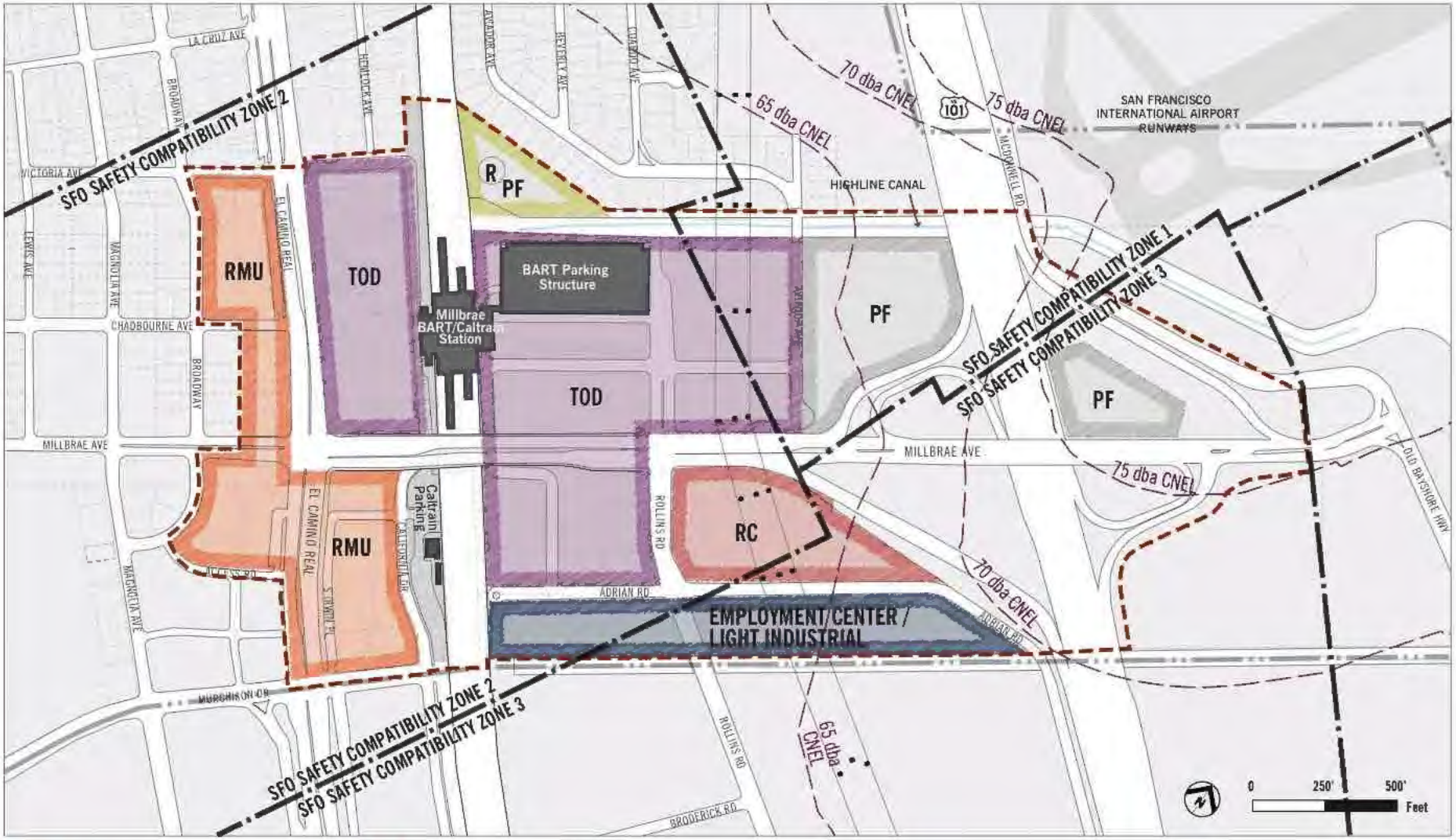



**FIGURE 5-1.** Planning and Overlay Zones

- MSASP Boundary
- City Boundary
- Power Lines

Planning Zones

- Transit-Oriented Development (TOD) Zone
- Residential Mixed Use (RMU) Zone
- Employment Center / Light Industrial Zone
- Retail Commercial (RC) Zone
- Public Facilities (PF) Zone

Overlay Zone

- R Residential Overlay
- SFO Safety Compatibility Zones
- SFO Noise Compability Zones

## 5.2. LAND USE REGULATIONS

Table 5-1 indicates the land uses that are permitted, conditionally permitted, and prohibited within each Planning or Overlay Zone. As described above, Overlay Zone land use regulations shall be applied in addition to those in the underlying base zone. Other uses not identified in Table 5-1 that are deemed consistent with the spirit and intent of the underlying land use designation shall be given Director consideration and approved at Director discretion or deferred to the Planning Commission.

**TABLE 5-1.** PERMITTED AND CONDITIONALLY PERMITTED LAND USES

| Permitted (P)<br>Conditional (C)<br>Not allowed (-)<br>Permitted when part of mixed use building (*) | TOD | Residential Mixed Use | Employment Center / Light Industrial | Residential Overlay | Retail Commercial | Public Facilities |
|---|---|---|---|---|---|---|
| **Residential Uses** | | | | | | |
| Duplexes | - | - | - | P | - | - |
| Live/Work Units | P* | P* | C | - | - | - |
| Multiple-Family Dwellings | | | | | | |
| – Less than 7 Units | - | - | - | P | - | - |
| – 7 Units or More | P* | P | C | P | - | - |
| **Public and Quasi-Public Uses** | | | | | | |
| Adult Education | C* | C* | C* | - | C | - |
| Community Centers [1] | P | P | P | - | P | - |
| Public Electric Vehicle Charging Station | P* | P* | P* | - | P | - |
| Library | P | P | P | - | P | - |
| Public Parks and Recreational Facilities [1] | P | P | P | P | P | P |
| Public Parking Structures | P | P | P | P | P | - |

| Permitted (P)<br>Conditional (C)<br>Not allowed (-)<br>Permitted when part of mixed use building (*) | TOD | Residential Mixed Use | Employment Center / Light Industrial | Residential Overlay | Retail Commercial | Public Facilities |
|---|---|---|---|---|---|---|
| **Commercial Uses** | | | | | | |
| ***Eating and Drinking Establishments*** | | | | | | |
| Restaurants | P* | P* | P* | - | P | - |
| Bars | C* | C* | C* | - | C | - |
| ***Commercial Services*** | | | | | | |
| Banks and Financial Services [2] | P* | P* | P* | - | P* | - |
| Business Support Services [2] | P* | P* | P* | - | C* | - |
| Child Care Services [2] [3] | C* | C* | C* | - | - | - |
| Health and Exercise Clubs (no more than 3,000 square feet if on ground floor) [2] | P* | P* | P* | - | P* | - |
| Medical Offices [2] | P* | C* | C | - | - | - |
| Offices [2] | P | P* | P | - | - | - |
| Personal Services | P* | P* | P* | - | P* | - |
| **Light Industrial [4]** | | | | | | |
| Biotechnology / Scientific Labs | - | - | C | - | - | - |
| Research and Development Facility (R&D) | C | - | P | - | - | - |
| Tech / Biotech Product Assembly | - | - | C | - | - | - |
| Tech / Biotech Component Manufacturing | - | - | C | - | - | - |

| Permitted (P)<br>Conditional (C)<br>Not allowed (-)<br>Permitted when part of mixed use building (*) | TOD | Residential Mixed Use | Employment Center / Light Industrial | Residential Overlay | Retail Commercial | Public Facilities |
|---|---|---|---|---|---|---|
| ***Retail*** | | | | | | |
| Drive-In and Drive-Through Facilities | - | - | - | - | P | - |
| Food and Beverage Sales (less than 15,000 square feet) | P* | P* | P* | - | P | - |
| Gas and Service Stations | - | - | - | - | C | - |
| Liquor Stores | C* | C* | - | - | C* | - |
| Retail Sales | P* | P* | P* | - | P | - |
| ***Other Commercial Uses*** | | | | | | |
| Commercial Lodging | C | C | C | - | C | - |
| Conference Center [5] | P* | C | P* | - | P* | - |
| Museum | P | - | - | - | - | - |
| Theater | P | - | - | - | - | - |
| Indoor Commercial Recreation | P* | - | - | - | P | - |

| Permitted (P)<br>Conditional (C)<br>Not allowed (-)<br>Permitted when part of mixed use building (*) | TOD | Residential Mixed Use | Employment Center / Light Industrial | Residential Overlay | Retail Commercial | Public Facilities |
|---|---|---|---|---|---|---|
| **Transportation, Communication, and Utilities Uses** | | | | | | |
| Off-Site Construction Staging | C | C | C | - | C | P |
| Wireless Communications Facilities | C | C | C | - | C | C |
| Cogeneration Facility | C | - | - | - | - | - |
| Transit Facilities | P | - | - | - | - | - |
| Utility Services | C | - | C | - | C | P |

NOTES:
Any use that requires a Conditional Use Permit (C) goes to the Planning Commission for approval.
An asterisk (*) indicates uses allowed only when part of mixed use building.
Within SFO Safety Compatibility Zones 1, 2, and 3, uses must comply with the ALUCP policies and criteria described in Policy SP-2, Safety Compatibility Land Use Criteria; Table IV-2, Safety Compatibility Criteria; and Policy SP-3, Hazardous Uses. (See pages IV-27 through IV-34 of the SFP ALUCP, November 2012, or the latest adopted Plan).
[1] Places of assembly seating more than 300 people are prohibited in SFO Safety Compatibility Zone 2. Places of assembly not in structure are prohibited in SFO Safety Compatibility Zone 1.
[2] Use is required to secure a Conditional Use Permit when located on the ground floor in a Type 1-Very Active Ground Floor Uses area as shown in Figure 5-4, Active Frontage Types.
[3] Large child day care centers, which are commercial facilities defined in accordance with Health and Safety Code, Section 1596.70, et seq., and licensed to serve 15 or more children, are prohibited in SFO Safety Compatibility Zones 2 and 3. Family day care homes and noncommercial employer-sponsored facilities ancillary to place of business are allowed in SFO Safety Compatibility Zone 3.
[4] Light Industrial facilities in Safety Compatibility Zone 2 of ALUCP shall not include hazardous uses as defined by the SFO ALUCP, Policy SP-3 on pages IV-33 and IV-34.
[5] Conference centers in Safety Compatibility Zone 2 of the ALUCP shall not provide seating in excess of 300 people.

## 5.3. DEVELOPMENT STANDARDS

The Development Standards in this section regulate new site and building development through standards for intensity, building height, setbacks, open space, parking, and other elements. Development Standards in Table 5-2 are provided for the Planning and Overlay Zones shown in Figure 5-1.

### HEIGHT LIMITS

Maximum and minimum building heights are established for projects in the Plan Area to achieve a building scale that is transit-supportive, as well as pedestrian-friendly. Figure 5-2 illustrates height limits in the Plan Area.

The Plan Area is located within the San Francisco International Airport (SFO) environs. Therefore, development within the Plan Area is subject to height limits imposed by the Federal Aviation Administration (FAA) for runways at SFO and the San Francisco Airport Land Use Compatibility Plan. All development projects shall be consistent with the SFO Airport Land Use Compatibility Plan (ALUCP).

Height is measured using the height above exterior finished grade per the definition in Section 5.3, Development Standards. In addition, structures must be compatible with the ALUCP, which measures height based on Mean Sea Level (MSL) – not based on the distance above exterior finished grade. The lower of the two standards shall apply.

The SFO ALUCP describes critical airspace surfaces in terms of height above MSL. In order to be consistent with the SFO ALUCP, specific development projects must adhere to the maximum allowable heights in the ALUCP, as stated in MSL. Developers of proposed projects must take into consideration the current grade of the site in relation to MSL in addition to the Above Ground Level (AGL) heights of proposed structures to determine compliance with the ALUCP height limits. Sponsors of the proposed projects shall provide the height of additional objects (towers, antennas, air conditioners, elevator equipment enclosures, etc.) extending above the main structure. These objects will be considered in airport land use compatibility airspace evaluations per Section 4.5.2 of the SFO Airport Land Use Compatibility Plan.

Sponsors of proposed projects should be notified at the earliest opportunity to file Form 7460-1, Notice of Proposed Construction or Alteration, with the FAA for any proposed project that would exceed the FAA notification heights.

Projects shall comply with the ALUCP Sections 4.5.4 and 4.5.5 as may be amended. A copy of the current provisions is attached as Appendix E.

*Height (of a Building or Structure): The measurement of the greatest vertical distance above the exterior finished grade to the highest point of the building immediately above, exclusive of antennas, chimneys, and roof equipment. The height of such antennas, chimney, roof equipment, or other rooftop structures shall be no more than otherwise permitted by the California Building Code. The height of a stepped or terraced building is the height of the tallest segment of the building.*

*Floor Area and Floor Area Ratio (FAR): The Floor Area of a building is the sum of the gross horizontal areas of all floors of a building or other enclosed structure, measured from the outside perimeter of the exterior walls. Floor area shall include all habitable space (as defined in the California Building Code) that is below the roof and within the outer surface of the main walls of the buildings and shall exclude all basement areas as defined by the California Building Code.*

*The Floor Area Ratio (FAR) is the ratio of the total horizontal Floor Area of all floors of a building or buildings on a parcel, divided by the total Gross Lot Area for the parcel. For the purposes of determining the Floor Area Ratio, the Gross Lot Area shall be the horizontal area within the exterior lines of the parcel.*

**TABLE 5-2.** DEVELOPMENT STANDARDS BY PLANNING AND OVERLAY ZONE

| | TOD | Residential Mixed Use | Employment Center / Light Industrial | Residential Overlay | Retail Commercial | Public Facilities |
|---|---|---|---|---|---|---|
| **Height** | | | | | | |
| Height (Max.)[1] | See Figure 5-2, Height Limits | | | | | |
| Height (Min.) | 2 stories | 2 stories | 2 stories | - | - | - |
| Ground floor Height (Min.)[2] | 15' | 15' | 15' | - | 15' | - |
| **Baseline FAR and Residential Density** | | | | | | |
| Minimum FAR [3] | 2.0 | 1.0 | 0.5 | - | 0.5 | - |
| Maximum FAR | 2.5 | 2.0 | 2.0 | - | 2.0 | 0.3 |
| Maximum Residential Density (dwelling units per acre) | 80 [4] | 60 [4] | 40 [4] | 30 | - | - |
| **FAR and Residential Density if Community Benefits are Provided** | | | | | | |
| Maximum FAR if Community Benefits are Provided [5] | [6] | 2.5 | 2.5 | - | - | - |
| Maximum Residential Density if Community Benefits are Provided (dwelling units per acre) [5] | [6] | 80 [4] | 60 [4] | - | - | - |
| **Setbacks** | | | | | | |
| Front Setback | See Section 5.3.(Street-Based Frontage) | | | | | |
| Minimum Interior Setback (side, rear) | 5' | 5' | 10' | 10' | - | N/A |
| Minimum Required Publicly Accessible Open Space (% of Lot Area) [7] | 10% | 10% | 10% | 10% | 10% | N/A |
| **Minimum Percentage of Total Number of Residential Units to be Affordable Housing for Very Low, Low, and Moderate Income Households [8]** | 15% | 15% | 15% | 15% | N/A | N/A |
| **Utility Infrastructure [9]** | See Chapter 8 | | | | | |

NOTES:
[1] Heights must be compatible with the San Francisco International Airport Land Use Compatibility Plan. Minor adjustments that pertain to building height increase within the maximum height range of 108 to 121 feet are also subject to compatibility and consistency determination with the Airport Land Use Compatibility Plan (ALUCP).
[2] Measured floor plate to floor plate.
[3] Community Benefits are required if the Baseline Minimum for FAR is not met. See Chapter 10 for Community Benefits Program.
[4] Dwelling units count towards FAR
[5] Community Benefits are required if the development proposes to exceed the Baseline Maximum FAR or Residential Density. See Chapter 10 for Community Benefits Program.
[6] Maximum FAR and Residential Density if Community Benefits are provided in the TOD zone are determined by height limits and setbacks.
[7] Open Space shall be calculated as the Gross Lot Area multiplied by the required Open Space Ratio.
[8] Affordable housing requirement shall be compatible with applicable law and implemented through on agreement negotiated with the City.
[9] All development projects shall install recycled water facilities for irrigation and provide connections to the City's fiber optic network as described in Chapter 8.


**FIGURE 5-2.** Height Limits

MSASP Boundary
City Boundary
Power Lines

Maximum Height*

108'-121'
90'-100'
85'
65'
45'
35'
30'
PG&E Easement

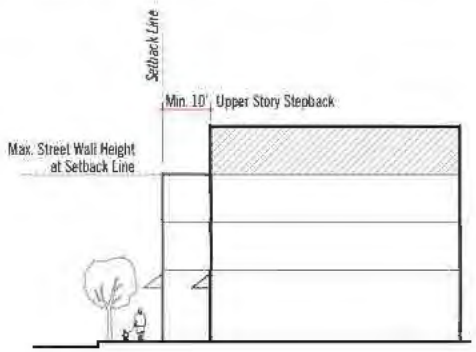
** "Height" is measured using the height above exterior finished grade level per the definition of page 5.8. In addition, structures must be compatible with the San Francisco International Airport Land Use Compatibility Plan, which measures height based on Mean Sea Level (not based on the distance above exterior finished grade level). The lower of the two standards shall apply. For the area between California Drive and El Camino Real, south of Victoria Avenue and north of Millbrae Avenue, the maximum allowable building heights indicated on the map include all rooftop structures and appurtenances, including towers, antennas, air conditioners, elevator equipment enclosures, etc.*

## STREET-BASED FRONTAGE STANDARDS

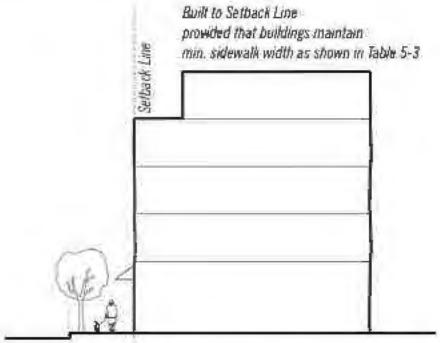
This section establishes standards for building edges adjacent to specific streets in the Plan Area. As shown in Table 5-3 and illustrated in Figure 5-3, the standards are set forth by street segment because of varying conditions, including widths, character, and use of the street. These standards shall be implemented in conjunction with the Streetscape Standards in Chapter 7.

### *Street Wall Height and Step-Backs*

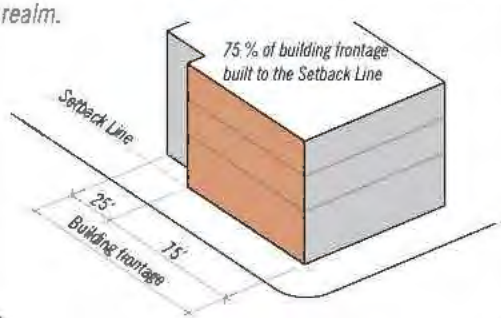
Standards for maximum street wall heights are set forth to break up building mass, lower the perceived building heights, and minimize shadow impacts. Upper floors beyond the street wall height limits shall be set back a minimum of 10 feet, as shown below. The intent of the street based frontage standards, including street wall heights and step-backs, is to provide a visually pleasing architectural style that avoids repetitive design, with particular attention being devoted to building elements at major entry corners, including Rollins Road at Millbrae Ave.




*Setback Line: This Specific Plan establishes building setback lines based on property lines. If the existing sidewalk width equals or exceeds the minimum shown in Table 5-3, the Setback Line equals the property line. If the existing sidewalk is less than the minimum width shown in Table 5-3, the Setback Line is set back from the property line the distance needed to achieve the minimum sidewalk width.*




*In general, at least 75 percent of building frontages should be built to the Setback Line to create a street wall that reinforces and activates the pedestrian realm.*



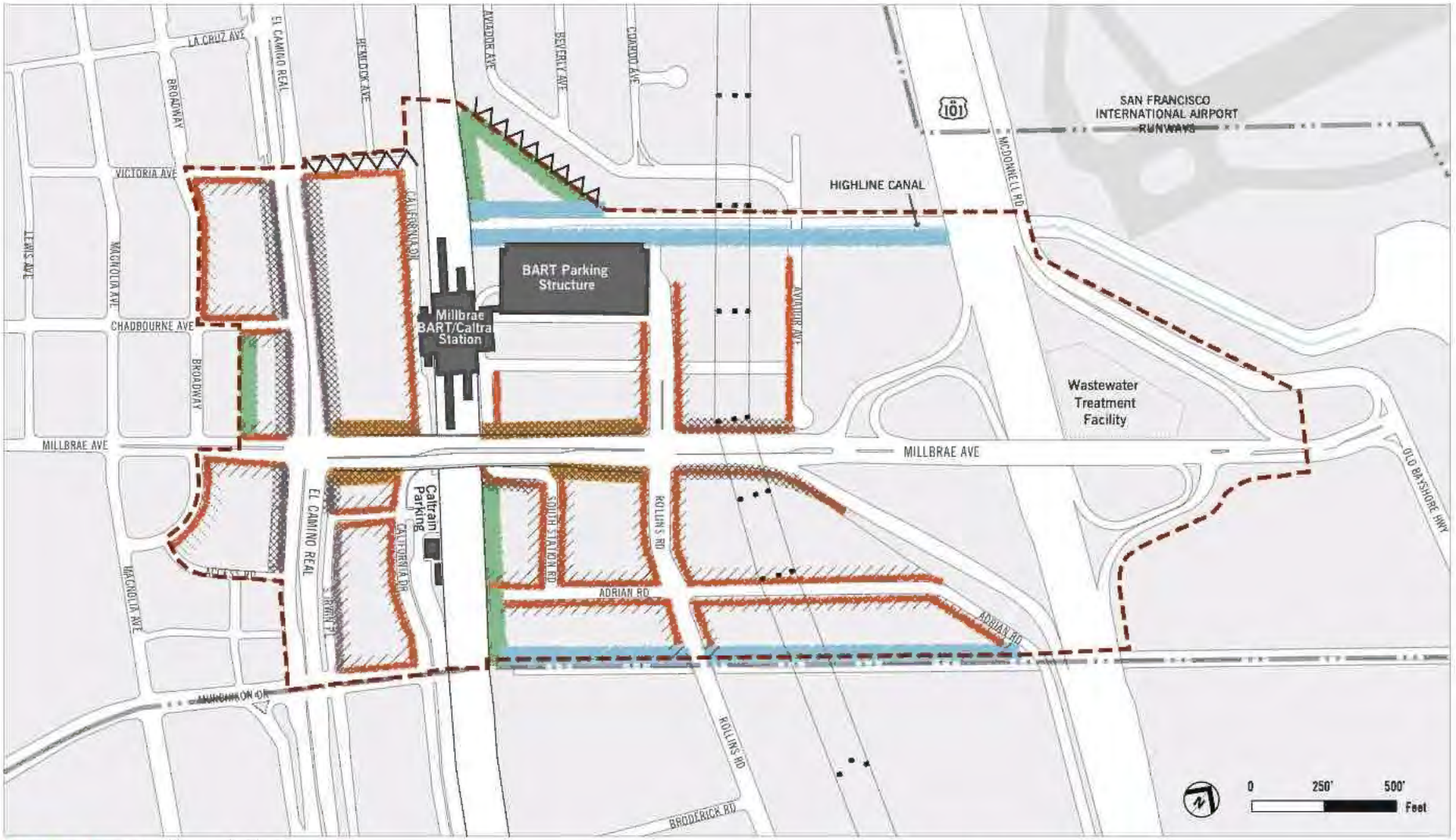




**FIGURE 5-3.** Sidewalk and Setback Requirements

- MSASP Boundary
- City Boundary
- Power Lines

Minimum Sidewalk Width*
6 feet if not identified
- 10 feet
- 12 feet

Special Building Setback Requirements
0 feet if not identified
- 20 feet from Milbrae Overpass Structure
- 20 feet Interioir Setback
- 35 feet Drainage Structure

Street Wall Height Limits**
- 65'
- 55'
- 35'

- Transition To Single-Family Neighborhoods

** See Table 5-3 for details.*

*** Within 600 feet of station, street wall height limit equals 100 feet.*

**TABLE 5-3.** STREET-BASED BUILDING FRONTAGE STANDARDS

| Street | Building Setback (Min.) | Sidewalk Width (Min.) | Street Wall Height at Setback Line (Max.) [2] |
|---|---|---|---|
| El Camino Real | Built to Setback Line | 12' | 65' |
| Millbrae Avenue | Built to Setback Line | 10' | 65' |
| Millbrae Overpass | 20' from the edge of the overpass structure to provide emergency access [1] | 10' | 65' |
| Rollins Road, South Irwin Place, Adrian Road, South Station Road (Long Term), California Drive, Murchison Drive | Built to Setback Line | 10' | 55' |
| Victoria Avenue, Chadbourne Avenue | Built to Setback Line | 10' | 55' |
| Broadway | Built to Setback Line | 10' | 35' |
| Highline Canal and El Portal Canal | 35' from the top of the bank to provide emergency access | N/A | N/A |
| Next to Bayside Manor Neighborhood | 20' from Property Line | N/A | 20' |
| Areas/Streets not Identified in this Table | Built to Setback Line | 6' | N/A |

[1] The portions of buildings below the overpass elevation could be built closer.
[2] If within 600 feet of Millbrae Station, street wall height of setback line may be a maximum of 100 feet.

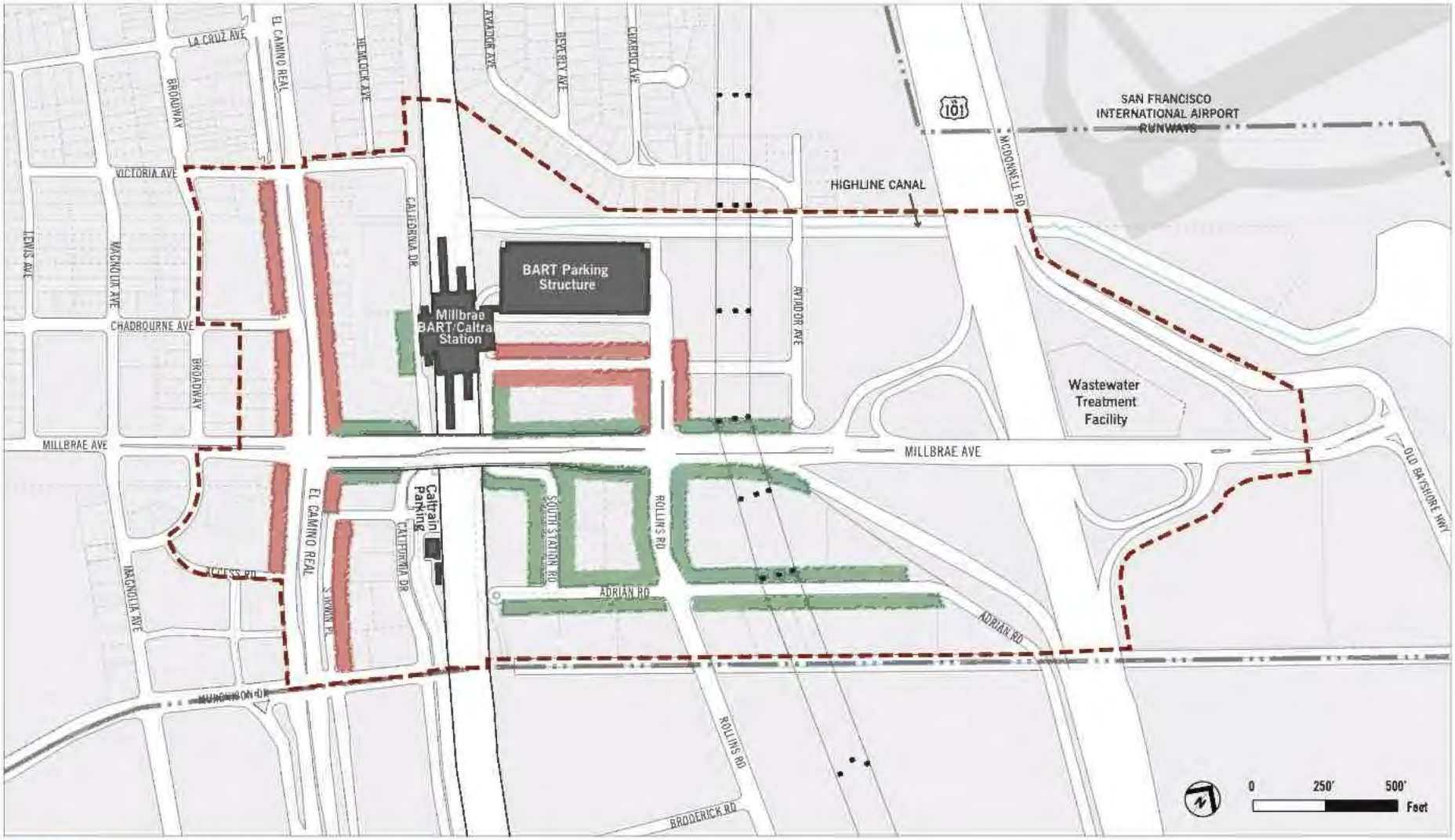



**FIGURE 5-4.** Active Frontage Types

MSASP Boundary

City Boundary

Power Lines

Active Frontage Type

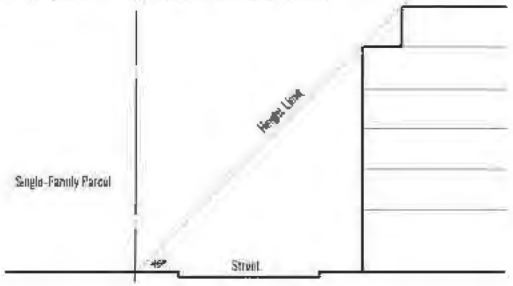
Type 1

Type 2

## TRANSITION TO SINGLE-FAMILY NEIGHBORHOODS

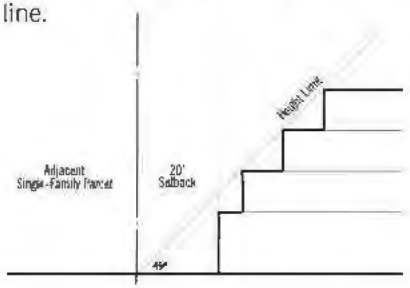
### *Parcels across the street from areas designated single family residential*

If a new building would be built across the street from areas designated as single family residential, the building height shall not exceed the line drawn at a 45-degree angle starting at the edge of the residential building's parcel line.




