LAWRENCE STATION AREA PLAN

NEIGHBORHOOD TRANSIT-ORIENTED DEVELOPMENT PLAN

Nov 2016 | CITY OF SANTA CLARA

LAWRENCE STATION AREA PLAN

TABLE OF CONTENTS

TABLES AND FIGURES

1 LSAP OVERVIEW

2 CONTEXTUAL ANALYSIS

3 LSAP VISION & DEVELOPMENT OBJECTIVES

4 DEVELOPMENT MASTER PLAN

5 ARCHITECTURAL STANDARDS & GUIDELINES

6 LANDSCAPE MASTER PLAN

7 STREETSCAPE MASTER PLAN

8 SIGNAGE, PUBLIC ART & LIGHTING MASTER PLAN

9 INFRASTRUCTURE PROGRAM

10 TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM

11 IMPLEMENTATION PROGRAM

1 LSAP OVERVIEW

1.1 PROJECT SUMMARY

The overall purpose of the Lawrence Station Area Plan (LSAP) is to transform an underutilized industrial area located within the City of Santa Clara near the Caltrain Lawrence Station, into a pedestrian-friendly and transit-oriented development that contributes to a more vibrant and livable community.

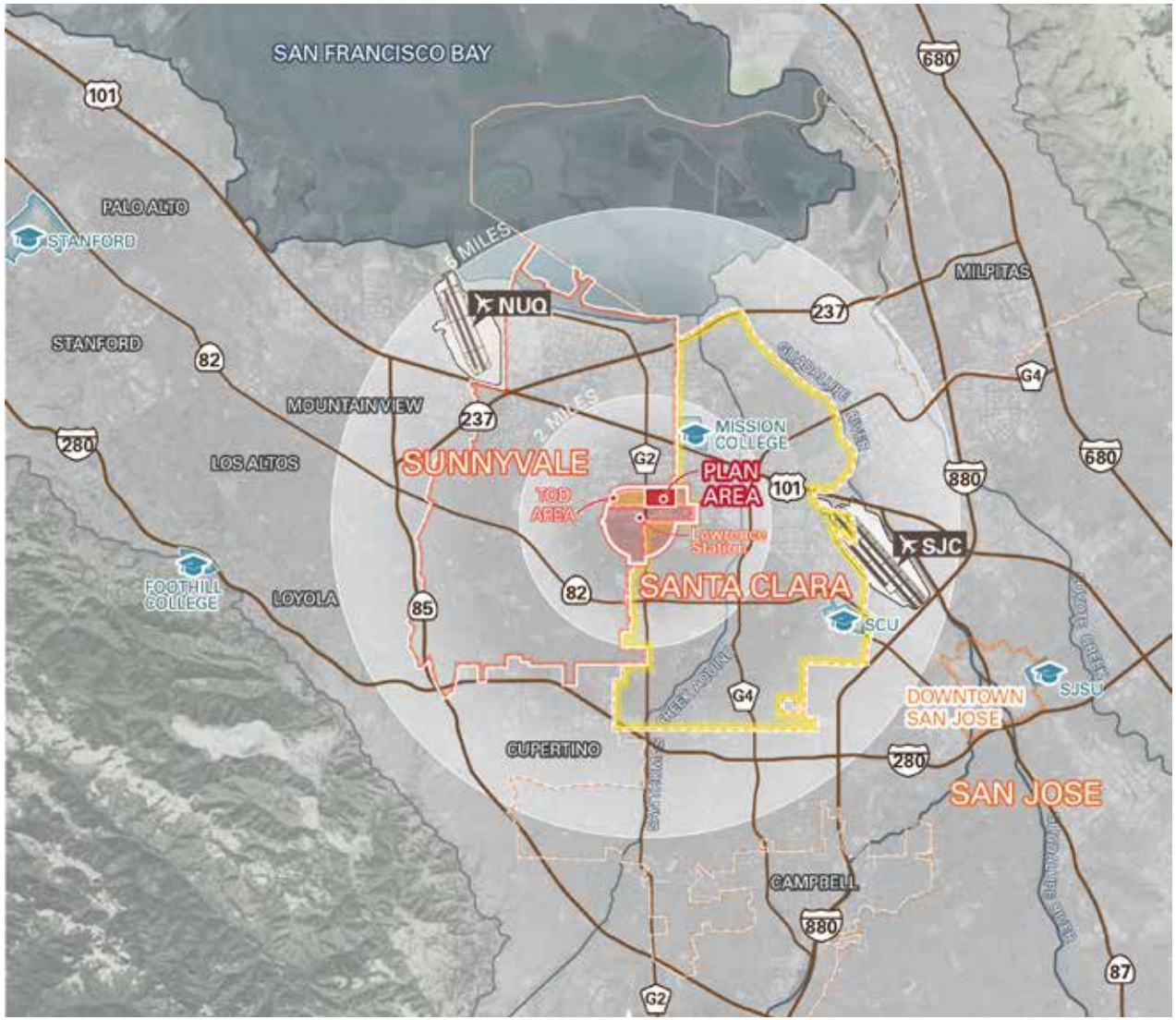
PROJECT DESCRIPTION

The LSAP provides for mixed-use development on an approximately 72 acres site (65 acres of developable land area excluding existing public right-of-way) located in close proximity to the Caltrain Lawrence Station serving the communities of Santa Clara and Sunnyvale.

At build-out, the Plan will create a lively neighborhood that accommodates up to 3,500 residential dwelling units, roughly 100,000 square feet of neighborhood-oriented and convenience retail, and approximately 6.3 acres of public open space in conjunction with various outdoor recreational facilities and landscape features, such as a community garden, a public plaza, pocket parks and paseos.

The targeted residential density is 45 - 56 dwelling units per acre. An existing Santa Clara Fire Department Station will remain in place as a component of the Plan, potentially incorporating a Santa Clara Police Department Substation. Associated infrastructure improvements are also required, including an internal road network comprised of public and private streets, and upgrades to sewer, water, and storm drain systems.

FIG 1–1: REGIONAL LOCATION



Lawrence Station


Transit Oriented Development near Lawrence Station

DEVELOPMENT OBJECTIVE

The primary objective of the LSAP is to transform underutilized property into a pedestrian-friendly, mixed-use development that will

1) increase residential opportunities in the broader community by providing a variety of housing types that cater to a diverse population;

2) broaden and strengthen the range of viable transportation choices in the area by encouraging walking, bicycling, and the use of public transit;

3) encourage the efficient use of available land and infrastructure; and

4) locate new housing closer to existing jobs.

The intent is to take advantage of the Plan Area's central location within the economically thriving Silicon Valley region, and to benefit from close proximity to a major regional transit facility by incorporating higher density and transit-supportive uses that will maximize development potential.

OUTREACH PROCESS

The LSAP is the result of on-going interaction between the planning team and stakeholders, including development interests and the surrounding community, based on an outreach plan formulated early in the planning process. Outreach activities included two community meetings scheduled at important milestones and decision points. It is important to note that the LSAP's conceptual master plan incorporates development plans submitted by three separate project applicants, each of whom played an active role in the formulation of the LSAP.