### *Parcels adjacent to areas designated single-family residential*

If a new building would be built adjacent to areas designated single family residential, the building shall set back 20 feet from the property line of the adjacent residential building, and the building height shall not exceed the line drawn at a 45-degree angle starting at the edge of the residential building's parcel line.




## ACTIVE FRONTAGE

*An active frontage is a building edge that is designed to promote pedestrian activity by providing pedestrian-oriented uses and visual interests to the street.*

This section defines two types of active frontages. Figure 5-4 shows where such types of frontages are required within the Plan Area. In general, active frontage treatments are encouraged throughout the Plan Area, wherever feasible. Where ground floor uses are not available, other design elements, such as entry lobbies and landscaping, shall fill the ground level facades to create an interesting streetscape for pedestrians, bicyclists, and even drivers.

### *Active Frontage Type 1: Very Active Ground Floor Uses*

This frontage type is intended to provide active ground floor uses to attract pedestrian traffic and create a vibrant streetscape. The following standards apply to Active Frontage Type 1:

- Active ground floor uses, including retail, restaurant, services, lobby entries, live/work, and community gathering spaces, are required to fill a minimum of 65% of the length of the building.
- 75% of the linear ground floor wall shall be transparent (consisting of windows and doors).
- The following uses are discouraged on the ground floor in the Type 1: Very Active Ground Floor Uses zone, but will be allowed upon approval of a conditional use permit: Banks and Financial Services, Business Support Services, Child Care Services, Health and Exercise Clubs of less than 3000 square feet, Medical Offices, and Office.

### *Active Frontage Type 2: Moderately Active Ground Floor Uses*

This frontage type is intended to create street frontages that are visually attractive and provide a sense of place and security when active ground floor uses are not applicable.

- Residential uses are allowed if residential entry doors are accessible from the sidewalk.
- Office uses are allowed if a minimum of 40% of the linear ground floor wall is transparent, and interior uses are visible from the sidewalk.
- Use landscaping and public art to screen blank walls.
- Structured parking shall be screened from pedestrian views.

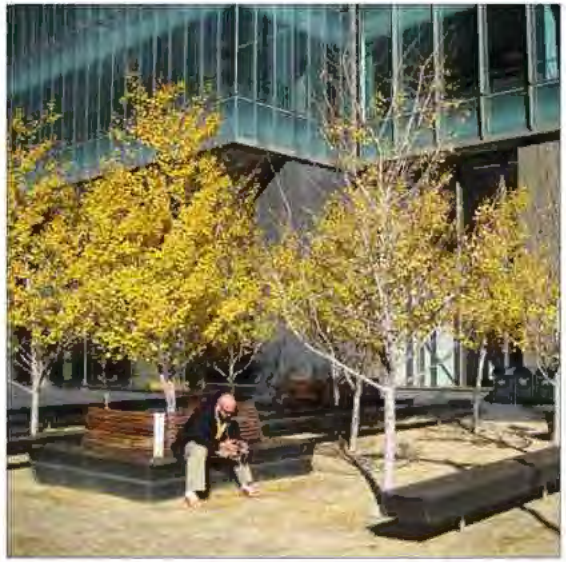
*A lively sidewalk with a pedestrian-friendly environment.*

## USABLE OPEN SPACE

Usable open space means outdoor or unenclosed areas on the ground, decks, porches, or terraces that are designed and accessible for outdoor living, recreation, pedestrian access, or gardening. Private open space, common open space, and publicly accessible open spaces, including paseos, are all counted in calculating usable open space. Streets, off-street parking and loading areas, driveways, utility or service areas, and required sidewalks are not counted as usable open space. Usable open space shall provide trees, seating, landscaping, shading, and lighting, as required in Chapter 6, Private Development Design Standards and Guidelines.

### *Publicly Accessible Open Space*

To provide the quality open space in sufficient quantity and variety and meet the needs of workers, residents, and visitors in the Plan Area, this section requires all development projects to provide publicly accessible open space within the TOD, Residential Mixed Use, Office, and Retail Commercial zones, as established in Table 5-3. Publicly accessible open space can take forms of plazas, terraces, front courts, rooftop gardens, and pocket parks, and shall be maintained by the developers. Public open spaces shall be located near building entrances, street frontages, or along public and publicly accessible pedestrian connections. The design of publicly accessible open space should follow the Design Guidelines in Chapter 6 of this Specific Plan.



*Private open space is accessible only to one unit of subdivided space. Common open space is accessible to all users in a single building. Publicly accessible open space is accessible to the general public at least 12 hours a day.*


## OFF-STREET PARKING STANDARDS

Off-street parking standards are designed to ensure that the right amount of vehicle parking is provided. Too much can incentivize driving and increase traffic congestion, and too little can cause parking to intrude into adjacent areas and neighborhoods. With appropriate parking standards, the transportation system can better accommodate the vehicle trips generated by a development.

These parking standards incorporate recent information and recommendations in the Metropolitan Transportation Commission (MTC) Parking Policies Toolbox for Suburban Center/Town Center* and ratios in the Pleasant Hill BART Station Plan. For restaurant uses, which have a high demand relative to gross square footage of the establishment, the upper end of parking requirements recommended by the MTC guidelines are used for transit-oriented restaurants, and rates supported by the Urban Land Institute's (ULI's) shared parking methodology are used for other Plan Area restaurant development.

The minimum parking requirements outlined in Table 5-4 apply to developments that do not employ other parking management techniques. Developments that incorporate other parking and transportation demand management techniques to reduce demand outlined in Chapter 7—including shared parking, employer TDM programs, subsidized transit passes, and rideshare incentives—could result in negotiations between the City and developers to provide lower parking requirements.

**"Suburban Centers and Town Centers are generally located in the center of communities with less density as compared to urban downtowns. Typically, these areas contain a good mix of medium or low-rise office buildings and housing types including townhomes and apartments. These locations can act as both origin and destination settings. The parking environment is typically defined by ample surface parking lots, however, suburban downtowns also tend to have a good mix of transit service with direct connections to urban settings, (e.g. San Francisco, Oakland, and San Jose). Examples of suburban centers and town centers include Walnut Creek, Concord, San Mateo or Palo Alto." (Reforming Parking Policies To Support Smart Growth, Metropolitan Transportation Commission, June 2007)*

**TABLE 5-4.** MINIMUM OFF-STREET PARKING REQUIREMENTS

| Land Use | Parking Ratios | |
|---|---|---|
| | Transit-Oriented | General |
| Office | (within 800' of station)<br>1.5 spaces per 1,000 gsf [1] | 2.5 spaces per 1,000 gsf |
| Hotel | (within 800' of station)<br>0.4 space per room | 1 space per room |
| Residential | (within 600' of station)<br>1 space per unit | 1.25 spaces per unit |
| Restaurant | (within 600' of station)<br>5.0 spaces per 1,000 gsf | 6.5 spaces per 1,000 gsf |
| Retail | (within 600' of station)<br>1.5 spaces per 1,000 gsf | 3 spaces per 1,000 gsf |

Source: Fehr & Peers, 2015; Metropolitan Transportation Commission, 2007; Contra Costa County Board of Supervisors, 1998; City of Millbrae, 1998.
[1] Gsf = Gross square feet
[2] "Station" is the Millbrae BART/Caltrain Station as shown on Figure 1-2, Millbrae Specific Plan Area.
[3] The maximum amount of parking provided shall not be greater than five percent more than the minimum off-street parking requirements (for retail uses, 10 percent more than the minimum) as set out in this table unless, based on a parking study, the project sponsor demonstrates that additional parking is required because of the specific nature of the proposed land use, or prevailing parking demand at the Millbrae Station.

## BIKE PARKING REQUIREMENTS

Bicycle parking generally falls into two categories: long-term (Class I) and short-term (Class II). Long-term bicycle parking serves parking needs of longer than two hours and is used by bicyclists who prioritize greater security and protection from the elements. Short-term bicycle parking serves parking needs of shorter than two hours and is used by bicyclists who prioritize convenience and accessibility.

### *Long-Term Bicycle Parking*

Long-term bicycle parking offers a secure and sheltered facility for an extended period of use. The provision of high-quality long-term bicycle parking has been shown to increase bicycle mode share among individuals who might otherwise be discouraged for fear of theft or exposing their bicycle to the elements.

Long-term bicycle parking can be provided in a number of different forms, including bicycle rooms or cages, bicycle stations, and bicycle lockers. There are a wide variety of possible site plan layouts for long-term bicycle parking facilities, and all should focus on ensuring the safety of users and maintaining exclusive and easy access to the area.

Long-term bicycle parking should have:

- Easy access through clear visibility or wayfinding signage;
- Convenient access within 200 yards of building or Millbrae Station entrance;

- Controlled access with key, smartcard, keycard, or code;
- High level of security, including effective lighting and visible surveillance cameras or security guards;
- Weather protection using free-standing shelter or indoor cage/room; and
- Lockers/changing areas and showers.

For bicycle racks inside cages and rooms, adequate clearance from walls and other fixed objects is necessary to allow parking of bicycles. Aisle spacing should allow for use of racks and entry/exit by simultaneous users.

### *Short-Term Bicycle Parking*

The majority of bicycle parking is short-term parking. Short-term bicycle parking fills the most basic need of providing a place for people to lock their bikes. Demand for short-term bicycle parking is often greatest around commercial districts, schools, libraries, parks, and transit stops.

Short-term bicycle parking can be provided in the following forms:

- Sidewalk bicycle racks and meter bicycle rings are placed on sidewalks throughout the area.
- On-street bicycle corrals are placed in the roadway parking lane where bicycle parking demand is greater than can be accommodated on the sidewalk. Corrals typically fit 8-12 bicycles per vehicle parking space.

Short-term bicycle parking should:

- Be located in the public right-of-way at a convenient site no more than 50 feet from a building entrance;
- Be placed near the curb, outside the path of pedestrian travel and parked vehicles;
- Be located in a high-traffic area;
- Support the bicycle in at least two places to prevent it from falling over;
- Allow locking of the frame and one or both wheels with a U-lock;
- Be securely anchored to the ground; and
- Resist cutting, rusting, and bending or deformation.

### *Bicycle Parking Policies and Codes Overview*

Bicycle parking policies and codes should be based on best practices and a city's bicycling potential. It is recommended that policies and codes:

- Require long-term bicycle parking for all workplaces, multi-unit residences, and at Millbrae Station;
- Require adequate short-term parking for other land uses;
- Specify the number of required bicycle parking spaces by land use;
- Provide bicycle parking facility site planning requirements; and
- Provide bicycle rack and locker design requirements.

Rates of bicycle parking should meet current demand, at a minimum, and also meet goals for future mode share. Rate requirements can be based on unit count, proportion of building square footage, building occupancy, or transit ridership. It is not recommended to link bicycle parking to vehicle parking requirements, given the trend towards parking maximums whereby a reduction in car parking requirements could have a deleterious effect on bicycling parking.

*Long-term bike parking*

***Bicycle Parking Rates***

This section establishes bicycle parking rates as shown in Table 5-5 based on a sample of best practices conducted by Association of Pedestrian and Bicycle Professionals (APBP), LEED Sustainable Sites credit requirements and BART's 2002 Bicycle Access and Parking Plan. The Specific Plan includes provisions to allow additional long-term bicycle parking beyond the required minimum to substitute for up to 15 percent of the required automobile parking, where for every five non-required long-term bicycle parking spaces, the automobile requirement is reduced by one space (Recommended in Driving Urban Environments: Smart Growth Parking Best Practices, Governor's Office of Smart Growth, Maryland, 2003-2007).

**TABLE 5-5.** BIKE PARKING REQUIREMENTS

| Activity Type | Long-Term Bicycle Parking Requirements | Short-Term Bicycle Parking Requirements |
|---|---|---|
| Multi-Family Residential | 0.5 spaces for each bedroom, including studio units. | 0.05 spaces for each bedroom, including studio units. |
| Office | 1 space per 10,000 square feet of floor area.<br>OR<br>Adequate spaces to accommodate 5% of building users (measured at peak periods). | 1 space per 20,000 square feet of floor area. |
| Retail | 1 space per 12,000 square feet of floor area. | 1 space per 2,000-5,000 square feet of floor area. |
| Off-Street Parking Lots and Garages Available To General Public | 1 space per 20 automobile spaces. | 1 space per 20 automobile spaces. |
| Millbrae Station | Adequate spaces to meet existing demand plus an additional 10% for future growth. | Adequate spaces to meet existing demand plus an additional 10% for future growth. |

Source: APBP Bicycle Parking Guidelines, 2nd Edition, 2010; BART Bicycle Access and Parking Plan, 2002

## 5.4. LAND USE DEFINITIONS

This section includes land use definitions.

**Adult Education**
Instructional and related support services for adults who are out of school or college.

**Banks and Financial Services**
Financial institutions providing on-site banking services to customers. This definition includes only those institutions engaged in the on-site circulation of money, but excludes check-cashing establishments.

**Bars**
A commercial establishment whose primary activity is the selling and serving of alcoholic beverages to be consumed on the premises and in which the service of food is only incidental to the consumption of such beverages; including taverns, lounges, pubs, wine bars, and beer gardens.

**Business Support Services**
An establishment that provides services to other businesses on a fee or contract basis. This definition includes computer rental and repair, catering, printing and duplicating services, outdoor advertising services, package delivery services, equipment rental and leasing, and other similar land uses.

**Child Care Services**
A facility providing daytime supervision and care for children under 18 years of age for periods of less than 24 hours. Care facilities serve between 1 and 14 children. This definition includes family day care homes, day care centers, infant centers, preschools, and extended day care facilities.

**Commercial Lodging**
Any building, or group of attached or detached buildings, or portion thereof, containing guestrooms or units, with or without kitchen facilities, in which lodging is offered for compensation, such as hotels and motels, which shall be used for stays of less than thirty days.

**Community Center**
A building, or portion thereof, used as a place of meeting, recreation or social activity and not operated for profit.

**Conference Center**
A building or structure which houses one or more of the following: Cafeteria or dining room for employees or a related office complex, kitchen, ballroom, and banquet room.

**Drive-In and Drive-Through Facility**
A business establishment that either wholly or partially provides service(s) and/or product(s) through a window directly to patrons who remain in their vehicles. Examples include prepared food, photo finishing services, pharmacies, computer repair, coffee kiosks, and banks.

**Duplex**
A building consisting solely of two dwelling units.

**Fuel and Service Stations**
A retail business where flammable or combustible liquids or gases to be used as fuel are stored and dispensed from fixed equipment into the fuel tanks of motor vehicles. Service stations may also supply goods and services essential to the normal operation of automobiles including the sale and service of tires, batteries, and automotive accessories and replacement items, and lubrication service, but not including body or fender work, automobile painting, major motor or running gear repairs, or storage of damaged or wrecked vehicles.

**Health and Exercise Club**
An indoor fitness center or health club that provides exercise machines, free weights, or a swimming area for use by clients.

**Indoor Commercial Recreation**
A recreation facility operated as a business and open to the public for a fee, entirely within a building, including, but not limited to: arcades, art galleries, bowling alleys, athletic or health clubs, gymnasiums, museums, performance theaters, swimming pools, ice skating rinks, billiard halls, motorized cart tracks, comedy clubs and nightclubs. Establishments, such as a restaurant or laundromat, that offer a small number of game machines to its customers as an accessory use are excluded from this definition.

**Liquor Stores**
A business where the principal use is the sale of alcoholic beverages for off-premises consumption.

**Live/Work Unit**
A space within a building permitted for joint use for both nonresidential and residential purposes where the residential use of the space is clearly secondary or accessory to the principal use as a place of business, the residential space is directly accessible from the nonresidential space, and the residential space is occupied by a person(s) working within the nonresidential space. The covenants, conditions and restrictions (CC&Rs) for specific projects will define the parameters under which live/work units will operate.

**Medical Office**
An office dedicated for use exclusively by a physician, dentist, orthodontist, ophthalmologist, chiropractor, physical therapist, acupuncturist, psychiatrist, psychologist or similar medical practitioner, on an appointment-only basis with no overnight care.

**Multiple-Family Dwelling**
A building or portion thereof, designed and constructed as four or more individual dwelling units.

**Off-Site Construction Staging**
The temporary storage of construction materials or equipment on property that is not the site of the construction itself.

**Offices**
The conducting of the business or affairs of a profession, business service, non-profit organization, agency, public utility and/or government entity which provides the following services to the business community or general public: professional services (such as architectural, engineering, legal services, accounting, tax preparation or interior design), insurance, management, consulting, technical, advertising, public relations, computer and data processing services, multimedia, software development, web design, electronic commerce, information technology or other computer-based technology, employment agencies, real estate offices, travel agencies, and other services determined by the Community Development Director to be of a similar character and intensity of use. This use category expressly does not include check-cashing facilities, saving and loan associations, banks, medical laboratories, medical clinics, hospitals, or medical research facilities.

**Parks and Recreational Facilities**
A non-commercial public facility that provides active or passive recreational opportunities. This definition includes community parks, regional parks, community centers, urban plazas, ball fields, tennis courts, indoor and outdoor swimming pools, gymnasiums, and other similar facilities. Limited service commercial activity that is directly related to the recreation activity conducted on site is also included in this definition.

**Personal Services**
An establishment that provides services to individuals and that may provide accessory retail sales of products related to the services provided. This definition includes beauty salon, barber shops, pet grooming services, tattoo parlors, body piercing, tanning salons, nail salons, tailors, laundromats, massage parlors, dry cleaners, cosmetics, day spas, and other similar land uses.

**Public Electric Vehicle Charging Station**
A public parking space served by electric vehicle supply equipment and the primary purpose of which is to charge electric car batteries.

**Research & Development Facility**
A facility that is intended to foster physical, chemical and biological research and/or experimentation located in an office building. This definition includes chemical, biological, and physical research; computer hardware and software development; light manufacturing (including instrumentation and pharmaceutical development); industrial design and physical experimentation; synthetic development; and prototype design and manufacturing.

**Restaurant**
An establishment where food, beverages and/or desserts are prepared on site and are served to patrons for consumption on or off the premises and which may or may not provide seating and shall include, but are not limited to, coffee shops, bakeries, cafeterias, sandwich shops, and diners, excluding take-out only restaurants.

**Retail Sales**
A commercial establishment engaged in selling goods within a building directly to customers. This definition includes drug stores, general merchandise stores, antique shops, department stores, and other similar retail establishments.

**Supermarket (less than 15,000 square feet)**
A retail establishment offering a wide variety of departmentalized food and household merchandise and may contain a deli, bakery, florist, bank, pharmacy, photo processing, or other ancillary uses within the store.

**Transit Facilities**
A depot or station that functions as a passenger loading and unloading facility specifically designed for public and private transportation modes, such as buses and trains, but excluding airports and airport operations.

**Utility Services**
All infrastructure related to the supply and maintenance of power, water, and communications including, but not limited to, electric distribution substations and transmission lines, service yards and field operating centers, communications equipment cabinets and buildings, and public utility pumps, wells, and valve stations.

**Wireless Communications Facilities**
A facility that transmits or receives electromagnetic signals for the purpose of transmitting voice or data communications. Includes antennas, towers, poles, microwave dishes, equipment buildings and other ancillary structures, development and uses.

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# 6

# PRIVATE DEVELOPMENT DESIGN STANDARDS & GUIDELINES

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# 6. DESIGN STANDARDS AND GUIDELINES FOR PRIVATE DEVELOPMENT

The Design Standards and Guidelines contained in this chapter are intended to promote well-designed and viable development projects within the Plan Area that support the goals and vision of the Specific Plan. These design standards and guidelines also augment the Development Standards in Chapter 5. While the Development Standards are mandatory requirements that regulate height, bulk, massing, and development density for new development, these design standards and guidelines govern design issues, such as scale, building materials, and character. Taken together, the Development Standards and Design Standards and Guidelines provide a framework for property owners, architects, and City staff to follow when planning and reviewing development projects. The language in this Chapter follows these principles:

"Shall" or "must" refers to a mandatory design standard that all projects must follow.

"Should, "may", or "encouraged" refers to a design guideline that the City recommends for all projects. While design guidelines provide design flexibility, they are strongly encouraged so that new projects help support an improved public realm, high quality buildings, and an attractive place to live, work, and visit.

Project approval pending adherence to the standards and guidelines found in this Chapter will be at the discretion of the Community Development Director, who may reserve the right to require guidelines as standards for certain projects.

*plazas and public gathering spaces help create a sense of place*

*A plaza next to a transit station with seating areas, wayfinding signage, pedestrian lighting, and public art*

# 6.1. MILLBRAE STATION AREA CHARACTERISTICS

This section describes the specific local context in Millbrae that future development must consider in designing a project. Standards and Guidelines are provided for each context.

## TRANSIT HUB DESIGN

The Plan Area serves as a regional and local transit hub that links different modes of travel. The transit hub includes the development opportunity areas located immediately west and east of the station. To the west, the transit hub areas include all the areas between the tracks and El Camino Real and north of Millbrae Avenue within the Plan Area. To the east, the transit hub includes the development opportunity areas where the BART surface parking areas are currently located. Buildings and open spaces in and around the transit hub should be designed to support a high level of pedestrian activity and promote the comfort and convenience of transit riders.

### *Standards*

» Development adjacent to the station shall provide publicly accessible plazas and public gathering spaces that cater to transit users. Such spaces should be visible and directly accessible from the station. At least one central publicly accessible space with a minimum dimension of 30 feet shall be provided on each development site, except for individual infill projects on parcels with frontage of less than 100 feet.

» Development shall prioritize pedestrian, bicycle, and transit access over vehicle access.

» Development shall provide clear and safe connections to and within the station area. Wayfinding signage shall be oriented to travel mode (pedestrian, bicyclists, or vehicles) and shall direct people to the station and shall be highly visible and easy to read.

» Transit-supportive amenities, such as convenient cafés and seating areas, shall be located on the most highly traveled routes to the station.

» Buildings adjacent to the station shall provide a direct pedestrian connection to the station, including front entrances, walkways, and paved connections to public streets that lead to the station.

### *Guidelines*

» Plazas and public gathering spaces should incorporate pedestrian amenities, outdoor seating, landscaping, shade trees, lighting, and public art.

- Open spaces and buildings should help foster a community identity for Millbrae and create a sense of place by incorporating unique architectural styles, materials, and innovative design approaches. Buildings may be designed with striking design elements, strong color palettes, and other highly recognizable features to further highlight the importance of the station area and showcase state-of-the-art architecture.

## GATEWAY DESIGN

The Plan Area includes two major corridors, Millbrae Avenue and El Camino Real, that lead residents and visitors to the city of Millbrae. Buildings and open spaces framing these corridors should be designed carefully given their prominent location in order to reinforce the gateway function of the streets.


*corner treatment to help create a prominent gateway*

***Standards***

- Buildings at major entries, corners, or intersections on Millbrae Avenue and El Camino Real shall include special architectural features, such as corner towers, to help create a prominent gateway.

***Guidelines***

- At major intersections, special gateway features are encouraged, including special paving, signage, public art, and landscaping. To the extent feasible, gateway features should be designed to coordinate with streetscape designs as required in the Streetscape Standards in Chapter 7 of this Specific Plan.
- Install attractive landscaping along all gateway corridors.

## PREVAILING WIND

Wind conditions are directly related to pedestrian comfort. Millbrae is located in an area that is frequently exposed to high wind and fog. Design features and other mechanisms that ameliorate these conditions should be considered in new development.

Tall buildings near or over 100 feet often funnel winds and affect wind patterns at the pedestrian level. Since pedestrian level wind can discourage pedestrian activities, wind should be considered in site planning and building design.

***Standards***

- Building massing shall be broken into smaller pieces to reduce the creation of wind tunnels. This may include setting back upper floors from ground floors in new buildings to redirect winds.
- For buildings over 65 feet, developers shall provide documentation to explain wind control features in projects.

***Guidelines***

- Ensure open spaces are enclosed and protected from prevailing winds.
- Plant tall trees with dense foliage along streets susceptible to wind to reduce wind funneling effects by mitigating winds. If appropriate in the location, shrubs can be planted at tree bases to help block winds closer to the ground level.
- Other wind-mitigating features include placement of awnings on building facades, street and frontage plantings, articulation of building facades, or the use of a variety of architectural materials.

## NEIGHBORHOOD TRANSITIONS

New development should respect the scale and character of adjacent single-family neighborhoods by providing appropriate setbacks and by limiting the general scale of development near them. The impact of lighting and other elements should also be considered and mitigated in the design of future projects adjacent to single-family residential uses.

### *Standards*

- Adequate buffer or setback shall be provided between new buildings and properties zoned as single family residential as required in Chapter 5 of this Specific Plan. If a new building is to be built adjacent to single family homes, the building shall set back 20 feet from the property line of the adjacent single family home. The setback area can consist of open space, a street, or a paseo. Landscaping along property shall be provided as a screen or buffer.

*landscaped setback area*

- New development massing shall be divided into smaller scale elements to respond to the scale of adjacent residential neighborhoods and provide a gradual transition in height and frontage character.

### *Guidelines*

- Loading, trash, and maintenance areas should be carefully located to avoid their exposure to adjacent residential uses.
- All light sources should be directed downward and shielded to prevent light and glare spillover onto adjacent residential properties.

## OUTDOOR ROOMS

"Outdoor rooms" are defined as usable urban open spaces enclosed by buildings or other vertical features. Millbrae has a climate amenable to the public use of outdoor space as long as they are sheltered from wind. New development should seek opportunities to frame entry areas, courtyards, paseos and similar spaces that create inviting useful 'outdoor rooms' where residents, visitors, employees, and transit users can take advantage of the mild climate.

*landscaped open space can provide a smooth transition to adjacent residential neighborhoods*

*outdoor room*

***Guidelines***

- Outdoor rooms should be visible from the public streets.
- Outdoor rooms should be large enough to allow for integration of landscaping, signage, and seating.
- Outdoor rooms should be landscaped in a manner that encourages active use and should be directly connected to building interiors. When possible, retail should front theses spaces to activate them.
- Outdoor rooms should be consistent with design guidelines in the Outdoor Rooms section of this chapter.