Anticipated as the first phase of development and covering a significant portion of the Plan Area, these development plans support the overall vision and development objective. Nonetheless, following adoption of the LSAP, these proposals are subject to formal application, review and approval in accordance with its provisions.

1.2 PROJECT LOCATION

Strategically located at the heart of the prosperous Silicon Valley, the Plan Area is situated within convenient walking distance northeast of the Caltrain Lawrence Station, a location that the City of Santa Clara has identified as appropriate for redevelopment as higher density housing serving regional employment.

PROJECT SETTING

Site Setting

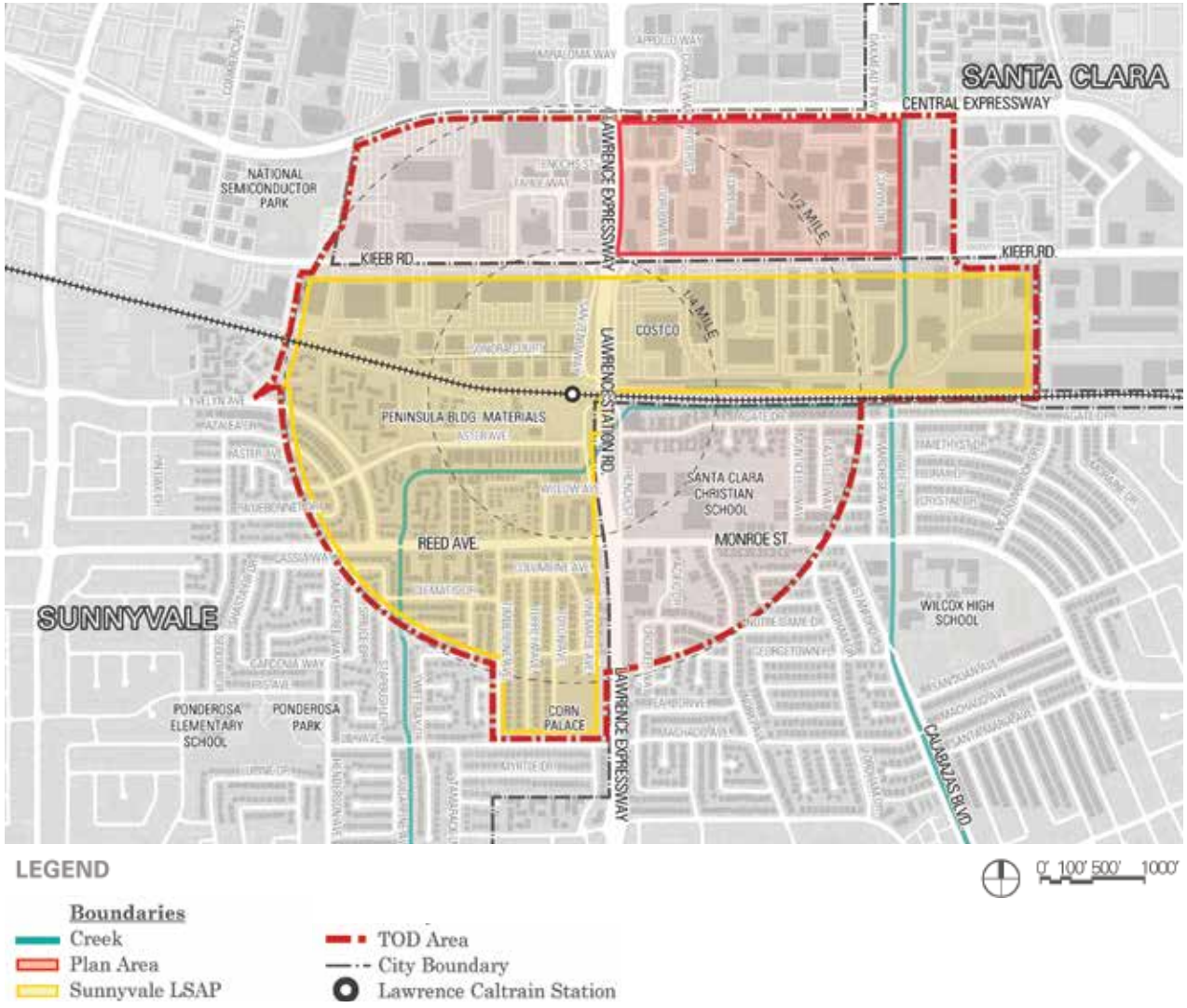
The Plan Area is located within the City of Santa Clara, approximately 45 mile southeast of San Francisco, and bordered by San Jose, Sunnyvale and Cupertino, in the center of Santa Clara County and the Silicon Valley. Santa Clara has experienced considerable population growth in recent decades, transforming itself into an important employment center within the San Francisco Bay Area, featuring the headquarters of several leading high-tech companies, and home to important regional destinations such as Levi's Stadium, Great America Theme Park, and Santa Clara University.

Moreover, San Jose International Airport is located directly east of Santa Clara. These assets present the opportunity for additional growth based on high quality development at strategic locations throughout the City, especially in proximity to major transit facilities such as Lawrence Station.

Lawrence Station

Lawrence Station is part of Caltrain commuter rail system, one of 32 stations serving the San Francisco Peninsula, and extending from San Francisco through the South Bay to Gilroy. Strategically located within the City of Sunnyvale near the western limits of Santa Clara, the station serves residential neighborhoods and employment districts in both cities. In general, properties north of the rail line are developed with low intensity commercial and industrial uses, while properties south of the rail line are comprised of low density residential zones. Not surprisingly, ridership data indicate that the station has capacity to serve a higher number of passengers than current levels.

FIG 1–1: LOCAL AREA MAP



TOD Study Area

For the purpose of the LSAP's contextual analysis and to ensure coordination with related planning efforts, a "TOD Study Area" has been delineated based on a roughly half-mile radius centered on Lawrence Station, and corresponding to the area of planning analysis utilized for the Draft Sunnyvale Lawrence Station Area Plan (February 2015). The half-mile radius is employed as a common unit of measurement for station area planning and analysis, representing the 10-minute walk that is considered a reasonable distance for a typical pedestrian to reach transit service. The approximately 629-acre TOD Study Area encompasses properties within Sunnyvale and Santa Clara.

Sunnyvale LSAP

Sunnyvale has prepared a draft plan to guide future development of the area surrounding Lawrence Station, specifically addressing approximately 372 acres of the TOD Study Area located within that city's boundaries.

The vision for those properties is to create a vibrant and walkable residential and employment center that takes advantage of proximity to transit. It is important to note that the City of Santa Clara's General Plan requires that development located in proximity to Lawrence Station within its own boundaries achieve consistency with the proposed Sunnyvale LSAP.

Lawrence Station Focus Area

The Plan Area boundaries fall within the 92-acre Lawrence Station Focus Area, one of nine such areas identified in the 2010-2035 Santa Clara General Plan. As a prominent gateway into Santa Clara from the west, and a highly accessible location along a major transportation corridor, the area is targeted for more intense development.

In particular, it is considered suitable for higher density housing serving the large concentration of jobs in and around the City, and envisioned as an "urban neighborhood that contains a dynamic mix of housing types, supportive retail and open spaces that are designed and maintained to enhance livability."

The LSAP addresses approximately 72 acres within the Focus Area that encompass the properties most likely to undergo redevelopment for housing within the 2015 - 2025 time frame for implementation of Phase II of the General Plan.

PROJECT SITE

Site Boundaries

The Plan Area is located to the northeast of the Caltrain Lawrence Station, largely within the one-half mile radius that defines the TOD Study Area. More specifically, the LSAP applies to a portion of the larger Lawrence Station Focus Area, encompassing all properties within the approximately 72 acres (the "Plan Area") bounded by Kifer Road to the south, Lawrence Expressway to the west, Central Expressway to the north, and the Calabazas Creek to the east. Due to the interlocking character of the boundary separating Sunnyvale and Santa Clara, the Plan Area is bordered by Sunnyvale on its north and south.

Site Description

The Plan Area is comprised of numerous, relatively flat parcels that are occupied by one and two-story buildings, generally accommodating light industrial and office uses served by large expanses of surface parking. Recent development in the area has seen the installation of a data center on Corvin Drive. Santa Clara Fire Department Station 9 is also located within the site boundaries. However, no residential land uses or public amenities are located within the Plan Area. Some buildings are vacant and the site may be described as underutilized.

Site Opportunities & Constraints

Most significantly, proximity to Lawrence Station supports redevelopment of the site's underutilized properties to more efficient and intensified land use, particularly higher density housing that will help meet the needs of expanding local and regional employment. As one of the City's designated Focus Areas, it is anticipated that new development will have limited impact on existing neighborhoods. Redevelopment of the Plan Area requires infrastructure upgrades and are projected to impact public services. Area developers will be expected to share costs to infrastructure and public services, including construction of on-site circulation, utility and open space improvements.

FIG 1–2: SITE BOUNDARY MAP

1.3 DOCUMENT SUMMARY

Following adoption by the City Council, the LSAP shall legally function as a Specific Plan that presents development policy, and design standards and guidelines applicable to all properties within the boundaries defined by the Plan, thereby implementing the City of Santa Clara's General Plan, and serving as a guide to public improvement and private investment.

FUNCTION

The LSAP establishes a comprehensive program to govern the use of land and provide for orderly development of the designated Plan Area. It incorporates a conceptual development framework and associated policy, as well as design standards and guidelines; the LSAP also identifies and coordinates necessary infrastructure improvements, public and private financing, and development phasing. In summary, the document is intended to ensure: a) that development within the Plan Area is consistent with the General Plan; and b) that development within both private and public realms is in accord with the LSAP's vision and design intent.

LEGAL AUTHORITY

The LSAP shall be adopted by resolution of the City Council as a Specific Plan, pursuant to Section 65450 et seq. of the California Government Code, and is intended to provide for the systematic implementation of the General Plan as related to properties within the LSAP boundaries. A Specific Plan is a planning tool used by cities to guide development in a defined geographic area. It offers an effective approach to implementing the General Plan, and provides a bridge between the General Plan's goals and policies and individual development projects. The California Government Code sets forth the requirements for a Specific Plan, including provisions for a land use plan, infrastructure plan, including a cost sharing plan between developers, and criteria and standards for development. This document has been drafted to meet the intent and requirements of State Law.

GENERAL PLAN PROVISIONS

Santa Clara's General Plan requires comprehensive planning of the Lawrence Station Focus Area through "preparation of a specific plan and accompanying technical studies" and as appropriate allowing for higher residential densities through the specific plan process. The LSAP fulfills this policy requirement, and otherwise accommodates development of the Lawrence Station Focus Area consistent with General Plan goals and policies that promote mixed-use and transit opportunities within identified Focus Areas. Of note, the Plan strives for compatibility with the Sunnyvale LSAP through harmonious land uses and height limits, supporting regional investment in transit, and contributing to densification of land use and creation of a mixed-use district surrounding Lawrence Station. As part of the planning process, General Plan text and diagram will be amended as necessary to recognize the uses, densities and intensities indicated in the LSAP.

REGULATORY PROVISIONS

Implementation of the LSAP necessitates rezoning of properties located within the Plan Area from Light Industrial (ML) to one or more zoning districts that are compatible with both the LSAP and amended General Plan diagram and text. Additionally, associated amendments to the Santa Clara Zoning Ordinance are required to establish zoning districts that allow for higher densities envisioned by the LSAP, as well as any other accompanying regulatory provisions that further implement LSAP policy, and augment the City's design standards and guidelines.

APPLICABILITY

The LSAP establishes development policy, and sets forth design standards and guidelines applicable to all properties within the Plan Area, specifically the 72 acre site bounded by Lawrence Expressway on the west, Central Expressway on the north, Calabazas Creek on the east, and Kifer Road on the south. All site development approvals subsequent to adoption of this Specific Plan shall be consistent with its policies, standards and guidelines. Additionally, the relevant intent and requirements of the Santa Clara Zoning Ordinance shall apply within the Plan Area boundaries.

1.4 DOCUMENT ORGANIZATION

The LSAP is structured to assist all interested parties, including prospective developers and local decision makers, in accessing the information needed to implement the desired project vision and ensure a high level of development and design quality. The organization of the document is as follows:

CHAPTER 1: LSAP Overview
This chapter introduces the project and the planning process, and outlines the function, applicability, and contents of the LSAP document.

CHAPTER 2: Contextual Analysis
This chapter describes the project setting and policy context, examining regional and local land use, circulation, environmental, and socio-economic contexts, and summarizing applicable local policy and related planning efforts.

CHAPTER 3: LSAP Vision And Development Objectives
This chapter presents the vision and guiding principles for development of the Plan Area.

CHAPTER 4: Development Master Plan
This chapter establishes the physical framework and associated policies for development of the Plan Area, addressing land use, mobility, open space, and urban design; it also presents an illustrative plan and conceptual development program.

CHAPTER 5: Architectural Master Plan
This chapter sets forth development standards and design guidelines with the intent of ensuring high quality construction, covering site planning, including building orientation, service, access and parking, and architectural design, including scale and massing, articulation and fenestration, and materials and details.

CHAPTER 6: Landscape Master Plan
This chapter presents conceptual plans and guidelines for the character and design of the project's landscape, addressing on-site parks and plazas, as well as other outdoor recreational facilities and significant landscape features.

CHAPTER 7: Streetscape Master Plan
This chapter presents conceptual plans and guidelines for the character and design of the project's streetscapes, covering both public and private streets, and addressing recommended street dimensions and streetscape amenities.

CHAPTER 8: Signage, Public Art & Lighting Master Plan
This chapter presents conceptual plans and guidelines for the design of on-site signage and lighting, addressing project and tenant signage, public art, and architectural and landscape lighting.

CHAPTER 9: Infrastructure Program
This chapter provides conceptual plans and programs for the improvement of infrastructure serving the Plan Area, including transportation, wet utilities (water, sewer, and storm drainage), solid waste disposal, and energy (gas and electric) services and systems.

CHAPTER 10: Transportation Demand Management (TDM) Program
This chapter details strategies to reduce the traffic and parking impacts associated with new development projects.