### ENHANCING THE CHARACTER OF MAJOR ARTERIALS

The two major arterials in the Specific Plan Area, Millbrae Avenue and El Camino Real, are currently primarily auto-oriented streets that act as barriers to the south and west of the transit hub. New development in the Plan Area along these corridors can help transition their character to be more pedestrian-friendly and architecturally unique and interesting.

***Standards***

- Primary building facades shall face onto Millbrae Avenue or El Camino Real. Where Millbrae Avenue becomes an overpass, new development shall still face the street with well-designed building frontages.
- Large scale street trees shall be provided to create canopy consistency and rhythm as required in the Streetscape Standards section in Chapter 7 of this Specific Plan.
- Front pedestrian entries to buildings shall be accessed directly from Millbrae Avenue or El Camino Real. Where necessary, provide passages from parking areas that exit onto Millbrae Avenue or El Camino Real and lead to front building entries along these streets.

***Guidelines***

- Where Millbrae Avenue becomes an overpass, building entries are strongly encouraged to directly access the pedestrian and bicycle path on the overpass.

## 6.2. GENERAL DESIGN STANDARDS AND GUIDELINES

### SITE PLANNING

A comprehensive site planning approach should be taken for placing buildings, framing streets, designing vehicular and pedestrian circulation, access and parking, and planning open space. The following design guidelines focus on improving the relationship of new developments to streets and enhancing the pedestrian environment next to and through new developments.

- Building Orientation: Buildings shall frame and invigorate the public realm of streets and active open spaces, with well-proportioned, human-scaled building features and amenity areas to create comfortable and interesting environments that invite pedestrian activity. Orient active ground floor spaces of buildings towards open spaces, streets, and pathways.
- Open Space Placement: Open spaces shall be located close to pedestrian areas, such as streets, on-site pathways, or primary building entries.

*open space that provides shade trees and allows sunlight*

*street corner enhancement*

- Circulation: Each project shall provide safe and clear connections for all modes of transportation, both internally and to existing streets, open spaces, and adjoining neighborhoods. Breaks or interruptions on sidewalks for driveways should be limited in number and width to reduce conflicts with pedestrians. Include safe, direct pedestrian connections within and around the site.
- Parking Placement: Surface parking areas shall be placed away from public streets and open spaces. Buildings shall be placed between along public areas to screen parking areas behind. Where parking is incorporated in the building envelope, it shall be lined with screening and active uses to the greatest extent possible.
- Environmental Consideration: Consider natural factors, such as solar orientation, passage of light and airflow, and prevailing wind patterns, when placing buildings and open spaces. Open spaces should include areas that provide shade and sunlight during different times of the day, as well as areas protected from the wind if necessary. Similarly, building orientation should consider topographic conditions and cardinal direction to contribute to environmental quality by minimizing energy use and grading.
- Integral Design: Projects should adopt a clear and strong architectural idea or design concept that makes the building or building ensemble read as part of a whole. This integral design concept should be extended to all portions of a building, as well as its signage and circulation system, allowing tenants or visitors to easily navigate their way within the project.
- Street Corners: Buildings or public plazas shall be placed on street corners to acknowledge the prominence of the corner. Include special architectural and building design features at street corners, such as taller building elements or architectural detail. Locate the main entrance of corner buildings at the corner, where feasible.


*corner entrance*

*Clear distinction between base, middle, and top; the base of the building at the ground level should be articulated with high quality materials to provide an attractive pedestrian environment; the top should define a distinct outline with elements, such as projecting parapets, cornices, or other projections*

*building articulation breaks up the street-facing building facade*

## BUILDING DESIGN

### *Building Articulation and Massing*

- Large building mass and bulk shall be broken up by modulating building exteriors. To establish a human scale along project frontages, building façades shall provide features that break up building massing at intervals of 25 to 50 feet. The overall length of individual building volumes shall not exceed 500 feet in length unless the site is designed with a series of smaller buildings separated by pedestrian pathways. Under any circumstance, after 500 feet, a new development building shall provide either a new connection or a pedestrian route to break apart the buildings into smaller segments.
- In residential buildings, changes in massing and architectural details should be used to differentiate individual units, such as window bays, balconies, porches, and recessed features.
- Upper levels should be shaped to increase solar access, light, and air to adjacent lower structures, on- and off-site open spaces, and adjoining land uses.
- Tall buildings should feature a clear distinction between their base (ground floor), middle, and top.

### *Building Entrances*

- Buildings should be designed so that all entries are easy to find and are visible from public rights-of-way.
- In mixed-use buildings, residential entries should be differentiated from commercial entries using different scales and architectural design.
- Primary building entrances should include architectural features that give them prominence, such as recessed entry bays, tower elements, moldings, lighting, overhangs, or awnings.
- When locating pedestrian seating and bicycle parking, areas near building entrances should be prioritized.
- Provide multiple entrances into large buildings, such as those that occupy most of a city block. These entrances should be located and arranged to create a rhythm.

### *Ground Floor Design*

- Transparent windows, storefronts, show windows, building entries, dwelling entries, and other active uses shall be placed along street and public open space frontages, as required in the Active Frontage section in Chapter 5 of this Specific Plan.
- Doors or sliding windows should enable ground-floor restaurants and retail to expand into outdoor amenity areas along sidewalks.
- High-quality materials, detailing, and intensity of color should be utilized adjacent to sidewalks. Particular attention should be given to enhancing building entries and other ground floor openings.

*multiple entrances create building rhythm*

*active ground floor*

### *Windows*

- Upper story windows should be enhanced with architectural details, such as sills, molded surrounds, and lintels, or the use of recessed or projected windows.
- Windows should be arranged and aligned to establish rhythms across the façade. Recessed or projected windows could create patterns.
- Street-level glazing should be clear. Transparent glazing at upper levels may be lightly tinted. Reflective glazing is strongly discouraged.
- Non-reflective coatings, low-emissivity glass, and external shade devices should be used for heat and glare control.

*windows are arranged to create rhythm*

### *Architectural Character*

- Contemporary and innovative design styles are encouraged provided that the design includes human-scaled proportions and engaging, pedestrian-oriented ground-floor features.
- Franchise retail should adapt to the design character of the Plan Area.

*contemporary building with engaging ground-floor features and asymmetrical architectural elements*

## SUSTAINABLE BUILDING DESIGN

- Public open spaces should be designed and located such that they maximize sunlight exposure during the day. Buildings located to the south of a public open space should use step-backs to achieve maximum sunlight exposure.
- Sunlight exposure shall be considered when determining building locations and orientation, to maximize comfort and minimize energy use for building inhabitants by taking advantage of solar heat and light.
- Green building features and elements should be integrated into building designs. Consider incorporation of vegetated roofs and building walls, and horizontal and vertical photovoltaic panels. These features can also contribute to the realization of a unique building character.
- Potable water consumption shall be reduced and recycled water use should be increased with efficient plumbing fixtures, rainwater harvesting, dual plumbing, on-site greywater systems (systems designed to reuse wastewater from showers, baths, and handwash basins for other uses because of its relative cleanliness), and other stormwater features.

*building designed to maximize solar access*

- Energy-efficient insulation, heating, ventilation, and cooling systems that regulate the interior temperature of buildings throughout the day shall be used. Fully operable windows should be provided that can be adjusted throughout the day for maximum ventilation.

## VEHICLE DRIVEWAY DESIGN

- Access points and driveways for parking areas in new development shall be prohibited on Millbrae Avenue and El Camino Real. Driveways to parking areas on adjacent development sites shall be accessed by connecting side streets.
- Driveways should be designed to minimize conflicts with pedestrians and bicyclists. The number and width of driveways from parking areas onto the main frontage roadway should be minimized. Wherever possible, common access driveways are encouraged for adjacent lots to reduce the number of access points along roadways.
- Where a driveway crosses a sidewalk, clearly demarcate the sidewalk across the entire width of the driveway by using colored paving or materials.
- Indicate major vehicle entrances with special design treatments, such as entry signage or distinctive landscaping.
- If there is a driveway or parking entrance an audible buzzer should be installed.

*parking is accessed from a side street*

## OFF-STREET PARKING AND LOADING

- Parking shall be located behind, within, or under buildings, or within separate structures. Surface parking areas are prohibited between buildings and streets, with the exception of Aviador Avenue north of Millbrae Avenue. This will contribute to an attractive and active street frontage that is pleasant to walk along.
- Loading docks and service areas shall be located at the rear of the development or inside parking structures for parcels deeper than 80 feet, separate from parking areas. For smaller parcels, loading docks and service area must be located on the side street, wherever possible. Loading zones should not disrupt the flow of traffic within a given project area.
- For mixed-use projects, landowners should be encouraged to enter into shared parking agreements that allow uses with different peak hours of operation to utilize off-street parking facilities provided by another building or use.
- Parking garages shall be lined with active uses or residential entries, or designed with attractive building façades to screen structural elements of the garage. Above-ground parking garages should be designed to complement the overall building design on project sites. They should be wrapped with attractive facades that either include active spaces or screen the garage in an attractive way.
- The design of entries to parking garages should not be more prominent on the building façade than the primary pedestrian entry.

## BICYCLE FACILITIES

- Bicycle parking spaces shall be separated from automobile parking spaces by walls, fences, hedges, curbs, protective bollards, clearly demarcated and painted buffers, or other areas.
- Development projects in the vicinity of the station shall design a consistent and recognizable wayfinding signage package for bicycles along major wayfinding paths to the station.
- Bicycle parking should be located close to building entrances and bicycle routes to help make bicycling more convenient. Bicycle parking should be designed to accommodate a range of bicycle types, including standard bicycles and bicycles with trailers.

*parking structure wrapped with an attractive facade; covered bike parking separated from automobile parking*


*parking structure lined with active uses*

*bike parking in a convenient location*

*bike parking visible from surrounding buildings*

» Design bicycle commuter amenities into the buildings, including showers, lockers, repair stands, and wayfinding information.

## OPEN SPACE AND LANDSCAPING IN PRIVATE DEVELOPMENT

Open spaces provide opportunities to enhance both the public and private realm, and contribute to environmental quality by reducing stormwater run-off, improving air quality, and providing visual relief. Open spaces can provide much-valued "breathing room" within compact developments. They also provide a venue for people to recreate and gather, fostering an opportunity to create a shared sense of community.

The following standards and guidelines apply to those open spaces provided in private development, which may have varying degrees of public access. Open spaces provided in private development typically include paseos, plazas, pocket parks, and courtyards.

### *Publicly Accessible Open Space*

Publicly accessible open spaces should provide gathering spaces for employees, residents, and visitors within the Plan Area.

» Publicly accessible open spaces shall be made visible and accessible to public streets either by their location or clear and direct signage that leads pedestrians from the street to the open space.

» Buildings located to the south of a public open space should use step-backs to achieve maximum sunlight exposure.

» Projects should contribute street-level open spaces where private property meets public rights-of-way, such as plazas, seating areas, courtyards, and landscaped setbacks.

» Climatic factors, such as sun orientation and prevailing winds, shall be accounted for when locating open spaces.

» For larger projects, developers shall design a comprehensive open space network that includes plazas and other open space elements to connect different project components.

» For smaller projects, small plazas, courtyards, and other small outdoor spaces should create a visual connection to public areas, as well as a physical transition zone between the building and the street.

*public open space visible from public streets and directly accessible from buildings*


*public open space with special paving, playground, benches and umbrellas for shade*

» Open spaces should provide both shaded and sunlit areas. Shade can be provided by trees, shading structures, awnings, canopies, or umbrellas.

- Open spaces should be designed for day and evening use. Lighting fixtures and systems should act as an integral part of open space design.
- Some building windows shall be oriented toward the publicly accessible open space areas for natural surveillance of these areas.

### *Common Open Space*

Common open spaces are communal open spaces or recreational areas with access limited to tenants of a residential, commercial, or mixed-use development. Forms of common open space include plazas, courtyards, rooftop gardens, and similar areas that often provide communal amenities, such as swimming pools, playgrounds, and cabanas.

*common open space directly accessible from surrounding buildings*

- Buildings should provide enclosure for common open spaces, and secondary building facades should be oriented toward the common open spaces.
- Common open space should be accessible from all surrounding buildings. In multi-family residential developments, dwelling units or amenity areas should be sited adjacent to the common open space areas.
- Some building windows should be oriented toward the common open space areas for natural surveillance of these areas.

### *On-Site Landscaping*

Landscaping should be used to provide an attractive setting for development, soften hard building contours, shade walkways, gathering areas, parking areas, and other larger expanses of pavement, and screen any unsightly uses. Additionally, landscaping should aid in managing stormwater.

- Landscaping shall be used at the edges of paths, plazas, and seating areas as appropriate to help define the spatial organization of the site.
- For multi-family residential development, setback areas shall be landscaped to establish transition zones between the sidewalk and street-level residential units and entries.

*landscaping helps to define site's spatial organization*

- Landscaped areas shall be regularly maintained to keep them aesthetically pleasing, and to remove dead and dying plants.
- Gateway or entry points should be emphasized with distinctive trees and plants.
- Existing trees should be preserved and integrated into site designs to the extent feasible.
- To reduce water usage, all development shall employ water-efficient irrigation techniques, including micro–irrigation, drip systems, and weather-based irrigation controllers, instead of conventional sprinklers. Provide gray water recycling as an additional source of irrigation water to the extent allowed by the California Plumbing Code (CPC) and other applicable local ordinance standards.

*landscaping softens hard building contours*

- Native, drought-tolerant, or well-adapted tree and plant species shall be used to Millbrae's climate since they generally require less water and maintenance.
- Seasonal and year-round flowering shrubs and trees should be located where they can be most appreciated by site users and passersby, such as adjacent to walks and open space areas, or as frames for building entrances and stairs.

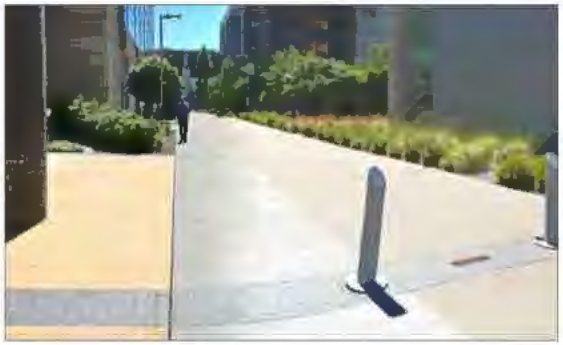
*landscaping with drought tolerant plants*

*entry point with distinctive trees and plants*

***Stormwater Management***

- Projects should minimize the amount of paved areas. Where feasible, paved areas should include "green" stormwater collection and treatment and employ Low Impact Development (LID) features that minimize surface water runoff. LID features may include bioretention systems, swales, green roofs, and permeable pavers.
- Stormwater retention features that minimize runoff into streets, parking lots, landscaped areas, and open spaces should be incorporated, whenever feasible. Stormwater retention features include drainage swales, and rain gardens.
- Where feasible, use permeable paving and materials for streets, sidewalks, parking lots, and driveways.

*landscaping integrates stormwater treatment features*



*landscape and paving patterns provide people with a sense of direction*

## CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

Streetscapes and private development shall be designed to ensure safety and crime prevention by applying the principles of Crime Prevention Through Environmental Design (CPTED). CPTED is a crime prevention philosophy based on the theory that the proper design and effective use of the built environment can lead to a reduction in the public perception and incidence of crime. CPTED principles include natural surveillance or "eyes on the street" as well as territorial reinforcement, which means a clear sense of ownership of space, both public and private.

- Natural Surveillance: The design of space shall promote "eyes on the street" by strategically locating windows, entrances, lighting, and other activity generators near a potential crime area.
- Natural Access Control: The design of walkways, fences, lighting, signage, and landscape should provide people with a sense of direction, while keeping unauthorized people out of a particular place.
- Territorial Reinforcement: Development shall use physical designs, such as pavement treatments, landscaping, and signage, to help users create a sense of proprietorship. Clear boundaries between public and private areas shall be provided.
- Maintenance: All development projects shall develop a maintenance plan to avoid neglected and poorly maintained properties, which can attract criminal activity.

*frequent windows and doors provide improved safety by having more "eyes on the street"*

## PUBLIC ART

Public art can provide visual interest to the pedestrian realm and enrich the visitor's experience by providing unique and interesting landmarks in Millbrae.

- Art should be incorporated into new development, whenever feasible, and should be placed in visible areas where many tenants, visitors, and other passerby can enjoy it, such as sidewalks, plazas, and common open space areas.
- Interactive art and functional art, such as creative seating, wayfinding, and lighting, is encouraged.
- Public art can be incorporated into walls, buildings, and paving.
- The design and placement of public art should not disrupt vehicle, bicycle, or pedestrian flow and safety.

*public art enriches the pedestrian experience*

*functional art*

## SIGNAGE AND WAYFINDING

Signage should be sized and placed appropriately for the intended audience, with larger signs visible from vehicle occupants, while sidewalk signage should be pedestrian oriented. Signage should contribute to and not detract from the overall character and design of new development.

- Development projects in the vicinity of the station shall design a consistent and recognizable wayfinding signage package along major wayfinding paths to the station.
- Wayfinding signage for pedestrians, bicyclists and drivers shall be appropriately scaled for each user.
- The physical design of signage should conform to the architectural detailing of the associated building. A coordinated signage and graphic design program shall be submitted to the City for review prior to project approval.
- Incorporate building scale, design, and materials selection into the design of all signs.
- A master sign program for multi-tenant buildings shall be developed to minimize potential visual conflict, clutter, and competition.
- Signage shall not obscure architectural details, such as recesses, structural bays, or fenestration, with signs.

- Externally illuminated or halo lit signs are encouraged. The use of internally lighted or box type signs should be discouraged.
- For ground floor retail uses, window signs should be placed in a manner which does not obscure primary views into and out of storefronts.
- For ground floor retail uses, hanging or projecting signs should be located near the front entry of a store. Coordinate with the overall design of the street wall. Hanging or projecting signs shall meet Americans with Disabilities Act (ADA) clearance requirements.

*ground floor signs coordinated with and proportioned to the overall building design*

- Freeway-oriented signage is limited to the area between Rollins Road and Highway 101 and shall comply with each of the following:
  - Freeway-oriented signs are defined as free-standing structures containing signage intended for motorists traveling on Highway 101.
  - Maximum allowable sign height, as measured above the finished grade at the base of the sign, shall be 50 feet.
  - Only one free-standing freeway-oriented sign may be permitted per "site development plan" as defined in the MSASP provisions of the zoning ordinance.
  - All signs must comply with the aircraft glide slope restrictions imposed by the Federal Aviation Administration (FAA) at the San Francisco International· Airport and written approval must be obtained from the FAA prior to City approval of a freeway sign.
  - Design Review approval by the Planning Commission is required in all cases.

# 7

# CIRCULATION AND PARKING

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# 7. CIRCULATION AND PARKING

This chapter describes the program of transportation improvements that will be necessary to support existing and new development in the Plan Area, as well as the volume of passengers accessing the Millbrae Station.

The transportation improvements discussed in this chapter have been designed to accommodate all travel modes and an intensification of development in the vicinity of Millbrae Station. The program introduces improvements to the Plan Area that will make travel by foot, bicycle, bus, and rail more efficient and attractive. Rather than treating the Millbrae Station as a single purpose transportation facility oriented to park-and-ride and shuttle access, the Specific Plan sets a strong vision for the redevelopment of adjacent sites in a manner that will better integrate the Millbrae Station into the surrounding residential and commercial activity.

The City of Millbrae shall ensure the Plan Area improvements identified in this chapter are implemented through the City's Capital Improvement Plan or in coordination with responsible private developers and/or transit agencies, including BART, SamTrans, and CHSRA. A list of major transportation improvements and responsible funding mechanisms are identified in Chapter 9 of this Specific Plan. The language in this Chapter follows these principles:

"Shall" or "must" refers to a mandatory standard that all projects must follow.

"Should, "may", or "encouraged" refers to a guideline that the City recommends for all projects.

## 7.1. PLAN AREA IMPROVEMENTS AND STRATEGIES

Concentrations of new commercial office, retail, restaurants, hotels, and housing near the Millbrae Station will help bolster transit ridership. In addition, the Specific Plan seeks to provide convenient and attractive transit staging areas on the east and west sides of the station, and provides for southbound SamTrans Route ECR service on California Drive (including the proposed north extension) to help improve access to rubber-tire transit (buses and shuttles). This chapter identifies improvements for local streets to make them attractive and safe routes for pedestrians and bicycles alike. Finally, a set of TDM strategies are identified to help reduce single occupant vehicle trips, as well as encourage alternative modes of travel.

### PEDESTRIAN FACILITIES

#### *Millbrae Station*

To improve pedestrian access to Millbrae Station, all station and parking structure entrances shall connect directly to a sidewalk, eliminating the need for pedestrians to walk through a parking area or a bus loading zone. Station and parking structure access points shall be located to shorten walking distances. A pedestrian paseo shall be constructed between the westside station entrance and El Camino Real to provide a grand station entrance and a major pedestrian connection between Millbrae Station and El Camino Real and bus stops on El Camino Real. In addition, the wide curb lane on northbound El Camino between Millbrae and Chadbourne Avenues presents an opportunity to improve the pedestrian environment and reduce El Camino crossing distance through additional sidewalk widening.

#### *Sidewalks*

The sidewalk network on the periphery of and internal to the Plan Area should be continuous, with sidewalks provided on both sides of the streets. Sidewalks shall be widened to a minimum of ten feet on minor streets and made even wider on commercial roadways like El Camino Real, Millbrae Avenue and Rollins Road, where sidewalks shall be at least twelve feet. New pedestrian paseos shall be provided along pedestrian desire lines throughout the Plan Area to connect buildings and the station, including from the west from El Camino Real and from the east from the shuttle pick-up/drop-off areas associated with new development on the current BART surface parking areas.

#### *Pedestrian Crossings*

All intersection crossings shall be improved to enhance pedestrian access, safety, and convenience at large and small intersections, including both signalized controlled and unsignalized uncontrolled crossings.

The following controlled crossings shall be improved:

- El Camino Real at Victoria Avenue
- Millbrae Avenue and Murchison Drive
- California Drive at Murchison Drive
- Rollins Road at Millbrae Avenue
- Rollins Road at Adrian Road

The following improvements shall be implemented:

- Crosswalks shall be striped in the "standard" pattern, with two solid white lines on each side of the crosswalk.
- Pedestrian refuge islands shall be included to break up the crossing and slow cars, where feasible.
- Audible pedestrian countdown timers shall be installed facing all directions to give notice to both drivers and pedestrians of the time remaining on the crossing signal.
- Signal timings shall allow for a pedestrian crossing speed of 3 feet per second and should aim to minimize pedestrian wait times.
- Pedestrian push buttons shall be included only where needed and are generally appropriate at locations with low or intermittent pedestrian activity. If used, pedestrian push buttons should be in clear view and wheelchair accessible.

At all uncontrolled crossings at minor intersections throughout the Plan Area, the following improvements shall be implemented:

- Crosswalks shall be marked with high visibility striping in the continental pattern, which consists of a series of wide stripes parallel to the curb for the length of the crossing.
- Pedestrian signage with fluorescent yellow-green background color shall be installed in advance of crossings to alert drivers to upcoming pedestrian activity

All crossings within the Plan Area:

- A crosswalk shall be marked on all legs to accommodate pedestrian crossing desires.
- Advance stop lines (solid white lines 12 to 24 inches wide) shall be painted across all approach lanes to indicate where vehicles must stop in compliance with a stop sign or signal. Advance stop lines reduce vehicle encroachment into the crosswalk and improve drivers' view of pedestrians.
- Fully accessible, ADA-compliant curb ramps and landings shall be installed on all corners to provide a safe place for people to wait and enter the crosswalk. Two curb ramps per corner shall be provided to directly align with the crosswalks.
- Corner bulb-outs shall be constructed at all feasible corners to shorten the pedestrian crossing distance and improve pedestrian visibility.
- Streetlights shall be provided on all four corners of intersections to ensure proper illumination.

***Wayfinding & Design***

The Plan calls for consistent wayfinding and design strategies to help pedestrians reach local destinations clearly and comfortably.

- All streets, paseos, and intersections in the Plan Area shall be designated as wayfinding paths.
- Wayfinding signage and street amenities shall be oriented towards pedestrians and should include elements, such as pedestrian-scale lighting, street trees, newspaper boxes, seating, and other street furniture. Street amenities should be located in front of businesses where feasible.
- Wayfinding signage shall be located at decision points, derived from one of the following ways: locations where transit stops, bicycle routes, or pedestrian routes of a major destination intersect, or locations where the navigator must choose which path of many to follow. For example, the intersection of El Camino Real and Victoria Avenue is a location where a bike path, bus stop, and the pedestrian route to the Millbrae Station, making it a likely location for information to inform navigation choice. Within the Plan Area, signage shall be provided at major intersections and along wayfinding paths.
- Wayfinding signage shall be provided throughout the Plan Area, with a particular focus on Millbrae Station. As mentioned previously, directional route signage is essential to facilitate pedestrian access to the transit station.
- Identity kiosks shall be located at prominent locations at key destinations, including the west and east entrances of the Millbrae Station, to serve as orientation aids to pedestrians.
- Require development projects in the vicinity of the station to design a consistent and recognizable wayfinding signage package along designated wayfinding paths to the station.

## BICYCLE FACILITIES

### *Millbrae Station*

To improve bicycle access to Millbrae Station, all station entrances shall connect directly to a bicycle facility, eliminating the need for bicyclists to ride through a parking area, a bus loading zone, or a pedestrian zone. Stair channels shall be provided to allow riders to wheel their bicycles up and down all stairways, and elevators large enough to accommodate bicycles should be located in a central location. Designated bicycle routes through the transit center should aim to minimize conflicts between bicyclists and pedestrians, autos, and buses.

### *Bicycle Facilities*

A system of on-street and off-street bicycle facilities shall be established in the Plan Area. The bicycle network should incorporate increased separation from other road users with Class I bicycle paths and Class II bicycle lanes to strengthen bicyclist comfort, where possible. Where separated facilities are not feasible, Class III on-street bicycle routes should be marked.

Streets within the Plan Area that shall be striped with on-street bicycle lanes include Adrian Road, South Station Street, California Drive, and Victoria Avenue east of El Camino Real. Bicycle lanes shall be at least five feet wide and should include a designated 18-inch buffer space to separate the bicycle lane from the adjacent motor vehicle travel lane or parking lane. To accommodate the bicycle lanes, parking shall be removed on one side of Adrian Road and California Drive.

On other streets, including Garden Lane, Rollins Road, El Camino Real, and Victoria Avenue west of El Camino Real, the roadway width north of Millbrae Avenue does not allow for a bicycle lane without the removal of a vehicle travel lane. The Plan recommends shared lane markings to indicate these streets as bicycle routes, with the intention of striping bicycle lanes once the right-of-way is provided in the future. If striped on El Camino Real, a vehicle high-speed and high-volume roadway, bicycle lanes should be located adjacent to the curb and consist of a four-foot bicycle lane with a 3-foot striped buffer between the bicycle lane and motor vehicle travel lane to enhance bicyclist separation from vehicle traffic.[1]

Primary north-south bicycle access routes will include Magnolia Avenue (west of the Plan Area) and California Drive connecting to the west entrance of Millbrae station and South Station Road connecting to the east entrance of Millbrae Station. Bicyclists shall be able to access the station via Rollins Road and El Camino Real, but these high-speed roadways are less desirable alternatives. Primary east-west bicycle access routes include Victoria Avenue and Millbrae Avenue from the neighborhoods to the west of Millbrae Station and Adrian Road and Millbrae Avenue from the areas to the east of the station.

### *Bay Trail*

The Plan Area includes a Bay Trail alignment connecting north and south. To the north, the Bay Trail will follow a yet to be determined route starting at the north end of Aviador Avenue. To connect to the Bay Trail traveling south, the Plan includes a Class I multi-use path on the east side of Aviador Avenue connecting to a planned pedestrian bicycle bridge over Highway 101. Once on the east side of the highway, the Bay Trail will head south into Burlingame on the existing Bay Trail.

### *Pedestrian/Bicycle Bridge over Highway 101 (Bay Trail Connection)*

The Specific Plan proposes connecting the Plan Area to the Bay Trail via a new two-way shared use bridge on the north side of Millbrae Avenue. The minimum width for a shared use bridge is 10 feet, although larger widths of up to 14 feet are recommended in areas with high use and/or varied user groups. Five feet is the recommended buffer distance between the path and the roadway curb, with a physical barrier or railing to encourage greater separation between the two.[2] The bridge should provide grade separation at the US 101 on- and off-ramps.

1 NACTO, Urban Bikeway Design Guide, http://nacto.org/cities-for-cycling/design-guide/bike-lanes/buffered-bike-lanes/ (accessed March 2015).

2 American Association of State Highway and Transportation Officials (AASHTO), Guide for the Development of Bicycle Facilities, Fourth Edition, 2012.

The shared use bridge should be recommended for all bicycle and pedestrian travel on Millbrae Avenue. The facility should provide a high-quality alternative to the narrow sidewalk on the south side of the roadway with numerous challenging driveway and on/off-ramp crossings.

***Intersections***

All major intersection crossings in the Plan Area that fall along a designated bicycle lane should be improved to enhance the safety and convenience of cyclists. These treatments should help reduce conflict between bicyclists and vehicles by heightening the level of visibility and denoting a clear right-of-way for bikes.

The Specific Plan recommends the following at all major intersections:

- Intersection crossing markings. Intersection crossing markings indicate the intended path of bicyclists and are used to guide bicyclists on a safe and direct path through signalized intersections. They provide a clear boundary between the paths of through bicyclists and either through or crossing motor vehicles in the adjacent lane. Striped dotted lines demarcate the bicycle crossing space and colored pavement can be used for increased visibility. Intersection crossing markings should be recommended on Adrian Road at the intersection of Rollins Road.
- Bike Boxes. A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase. A bike box is typically 10-16 feet deep to hold a queuing bicyclist and is accompanied by stop lines indicating the point behind the bike box where vehicles are required to stop. Pavement markings are used to designate the space as a bike box, and "No Turn on Red" is enforced to prevent vehicles from entering the Bike Box during a red phase. A bike box is also recommended on the eastbound and westbound approaches to the intersection of Adrian Road and Rollins Road. A bike box is recommended on the eastbound left turn lane of the intersection of Millbrae Avenue and El Camino Real, where special consideration must be taken to facilitate bicycle access of the shared use sidepath proposed for the north side of Millbrae Avenue. Bicyclists will be directed from the curbside travel lane to the left turn lane using colored pavement markings like green-backed sharrows.
- Bicycle Detection. Bicycle detection is used at actuated signals to alert the signal controller of bicycle crossing demand on a particular approach. Proper bicycle detection meets two primary criteria: 1) accurately detects bicyclists; and 2) provides clear guidance to bicyclists on how to actuate detection (e.g., what button to push, where to stand). In the Plan Area, bicycle detection should be used at all intersection approaches that are actuated or at left-turn lanes with actuated left-turn signals where bicyclists may also turn left. Bicycle detection can occur through a number of strategies, including:
  - Push-button - user-activated button mounted on a pole facing the street
  - In-pavement loops - induction loop embedded in the pavement, calibrated to detect bicycle metallic mass
  - Video - video detection aimed at bicyclist approaches and calibrated to detect bicyclists
  - Microwave - miniature microwave radar that picks up non-background targets

### *Bicycle Parking*

Secure and sheltered bicycle parking shall be provided throughout the station area to provide reassurance that bicycles will not be stolen, vandalized, or exposed to the elements. Class I bicycle lockers and Class II bicycle racks should be provided at entrances to Millbrae Station to accommodate long-term commuter parking and short-term trip parking. All new developments in the Plan Area shall construct bicycle lockers or storage rooms at convenient locations within the building for residents and/or employees. Outdoor bicycle racks shall be provided near all building entrances.

### *Wayfinding & Design*

The Plan calls for a consistent wayfinding strategy to help bicyclists determine the most direct and safest routes, as well as quickly identify bicycle parking areas.

- All streets, intersections, and bicycle routes in the Plan Area shall be designated as wayfinding paths.
- Wayfinding signage shall be located at decision points, derived from one of the following ways: locations where transit stops, bicycle routes, or pedestrian routes of a major destination intersect, or locations where the navigator must choose which path of many to follow. For example, the intersection of El Camino Real and Victoria Avenue is a location where a bike path, bus stop, and the pedestrian route to the Millbrae Station, making it a likely location for information to inform navigation choice. Within the Plan Area, signage shall be provided at major intersections and along wayfinding paths, including El Camino Real, Millbrae Avenue, California Drive, Adrian Road, Aviador Avenue, South Station Road, and Rollins road.
- Wayfinding signage shall be provided through on-site signage and web-available maps, focused particularly on guiding bicyclists into and out of Millbrae Station. As mentioned previously, directional route signage is essential to facilitate bicycle access to the transit station.
- Require development projects in the vicinity of the station to design a consistent and recognizable wayfinding signage package along designated wayfinding paths to the station.
- Bicycle signs should include distance markers, where appropriate, designated by miles.
- Identity kiosks shall be located at prominent locations at key destinations, including the west and east entrances of the Millbrae Station, to serve as orientation aids to bicyclists.

## TRANSIT IMPROVEMENTS

### *Millbrae Station*

The Millbrae Station (serving BART/Caltrain) is the focal point of transit for the Plan Area. There are no planned changes to the station footprint in the short term.

Station area wayfinding and directional signage shall be improved. In the long term, the California High Speed Rail Authority (CHSRA) is proposing to create a station for High Speed Rail at the Millbrae Transit Center. The plans for this are still being developed at the time of the publishing of this Specific Plan, so the extent of physical improvements are unknown. Route directional signs for pedestrians and bicycles accessing the station will improve accessibility. Improving Caltrain directional signage at the west entrance, BART platform signage, and signage for bicycle parking at the station will make for an easier rider experience.

### *Fixed Route Bus Service*

The Plan Area is served by SamTrans Routes ECR and 397. Route ECR is a north-south bus line that provides regional transit service between Daly City and Palo Alto via El Camino Real. The current service operates at 15 minutes headways throughout most of the day on weekdays and 20-30 minute headways on weekends. The Specific Plan anticipates eventual evolution of local bus service to Rapid or BRT-style service on El Camino Real by 2040 with exclusive travel lanes in certain segments (see figure for center and side running concepts), signal priority, enhanced and more robust stations, and other features to improve reliability, speed, in-vehicle experience, and passenger waiting experience. Route 397 is an owl (late-night) service that stops at the existing eastside transit center. Its operation will be accommodated in the Millbrae Station's eastside transit facility; the late-night service span will not conflict with any shuttle activity.

#### Routing and Stops

Currently, Route ECR stops on El Camino at Murchison Drive (north- and southbound), Linden Avenue (northbound), and Victoria Street (southbound) in the Plan Area. Buildout of the Specific Plan should offer SamTrans the option of rerouting southbound ECR service along California Drive (including proposed northern extension) to provide direct access to the Millbrae Station. Currently, the closest southbound stop to Millbrae Station is at Victoria Avenue and El Camino Real – a quarter mile walk from the station. Ideally, the southbound stop should be located in front of pedestrian paseo directly across from the west-side station entrance. The ultimate decision to reroute southbound ECR service will be made by SamTrans. While providing better access to the Millbrae Station and Plan Area the re-routing should incur a time penalty compared to a through trip on El Camino. The tradeoff between access and travel time (which increases operating costs) will need to be considered by SamTrans during the service planning process. Northbound ECR service should remain on El Camino with a stop in front of the pedestrian paseo that leads to the station. The proposed stop locations are illustrated in Figure 4-5 in Chapter 4, Concepts and Policies.

#### Stop Enhancements

Transit stop enhancements will improve bus access to the Plan Area. Amenities can range from redesigned shelters to more elaborate rail-like stations with high platforms and large seated waiting areas. Other potential amenities include better lighting, sheltered waiting areas, and real-time passenger information. For the Plan Area, each enhanced stop should include the following enhancements:

- One three-seat bench
- 66-square foot canopy structure
- New concrete platform or removal and replacement of existing concrete platform
- Real-time passenger information display
- Map or advertising display cases
- Windscreens
- Lighting, signage
- Electrical and PG&E service

### *Shuttles*

Shuttle stops are currently located on the west and east sides of the station. Table 7-1 shows the shuttles that currently serve the Millbrae Station. Recently, there has been substantial growth of shuttle operations in the San Francisco Bay Area, especially private employer-provided shuttles. Shuttles provide direct service to employment sites either from residential neighborhood stops or from major transit hubs, including Millbrae Station. Considering the growing demand for "last mile" connections from regional transit hubs to employment sites, shuttle access must be provided on both sides of the station.

#### Westside

New development on the west side of the station will likely trigger the need to reconfigure or replace the existing shuttle facilities. The replacement or reconfigured facility on California Drive must be designed to safely and effectively accommodate future shuttle activity, provide adequate facilities for riders, and minimize rider walk distance from the Millbrae Station. The existing "sawtooth" configuration that includes two bays is currently in the ideal location for transfers and should be expanded to three shuttle bays to accommodate future demand. Replacement facility design must minimize travel distances for shuttles to turn around to begin outbound runs. Based on the roadway network design, westside shuttles will enter the Plan Area from Murchison Drive and exit via California Drive extension to El Camino Real.

#### Eastside

The existing capacity of the eastern bus transit center (eleven bus bays total) allows shuttles to operate efficiently during peak periods. However, even at peak operations some bays remain empty. A total of seven bays are recommended for a redesigned transit center on the eastside to accommodate current and future shuttle activity. These bays will be provided on a new roadway west of Rollins Road and south of the BART parking structure (4 smaller bays to accommodate cutaway vehicles) and on a bus transfer facility located east of Rollins Road on Garden Lane (three larger bays to accommodate 45' OTR coaches). Additional pedestrian crossing facilities on Rollins Road and wayfinding will be needed create acceptable shuttle facilities located east of Rollins Road.

**TABLE 7-1.** SHUTTLES SERVING THE MILLBRAE STATION

| Station Side | Name | Type | Location |
|---|---|---|---|
| Westside | Broadway-Millbrae | Caltrain Shuttle | Station Adjacent |
| | North Burlingame | C/CAG Shuttle | Station Adjacent |
| | Mercy High School Shuttle | School Shuttle | Station Adjacent |
| Eastside | Burlingame-Bayside | C/CAG Shuttle | Transit Center |
| | North Foster City | C/CAG Shuttle | Transit Center |
| | Sierra Point | Public/ Private Shuttle | Transit Center |
| | Genentech | Private Shuttle | Transit Center |
| | Cisco | Private Shuttle | Transit Center |
| | VISA | Private Shuttle | Transit Center |
| | Google | Private Shuttle | Transit Center |
| | Go Pro | Private Shuttle | Transit Center |
| | Solar City | Private Shuttle | Transit Center |

**Recommended Dimensions**

Dimensions for consecutive bus loading zones are based on VTA design criteria[3] and include a standard lane width (12') for circulation and a 10' wide loading zone. If a sawtooth design is feasible, these dimensions may be reduced as shown in the table below.

| Loading Zones | Dimensions |
|---|---|
| Clearance between loading zones | 20' |
| Minimum approach/ departure clearance | 20' (Min. 50' if duckout) |
| Loading zones by vehicle type/length | |
| *30' cutaway and smaller vehicles* | 45' |
| *31-35' cutaway vehicles* | 50' |
| *40' transit buses (or >35' cutaway vehicles)* | 55' |
| *45' OTR coaches* | 60' |

## VEHICLE CIRCULATION IMPROVEMENTS

### *Trip Generation Forecasts*

Development anticipated with implementation of the Specific Plan will increase vehicle travel to the area. Estimated increases in vehicle trip generation and transit ridership were developed by using the C/CAG model, Institute of Transportation Engineers (ITE) trip generation rates, and the latest research on trip internalization in mixed-use developments. The projected increase in travel to the area by travel mode is summarized in Table 7-2. Increased transit ridership will be primarily accommodated by Caltrain service improvements and added shuttle buses. New roadways, roadway connections, and intersection improvements will be required to accommodate the added vehicular travel expected from buildout under the Specific Plan. Improvements to the transportation system are discussed in the following sections and are categorized by travel mode.

### *Vehicular Improvements*

Within and adjacent to the Plan Area, reconfigured and new roadways, improved connections, and intersection modifications shall be implemented to improve vehicle access and circulation to, and adequately serve, proposed development. These improvements will complement transit and pedestrian/bicycle improvements in order to safely, effectively, and efficiently accommodate all modes of travel.

3 Local Bus Service Design Guidelines, VTA Transit Sustainability Policy 2007

**TABLE 7-2. 2040 MSASP TRIP GENERATION (PERSON-TRIPS)**

| | All Person Trips | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|
| **Land Use** | **Daily** | **Vehicle** | **Transit** | **Walk/Bike** | **Vehicle** | **Transit** | **Walk/Bike** |
| Residential | 8,272 | 448 | 189 | 17 | 498 | 170 | **18** |
| Retail | 10,635 | 526 | 128 | 20 | 572 | 139 | **22** |
| Office | 9,297 | 1,051 | 426 | 46 | 984 | 400 | **43** |
| Other[1] | 179 | -96 | -50 | 0 | -99 | -51 | **0** |
| Total | 28,383 | 1,928 | 694 | 82 | 1,956 | 658 | **83** |

Notes:
[1] Other includes industrial/non-retail commercial land uses to be removed and hotel land use to be added
Source: Fehr & Peers, 2015

- Extend and Realign California Drive. California Drive should be realigned and extended north from Linden Avenue to form the eastern leg of the signalized intersection at El Camino Real / Victoria Avenue. This roadway extension must be constructed in conjunction with development on the west side of the Millbrae Station.
- Signalize the California Drive / Murchison Drive Intersection. The intersection is projected to meet the Manual on Uniform Traffic Control Devices (MUTCD) peak hour signal warrant with buildout of the land uses anticipated in the Specific Plan and other growth in the area.[4] This intersection will be an important access point, especially for development planned for the west side of the Station and will help relieve traffic operations at the El Camino Real / Millbrae Avenue intersection.
- Rollins Road Reconfiguration. North of Millbrae Avenue, Rollins Road should be reconfigured to accommodate vehicle traffic accessing development anticipated east of the station. This reconfiguration may include signalization of the internal intersection of Rollins Road / Garden Lane, if determined to be necessary.
- Victoria Avenue Reconfiguration. Convert Victoria Avenue from one-way traffic to two-way traffic between El Camino Real to Magnolia Avenue. With the addition of new land uses and traffic created in the Plan Area, Victoria Avenue will become an important access point, linking Downtown Millbrae and the Station. Converting Victoria Avenue will help alleviate congestion at the El Camino Real / Millbrae Avenue intersection. Two-way operation can be accommodated on Victoria Avenue within the existing right-of-way by removing the existing on-street parking and by updating the existing signal at its intersection with El Camino Real.
- Create South Station Road. In the short-term, the existing exit road from the east side of Millbrae Station shall remain. New development shall convert South Station Road from one-way to two-way traffic between Garden Lane and Adrian Road. This expansion will increase vehicle and bicycle connectivity between planned land uses south of Millbrae Avenue with the station, the rest of the Plan Area, and the city.

4 Signal installation should be considered only after completion of a full signal warrant analysis and under the direction of a professional engineer.

## PARKING STRATEGY

As mentioned in Chapter 4: Concepts and Policies, the Specific Plan seeks to balance parking demand and supply. New development throughout the Plan Area will need to provide the minimum amount of parking necessary to accommodate the anticipated demand, but will be encouraged to not provide more than needed, as additional parking spaces tend to generate use, and therefore additional trips and congestion. Providing appropriate parking supply (not too much, not too little) will help reduce the total number of cars on the road, reduce potential conflicts with other modes, and discourage auto use. Following are several strategies to manage number and use of parking in the Plan Area. The City shall require future development projects to employ all or a mix of the following strategies.

### *Encourage Shared Parking Measures*

Shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions; variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses, and relationships among the land uses that result in visiting multiple land uses on the same auto trip. Shared parking should be encouraged across the Plan Area for site-specific development.

### *Consider Controlling the Use of Parking Through Pricing Mechanisms*

- Unbundled Parking. Unbundled parking means that parking spaces in residential or commercial developments may be rented or sold separately rather than automatically included with the building space. The cost of parking is often "hidden" within the rent or purchase price of a residential or commercial unit. Unbundling can provide more affordable residential units by providing residents the choice of opting out of parking and investing instead in alternative transportation options.
- Parking cash-out. Parking cash-out is a program in which employers offer workers the cash value of the cost of a parking space that should otherwise be provided. Employees may choose to trade their parking space for the cash value and commute to work using another travel mode. California Law (Assembly Bill 2109, 1992) requires parking cash-out for sites with more than 50 employees in areas with poor air quality that can reduce parking without financial penalty. Cities such as San Francisco have created programs to eliminate free or subsidized parking and instead providing employees with transit passes.
- Coordinated Off-street and On-street Pricing. Coordinated off-street and on-street pricing is a strategy to encourage long-term parking off-street and reserve on-street parking for short term use.
- Variable Rate Parking Pricing. Variable rate parking pricing can be used to encourage turnover and increase the short-term parking supply. It can also help maintain desired occupancy rates by charging a higher rate during events or during peak shopping season.
- Residential Permit Parking. A program should be explored for nearby residential uses, to ensure that existing parking resources on public residential streets near the Plan Area remain available to residents and are not used by long term transit users or office workers.

### *Explore Ways to Finance Public, Shared Parking Spaces*

In-lieu fees provide developers the opportunity to buy out of minimum parking requirements. The developer pays the city approximately the cost of building the parking spaces, and this payment goes towards future parking facilities or, in some cities, other transportation improvements in the project area.

### *Support Alternatives to Driving Alone*

Transportation Demand Management (TDM) is a strategy that reduces demand for parking by supporting alternatives to driving alone. TDM strategies, which include car sharing, carpooling, pedestrian- and transit-oriented design, and employer policies allowing working from home or alternative work hours, are discussed fully in the previous section.

## TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) strategies and measures can be used to encourage future employees, residents, and visitors to the Millbrae Station area to walk, bicycle, use public transportation, carpool, or use other alternatives to driving alone when traveling to and from the Plan Area.

### *Near-Term TDM Strategies*

The following TDM strategies incorporate design, infrastructure, and BART- or Caltrain-specific actions and should be incorporated into early stages of Plan Area development.

#### Building Design Elements

- Amenities help reduce the number of trips an employee needs to make during the day and may include the following. These uses should be provided only if no existing or planned similar uses are within 400 feet of the building.
  - A cafeteria
  - Grab-and-go meals
  - Fitness facility
  - Coffee bar
  - General store
  - ATM
  - Barbershop
  - Sport courts
  - Banking
  - Dry cleaning
- Passenger loading zones near the main entries to buildings are convenient for carpools and vanpools dropping off passengers. Building designs can also dedicate a location to casual carpooling.
- Reduced building setbacks allow buildings to be located closer to pedestrian and transit facilities, which improve the pedestrian experience and encourage walking.

#### Rideshare Programs

- Car share can be available for errands or meetings for employees who bike, walk, use transit, or use carpools or vanpools. This reduces concerns and inconvenience of not having a vehicle during the day. Car share parking spaces should be located in centralized locations and on-street to provide high visibility.
- Last-mile connections can be provided through autonomous vehicles or pedi-cabs to get a group of people from a transit stop to an employer location. This eliminates the barrier or last-mile transportation for people who want to use transit.

#### Bicycle Programs

- Bike share programs, either internal to the Plan Area or coordinated with Bay Area Bike Share, provide a first/last mile option for commuters, as well as for short trips throughout the day.
- Electric bicycle charging stations. Electric bicycle charging stations should be encouraged in new development. Electric bicycles can be used for longer trips than standard bicycles.

### *TDM strategies for Project-Specific Developments*

The City of Millbrae requires all new development within the Specific Plan Area that generates more than 50 trips to prepare and implement a Transportation Demand Management (TDM) to reduce peak single-occupancy vehicle trips and encourage use of transit, walking, and biking as transportation modes. These strategies can significantly enhance mobility for people accessing the Plan Area and will require close coordination among multiple agencies, including SamTrans, C/CAG, San Mateo County, and Caltrans. These TDM strategies will be most effective when they are provided for all user groups in the Plan Area, including residents, employees, and visitors.

TDM measures include providing subsidized transit passes, incentivizing non-vehicle transit modes and car-pooling, parking pricing, car sharing, and participating in car-sharing programs. The measures identified in Table 7-2 are based on the current best practices for TDM programs. They should be regularly evaluated to ensure the widest range of options is available to reduce the number of single occupancy vehicle trips.

### *Plan Area TDM Coordinator*

Each development project subject to the TDM requirement will include an on-site TDM coordinator that will manage and promote TDM programs and oversee monitoring to determine program effectiveness. A TDM coordinator provides information via flyers, posters, e-mail, and educational programs regarding non-auto access and circulation options. The TDM coordinator's role may also include actively marketing alternative mode use, administering a neighborhood ridematching program, and overseeing a Guaranteed Ride Home program (working with a local taxi service or rental car agency). A TDM coordinator could also help implement or support the following parking and vehicle management strategies described in this section.

### *TDM Monitoring*

The project applicant shall submit annual reports to the City describing the specific TDM measures that are being implemented, the number of employees on-site, and the success of the measures expressed in AM and PM peak hour vehicle trips generated by the project. The report shall be prepared by an independent City-approved transportation planning/ engineering firm.

**TABLE 7-3.** TDM STRATEGIES FOR FUTURE DEVELOPMENTS

| TDM Measure | Description |
|---|---|
| Bicycle Program | Bicycle programs encourage employees to bike to work and may include mapping routes, creating biking groups or buddies, and providing incentives, including bike light and helmet giveaways. |
| Showers and Lockers | Shower and changing rooms help promote bicycling (and walking) as an alternative commute option. |
| Tax Incentives | Passing employer tax benefits to employees who use alternative modes of transportation provide a financial incentive to use alternative modes. |
| Financial Incentives | Employees who use alternative modes can be provided other financial incentives to encourage continued use of that mode. |
| Day Care | Providing child care services allow more flexibility in employees' schedules and allow them to make fewer trips during the day. |
| Carpool Programs | Carpool programs help carpools to form by matching drivers and passengers. |
| Vanpool Programs | Vanpool programs help vanpools to form by matching drivers and passengers and by providing or subsidizing vans. |
| Transportation coordinator | Transportation coordinators are responsible for developing, marketing, implementing, and evaluating TDM programs. Having dedicated personnel on staff helps to make the TDM program more robust, consistent and reliable. Programs and strategies could include new employee TDM orientation, a commuter information center, and designated commute ambassadors to ease people into commuting alternatives. |
| TDM Plans | New developments will be required to develop and submit a TDM plan to the City for review and approval. |
| Annual Monitoring | Annual monitoring (which may include counts and surveys) will be conducted to monitor the implementation and effectiveness of approved TDM plans, and provide guidance for TDM plan modification. |
| Guaranteed Ride Home Program | Employees who use transit, carpools, or vanpools are guaranteed a ride home in case ot emergency or if they need to work late. This helps reduce concerns about using alternative modes. |
| Telecommuting | Telecommuting allows employees to work from home or from neighborhood telecenters via telecommunications and reduces trips made to the employer site. |
| Flextime | Allowing employees set or modity their arrival and departure times can provide the flexibility people need to use alternative modes. |
| Staggered Work Hours | Setting up work units or groups which select or are assigned different starting and ending times for their work day can provide the flexibility people need to use alternative modes. |
| Compressed Work Week | Allowing employees to work more hours in a single day but fewer days ot the week reduces trips made to the employer site. |
| Transit subsidies | Employers can subsidize transit passes through programs such as Commuter Check or by purchasing passes to provides a financial incentive for employees to use transit. |

Source: Fehr & Peers, 2015

## 7.2. STREETSCAPE STANDARDS

Streetscape plays a critical role in creating a vibrant pedestrian-friendly environment. This section establishes standards for streetscape improvements on key streets in the Plan Area. The standards in this section focus on the design of the public right-of-way, including sidewalk areas, street landscaping, on-street parking areas and travel lanes. They are intended to facilitate a pedestrian-oriented, active, and attractive street environment. Recommended improvements will likely be provided through a combination of public investment and private development.

The standards in this section should be adjusted to accommodate existing special conditions and constraints in future detailed streetscape planning processes. These standards shall be implemented in conjunction with the Street-Based Frontage Standards in Chapter 5, Streetscape standards, are established for the following streets:

- El Camino Real
- Millbrae Avenue
- Rollins Road
- Murchison Drive
- California Drive
- Adrian Road
- South Station Road (Interim and Long-Term)
- Victoria Avenue
- Aviador Avenue
- Mid-Block Path

*A streetscape can be defined as the overall aesthetic character, physical configuration, and view of street as experienced by a pedestrian, bicyclist or driver. A streetscape includes several elements, including the adjacent uses at the edge of the street, such as buildings or parking lots, walking areas or sidewalks, landscaping or open space, street trees; curb to curb right of way (on-street parking, on-street bike lanes, and vehicular travel lanes); and potentially medians or other aesthetic features. Utilities and infrastructure elements such as junction poles, utility boxes and storm drains also contribute to a streetscape environment as well as other more secondary elements such as benches, trash cans, bike racks, and other similar pedestrian and/or bicycle amenities.*

## EL CAMINO REAL

El Camino Real will continue to serve as a primary arterial in Millbrae but will transform into an active and safe environment for walking and biking. In keeping with the Grand Boulevard Initiative's vision of creating a "boulevard," frontage roads are proposed on both sides of the street. The intent of frontage roads is to provide an adequate buffer between pedestrians and traffic.

As new development occurs, private property may need to be set aside to provide frontage roads. While it is ideal to provide continuous frontage roads all along the corridor, it may not be feasible in some locations due to site constraints. In the area south of Millbrae Avenue, Irwin Place already serves as a frontage road on the east side of El Camino Real. On the west side of the street, a south-bound frontage road is provided only in front of the new mixed-use development site (88 S Broadway). This frontage road shall be extended to the south to Murchison Drive when and if the Friendship Plaza site would be redeveloped. In the area north of Millbrae Avenue, a continuous south-bound frontage road is in place, except for the street segment between Millbrae Avenue and Chadbourn Avenue. When and if the parcels along this street segment would be redeveloped, private property shall be set aside to provide frontage roads. The parcels on the east side of El Camino Real, however, may be too shallow to set aside private property to create a frontage road. Parcels less than 150-feet deep can be exempt from the frontage road requirement.

All frontage roads shall provide a minimum 12-foot wide sidewalk, on-street parking (diagonal preferred), and a minimum 8-foot wide landscaped buffer separating the main street from the frontage road. Large to medium-sized deciduous and semi-deciduous trees reaching heights of 30 to 50 feet at maturity shall be planted in the buffer at intervals no greater than 40 feet on center to create visual distinction between travel lanes and frontage roads. Within the pedestrian realm next to new buildings, street trees, pedestrian lighting, benches, trash receptacles, bicycle racks, and other amenities shall be provided. Bulbouts are proposed for sidewalks adjacent to development to reduce the distance of crosswalks and provide additional room for pedestrian amenities and landscaping. South of Millbrae Avenue on the east side of El Camino Real, South Irwin Place already serves as a frontage road, but the road width should be reduced to add diagonal parking and bulbouts.

Lane widths on El Camino Real shall be reduced to provide room for new bike facilities and other public realm enhancements. The existing medians should be landscaped with additional drought tolerant plants to add character to the street. El Camino Real is under Caltrans jurisdiction, so implementation of streetscape improvements is subject to Caltrans review and approval.

Special landscaping, paving, and signage shall be provided at intersections to create a gateway to the Plan Area from Burlingame and Downtown Millbrae.

Figures 7-1 and 7-2 illustrate a typical proposed section of El Camino Real. Table 7-4 shows typical required street dimensions. These dimensions are intended to provide general guidance. Further design and engineering will be necessary.