CHAPTER 11: Implementation Program
This chapter describes the regulatory framework that will be utilized to implement the LSAP; it outlines processes for administration of the Plan and subsequent development approvals, and recommends development phasing, financing and implementation responsibilities.

APPENDICES
The appendices incorporate supplementary planning and project data, including a precise description of the Plan Area, a glossary of key terms, and a list of plan contributors.

2 CONTEXTUAL ANALYSIS

2.1 REGIONAL SETTING

The LSAP Plan Area is located at the heart of Silicon Valley, in the City of Santa Clara, adjacent to the City of Sunnyvale and in close proximity to the Caltrain Lawrence Station. Regional attractions, high-tech employment, and accessible highway and commuter rail networks support higher density, transit-oriented development at key locations throughout the City, including the Plan Area.

REGIONAL VICINITY

Situated approximately 45 miles southeast of San Francisco at the southern end of the San Francisco Bay, Santa Clara is strategically located at the center of Santa Clara County and Silicon Valley; it is bordered by San Jose to the north, south and east, Sunnyvale to the west, and Cupertino to the southwest. Important regional centers located in the vicinity of the Plan Area include Downtown Sunnyvale (3 miles distance), Downtown Santa Clara (4 miles distance), and Downtown San Jose (9 miles distance).

REGIONAL POPULATION & ECONOMY

Santa Clara County is one of the fastest growing and most affluent counties in the State; it is highly urbanized with a population of nearly 1.8 million. The City of Santa Clara has similarly experienced considerable population and employment growth in recent decades to become an important center of technology and a prosperous city with a population in excess of 120,000. During this period of transformation from a primarily agricultural community, a low density pattern of development was established in which residential subdivisions were built in the southern half of the City, while employment activities developed in the northern half of the City, with the Southern Pacific Railroad tracks as the dividing line.

High-Tech Employment

Silicon Valley is the nation's leading hub for high-tech innovation and development, with Santa Clara County serving as the headquarters for many of the largest high tech corporations in the world. The area also attracts global talent and entrepreneurship and is also home to numerous innovative startup companies. Several distinguished institutions of higher learning also secure Silicon Valley's tech leadership, including Stanford University, San Jose State University, and Santa Clara University. To its benefit, the City of Santa Clara occupies the County's industrial and employment core. Applied Materials, Oracle, Nvidia, and Intel are among the major employers that make the northern part of the City one of the leading employment centers for the region. Santa Clara currently provides over 120,000 total jobs, with projected growth in employment to over 145,000 jobs by 2040.

Population Growth And Housing Need

Population and household growth is also expected for the City of Santa Clara, with the number of residents forecast to exceed 155,000 by 2040. The Regional Housing Needs Allocation (RHNA) undertaken by the Association of Bay Area Governments (ABAG) projects housing needs by income level; the total projected RHNA for Santa Clara is just over 4,000 units through 2022, with the greatest needs in the "very low" and "above moderate" income categories. The most common housing type in Santa Clara is the single family home (comprising about 50 percent of the housing stock), City policy favors higher-density, mixed-use and transit oriented development on key redevelopment sites, while protecting established single family neighborhoods.

Jobs/Housing Imbalance

Jobs/Housing Imbalance: The concept of jobs/housing balance refers to the relationship between the number of residences to jobs available in any given community or area. A well-balanced community will provide the opportunity to work and reside in that same community, while providing other environmental benefits such as a reduction in vehicle miles traveled (VMT). The City of Santa Clara faces a jobs/housing imbalance of 1.9 jobs per employed resident (2010 General Plan), wherein new housing is required to help meet regional demand, and house those working in the City and surrounding region.

REGIONAL LAND USE

For both Sunnyvale and Santa Clara, low density residential is the dominant land use south of the Caltrain Corridor, and employment activities (industrial/office/R&D) represent the primary land use north of the corridor, making these two cities a focus for high-tech research, development and manufacturing. The most significant retail activity is found along the El Camino Real corridor as it passes east-west through the center of both cities; as Santa Clara's most identifiable commercial corridor it is identified by the community as a focus of revitalization. Downtown Santa Clara and the area surrounding the Santa Clara Station are also targeted by the City for revitalization and reinvestment.

Santa Clara

The Caltrain Corridor establishes an approximate division between the northern and southern halves of Santa Clara. Low density, low-rise residential development characterizes the land use pattern south of the Caltrain Corridor, although higher density residential pockets are evident, especially along arterial streets. Neighborhood parks and public schools are intermixed with these residential zones, while auto-oriented, strip commercial development is commonplace along major thoroughfares, most notably El Camino Real. Office and industrial uses, including the campuses of a number of high-tech companies, dominate the northern half of the City. Popular regional attractions are also located there, namely Levi's Stadium, California's Great America Amusement Park, and the Santa Clara Convention Center. Residential communities and parks are less common north of the Caltrain Corridor.

Sunnyvale

Like Santa Clara, Sunnyvale is essentially built-out with minimal vacant land and a similar land use pattern in which the northern part of Sunnyvale is office and predominantly light industrial use, although the area also contains a significant residential component. In addition to the headquarters for tech leaders such as Yahoo, Inc. and Advanced Micro Devices, major employers include Lockheed Martin Space Systems and Northrup Grumman Marine. Low density residential land use populates Sunnyvale south of the Caltrain Corridor, with significant pockets of medium and high density residential. Sunnyvale is actively engaged in improving its downtown, which is situated just south of its Caltrain Station.