**TABLE 7-4. EL CAMINO REAL STANDARDS (TYPICAL)**

| | |
|---|---|
| **Sidewalk** | **12 ft. minimum** |
| Walk Zone | 8 ft. |
| Tree Zone/Buffer | 4 ft. |
| **Frontage Road** | **30 ft.** |
| Diagonal Parking | 16 ft. (8 ft. if parallel) |
| Frontage Way | 14 ft. |
| Buffer | 8 ft. |
| Street Trees in 8'-Buffer | – Large to medium-sized trees (60 feet high at maturity)<br>– Min. 40' intervals<br>– Recommended species:<br>– London Plane (Platanus x acerifolia), Chinese Elm (Ulmus parvifolia), and Princeton Elm (Ulmus americana 'Princeton') |
| **Roadway** | **Varies** |
| Bike Facilities | Class III Bike Routes |
| Travel Lanes | Three travel lanes in each direction, right turn lane, and center turn lane (s)/median |

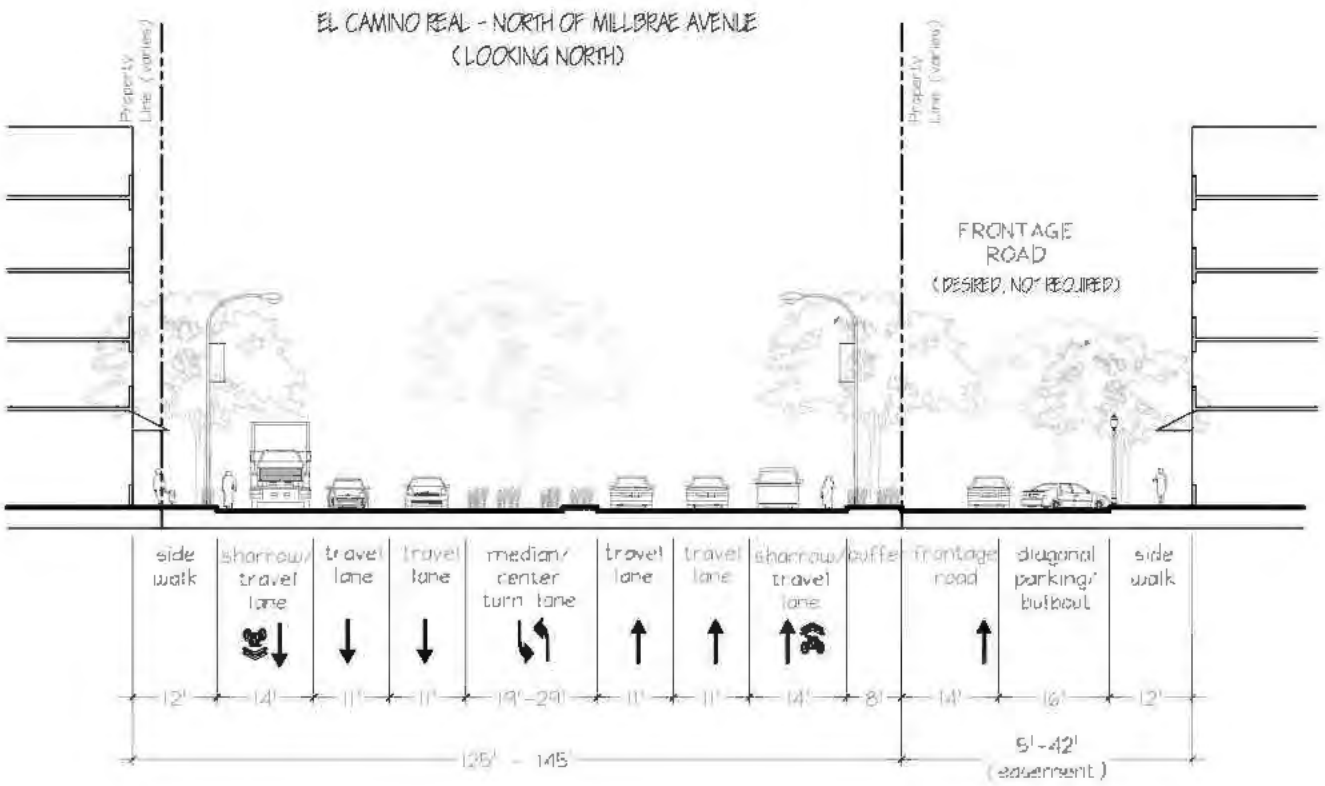



**FIGURE 7-1.** El Camino Real - North of Millbrae Avenue Typical Section

*The 2010 Grand Boulevard Initiative Multimodal Corridor Plan (GBI Corridor Plan) identified the need for improvements in both transportation and land use along the El Camino Corridor.[5] Complete street improvements (such as pedestrian realm enhancements, bike facilities, lane reductions/reconfigurations, exclusive bus-lanes, etc.) applied to the Plan Area portion of El Camino (between Victoria Avenue and Murchison Drive) will be coordinated with the City of Millbrae, City of Burlingame, SamTrans, and Caltrans for continuity and compatibility north and south of the Plan Area limits.*

5 Grand Boulevard Multimodal Transportation Corridor Plan, The Grand Boulevard Initiative, October 2010.

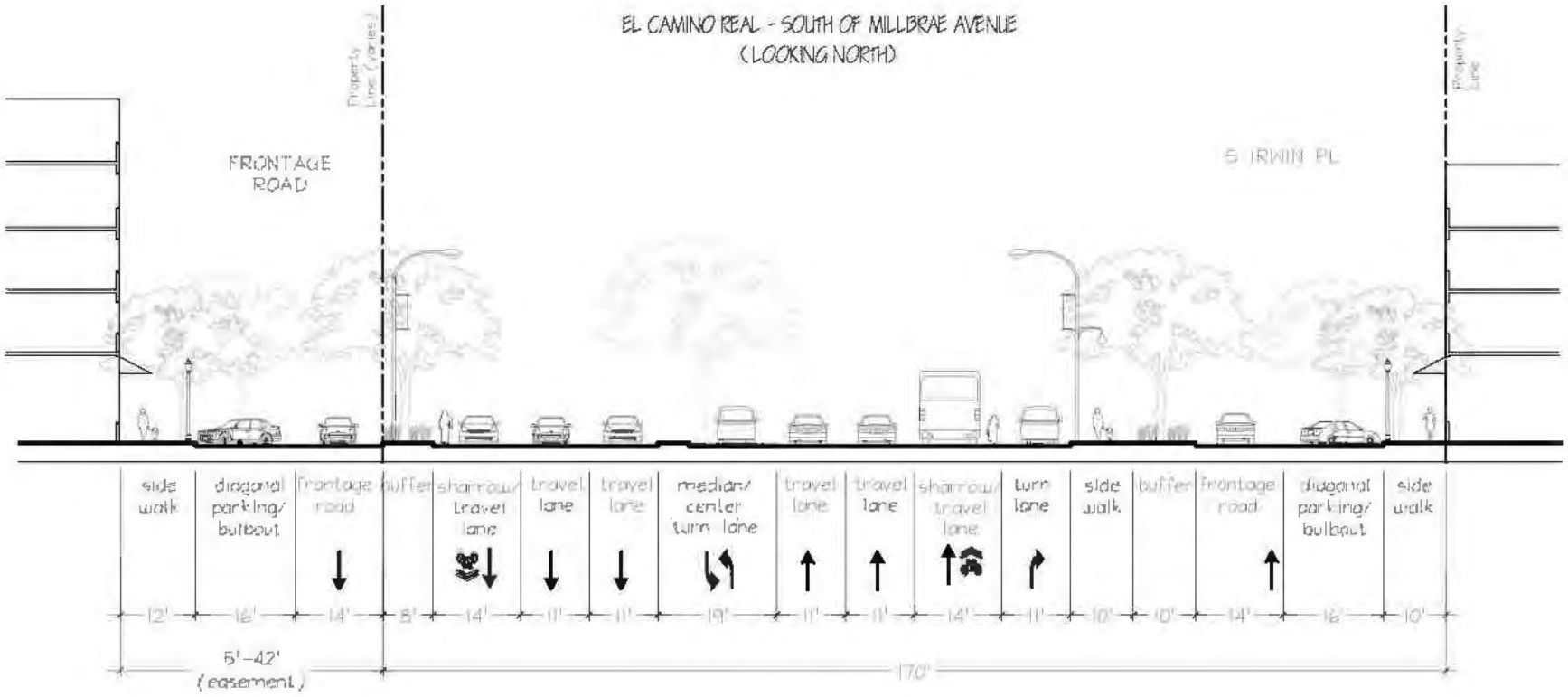



**FIGURE 7-2.** El Camino Real - South of Millbrae Avenue Typical Section

## MILLBRAE AVENUE AND OVERPASS

Millbrae Avenue will become a "gateway street" and support safe and comfortable multimodal connections, including through providing a bicycle and pedestrian connection to the Bay Trail.

These recommendations focus on improving the pedestrian and bicycle environment with widened sidewalks, consistent street tree canopies, and pedestrian amenities, such as pedestrian lighting, signage, and benches. Large to medium-sized trees reaching heights of 30 to 50 feet at maturity shall be planted in the tree zone on the sidewalks at intervals no greater than 30 feet on center to create consistent tree canopies. A combination of a planned bicycle/pedestrian bridge, Class II bike lanes, and Class III bike routes are proposed along Millbrae Avenue.

Millbrae Avenue's physical character and right-of-way widths change by segment. Therefore, three different sets of street dimensions are proposed to reflect different configurations, as shown in Table 7-5. Figure 7-3 illustrates a typical proposed section of the Millbrae Avenue overpass.

**TABLE 7-5.** MILLBRAE AVENUE STANDARDS (TYPICAL)

| | East of Rollins Road | Millbrae Avenue Overpass (Between El Camino Real and Rollins Road)* | West of El Camino Real |
|---|---|---|---|
| **Sidewalk** | **12 ft. minimum** | **8 ft. minimum** | **12 ft. minimum** |
| Walk Zone | 8 ft. | 7 ft. | 8 ft. |
| Tree Zone/Buffer | 4-6 ft. | 1 ft. | 4 ft. |
| Street Trees in 4'/6'-Tree Zone | – Large to medium-sized trees (30 'to 60' at maturity)<br>– Min. 40' intervals<br>– Recommended species:<br>– London Plane (Platanus x acerifolia) and Chinese Elm (Ulmus parvifolia) | - | – Medium-sized trees (30' to 50' at maturity)<br>– Min. 30' intervals<br>– Recommended species:<br>– Chinese Elm (Ulmus parvifolia) and Chinese pistache (Pistacia chinensis) |
| **Roadway** | **Varies** | **Varies** | **Varies** |
| Bike Facilities | – Class III Bike route (sharrow) between Rollins and Aviador Avenue<br>– Planned Ped/Bike Bridge from Aviador Avenue to Old Bayshore Highway | Class II Bike lane: 6 ft.* | Class III Bike route (sharrow) |
| Travel Lanes | Three travel lanes in each direction; right turn lane (s) and center turn lane (s)/median | Three travel lanes in each direction; right turn lane and center turn lane (s)/median | One travel lane in each direction; right turn lane and center turn lane/median |

** In the long-term, Class I bike paths are proposed along the Millbrae Avenue overpass. These long-term improvements can be implemented in two different ways:*
*LONG-TERM OPTION 1. Reduce lane widths and move the concrete barrier between the sidewalk and travel lanes to provide a 14' Class I multi-use path on the north side.*
*LONG-TERM OPTION 2: Realign and reduce the median and reduce the travel lane widths to provide a 2-way Class I bike path on the north side of the overpass without changing the overpass structure.*

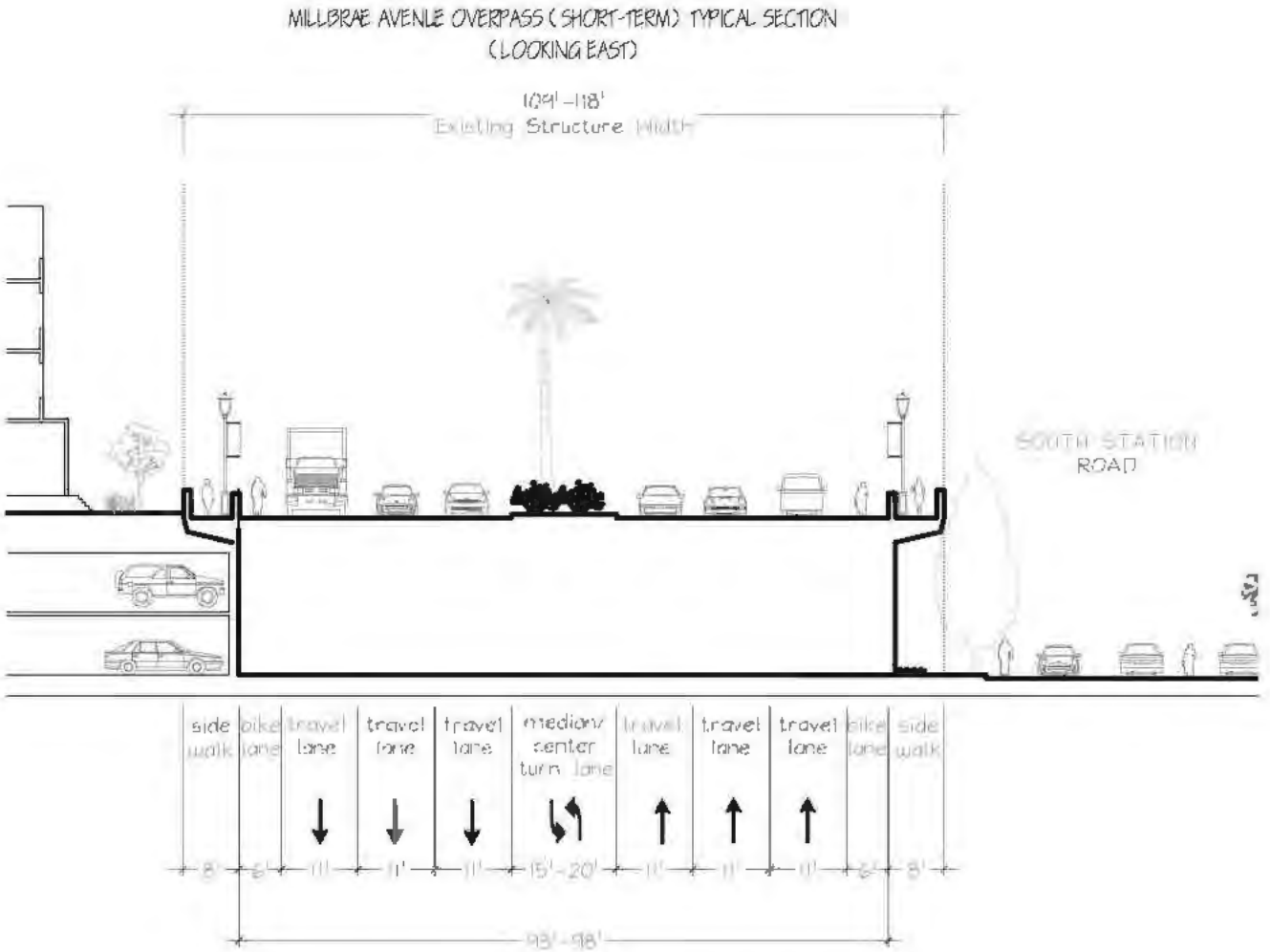



**FIGURE 7-3.** Millbrae Avenue Overpass (Short-Term) Typical Section

## ROLLINS ROAD

Rollins Road will continue to serve as a main connector to the eastern entry of the station, but the travel lane widths will be reduced to provide more room for pedestrians and bicyclists. For the segment south of Adrian Road, Class II bike lanes and 10-foot wide sidewalks are proposed, which may require easements or dedications from private development and/or the removal of on-street parking. For the segment between Millbrae Avenue and Adrian Road, Class III bike routes are proposed. Bicyclists traveling to the Millbrae Station will be recommended to use Adrian Road to South Station Road (new street), instead of Rollins Road.

Street trees and pedestrian lighting are proposed along Rollins Road to create a more comfortable walking environment. In addition, the intersection at Millbrae Avenue is proposed to be reconfigured to create a safer bicycle and pedestrian crossing.

Figure 7-4 illustrates a typical proposed section of Rollins Road south of Millbrae Avenue. Table 7-6 shows typical proposed street dimensions.

**TABLE 7-6.** ROLLINS ROAD STANDARDS (TYPICAL)

| | |
|---|---|
| **Sidewalk** | **10 ft. minimum** |
| Walk Zone | 8 ft. |
| Tree Zone/Buffer | 4 ft. |
| Street Trees in 4'-Tree Zone | – Small to medium-sized trees (40' at maturity)<br>– Min. 25' intervals<br>– Recommended species: Trident maple (Acer Buergeranum), European Hackberry (Celtis australis), and Chinese Tallow (Sapium sebiferum) |
| **Roadway** | **Varies** |
| Bike Facilities | Class II Bike lane: 6 ft. (Sharrows at intersection when bike lanes are infeasible) |
| Travel Lanes | Two travel lanes in each direction; right turn lane and center turn lane (s)/median |

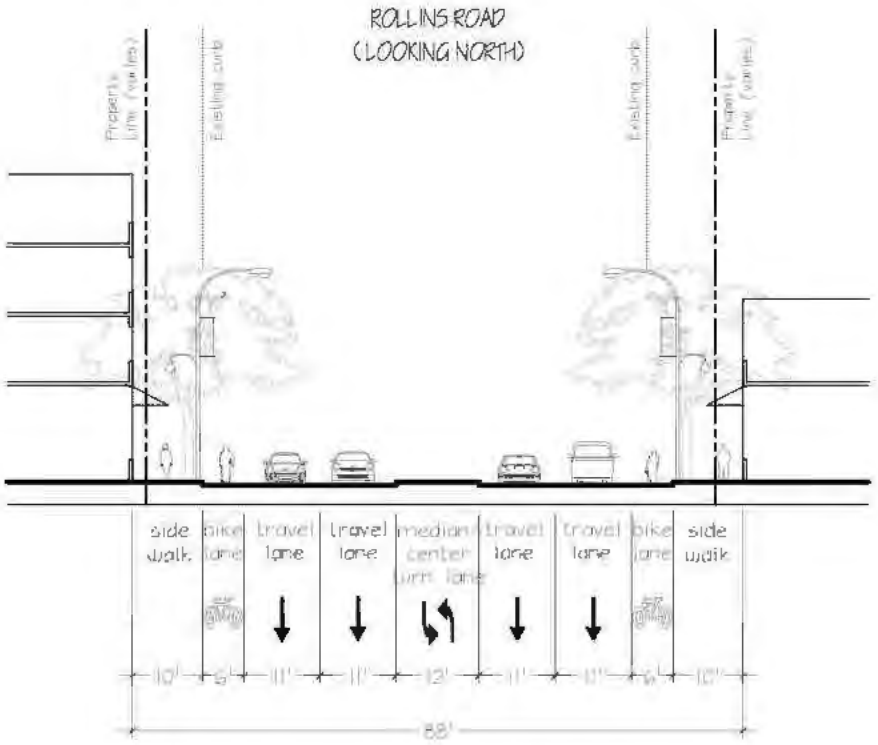



**FIGURE 7-4.** Rollins Road Typical Section

## MURCHISON DRIVE

The section of Murchison Drive within the Plan Area will be activated with new buildings and frequent use by pedestrians, bicyclists, buses, shuttles, and cars due to the northern extension of California Drive discussed previously. This street shall be reconfigured to provide Class III bike routes (sharrows). Sidewalks shall be widened and provide street trees for shade, which may require dedications or easements on private property. At the intersections, high visibility crosswalks and bulbouts are proposed to make crossing safer.

Figure 7-5 illustrates a typical proposed section of Murchison Drive. Table 7-7 shows typical proposed street dimensions.

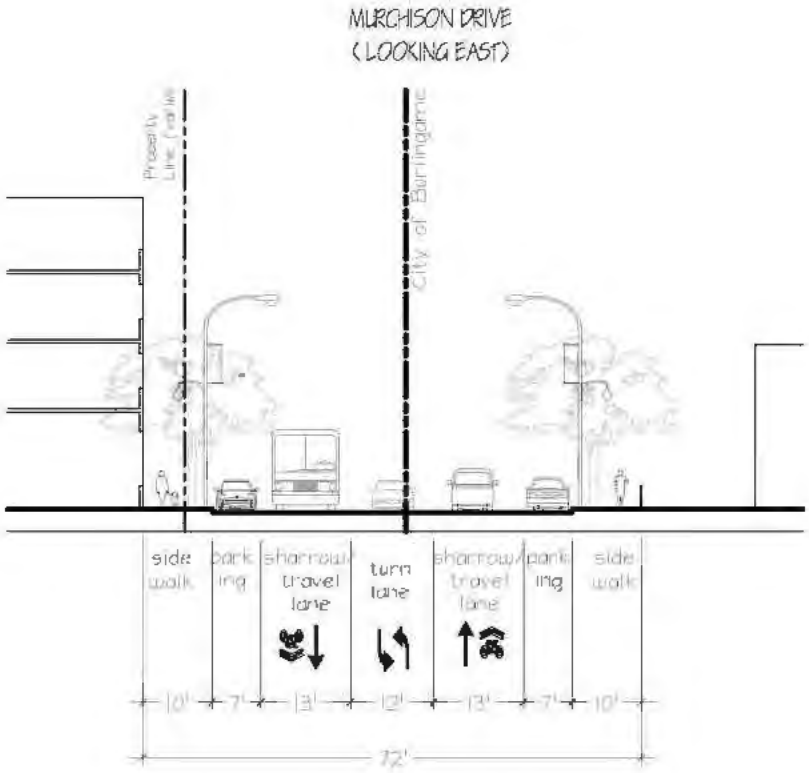



**FIGURE 7-5.** Murchison Drive Typical Section

**TABLE 7-7.** MURCHISON DRIVE STANDARDS (TYPICAL)

| | |
|---|---|
| **Sidewalk** | **10 ft. minimum** |
| Walk Zone | 8 ft. |
| Tree Zone/Buffer | 4 ft. |
| Street Trees in 4'-Tree Zone | – Small to medium-sized trees (35' at maturity)<br>– Min. 25' intervals<br>– Recommended species: Trident maple (Acer Buergeranum) and Chinese Tallow (Sapium sebiferum) |
| **Roadway** | **Varies** |
| Bike Facilities | Class III (sharrow) |
| Travel Lanes | One travel lane in each direction; center turn lane/median |
| Parking | 7 ft. on both sides (used as turn lane at intersection) |

*Note: Coordination with the City of Burlingame is required. Streetscape improvements shall be coordinated with installations of new traffic signal at Murchison and California Drive.*

## CALIFORNIA DRIVE

California Drive shall be extended to the north and become a critical multimodal connection to and from the station. California Drive will run parallel to El Camino Real up to the northern Plan Area boundary, where it will curve to the left to meet Victoria Avenue. Since this street will carry less traffic and connect directly to the station, it will provide a safer north-south bicycle alternative to El Camino Real. As such, Class II bike lanes shall be provided along California Drive. Because the right-of-way is limited, it may require street reconfiguration, private easements, and the removal of on-street parking.

California Drive shall serve as a major transit route since it will run immediately next to the western entry of the station. Pullout areas and stops for buses and shuttles shall be provided near the station entry. A high visibility mid-block crossing is also proposed in front of the station for people transferring between buses and trains.

Streetscape improvements shall focus on creating a pleasant walking environment. To enhance the pedestrian realm, street trees, pedestrian lighting, benches, trash receptacles, bicycle racks, and other similar amenities are proposed. Where existing overhead utilities are present, they should be moved underground.

**TABLE 7-8.** CALIFORNIA DRIVE STANDARDS (TYPICAL)

| | |
|---|---|
| **Sidewalk** | **7-12 ft.** |
| Walk Zone | 7-8 ft. |
| Tree Zone/Buffer | 0-4 ft. (0 ft. may be allowed only next to Caltrain parking lot) |
| Street Trees in 4'-Tree Zone | – Small to medium-sized trees (35' at maturity)<br>– Min. 25' intervals<br>– Recommended species: Trident maple (Acer Buergeranum) and Chinese Tallow (Sapium sebiferum) |
| **Roadway** | **Vary** |
| Bike Facilities | Class II Bike lane: 5-6 ft. (6 ft when next to on-street parking; Sharrows at intersection when bike lanes are infeasible) |
| Travel Lanes | One travel lane in each direction |

Figure 7-6 shows a plan view of California Drive Extension, and Figure 7-7 illustrates a typical proposed section of California Drive. Table 7-8 shows typical required street dimensions.

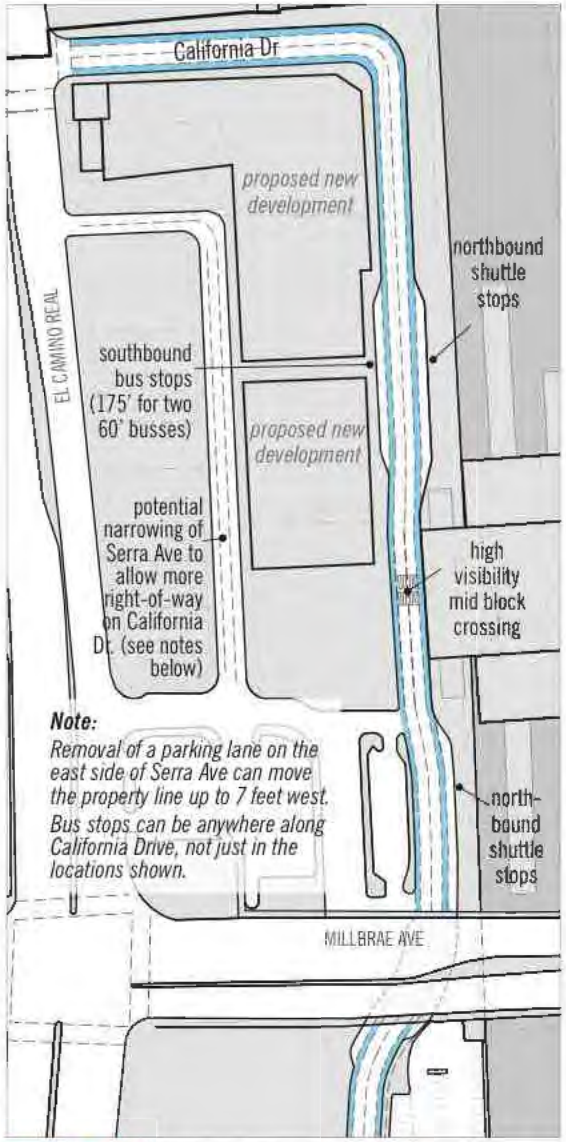



**FIGURE 7-6.** California Drive Extension Plan View

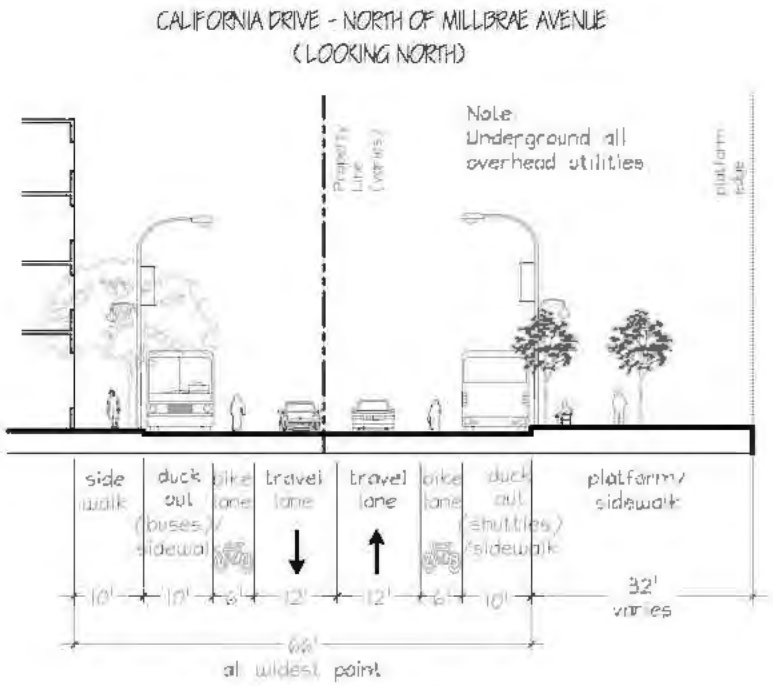



**FIGURE 7-7.** California Drive Typical Section

## ADRIAN ROAD

Adrian Road will become an active street surrounded by pedestrian-friendly building frontages. Streetscape improvements to Adrian Road focus on balancing mobility, safety, and comfort for pedestrians, vehicles, and bicycles. The street shall be reconfigured to provide Class II bike lanes and widened sidewalks. This may require private easements and/or the removal of on-street parking. To enhance the pedestrian realm, street trees, pedestrian lighting, benches, trash receptacles, bicycle racks, and other similar amenities shall be provided.

Figure 7-8 illustrates a typical proposed section of Adrian Road. Table 7-9 shows typical required street dimensions.

**TABLE 7-9.** ADRIAN ROAD STANDARDS (TYPICAL)

| | |
|---|---|
| **Sidewalk** | **10 ft. minimum** |
| Walk Zone | 6 ft. |
| Tree Zone/Buffer | 4 ft. |
| Street Trees in 4'-Tree Zone | – Small to medium-sized trees (35' at maturity)<br>– Min. 25' intervals<br>– Recommended species: Trident maple (Acer Buergeranum) and Chinese Tallow (Sapium sebiferum) |
| **Roadway** | **Varies** |
| Bike Facilities | Class II Bike lane: 5-6 ft. (6 ft. when next to on-street parking) |
| Travel Lanes | One travel lane in each direction |
| Parking | 7 ft. on one side (used as turn lane at intersection) |

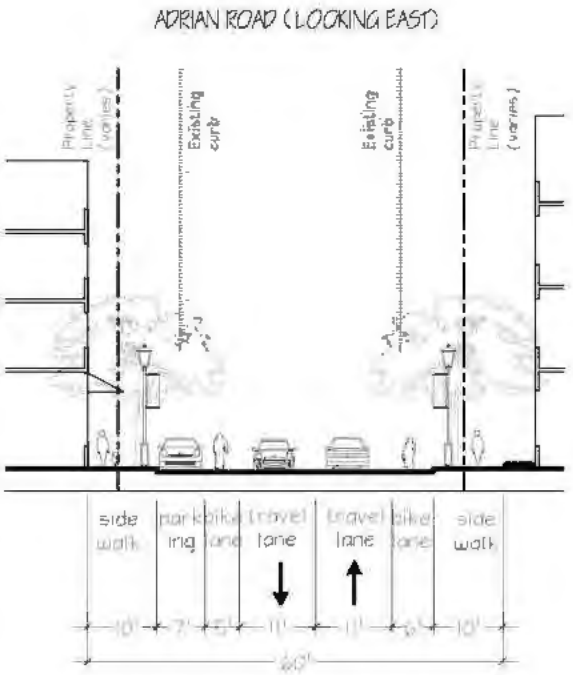



**FIGURE 7-8.** Adrian Road Typical Section

## SOUTH STATION ROAD

In the short-term, South Station Road remains as a one-way southbound connection for vehicles, with added northbound and southbound bike lanes as shown in Figure 7-9.

In the future, as development occurs, South Station Road shall be improved as a new 2-way street that links Adrian Road to the station as shown in Figure 7-10. As shown in figures throughout this Plan, the recommended alignment for this improved street is next to the railroad right-of-way leading from Adrian Road to connect to the station. This street is envisioned to be a safer and quieter alternative route for pedestrians and bicyclists relative to Rollins Road. The proposed new street includes Class II bike lanes, two travel lanes, 10-foot wide sidewalks, and on-street parallel parking on one side. Street trees, benches, trash receptacles, and pedestrian lighting should also be provided to create a comfortable and pleasant walking environment. Private easements will be necessary since this is a new street. North of Garden Lane, South Station Road should include improvements that facilitate access options for transit vehicles.

Figures 7-9 and 7-10 illustrate the interim and long-term configurations for South Station Road, south of Millbrae Avenue. Table 7-10 shows typical proposed street dimensions.


**FIGURE 7-9.** South Station Road (Interim) Typical Section

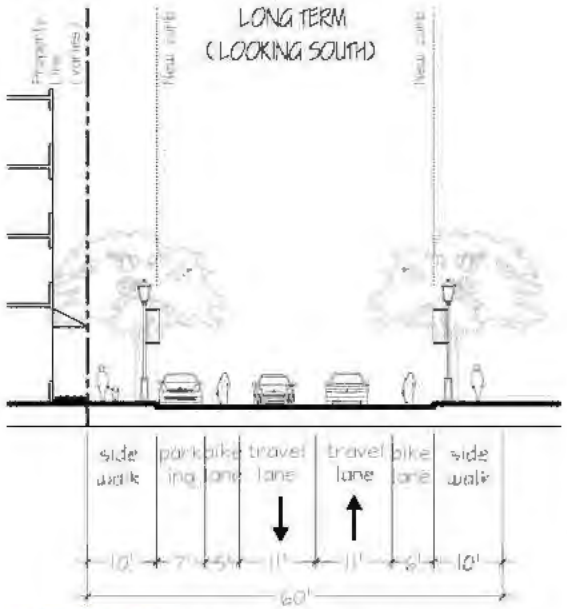



**FIGURE 7-10.** South Station Road (Long Term) Typical Section

**TABLE 7-10.** SOUTH STATION ROAD STANDARDS (TYPICAL)

| | |
|---|---|
| **Sidewalk** | **10 ft. minimum** |
| Walk Zone | 6 ft. |
| Tree Zone/Buffer | 4 ft. |
| Street Trees in 4'-Tree Zone | – Small to medium-sized trees (35' at maturity)<br>– Min. 25' intervals<br>– Recommended species: Trident maple (Acer Buergeranum) and Chinese Tallow (Sapium sebiferum) |
| **Roadway** | **Varies** |
| Bike Facilities | Class II Bike lane: 5-6 ft. (6 ft. when next to on-street parking) |
| Travel Lanes | One travel lane in each direction |
| Parking | 7 ft. on one side (used as turn lane at intersection) |

## VICTORIA AVENUE

Victoria Avenue will become a critical link between Downtown and the station. This role will be reinforced with California Drive's extension to the north and connection to El Camino Real at the Victoria Avenue intersection. Improvements to Victoria Avenue shall focus on providing safe connections for drivers, pedestrians, and bicyclists.

The existing one-way street segment of Victoria Avenue west of El Camino Real shall become a two-way street with bike facilities to promote a bicycle connection to/from Downtown. This segment has a limited right-of-way, and private easements may not be feasible in the near future. As a result, the removal of on-street parking is proposed.

Figure 7-11 illustrates a typical section of Victoria Avenue, and Table 7-11 shows typical street dimensions.

**TABLE 7-11.** VICTORIA AVENUE STANDARDS (TYPICAL)

| | |
|---|---|
| **Sidewalk** | **10 ft. minimum** |
| Walk Zone | 6 ft. |
| Tree Zone/Buffer | 4 ft. |
| Street Trees in 4'-Tree Zone | – Small to medium-sized trees (35' at maturity)<br>– Min. 25' intervals<br>– Recommended species: Trident maple (Acer Buergeranum) and Chinese Tallow (Sapium sebiferum) |
| **Roadway** | **Varies** |
| Bike Facilities | – Westbound Class II Bike lane: 6 ft.<br>– Eastbound Class III Sharrow: part of 13 ft. wide travel lane |
| Travel Lanes | One travel lane in each direction |
| Parking | None |

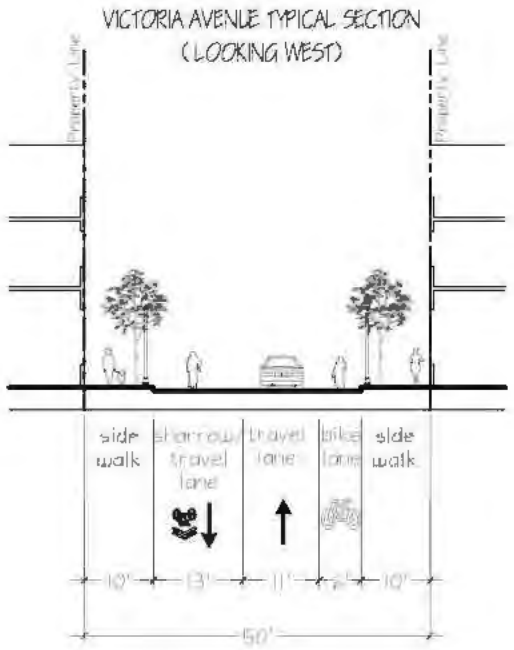



**FIGURE 7-11.** Victoria Avenue Typical Section

## AVIADOR AVENUE

Aviador Avenue will become a critical Bay Trail connection when the planned bicycle/pedestrian bridge over Highway 101 is built and extended to the north to fill a Bay Trail gap. Vehicle access to Aviador Avenue will continue to be limited to internal circulation. As such, improvements shall focus on providing sufficient room for pedestrians and bicyclists. A separated bicycle/pedestrian path shall be provided on the east side of the street to connect from the planned bicycle/pedestrian bridge to a potential Bay Trail alignment through the Bayside Manor neighborhood. The sidewalk on the west side of the street shall be widened. Both the sidewalk and new path shall include street trees, pedestrian lighting, wayfinding signage, benches, trash receptacles, and other amenities. Private easements may be required to provide these facilities.

Figure 7-12 illustrates a typical section of Aviador Avenue. Table 7-12 shows typical required street dimensions.

**TABLE 7-12. AVIADOR AVENUE STANDARDS (TYPICAL)**

| | |
|---|---|
| **Sidewalk** | **6 ft. minimum (on the west side)** |
| Walk Zone | 6 ft. |
| Tree Zone/Buffer | 0-4 ft. |
| Street Trees in 4'-Tree Zone | – Small to medium-sized trees (35' at maturity)<br>– Min. 25' intervals<br>– Recommended species: Trident maple (Acer Buergeranum) and Chinese Tallow (Sapium sebiferum) |
| **Roadway** | **Varies** |
| Bike Facilities | Class I Bike/Ped Path: 14-20 ft. (on the east side, including 4 ft. buffer) |
| Travel Lanes | One travel lane in each direction |

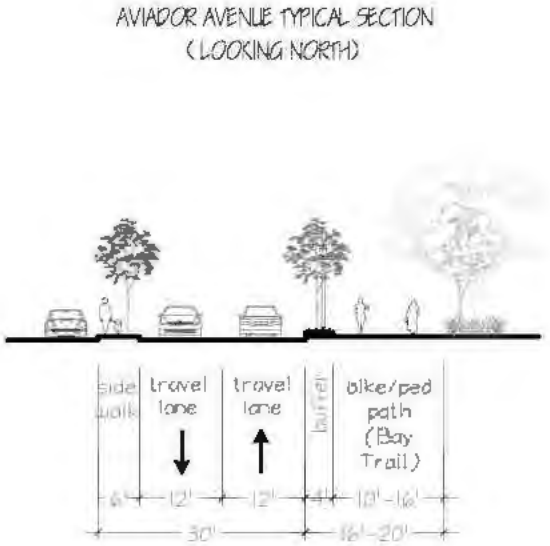
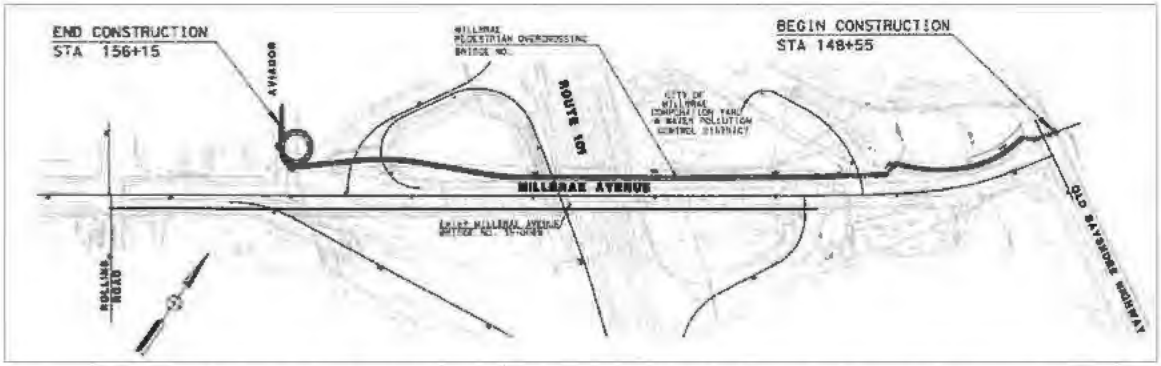



**FIGURE 7-12.** Aviador Avenue Typical Section




*Proposed Pedestrian Bridge Overcrossing of Route 101, from the Caltrans approved Combined Project Study Report/Project Report, dated 5/14/07*

## MID-BLOCK PATH

Mid-block paths (paseos) create higher levels of connectivity for pedestrians and, in some places, cyclists and emergency vehicles. Paseos are intended to help provide pedestrians with efficient routes to their destination by eliminating unnecessary detours. Paseos also create opportunities for placemaking, as well as the integration of the circulation network and open space. Development adjacent to paseos can "spill out" onto the paseo with outdoor seating, special landscaping, and other similar features. Paseos could accommodate special events, such as sidewalk sales, farmers' markets, and other temporary activities.

Paseos will bisect blocks containing parcels under private ownership and will potentially require property easements, public/private partnerships, or other mechanisms.

Paseos are recommended to be 16 to 32 feet wide including a buffer/amenity zone. The throughway shall be 8 feet wide at a minimum and kept clear for walking and biking. Decorative paving, such as stamped concrete and brick, is encouraged. The buffer/amenity zone can be located on either side and may be used for landscaping, pedestrian seating, public art, and/or pedestrian lighting. Figure 7-13 illustrates a typical section of a paseo. Table 7-13 shows typical paseo dimensions.

**TABLE 7-13.** PASEO (TYPICAL)

| | |
|---|---|
| **Paseo (Total Width)** | **16-32 ft.** |
| Throughway | 8 ft. minimum if pedestrian only<br>20 ft. if shared |
| Buffer/Amenity Zone | Varies |

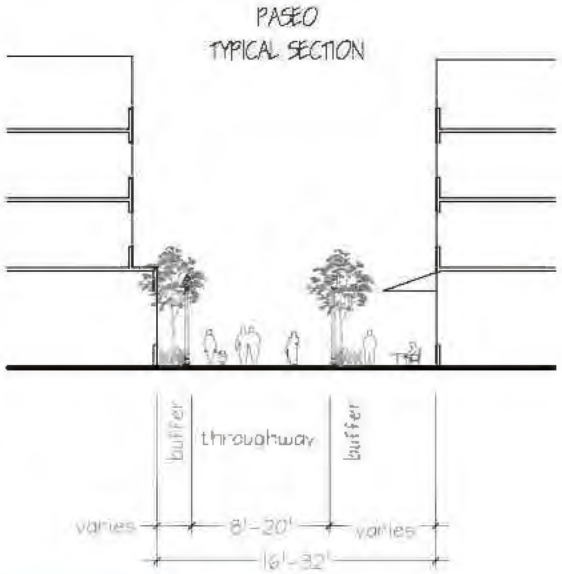



**FIGURE 7-13.** Paseo Typical Section

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# 8

# UTILITIES & PUBLIC SERVICES

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# 8. UTILITIES AND PUBLIC SERVICES

Implementation of the Specific Plan will result in increased demands on utility infrastructure systems and public services. Increased numbers of residents and employees living and working in the Plan Area will trigger a need for enhancements to sewer and water systems to ensure that there is sufficient capacity. Likewise, public services and facilities, such as police, fire and safety services, schools, and parks will likely need to be expanded to accommodate new growth in the Plan Area. This chapter describes each type of infrastructure and public service, estimates potential increases in demand, and describes the process by which that demand will be met. See Chapter 9, Implementation and Financing Plan, for how improvements to utility infrastructure can be funded and implemented.

# 8.1. WATER SUPPLY AND DISTRIBUTION

## EXISTING WATER SUPPLY AND DISTRIBUTION

Millbrae obtains all of its water through a contract with the San Francisco Public Utilities Commission (SFPUC). This water is delivered from the City and County of San Francisco's Regional Water System (RWS), operated by the SFPUC. SFPUC's supply is predominantly from the Sierra Nevada, delivered from the Hetch Hetchy Reservoir through the Hetch Hetchy aqueducts, but also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties. The SFPUC and the City (and the other wholesale customers) entered into a Water Supply Agreement (WSA) in July 2009, which has a 25-year term. Millbrae's Individual Supply Guarantee (ISG) is 3.15 mgd.

The Millbrae distribution system includes 11 pressure zones, 6 pumps (3 each at 2 stations), 5 storage tanks (only 4 are in operation; 1 is standby), 568 hydrants, and 69.7 miles of water mains. Water mains in the Specific Plan Area range from 6 to 12 inches in diameter, with a mix of materials such as asbestos-cement, cast iron, and PVC pipe. The Specific Plan Area is within the city's Pressure Zone #4. Tank storage has not yet been developed in this pressure zone due to the direct connection to the Hetch Hetchy transmission infrastructure through this area.

While this combination of water supply and distribution is sufficient to accommodate the current domestic water demands, some fire water flows are restricted by undersized lines and loop limitations throughout the City's system.

## PROPOSED WATER SUPPLY AND DISTRIBUTION

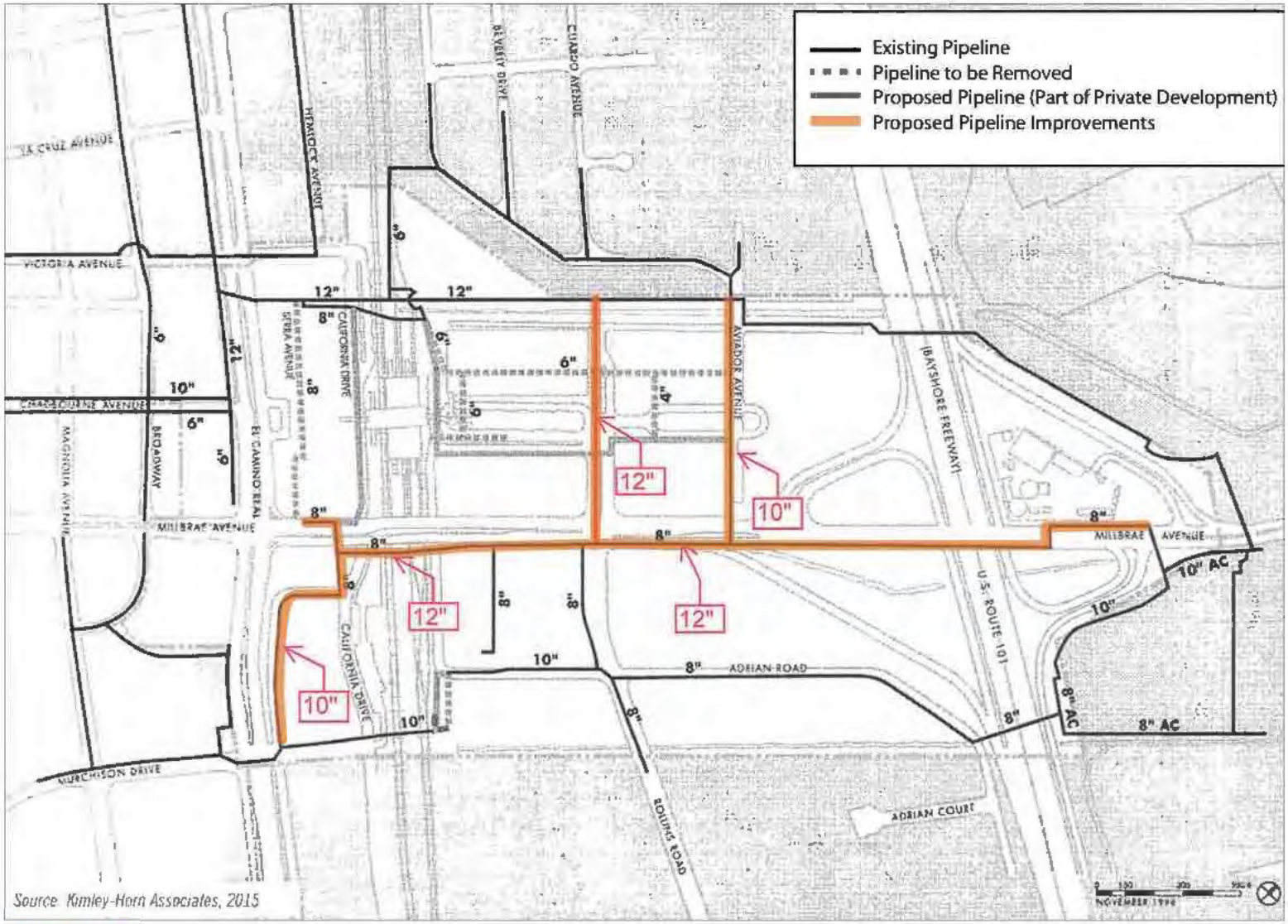
Additional demand for water from the new development in the Plan Area would be approximately 676,000 gallons per day based on the additional net buildout quantities associated with office, retail, residential, and hotel uses. The city would have sufficient capacity to meet the water demands of the Specific Plan until year 2035, when there would be a deficit of 18 acre feet per year (AFY).[1] Since the water deficiency is relatively small compared to supply (0.5 percent), the City could meet the water demand with the implementation of water conservation and water efficiency ordinances recently adopted by the City, including the Indoor Water Ordinance (Municipal Code 9.60), the Green Building Code Ordinance (Municipal Code 9.35), and the Water Efficient Landscape Ordinance (Municipal Code 8.45).

However, in critical dry and multiple-dry year events, when the SFPUC could impose 20 percent reductions in supply, buildout of the Specific Plan would result in a water demand that would exceed the supply for all years. Prior to approving future applications for development in the Plan Area, the City shall require future project applicants to prepare a written statement that clearly demonstrates how the project complies with the water conservation and water efficiency ordinances adopted by the City, including the Indoor Water Ordinance (Municipal Code 9.60), the Green Building Code Ordinance (Municipal Code 9.35), and the Water Efficient Landscape Ordinance (Municipal Code 8.45) and any other water conservation strategies that would be implemented by the project applicant. .

The additional demand from the Plan Area will also affect the already limited capacity of fire water flows restricted by undersized lines and loop limitations throughout the City's system. The City's 2014 Water Master Plan addresses existing system-wide deficiencies, noting that the majority of the fire flow deficiencies are located in Pressure Zones I, II, and III and distributed in isolated areas throughout the system.[2] Since several streets will be removed or modified as a result of the Plan Area buildout, existing water lines will need to be relocated to adjoining street areas. A preliminary schematic of the water line distribution system within the Plan Area is shown in Figure 8-1. These improvements are conceptual and schematic in nature and therefore, a more thorough infrastructure analysis will be required to determine the precise required improvements, and all design shall be complete during development.

1 GHD, 2015. City of Millbrae Water Supply Assessment. Dated June 2015.

2 Kimley Horn and Associates, 2014, Millbrae Station Area Specific Plan Update, Utilities and Service Systems report, December 18, 2014.




Source: Kimley-Horn Associates, 2015

**FIGURE 8-1.** Water Line Schematic Improvements

### PROPOSED RECYCLED WATER FACILITIES

Currently no recycled water facilities exist within the Plan Area. The Specific Plan requires all development projects to use recycled urban water for the irrigation of landscapes, plazas, and playgrounds to reduce demand for potable water. All new projects shall provide purple pipes in the street adjacent to their property for future hookup to the citywide purple pipe network, and pay for MSASP Development Impact Fees as required in Article XVIII of the City's Zoning Code. As described in Chapter 9 of this Specific Plan, the City will conduct a nexus study to update its existing fee structure for new development to ensure that the fees accurately reflect the costs to provide services and upgrades triggered by new development. Figure 8-2 shows a schematic recycled water system network in the Plan Area.

All public improvements shall be constructed in accordance to the most recent edition of the Millbrae Public Works Standard Plans and Specifications.

## 8.2. WASTEWATER COLLECTION AND TREATMENT

### EXISTING WASTEWATER COLLECTION AND TREATMENT

The City of Millbrae provides sewer services throughout its jurisdiction and for Capuchino High School. Sewage is collected primarily in gravity flow lines supplemented by three pumping stations and force mains that convey flows to the Millbrae Wastewater Treatment Plant. The Millbrae Wastewater Treatment Plant is located in the northeast quadrant of the Highway 101 and Millbrae Avenue interchange within the limits of the Plan Area. Most of the City's large primary sewer lines pass immediately adjacent to or through the Millbrae Station Plan Area. The main trunk sewer lines range in size from 10 to 36 inches as they convey flows west to east, with lines ranging from 6 inches to 18 inches in the Plan Area.

Observed and monitored sanitary flows adjacent to the Plan Area have demonstrated limited capacity to accommodate additional peak flows. An inability of the existing sanitary sewer system to accommodate increased flows combined with a high rate of Inflow and Infiltration (I/I) will require infrastructure improvements and possible modification of discharge strategies for high generation connections.

The Millbrae Water Pollution Control Plant (WPCP) is located in the northeast corner of the Plan Area at the intersection of US Highway 101 (Bayshore) and Millbrae Avenue. The WPCP provides primary and secondary treatment for all sanitary sewage generated within the City limits and Capuchino High School. Flows are then conveyed through the Joint Use Force Main (JUFM) to the South San Francisco Wastewater Treatment Plant for ultimate disposal through the deep water outfall at Oyster Point in San Francisco Bay. The JUFM is administered under a Joint Powers Agreement (JPA) with the Cities of Millbrae, Burlingame, San Bruno, South San Francisco, and the City and County of San Francisco (SFO). Under the JPA, the City of Millbrae has the right to discharge 9.0 mgd to the JUFM.

### PROPOSED WASTEWATER COLLECTION AND TREATMENT

New development projected to occur under implementation of the Specific Plan is estimated to create a demand for an additional 0.62 million gallons per day (mgd). Pipe upsizing to accommodate increased flows will be required as shown in Figure 8-3. These improvements are conceptual and schematic in nature and therefore, a more thorough infrastructure analysis will be required to determine the precise required improvements. More detailed utility infrastructure analysis is recommended, as discussed in the next chapter.