California Convention Center, Santa Clara

Yahoo, Sunnyvale

California Great America, Santa Clara

Advanced Micro Devices (AMD), Sunnyvale

Levi's Stadium, Santa Clara

Fujitsu Inc., Sunnyvale

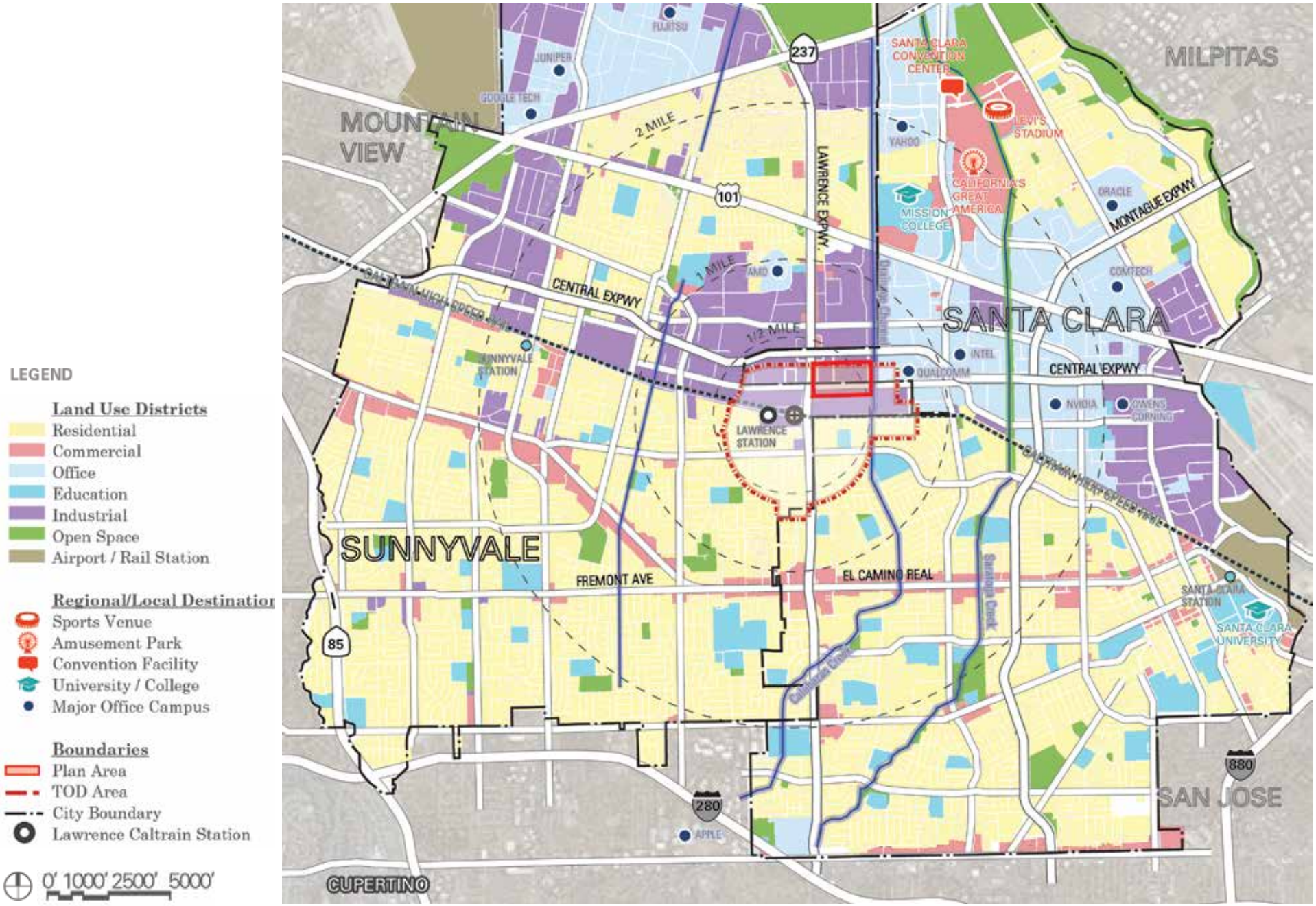
Mission College, Santa Clara

Intel, Santa Clara

Nvidia, Santa Clara

Oracle, Santa Clara

FIG 2–1: REGIONAL LAND USE DISTRIBUTION



REGIONAL TRANSPORTATION

Santa Clara is generally well served by the regional transportation system, offering highway access, and commuter and light rail connections to cities and attractions throughout the South Bay, as well as the San Francisco Peninsula and the East Bay. As a result, the City is especially attractive to commercial interests.

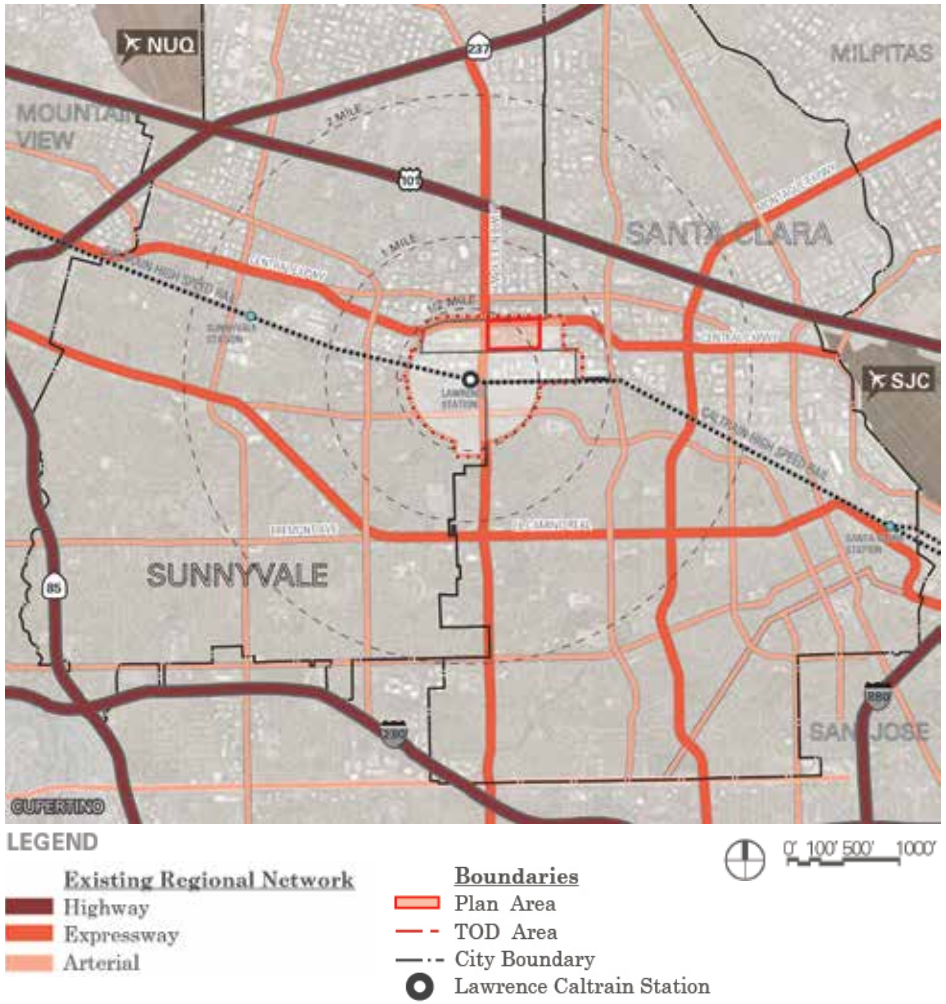
Highway & Major Road Network

Santa Clara gains regional access via US Highway 101 (US 101) as it passes through the center of the City in a generally northwest-southeast direction. Regional highway connections also include State Route 237 which skirts the northern boundary of Santa Clara, Interstate 880 which touches the southeastern edge of the City, and Interstate 280 (I-280) which passes near the City's southern boundary. Lawrence Expressway, Great America Parkway/Bowers Avenue, and San Tomas Expressway are significant north-south links through Santa Clara and afford arterial connections to regional highways; Lawrence Expressway provides the major north-south link to Lawrence Caltrain Station. Central Expressway and El Camino Real are important east-west thoroughfares linking Santa Clara and Sunnyvale; Central Expressway also provides the major east-west link to the Lawrence Caltrain Station.

Lawrence Expressway

Central Expressway

FIG 2–2: REGIONAL ROAD NETWORK



Public Transit

Existing transit lines serving Santa Clara include Caltrain, Altamont Commuter Express (ACE), Capitol Corridor, and Santa Clara Valley Transit Authority (VTA) bus and light rail. The Lawrence Caltrain Station is one of 32 stations located along the Caltrain commuter rail line that provides intercity passenger service along the San Francisco Peninsula between San Francisco and San Jose, with extended service to Morgan Hill and Gilroy during weekday commute hours. It is situated about 1.9 miles east of the Sunnyvale Caltrain Station, and 3.6 miles west of the Santa Clara Station, which functions as an intermodal transportation center also served by the ACE and Capitol Corridor trains, and offering free shuttle to the nearby airport.