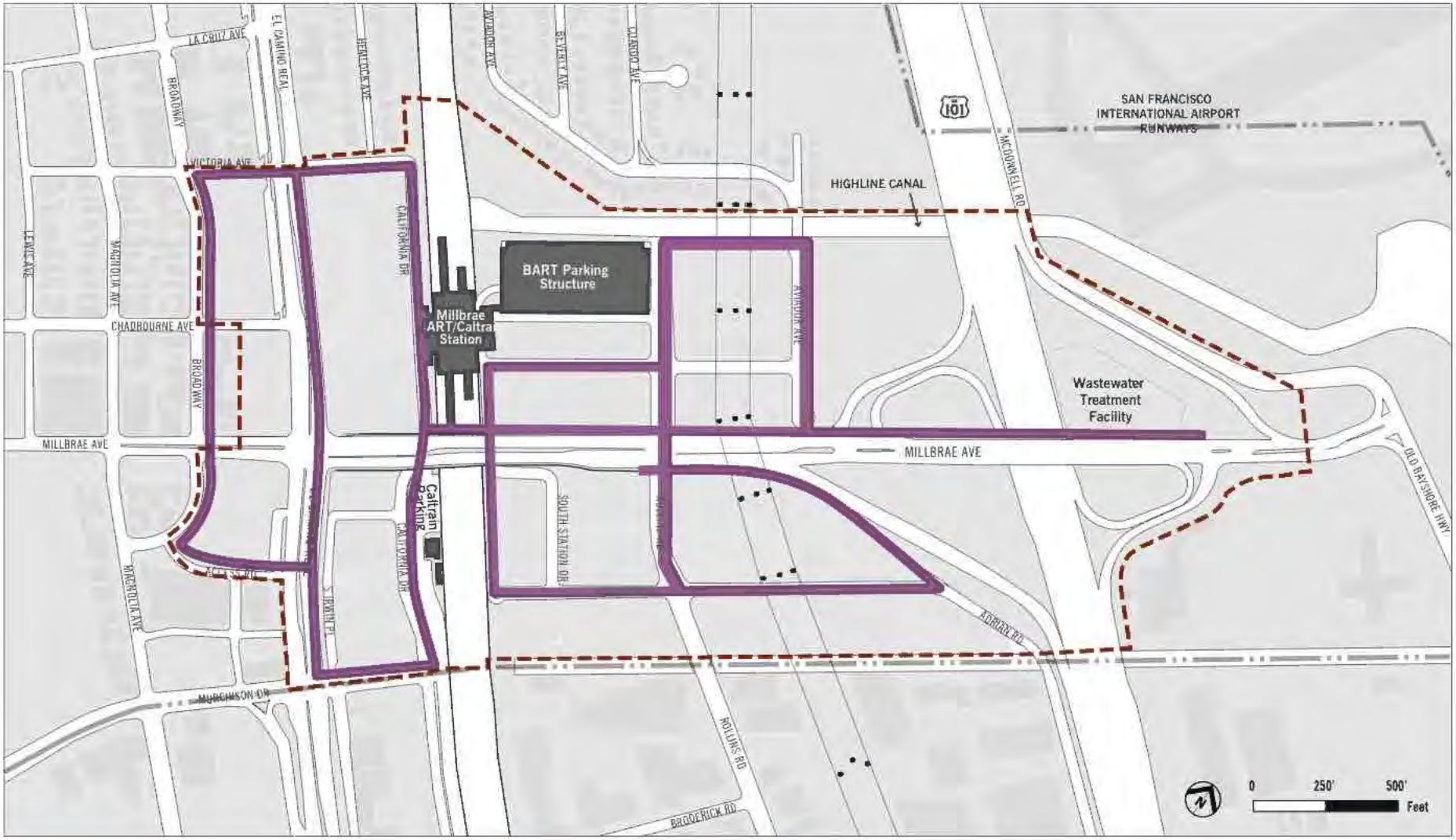



**FIGURE 8-2.** Proposed Recycled Water System

MSASP Boundary

City Boundary

Recycled Water System Network

Power Lines

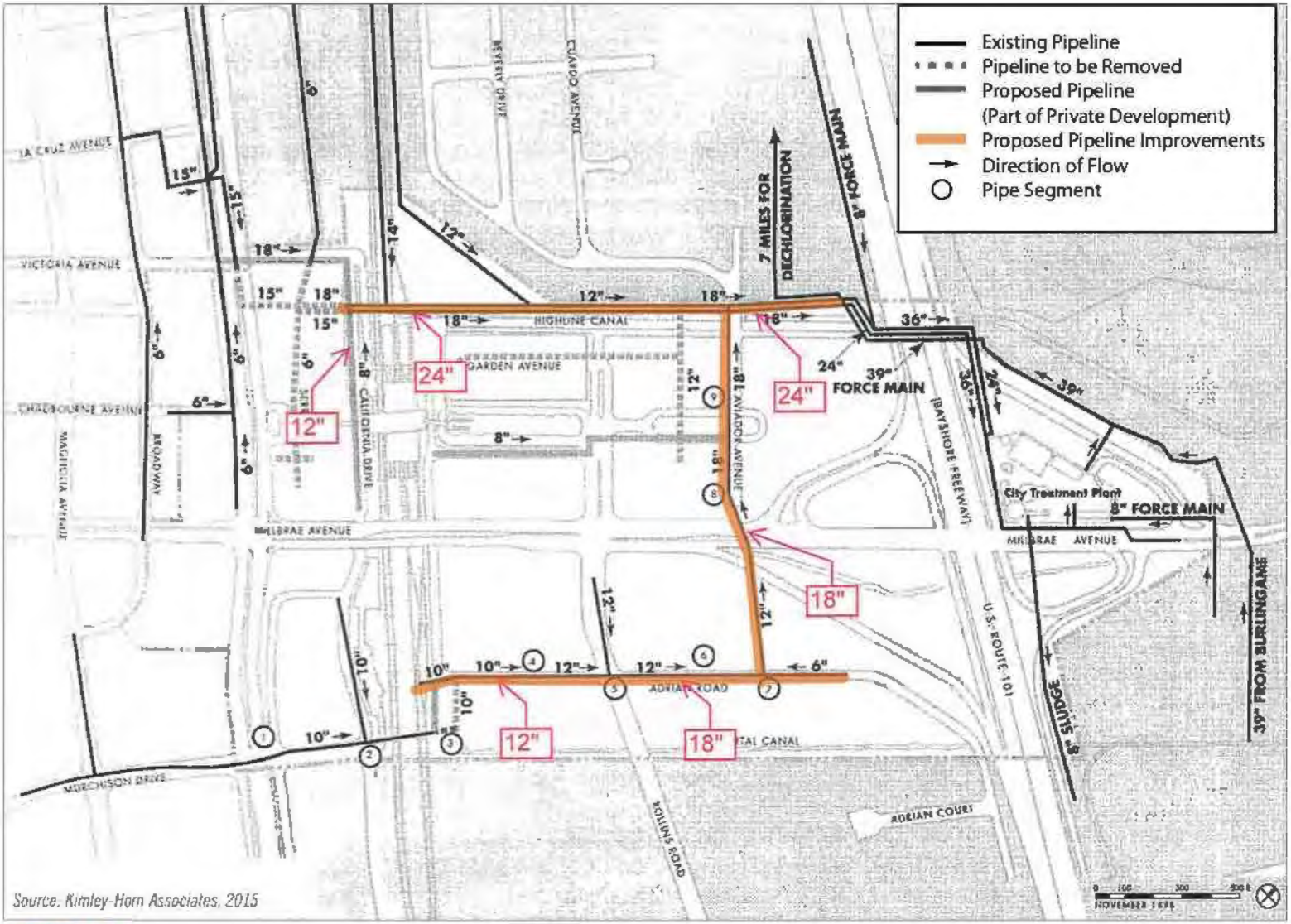



**FIGURE 8-3.** Wastewater Line Schematic Improvements

## 8.3. STORM DRAINAGE

### EXISTING STORM DRAINAGE

Stormwater in Millbrae is conveyed through three primary trunk lines consisting of storm drain pipes, open channels, and pump stations before discharging into the San Francisco Bay. The northern part of the system flows through to Spruce Street, where stormwater empties into Lomita Canal. The center part of the system empties into the Highline Canal, which conveys flows directly into the Bay. The canal has a floodgate to prevent high tides from backing up into the canal. The southern part of the City storm drain system enters a canal shared with the City of Burlingame. The canal is dewatered by a pump station in Burlingame.

The Plan Area is located at the downstream end of the southernmost system. The storm drain system in the planning area is composed of a network of 12-15 inch pipes that convey flows to larger trunk lines or directly discharge into the adjacent canals.

According to current Federal Emergency Management Association (FEMA) FIRMs (Flood Insurance Rate Maps), the 100-year event zone is contained within the canals. Localized flooding in the Plan Area for those portions below elevation 8.2 feet NGVD (National Geodetic Vertical Datum) can occur under conditions of combined heavy storm events and high tides or pump station malfunctions. Preliminary Flood Risk Review materials generated by FEMA intended to update the current FEMA FIRMs that include the Plan Area could incorporate revisions that would significantly affect the Base Flood elevations east of Rollins Road.

### PROPOSED STORM DRAINAGE

Storm drainage in the Plan Area is not expected to increase since the area is already developed and no increases in pervious surfaces are proposed. Furthermore, State-mandated C.3 stormwater management requirements require that new development minimize pervious surfaces and incorporates LID (low impact development) features to treat stormwater on-site and prevent increased flows to the stormwater system and ultimately the San Francisco Bay.

When developing designs for stormwater treatment, project sponsors should refer to AC 150/5200-33B *Hazardous Wildlife Attractants on or Near Airports* for design measures to reduce the attractiveness of storm water management features to wildlife, as cited in ALUCP Policy AP-4(f).

## 8.4. ELECTRICAL, GAS AND TELEPHONE

Electricity and gas are provided to the city of Millbrae by Pacific Gas and Electric (PG&E). The existing electrical system consists of overhead and underground facilities. Four sets of 115-kilovolt (kV) electrical transmission lines traverse the eastern portion of the project area in a north-south direction. Gas service is provided throughout the city through a system of underground gas mains.

New development under the Specific Plan would continue to be served by PG&E in accordance with Millbrae Municipal Code, Chapter 11.05 (Electrical Transmission Franchise) and Chapter 11.10 (Gas Distribution Franchise). Chapter 11.05 establishes terms for PG&E, the electrical franchise serving the City, to construct, maintain and use poles, wires, conduits and appurtenances, including communication circuits, necessary or proper for transmitting and distributing electricity to the public for any and all purposes, in, along, across, upon, under, and over the public streets, ways and places within the city. Chapter 11.10 establishes terms for PG&E, the franchisee, to install, maintain and use in the streets of the city, all pipes and appurtenances for transmitting and distributing gas to the public for any and all purposes.

New underground electrical and gas lines would be required to replace existing lines if realignment is required under future development. For example, California Drive is planned to be redeveloped, and as part of that project the overhead utility lines, if any, should be moved underground. Other examples include Serra Avenue and Garden Lane would be removed as part of the Plan Area development. New underground electrical and gas lines would be required to replace existing lines located in these streets. The proposed lines could be located within the public right-of-way or in dedicated easements in a joint trench with electrical, gas, telephone, and cable utilities.

## 8.5. FIBER OPTIC NETWORK

Figure 8-4 shows a proposed citywide fiber option network, as well as a proposed network for the Plan Area. All development projects in the Plan Area shall provide 2" to 4" conduits for fiber optic in the street in front of their properties. and pay for MSASP Development Impact Fees as required in Article XVIII of the City's Zoning Code. As described in Chapter 9 of this Specific Plan, the City will conduct a nexus study to update its existing fee structure for new development to ensure that the fees accurately reflect the costs to provide services and upgrades triggered by new development.

## 8.6. SOLID WASTE

South San Francisco Scavenger Company collects solid waste under franchise with the City of Millbrae. Millbrae's solid waste is processed at a transfer station at Oyster Point in South San Francisco and is transported from there to the Ox Mountain sanitary landfill site in Half Moon Bay. The Ox Mountain Landfill is owned and operated by Republic Services Group. Millbrae residents participate in curbside recycling program for paper, aluminum, glass and plastic. The City operates a Source Reduction and Recycling program designed to meet state law requiring a 50 percent reduction of waste to landfills.

With continued compliance with applicable regulations listed below, projected solid waste generated from the Project would not exceed the landfill capacity available to the City. Therefore, the Specific Plan would be served by a landfill with sufficient permitted capacity to accommodate the solid waste needs of new development.

All solid waste collection is subject to AB341, AB1826, and AB1594.

## 8.7. FIRE SERVICES

In December 2014, the Central County Fire Department (CCFD), a joint powers and governmental agency, began providing fire protection services to the City of Millbrae through a contractual agreement that benefits the Town of Hillsborough and the Cities of Burlingame and Millbrae. Formed in 2004, the CCFD provides fire suppression, rescue, emergency medical services, operational training, fire prevention and investigation, and community education services. Fire protection services are also provided to the CCFD service area by the San Bruno Fire Department (SBFD).

The CCFD has indicated that the increase in development, including building heights ranging from 8 to 12-stories, would require additional staffing and equipment (i.e. ladder truck). Future development within the Plan Area would be required to pay developer impact fees per the Millbrae Municipal Code requirements. The payment of these fees would defray the cost for facility improvements, equipment, or other needs necessary for maintaining or improving services as needed to accommodate the increase in service population. All future development and street improvement projects shall be subject to the CCFD's and City's review processes to ensure adequate access to public safety vehicles.

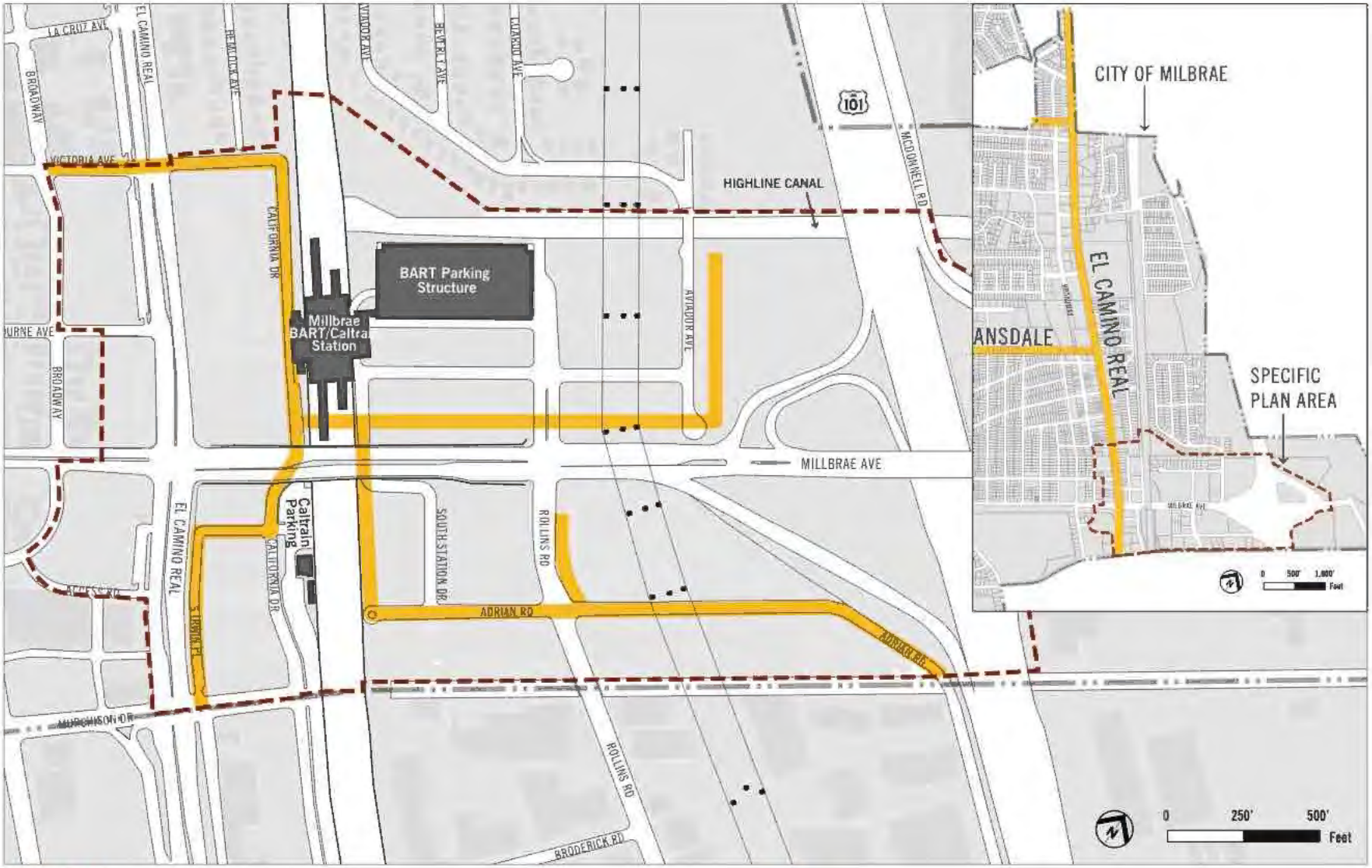



**FIGURE 8-4.** Proposed Fiber Optic Network

MSASP Boundary
City Boundary
Fiber Optic Network
Power Lines

## 8.8. POLICE SERVICES

The Plan Area is currently served by Millbrae Police Bureau and the BART Police Department. New development that will occur under implementation of the Specific Plan will result in an increase in demand for police services, particularly given the number of new residents expected to move to the Plan Area and daytime employees. The following represent estimates of increased need for the Millbrae Police Bureau as a result of Specific Plan implementation:

- 4 Deputies (1 assigned to four shift teams) to provide 24/7 coverage and handle calls for service, citizen contact and community engagement within the proposed development area.
- 1 Motorcycle traffic enforcement officer (Assigned to day shift) – Provide for traffic enforcement during daytime high density hours in and around proposed development area.
- 2 Community Service Officers (assigned to Day shift schedules) – to assist with parking enforcement, traffic accidents, property/evidence management from additional caseloads.

The demand for BART Police services will also increase since BART ridership is expected to increase with implementation of the Specific Plan. The BART Police Department is funded through ridership fares and sales tax, which ensures adequate police services are provided to accommodate additional ridership.

All future development and street improvement projects shall be reviewed to ensure adequate access to public safety vehicles.

## 8.9. PUBLIC SCHOOLS

Implementation of the Specific Plan will result in new residents and families in the Plan Area. As a result, there will be increased demand for school services. It is estimated that approximately 875 new elementary students will result if full implementation of the Specific Plan occurs. It is important to note that these 875 new students would gradually move to the Plan Area over the full course of the 25-year estimated buildout period. It is estimated that approximately 350 new high school students will result over that same 25-year buildout period. As stated in Policy P-UTIL 14, the City will coordinate with affected school districts to consider the impacts of residential development on school facilities and services.

## 8.10. PARKS AND RECREATION

New permanent residents anticipated to move to the Plan Area under implementation of the Specific Plan will generate increased demand for expanded parks and recreation facilities. In addition, new development will be required to provide parks and recreation facilities necessary to accommodate increased demand.

# 9 IMPLEMENTATION & FINANCING PLAN

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# 9. IMPLEMENTATION AND FINANCING PLAN

This chapter provides both technical guidance on how to implement the Specific Plan and a conceptual discussion of development phasing. This chapter also describes potential funding sources and financing tools that could be used to implement public improvements called for in the Specific Plan. The chapter concludes with a list of short-term implementation steps to be initiated soon after adoption of the Specific Plan.

## 9.1. TECHNICAL IMPLEMENTATION STEPS

This section describes the technical steps necessary to implement this Specific Plan.

### GENERAL PLAN AMENDMENT

The Plan Area is designated as a Special Land Use Policy Area (Policy LU3.5) in the General Plan. Adoption of this Specific Plan requires an amendment to the General Plan to ensure consistency between the two documents. Potential changes include the following:

- Update Policy LU 3.5 to reflect the revised vision and goals of the Specific Plan.
- Update the General Plan Bicycle and Trail Routes Map.
- Revise Policy CIP-12 to show the updated list of street improvements that are identified in this Specific Plan.
- Update Map 4-2 (Millbrae Street Classification System) and Map 4-3 (Millbrae Transit System)

### ZONING CODE AMENDMENT

Adoption of the Specific Plan will require the following amendments to Article XVII (Millbrae Station Area Planned Development of "MSAPD" District) of the City's Zoning Code:

- Add a reference of the updated Specific Plan to Section 10.05.1709 Millbrae Station Area Specific Plan.
- Update definitions under Section 10.05.1805 (Definitions) to add terminology defined in the Specific Plan.

## 9.2. CONCEPTUAL DEVELOPMENT PHASING

The Specific Plan envisions three phases of development with a total plan implementation timeframe of up to 25 years. This section is intended to describe a conceptual estimation of the phasing of private development. The phasing discussion is conceptual and will depend on future market conditions and landowner decisions. Plan implementation phases include Short Term (2015-2020), Mid-Term (2021-2026), and Long-Term (2027-2035).

**Phase 1: Short-Term (2015-2020)**

In Phase 1, it is projected that the underutilized areas adjacent to the Millbrae Station will redevelop first, particularly the areas immediately west and east of the station. These areas present the highest potential for redevelopment in the near future because of their proximity to the station, landowner development interest, parcel sizes, and ownership patterns. A concentration of mixed-use (offices, retail, residential, and entertainment uses) and hotel projects are anticipated in these areas. These new projects will function as catalyst projects, attracting more development throughout the Plan Area in the mid-term and long-term.

**Phase 2: Mid-Term (2021-2026)**

In Phase 2, opportunity sites along El Camino Real are anticipated to redevelop, including parcels between El Camino Real and Serra Avenue and the corner lots at the Millbrae Avenue intersection. The parcels located immediately south of the Millbrae Avenue overpass may also redevelop during this phase. A mix of Class A office space and mixed-use residential projects are expected in these areas.

**Phase 3: Long-Term (2027-2035)**

Phase 3 includes the remaining new development anticipated by the Specific Plan. Development in this phase includes additional residential mixed use projects along El Camino Real and Class A office, hotel, and retail projects along Adrian Road.

## 9.3. FUNDING SOURCES AND FINANCING MECHANISMS

This section begins with an overview of funding and financing concepts. Following this overview, the section provides a list of cost estimates for public improvements and a presentation of funding sources and financing mechanisms potentially available to pay for the improvements.

### OVERVIEW OF PUBLIC FUNDING AND FINANCING MECHANISMS

The term "funding" refers to a revenue stream – whether from a tax, fee, grant, or other revenue source that generates money to pay for an improvement. "Financing" or "debt financing" refers to the mechanisms used to manipulate available revenue streams, so that agencies are able to provide infrastructure immediately, before revenue equal to the full cost of that infrastructure is available.

Typically, financing involves borrowing from future revenues by issuing bonds that are paid back over time through taxes or fee payments. Although the terms funding and financing are often used interchangeably, the distinction is important because financing mechanisms almost always require that a funding source be identified to pay off the debt. For example, many district-wide taxes or assessments can be used to issue debt and then the tax and/or assessment revenue is used to pay back bondholders.

Debt financing, as described above, is one way to approach paying for infrastructure improvements. Pay-as-you-go is another. In the pay-as-you-go approach, an improvement can only be made once a sufficient amount of revenue is gathered to fund the improvement. Each of these approaches has advantages and disadvantages, as summarized in Table 9-1.

As shown in the table, the pay-as-you-go approach is less risky to the City, but may take longer to implement. In contrast, the debt financing approach involves a higher level of risk, but is more applicable to addressing larger-scale infrastructure needs.

These two general approaches for paying for infrastructure are not dependent on any particular funding source, but instead can rely on a variety of the funding sources and financing mechanisms, which are described in more detail in the following section.

**TABLE 9-1.** ADVANTAGES AND DISADVANTAGES OF PAY-AS-YOU-GO AND DEBT FINANCING TOOLS

| | Advantages | Disadvantages |
|---|---|---|
| Pay-As-You-Go | • Very little financial risk to City or district | • Improvements take longer to finance. Difficult to apply to larger-scale, more costly improvements. |
| Debt Financing | • Improvements can be made immediately.<br>• Allows for financing of larger-scale, costly improvements. | • Some risk that future revenues will be insufficient to pay off debt within time frame.<br>• Many cities have reached their bonding capacity. |

## POTENTIAL FUNDING SOURCES AND FINANCING MECHANISMS

This section provides brief descriptions of the potential funding sources and financing tools that may be used to implement the capital improvements identified in this Specific Plan. The sources discussed below represent a menu of options. In some cases multiple sources may need to be combined in order to pay for specific projects.

### General Fund

General Fund revenues include property tax, sales tax, transient occupancy tax, and other revenues that are primarily used to pay for ongoing municipal services and operations. There are no restrictions on the types of capital projects that can be funded with General Fund revenues.

### Existing Connection and Facilities Fees

Connection and facilities fees are one-time fees imposed on developers for connecting to the City's water, sanitary sewer, and storm drainage facilities, in order to reimburse the City for the cost of providing those facilities. These revenues can only be used to pay for improvements to the type of system for which the fee is charged (i.e., water fees can only be used to pay for improvements to water mains and other water infrastructure).

### User Fees and Rates

User fees and rates are fees charged for the use of public infrastructure or goods, such as for use of a toll road or bridge, water or wastewater system, or public parking facility. User fees and rates are typically set to cover a system's operating and capital expenses each year, which can include debt service for improvements to the system. The City of Millbrae currently charges rates for the use of Millbrae's water and wastewater systems, based on the amount of water each user consumes. User fees charged for parking in publicly owned parking spaces could also be used to pay for the construction, operations, and/or maintenance of a public parking facility.

### Development Impact Fees and In-lieu Fees

Development impact fees are a one-time charge to new development imposed under the Mitigation Fee Act. These fees are charged to new development to mitigate impacts resulting from the development activity, and cannot be used to fund existing deficiencies. This means that for improvements that benefit existing as well as new development, impact fees can only pay for the portion of the improvement that benefits the new uses. Impact fees must be adopted based on findings of a reasonable relationship (or "nexus") between the development paying the fee, the size of the fee, and the use of fee revenues.

Similar to impact fees, in-lieu fees allow a developer to pay a fee to satisfy a requirement that would otherwise entail providing infrastructure, an amenity, or mitigation measure on-site, such as affordable housing. The City of Millbrae has established in-lieu fees for park land, but their use is limited.

Millbrae has established a MSASP Development Impact Fee that applies to commercial uses, hotel uses, and multi-family residential uses. The city also has a Park and Recreation Fee that applies to residential uses and Utility Capital Facility Fees that pay for water and wastewater facilities.

### Developer Contributions and Developer Financed Public Improvements

In addition to impact fees as outlined above, some types of improvements may be paid for with direct contributions from developers or be financed and constructed by developers. Structured negotiations between cities and developers may be conducted to obtain desired improvements in exchange for development rights. The extent to which a new project can contribute to the provision of infrastructure depends on a number of factors, including the cost of the improvements, the scale of the development project, anticipated revenues that will be generated by development, construction costs, on-site parking requirements, and parking ratios. All of these factors will vary depending on the final format and timing of development, and therefore the amount of public benefits that can be provided will need to be negotiated on a case by case basis.

### Infrastructure Financing Districts (IFDs) and Enhanced Infrastructure Financing Districts (EIFDs)

IFDs divert a portion of future General Fund revenues generated within a defined geographic area from a city's existing property tax rate in order to help fund infrastructure projects. Like tax increment financing (TIF) under redevelopment, IFDs do not add any new fee or tax obligations to property owners, but instead divert money from property tax revenues. The revenues may be used to fund the construction of infrastructure and public facility improvements on a pay-as-you-go basis, or to issue bonds to finance those improvements.

IFDs have not been widely used in California to date, in large part because redevelopment TIF served as a more viable alternative prior to the elimination of redevelopment by the State of California in 2011, but also because of voting requirements and other restrictions on their use.

However, recently passed legislation established "enhanced" IFDs and reduced some of the restrictions on the use of the new EIFDs, including a provision that allows EIFDs to be formed in areas that are within former redevelopment project areas. In addition, the voting requirement for establishment of an EIFD was eliminated, although the issuance of bonds does require a 55 percent vote. If there are 12 or more registered voters in the district boundaries, approval by those registered voters is required. Otherwise, the vote is by the property owners in the district.

### Mello-Roos Community Facilities Districts (CFDs)

CFDs are a type of special taxing district formed when registered voters or property owners within a geographic area agree to impose a new tax on property in order to fund infrastructure improvements, the development of public facilities, or ongoing maintenance, repair, or services. Tax revenues can then be saved in a fund for use on a pay-as-you-go basis, or used to issue bonds. CFDs are relatively flexible, and the special tax rates may be set on any reasonable basis determined by the local legislative body (e.g., on the basis of building area, parcel size, or linear feet of parcel frontage), except that the tax cannot be ad valorem (based on property value). CFD boundaries can be drawn to include non-contiguous parcels, and different special tax rates can be set for different parcels within the CFD, based on land use/property type, densities, or other material factors. CFDs require approval by two-thirds of property owners (weighted by property area) so long as there are no more than 11 registered voters living within the proposed boundary. If there are 12 or more registered voters living within the district, the formation of a CFD requires two-thirds voter approval.

Because of this voter approval requirement, CFDs are most commonly formed in undeveloped areas where the district encompasses a single property owner or a small number of property owners who intend to develop the property and/or subdivide the land for sale. One provision of the Mello-Roos Community Facilities District Act is that the fees can be proportionally subdivided with the land and passed on to the future owners.

### Special Assessment Districts

In a special assessment district, property owners agree to pay an additional assessment in order to fund specific improvements or services. Assessment districts are established by a vote of the property owners and require support from owners of a simple majority (50 percent plus one) of assessed property value in the district. However, under Proposition 218, a constitutional amendment passed by California voters in 1996, the amount that each property owner pays must be directly proportional to the "special benefit" the property will receive from the proposed improvement. The assessment district may not be used to pay for the portion of an improvement that accrues to the community at large (known as the "general benefit"). California law defines a number of different types of assessment districts (e.g., Lighting and Landscaping Districts, Parking Districts, Property and Business Improvement Districts), most of which can issue tax-exempt bonds. As a result of the special benefit requirement, assessment districts are typically used to fund small, primarily local-serving infrastructure such as landscaping, lighting, street, or sidewalk improvements.