Airport Proximity

The Mineta San Jose international Airport (SJC) is located along Santa Clara's eastern edge, its passenger terminal a little over 6.5 miles distance by roads from the Plan Area. Although the smallest of the Bay Area's three international airports, the modernized SJC provides a valuable commercial and general aviation service option for Silicon Valley residents.

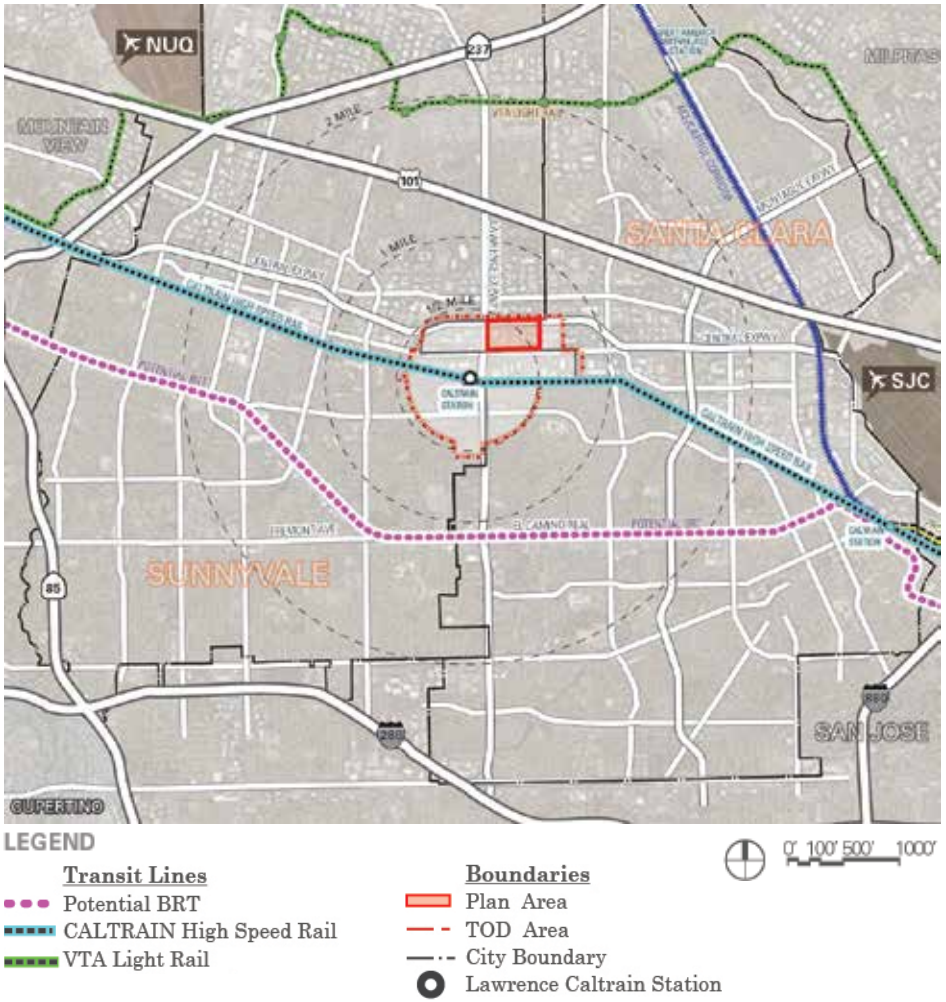
KEY OPPORTUNITIES & CONSTRAINTS

- Santa Clara and Sunnyvale will continue to see employment and population growth, necessitating land use intensification at strategic locations within these built-out communities.
- Redevelopment surrounding the Lawrence Caltrain Station will capitalize on regional investment in transit, and offer a more livable and sustainable option for the Silicon Valley.
- The TOD Study Area is well placed to absorb growth, offering access to transit, and regional proximity to leading high-tech employment, educational institutions, and other attractions.
- The LSAP Plan Area is an important opportunity to deliver quality housing that serves the large concentration of jobs in the vicinity and promotes jobs/housing balance.

Caltrain Transit

VTA Bus

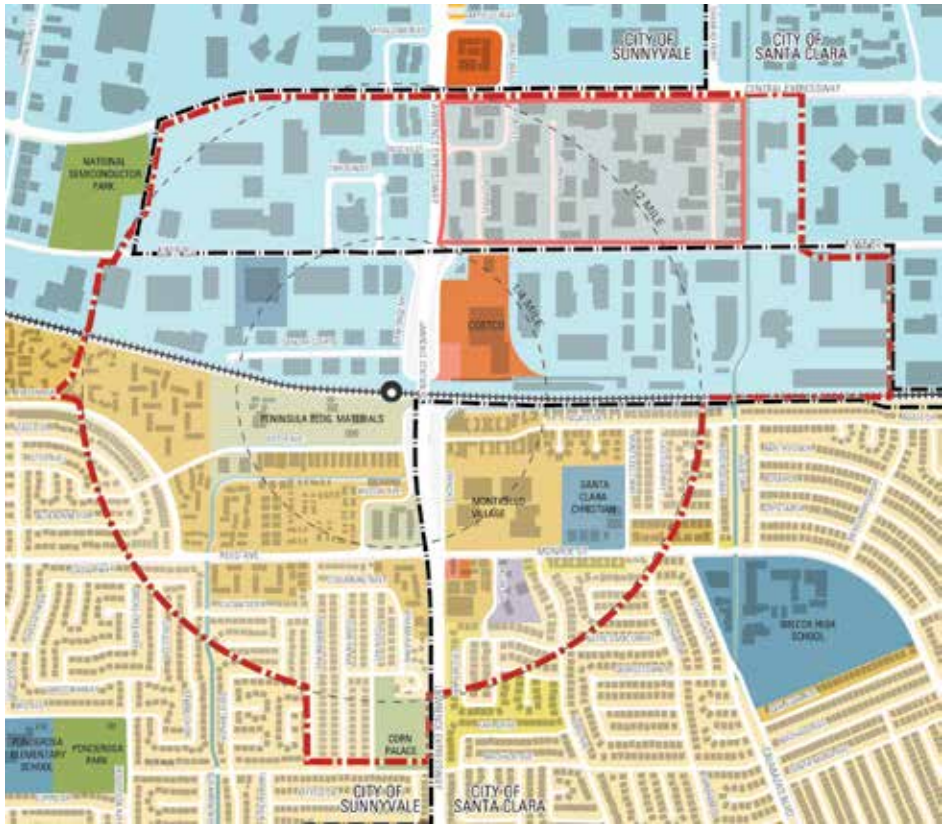
FIG 2–3: REGIONAL TRANSIT NETWORK



2.2 SITE SETTING

For the purpose of site analysis, a TOD Study Area has been defined that roughly covers a half-mile radius surrounding the Lawrence Caltrain Station. Altogether, this area takes in approximately 629 acres, comprised of properties in both Santa Clara and Sunnyvale.

FIG 2–4: LOCAL LAND USE DISTRIBUTION



OVERVIEW

The Caltrain corridor bisects the area east to west, while Lawrence Expressway bisects the TOD Study Area north to south, creating barriers that roughly divide the area into four quadrants; the Santa Clara LSAP Plan Area is located in the northeastern quadrant. It is fully developed with residential, commercial and industrial uses, generally topographically flat, and lacking distinct natural features. Calabazas Creek is a seasonal waterway that flows north-south to the San Francisco Bay, traveling along the eastern edge of the TOD Study Area. It is devoid of vegetation along its 65-foot channelized right-of-way. The El Camino Storm Drain Channel runs through residential neighborhoods and along the Caltrain Corridor before draining into Calabazas Creek; though mostly concrete, its 40 to 45 feet right-of-way includes stretches of grass and earthen banks.

LOCAL LAND USE

Consistent with the broader land use pattern, the TOD Study Area is characterized by commercial and light industrial uses north of the Caltrain Corridor, including mid- to large-scale office complexes, with low to medium density residential uses dominant south of the Caltrain Corridor. Some of the industrial and commercial buildings date to the early years of growth in the Silicon Valley. The Calstone/Peninsula Building Materials operation located on the southside of the rail tracks directly west of the station is the one of the few remaining large-scale heavy manufacturing uses in the area.

There is limited retail activity within the Study Area, although a Costco located north of the station along Lawrence Expressway is an important exception to this pattern. The Study Area has no public parks or significant open spaces; neighborhood parks closest to the Santa Clara LSAP Plan Area are Bracher Park (3.5 acres in size) located about 0.9 miles to the west, and Machado Park (3.5 acres in size) located about 1 mile to the south. Bracher Elementary School, Cabrillo Middle School, and Adrian Wilcox High School are public schools located southwest of the Study Area that will serve school-aged residents of the proposed LSAP development

LOCAL TRANSPORTATION

Movement through the TOD Study Area is a challenge for pedestrians, bicyclists and motorists. East-west connections are generally suitable; however, north-south linkages are poor, especially north of the Caltrain Corridor due to the barrier presented by the rail tracks and the large lot commercial and industrial development pattern. A finer grained pattern of streets and blocks more amenable to circulation characterizes the residential neighborhoods to the south of the Caltrain Corridor.

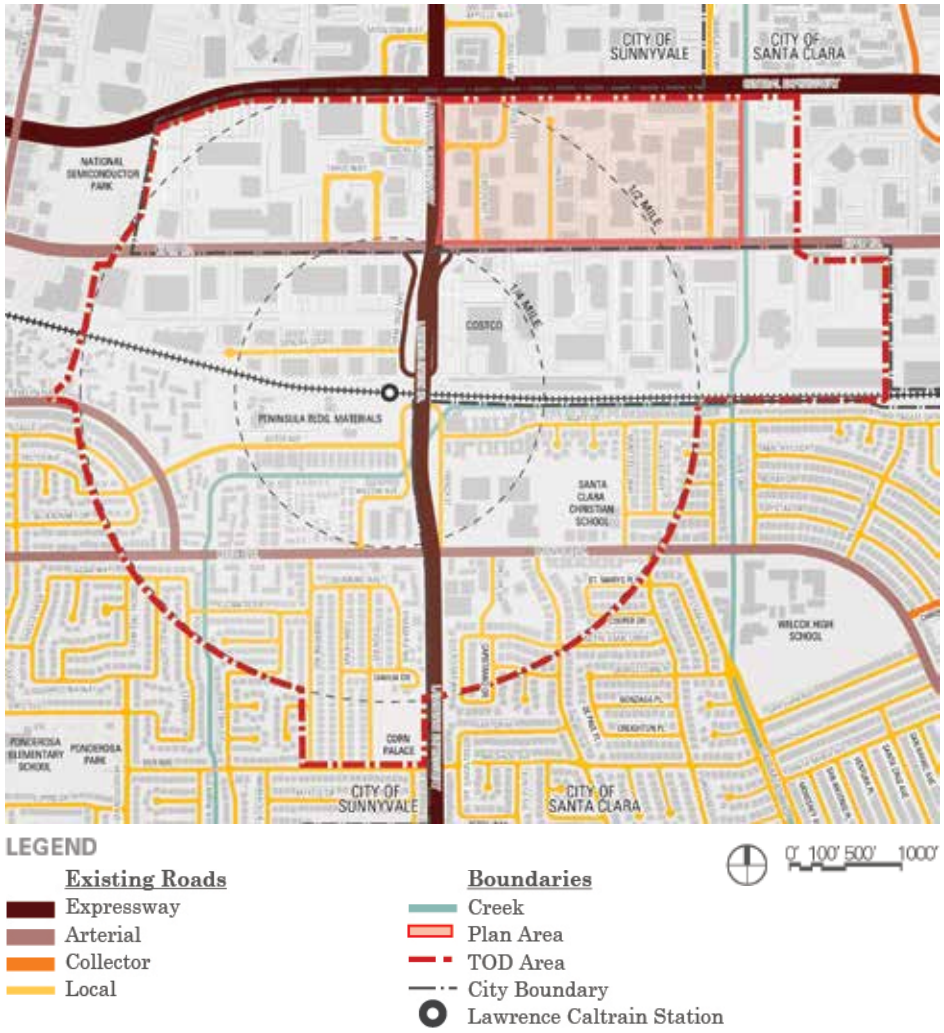
Road Network

As previously noted, Lawrence Expressway provides access to the Lawrence Caltrain Station, and affords the TOD Study Area a direct north-south link to the regional highway network; Central Expressway functions as an important east-west connection that runs along the Study Area's northern boundary. Kifer Road and Monroe Street/Reed Avenue are arterial streets that promote east-west connectivity. The Santa Clara LSAP Plan Area offers limited access to the bordering Lawrence and Central Expressways, with the site most readily accessed from Kifer Road via Gordon Avenue, Copper Road and Corvin Drive, which are north-south roads providing local access to on-site commercial and light industrial properties.