### Business Improvement District (BID) or Property-Based Improvement District (PBID)

Business Improvement Districts (BIDs) and Property-Based Improvement Districts (PBIDs) are a type of assessment district in which business or commercial property owners vote to be assessed a fee, which is collected on their behalf by the City, to fund programs and projects within the business area. Typically, a BID or PBID provides resources to develop marketing campaigns, increase lobbying efforts, secure additional funding and enhance public improvement and beautification projects in partnership with the City. By pooling private resources, business owners in BIDs collectively pay for activities that they could not afford on an individual basis.

### One Bay Area Grant Program

The One Bay Area Grant (OBAG) Program provides grants for local streets and roads preservation, bicycle and pedestrian improvements, and streetscape improvements. At least 70 percent of OBAG funds must be spent in Priority Development Areas (PDAs); as a PDA, the MSASP area would be eligible for this funding. The City/County Association of Governments of San Mateo County (C/CAG) administers the OBAG capital grant program in San Mateo County. C/CAG has fully allocated its share of OBAG dollars through FY 2015-16. After FY 2015-16, however, more OBAG funds may become available.

### Other Transportation Grant Programs

In addition to the OBAG Program, State and regional agencies periodically offer other competitive grants for pedestrian, bicycle, streetscape, road, and other transportation-related improvements. These programs change over time depending on funding availability. Recent examples include the California Department of Transportation's (Caltrans) Safe Routes to School program; the Transportation Fund for Clean Air program, administered jointly by the Bay Area Air Quality Management District (BAAQMD) and C/CAG; the San Mateo County Intelligent Transportation System (ITS) and Smart Corridors Program, administered by C/CAG; and the San Mateo County Measure A Bicycle and Pedestrian Program: Grants for bicycle and pedestrian facilities in San Mateo County, administered by San Mateo County Transportation Authority (SMCTA).

### Other Funds

Other funds include funds from the State gas tax and San Mateo County's $10 Vehicle Registration Fee (Measure M), a portion of which is allocated based on population and road miles to cities and the County of San Mateo and can be used for congestion mitigation and stormwater pollution mitigation programs, including projects such as road restriping, signal timing/coordination, signage, and street runoff treatment.

### Water and Sewer Grant Programs

State and federal agencies occasionally make competitive grant funding available for water and sewer programs. Like discretionary transportation grants, these programs change over time depending on funding availability. For example, various State bond measures have provided grant funding for programs administered by the California Department of Water Resources (DWR) and State Water Resources Control Board (SWRCB). These include the Integrated Regional Water Management Program Implementation Grant for water supply and water quality, wastewater and recycled water, flood protection and stormwater management, and watershed management projects; and the Stormwater Flood Management Grant program for projects that manage stormwater runoff to reduce flood damage, improve groundwater supplies, improve water quality, and restore ecosystems.

## FUNDING AND FINANCING OPTIONS

Table 9-2 provides a menu of options for the types of improvements that have been identified (water, sewer, streetscape and traffic improvements). It is likely that some projects will be funded through a number of different local, state, federal, and even private sources, and the potential for utilizing a given source will vary depending on market conditions, funding availability, consent from property owners, and other factors at the time the improvement is made. In particular, it is likely that some portion of

infrastructure costs will be directly associated with development projects included in the Plan Area, and will be borne by developers as a part of their development project, or as a result of negotiations with the City.

**TABLE 9-2.** FUNDING AND FINANCING MATRIX

| | | Capital Improvement Type | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Funding and Financing Sources** | **Administering Agency** | Pedestrian & Streetscape Improvements | Bicycle Improvements | Other Road Improvements | Parks, Plazas, Open Space | Shared & Public Parking Facilities | Water System Improvements | Sanitary Sewer Improvements |
| General Fund | City | X | X | X | X | X | X | X |
| Existing Connection and Facilities Fees | City | | | | | | X | X |
| User Fees and Rates | City | | | | | X | X | X |
| Development Impact & In Lieu Fees | City | | | X | X | X | X | X |
| Developer Contributions and Developer Financed Public Improvements | City and/or Property Owners | X | X | X | X | X | X | X |
| Enhanced Infrastructure Financing District (EIFD) | City | X | X | X | X | X | X | X |
| Community Facilities District (CFD) | City | X | X | X | X | X | X | X |
| Special Assessment District | City | X | | | X | | | |
| Property-Based Improvement District (PBID) or Business Improvement District (BID) | Business and/or Property Owners | X | X | | X | X | | |
| One Bay Area Grant (OBAG) Program | MTC, C/CAG | X | X | X | | | | |
| Other Transportation Grant Programs | Caltrans, MTC, C/CAG, BAAQMD | X | X | X | | | | |
| Other Funds | City | X | X | X | X | X | X | X |
| Water and Sewer Grant Programs | DWR, SWRCB | | | | | | X | X |

Acronyms: Caltrans: California Department of Transportation, MTC: Metropolitan Transportation Commission, C/CAG: City/County Association of Governments of San Mateo County, BAAQMD: Bay Area Air Quality Management District, DWR: California Department of Water Resources, SWRCB: State Water Resources Control Board

## IMPROVEMENT LIST

The Specific Plan identifies a series of public improvements in the Plan Area to advance the overall vision as well as mitigate development-related impacts, as shown in Table 9-3 below. These improvements include intersection improvements and street reconfigurations to enhance traffic circulation; streetscape improvements including new sidewalks; street lighting and furniture; infrastructure improvements related to stormwater management; and other similar improvements.The improvements in Table 9-3 should be primarily considered in conjunction with specific development projects.

Based on the menu of funding options identified in Table 9-2, Table 9-3 shows financing mechanisms that shall be used to implement the capital improvements.

**TABLE 9-3.** FINANCING MECHANISMS FOR SPECIFIC PLAN CAPITAL IMPROVEMENTS

| List of Public Improvements | Description | Future Developer Contributions | Impact Fees | General Fund, Grants & Other Funding Sources |
|---|---|---|---|---|
| **Streetscape Improvements (including on-street bicycle infrastructure)[1]** | | | | |
| El Camino Real (west side only; south of Millbrae Ave) | Bike facilities, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | | X | X |
| Millbrae Ave (between Broadway and El Camino Real) | Median change, bike facilities, street trees | | X | X |
| Victoria Ave (between Broadway and El Camino Real) | Bike facilities, street trees | | X | X |
| **Streetscape Improvements Part of Private Development** | | | | |
| Adrian Rd | Curb change, bike facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| Aviador Ave (Bay Trail) | Bike facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| California Dr Extension (north of Millbrae Ave) | Bike and transit facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| El Camino Real (north of Millbrae Ave) | Curb change (e.g. frontage road), bike facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| Irwin Pl | Bulbouts, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| Millbrae Avenue (between El Camino Real and Aviador Ave) | Curb change, bike facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |

| List of Public Improvements | Description | Future Developer Contributions | Impact Fees | General Fund, Grants & Other Funding Sources |
|---|---|---|---|---|
| Murchison Dr (north side only) | Bike facilities, street trees, pedestrian amenities, pedestrian-scaled lighting | X | | |
| Rollins Rd (between Millbrae Ave and El Portal Canal) | Curb change, bike facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| Rollins Rd, Garden Ln, and South Station Rd (north of Millbrae Ave) | Bike and transit facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| South Station Rd (south of Millbrae Ave) | Curb change, bike facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| West side of California Dr (south of Millbrae Ave)[3] | Curb change, bike facilities, sidewalk widening, street trees, pedestrian amenities, pedestrian-scaled lighting, bike racks, landscaping | X | | |
| **Regional Bike/Ped Facilities** | | | | |
| Pedestrian/Bicycle Bridge over Highway 101 (Bay Trail) | Pedestrian/bicycle bridge structure, utility relocation, right of way | | X | X |
| Millbrae Overpass (Long Term Option 2, described in Chapter 7)[3] | Realign median, 2-way bike facilities, reduced land widths, curb change | | X | X |
| **Enhanced Bus Stops [5][6]** | | | | |
| Northbound ECR at Murchison Drive | Enhanced stops and real-time passenger information | | | |
| Northbound ECR at Linden Avenue/Paseo | Enhanced stops and real-time passenger information | | X | X |
| Southbound ECR at Millbrae Station/Paseo | Enhanced stops and real-time passenger information | | X | X |
| Southbound ECR at Murchison Drive | Enhanced stops and real-time passenger information | | X | X |
| **Traffic Mitigation [6]** | | | | |
| California/Murchison Signalization | | | X | |

| List of Public Improvements | Description | Future Developer Contributions | Impact Fees | General Fund, Grants & Other Funding Sources |
|---|---|---|---|---|
| **Enhanced Pedestrian Crossings [6]** | | | | |
| Rollins Rd/Millbrae Ave Intersection | Curb ramp upgrade (ADA-compliance), new pedestrian refuge, pedestrian signals, advance stop bars | | X | X |
| Rollins Rd/Adrian Rd Intersection | Curb ramp upgrade (ADA-compliance), pedestrian signals, advance stop bars | | X | X |
| El Camino Real /Millbrae Ave Intersection | New pedestrian refuge, pedestrian signals, advance stop bars | | X | X |
| El Camino Real /Victoria Ave Intersection | Curb ramp upgrade (ADA-compliance), new pedestrian refuge, new crosswalk, pedestrian signals, advance stop bars | | X | X |
| El Camino Real /Murchison Intersection | Curb ramp upgrade (ADA-compliance), new pedestrian refuge, new crosswalk, advance stop bars | | X | X |
| **Utility Infrastructure [7]** | | | | |
| Water main along the east side of El Camino Real between Murchison Dr and Millbrae Ave | 8 inch to 10 inch | | X | X |
| Water main along the south side of Millbrae Ave between California Dr and Aviador Ave | 8 inch to 12 inch | | X | X |
| Water main along Rollins Rd between Millbrae Ave and the north of Highline Canal | New 12 inch | | X | X |
| Sanitary sewer line along Adrian Rd between railroad tracks and Rollins Rd | 10 inch to 12 inch | | X | X |
| Sanitary sewer line along Adrian Rd from Rollins Rd to the east and along Aviador Ave | 12 inch to 18 inch | | X | X |
| Sanitary sewer line along California Dr Extension north of Millbrae Ave | 8 inch to 12 inch | X | | |

| List of Public Improvements | Description | Future Developer Contributions | Impact Fees | General Fund, Grants & Other Funding Sources |
|---|---|---|---|---|
| Sanitary sewer line along Highline Canal between California Dr Extension north of Millbrae Ave and Highway 101 | 18 inch to 24 inch | | X | X |
| Sanitary sewer detention tank for sewer peak buffering | 250,000-gallon-tank | X | X | |
| **Infrastructure Part of Private Development** | Expansion and relocation of pipelines on private project sites | | | |

Notes:

[1] Source: PlaceWorks, 2015

[2] Assumes that the curb line of the east side of the street remains the same. The east side of the street will be improved by Caltrain, if necessary, in conjunction with Caltrain parking lot improvements.

[3] Source: Fact Sheet Exceptions to Mandatory Design Standards EA0A660, attached to the Combined Project Study Report / Project Report prepared for the City of Millbrae, May 14, 2007.

[4] The same cost assumptions were made as ground-level improvements. Costs may increase should the recommended improvements require modification of the overpass structure.

[5] Source: El Camino BRT Phasing Study, SamTrans, 2014.

[6] Costs include 10 percent contingency and no design fees or traffic control/mobilization; Source: Fehr and Peers, 2015

[7] Source: Kimley-Horn Associates, 2014.

## 9.4. SHORT-TERM NEXT STEPS

### Complete a Robust Specific Plan Area Infrastructure Analysis

The Specific Plan provides a broad overview of the utility infrastructure improvements required to support the development anticipated under the Specific Plan. This discussion, as presented in Chapter 8, is based on a general understanding of the infrastructure needs in the city and Plan Area. The City should explore the preparation of a more robust infrastructure analysis that includes detailed modeling of future uses to determine specific improvements to the utility infrastructure system, including pipe upsizing.

### Update the Existing Development Impact Fee Structure

The Specific Plan recommends that the City update its existing fee structure for new development to ensure that the fees accurately reflect the costs to provide services and upgrades triggered by new development. To do so, the City must initiate nexus studies as described previous in this chapter. Nexus studies make findings of a reasonable relationship (or "nexus") between the development paying the fee, the size of the fee, and the use of fee revenues.

### Initiate Detailed Future Streetscape Design and Pedestrian/Bicycle Planning

The Specific Plan sets several goals and recommendations for improved streetscapes and an improved bicycle circulation system. Some of these improvements may be provided by future private development, but others may be partially or fully initiated by the City and/or other partnering agencies. This could occur through the use of City funds, through grant funding, or some combination thereof. As such, the Specific Plan recommends further, more detailed streetscape design and pedestrian/bicycle planning work to better define the precise improvements needed. With more detailed planning documents and design work in hand, the City will be in an improved position when applying for grant funding to implement physical improvements.

### Work With School District to Consider Impacts

Coordinate with affected school districts to consider the impacts of residential development on school facilities and services. Help facilitate the school districts and developers in determining school related needs that result from development, and in addressing impacts through the imposition of development fees and other mitigation measures to the extent permitted by law.

### Require a Fiscal Impact Analysis for Major New Development Proposals

Fiscal impact studies measure the impact of new development and associated municipal services on a city's budget. This type of analysis requires long range projections of the future, and is therefore best used to understand which components of different development scenarios generate revenues and costs, and to compare the differing impacts among alternatives. This information will be used in evaluating the proposed mix of uses and the opportunity to require changes to the development scenario dependent on the desired outcome in consideration of community benefits and/or generating economic revenue. Therefore, a fiscal impact study is required for major mixed-use development entitlements located within the Transit-Oriented Development (TOD) and Residential Mixed Use (RMU) Planning Zones (Figure 5-1).

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10
COMMUNITY BENEFITS PROGRAM

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# 10. COMMUNITY BENEFITS PROGRAM

Community benefits refer to development contributions made by property owners or developers to provide benefit to the Plan Area in exchange for approval to develop additional or reduced intensity. The Plan defines "Baseline" FAR and Residential Density for each zone in Chapter 5. Any development above the maximum or below the minimum baseline shall provide public improvements and/or equivalent resources to improve quality of life in the Plan Area or city and to help implement the Plan. This exchange is voluntary for the applicant and the City.

## AGREEMENT REQUIRED

Any developer taking part in the Community Benefits Program shall be required to enter into a binding Agreement with the City to specify the public benefit(s) that will be provided in exchange for the higher development intensity that is requested. The City will negotiate the terms of the Agreement, including the period during which the development entitlement will be available to the developer and public benefits that will be provided by the developer. A developer may elect to negotiate this agreement in the form of a Development Agreement as defined in the Zoning Ordinance.

## PUBLIC BENEFITS LIST

The public benefits in Table 10-1 are intended to provide examples of benefits that may be implemented through a voluntary Community Benefits Agreement and are not intended to be all-inclusive or limited. The City shall determine the appropriate public benefit required in exchange for the request of increase in development standards based on current, identified City needs. In general, public benefits should be provided within and/or accessible from the Plan Area.

Project applicants may elect to directly construct or provide the benefits in Table 10-1. Construction of benefits is preferred. However, the City will have the discretion to accept a monetary contribution (with the exception of affordable housing benefits) to construct the benefit or improvement where deemed appropriate through development of the Community Benefits Agreement.

**TABLE 10-1.** EXAMPLES OF PUBLIC BENEFIT CONTRIBUTIONS

| Benefit | Description |
|---|---|
| Affordable Housing | • Development of Affordable housing units on-or off site that exceed the minimum requirement as set forth in this Plan.<br>• Larger units with higher bedroom counts. |
| Pedestrian and Bicycle Facilities | • Development of pedestrian and bicycle facilities that exceed the minimum requirement as set forth in this Plan.<br>• Enhanced design efforts of pedestrian and bicycle pathways and/or additional connections. |
| Publically Accessible Open Space and/or Improvements | • Development of publically accessible open space that exceeds the minimum requirement as set forth in this Plan.<br>• Public art, recreational facilities, other facilities (plazas, landscaping, trails, water fountains, restrooms, benches) |
| Public Right-of-Way Improvements | • Development of improvements te the public right-of-way exceeds the minimum requirement as set forth in this Plan.<br>• Lighting, signage, streetscape landscape, improved aesthetic materials. |
| Transportation Demand Management (TDM) | • Development of a TDM plan that exceeds the minimum requirements as set forth in this Plan |

# APPENDIX E: AIRPORT LAND USE COMPATIBILITY PLAN SECTIONS

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**Exhibit IV-19**, which is provided for information purposes only, depicts a profile view of the lowest critical airspace surfaces along the extended centerline of Runway 10L-28R – the TERPS Obstacle Departure Procedure (ODP) surface, representing standard all-engines departures, and the approximate OEI surface developed by SFO through independent study in consultation with the airlines serving SFO. The exhibit also shows the terrain elevation beneath the airspace surfaces and various aircraft approach and departure profiles, based on varying operating assumptions. The exhibit illustrates a fundamental principle related to the design of airspace protection surfaces. The surfaces are always designed below the actual aircraft flight profile which they are designed to protect, thus providing a margin of safety. Note that the ODP climb profile is above the ODP airspace surface, and the OEI climb profile is above the OEI airspace surface.

### 4.5.4 AIRSPACE PROTECTION POLICIES

The following airspace protection policies (AP) shall apply to the ALUCP.

#### AP-1 COMPLIANCE WITH 14 CFR PART 77, SUBPART B, NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

**AP-1.1 Local Government Responsibility to Notify Project Sponsors**

Local governments should notify sponsors of proposed projects at the earliest opportunity to file Form 7460-1, *Notice of Proposed Construction or Alteration*, with the FAA for any proposed project that would exceed the FAA notification heights, as shown approximately on Exhibit IV-10. Under Federal law, it is the responsibility of the project sponsor to comply with all notification and other requirements described in 14 CFR Part 77. This requirement applies independent of this ALUCP.

**AP-1.2 FAA Aeronautical Study Findings Required Before Processing Development Application**

The sponsor of a proposed project that would exceed the FAA notification heights, as shown approximately on Exhibit IV-10, shall present to the local government permitting agency with his or her application for a development permit, a copy of the findings of the FAA's aeronautical study, or evidence demonstrating that he or she is exempt from having to file an FAA Form 7460-1. It is the responsibility of the local agency to consider the FAA determination study findings as part of its review and decision on the proposed project.

#### AP-2 COMPLIANCE WITH FINDINGS OF FAA AERONAUTICAL STUDIES

Project sponsors shall be required to comply with the findings of FAA aeronautical studies with respect to any recommended alterations in the building design and height and any recommended marking and lighting of their structures for their proposed projects to be deemed consistent with this ALUCP.

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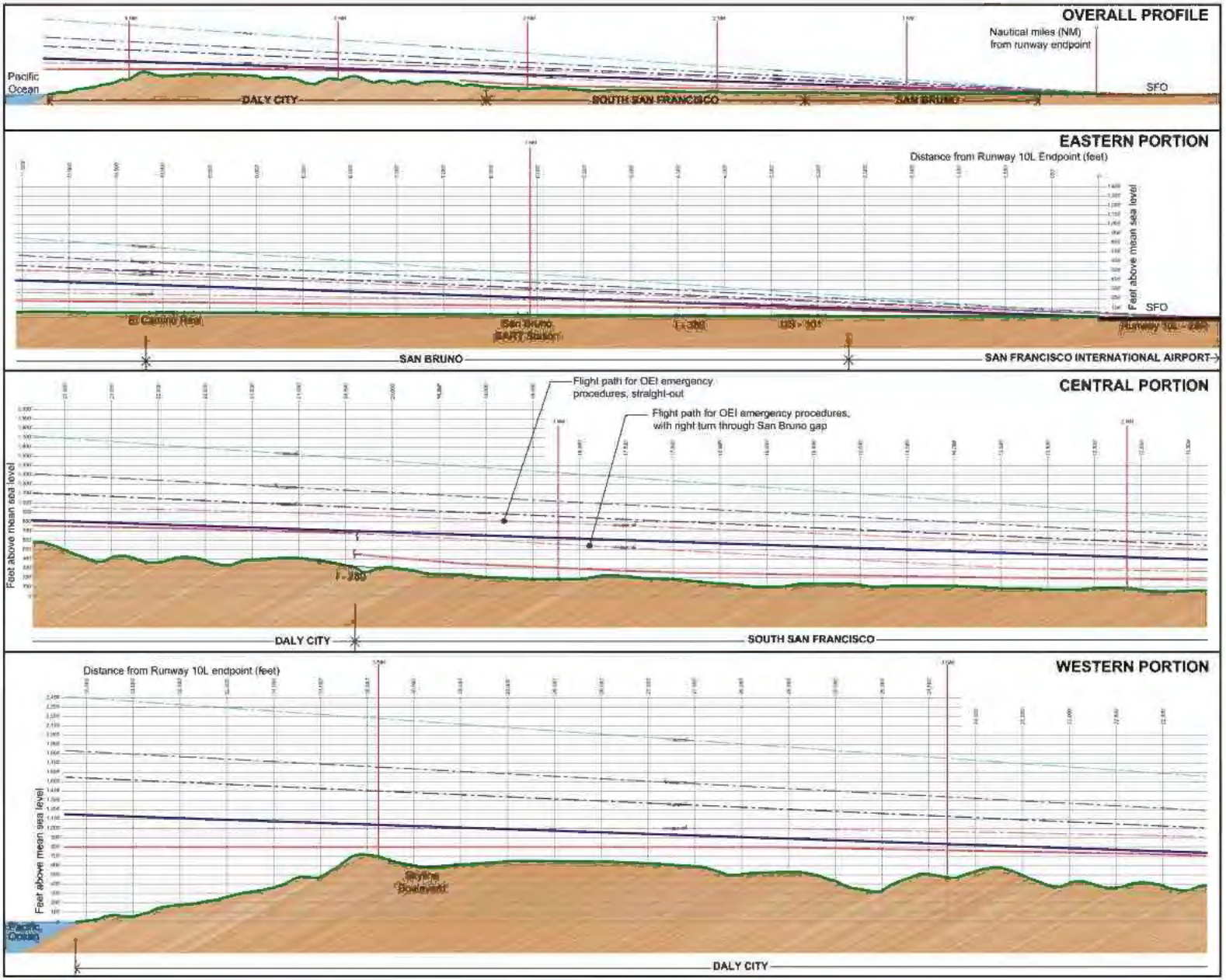


**LEGEND**

- Terrain Profile
- One Engine Inoperative (OEI) emergency flight path (approximate)
- OEI airspace protection surface

**Representative Standard Flight Procedures**

- Runway 28R departure: 270 feet per nautical mile minimum climb gradient, as specified in Obstacle Departure Procedure (ODP)
- Obstacle Clearance Surface (OCS) for ODP
- Runway 28R departure: 425 feet per nautical mile minimum climb gradient, as specified in several Standard Instrument Departure (SID) procedures

  Note: Aircraft on departure usually climb at a higher rate than the specified minimum
- Runway 10L approach: 3.0° glidepath angle
- Representative at-scale aircraft - Boeing 777-300

**KEY PLAN**


Exhibit IV-19

**PROFILE VIEW ALONG RUNWAY 10L EXTENDED CENTERLINE RUNWAY 10L APPROACHES / RUNWAY 28R DEPARTURES**

Comprehensive Airport Land Use Plan
For the Environs of San Francisco International Airport

**C/CAG**

City / County Association of Governments of San Mateo County, California

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### AP-3 MAXIMUM COMPATIBLE BUILDING HEIGHT

In order to be deemed consistent with the ALUCP, the maximum height of a new building must be the lower of (1) the height shown on the SFO critical aeronautical surfaces map (Exhibits IV-17 and IV-18), or (2) the maximum height determined not to be a "hazard to air navigation" by the FAA in an aeronautical study prepared pursuant to the filing of Form 7460-1.

For the vast majority of parcels, the height limits established in local zoning ordinances are lower than the critical airspace surfaces. In those cases, the zoning district height regulations will control. Compliance with the zoning district height and the SFO critical aeronautical surfaces map, however, does not relieve the construction sponsor of the obligation to file a FAA Form 7460-1 *Notice of Proposed Construction or Alteration*, if required, and to comply with the determinations resulting from the FAA's aeronautical study.

For a project to be consistent with this ALUCP, no local agency development permits shall be issued for any proposed structure that would penetrate the aeronautical surfaces shown on Exhibits IV-17 and IV-18 or the construction of which **has not** received a Determination of No Hazard from the FAA, or which would cause the FAA to increase the minimum visibility requirements for any instrument approach or departure procedure at the Airport.

### AP-4 OTHER FLIGHT HAZARDS ARE INCOMPATIBLE

Proposed land uses with characteristics that may cause visual, electronic, or wildlife hazards, particularly bird strike hazards, to aircraft taking off or landing at the Airport or in flight are incompatible in Area B of the Airport Influence Area. They may be permitted only if the uses are consistent with FAA rules and regulations. Proof of consistency with FAA rules and regulations and with any performance standards cited below must be provided to the Airport Land Use Commission (C/CAG Board) by the sponsor of the proposed land use action.

Specific characteristics that may create hazards to aircraft in flight and which are incompatible include:

(a) Sources of glare, such as highly reflective buildings or building features, or bright lights, including search lights or laser displays, which would interfere with the vision of pilots making approaches to the Airport.

(b) Distracting lights that that could be mistaken by pilots on approach to the Airport for airport identification lighting, runway edge lighting, runway end identification lighting, or runway approach lighting.

(c) Sources of dust, smoke, or water vapor that may impair the vision of pilots making approaches to the Airport.

(d) Sources of electrical interference with aircraft or air traffic control communications or navigation equipment, including radar.

(e) Land uses that, as a regular byproduct of their operations, produce thermal plumes with the potential to rise high enough and at sufficient velocities to interfere with the control of aircraft in

flight. Upward velocities of 4.3 meters (14.1 feet) per second at altitudes above 200 feet above the ground shall be considered as potentially interfering with the control of aircraft in flight.[17]

(f) Any use that creates an increased attraction for wildlife, particularly large flocks of birds, that is inconsistent with FAA rules and regulations, including, but not limited to, FAA Order 5200.5A, *Waste Disposal Sites On or Near Airports*, FAA Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, and any successor or replacement orders or advisory circulars. Exceptions to this policy are acceptable for wetlands or other environmental mitigation projects required by ordinance, statute, court order, or Record of Decision issued by a federal agency under the National Environmental Policy Act.

### 4.5.5 iALP AIRSPACE TOOL

In consultation with C/CAG, SFO developed the iALP Airspace Tool, a web-based, interactive tool to evaluate the relationship of proposed buildings with the Airport's critical airspace surfaces. The iALP Airspace Tool is designed to assist planners, developers, and other interested persons with the implementation of the airspace protection policies of the SFO ALUCP. The tool helps users determine: (1) the maximum allowable building height at a given site, and/or (2) whether a building penetrates a critical airspace surface, and by how much, given the proposed building height.

A more detailed description of the iALP Airspace Tool and a tutorial explaining how to use it is presented in **Appendix J**. Use of this tool, however, does not relieve a project sponsor of the duty to comply with all federal regulations, including the obligation to file Form 7460-1, Notice of Proposed Construction or Alteration, with the FAA.

[17] This is a threshold established by the California Energy Commission in its review of power plant licensing applications. See *Blythe Solar Power Project: Supplemental Staff Assessment, Part 2*,. CEC-700-2010-004-REV1-SUP-PT2, July 2010. California Energy Commission. Docket Number 09-AFC-6, p. 25. This criterion is based on guidance established by the Australian Government Civil Aviation Authority (Advisory Circular AC 139-05(0), June 2004). The FAA's Airport Obstructions Standards Committee (AOSC) is studying this matter but has not yet issued specific guidance.


# MSASP

MILLBRAE STATION AREA SPECIFIC PLAN