Lack of retail space

Lack of open space

FIG 2–5: LOCAL ROAD NETWORK



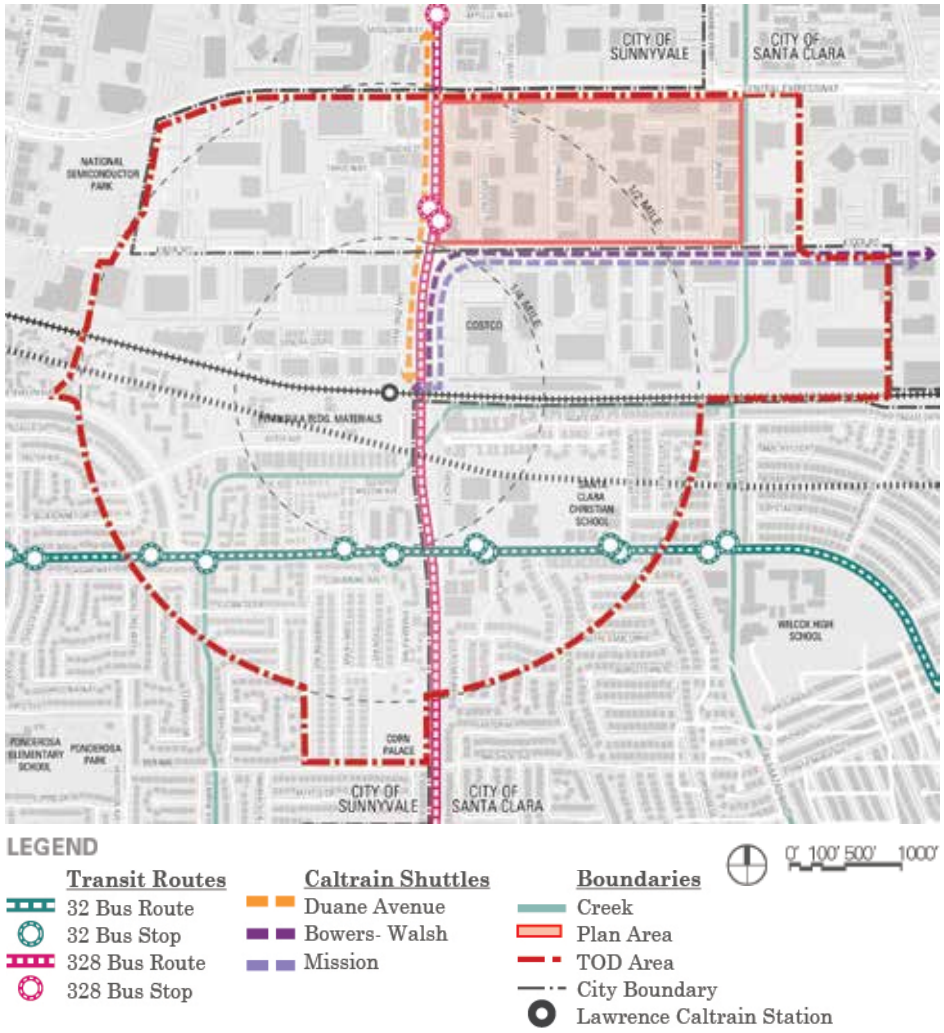
Public Transit

The TOD Study Area is served by the Lawrence Caltrain Station, which is designated as a limited stop station; recent data show that it operates at less than capacity. The station sits below an overpass of the Lawrence Expressway, between Kifer Road and Monroe Street/Reed Avenue; from the Santa Clara LSAP Plan Area the most direct access is provided by Lawrence Station Road. Local bus service is operated by the VTA and provided along Lawrence Expressway and Monroe Street/Reed Avenue, although none of the routes directly serves the station. Various public and private commuter shuttles offer direct service between the station and major employment areas. Limited bus transit connections within the TOD Study Area have been attributed to low levels of demand and poor access to the station.

Caltrain

Lawrence Station

FIG 2–6: LOCAL PUBLIC TRANSIT



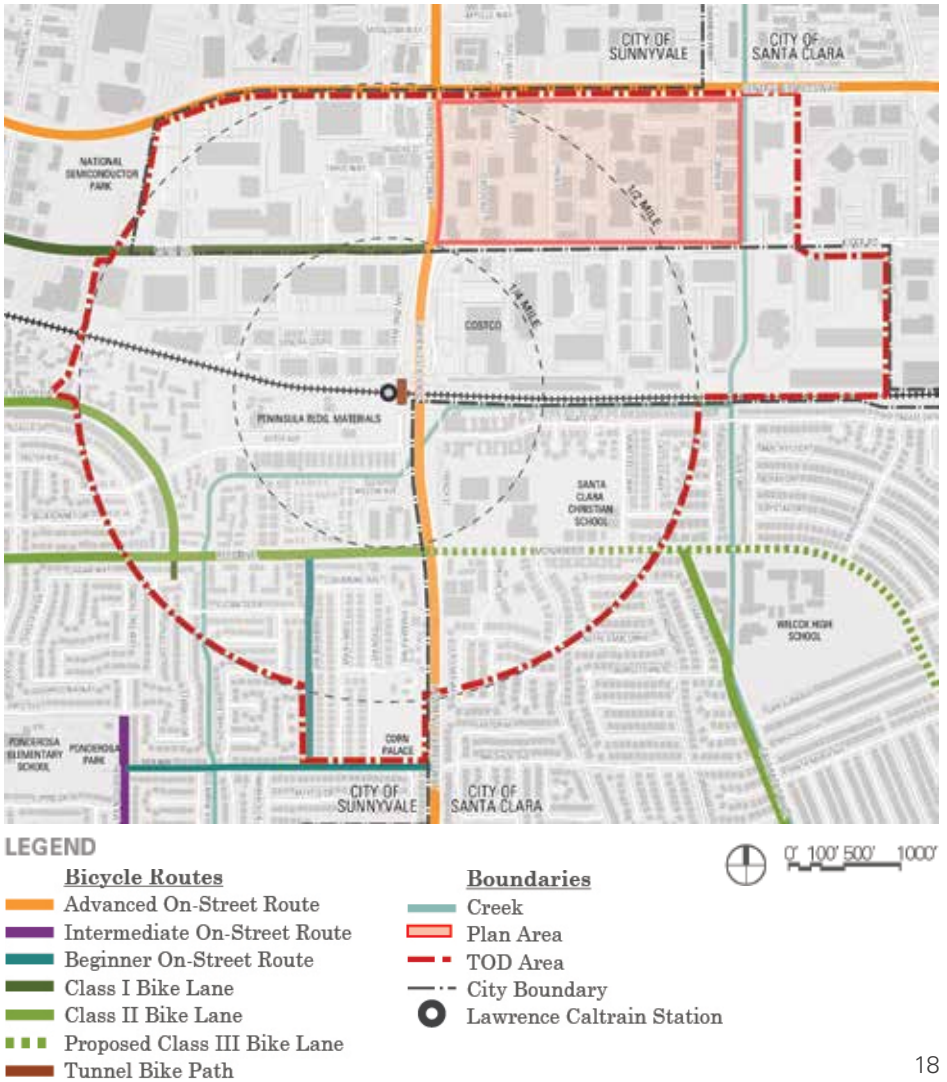
Active Transportation

It is important to note that most of the Santa Clara LSAP Plan Area lies within a 10-minute walk of the station. However, the character of development north of the rail tracks is relatively inhospitable to pedestrian and bicyclists, taking into consideration that there are few roads, as well as the industrial and commercial nature of the uses. Although many of these streets have sidewalks, there are critical gaps, for example, along Kifer Road and Central Expressway. Moreover, the sidewalk on Lawrence Station Road, which provides direct access from the Plan Area to the station, contains major impediments due to utility poles and boxes. Bicycle lanes are provided on major roadways surrounding the Plan Area, including Lawrence and Central Expressways, and Kifer Road west of Lawrence Expressway. A number of bicycle infrastructure improvements have been identified by the City of Santa Clara and Santa Clara County, including a potential Calabazas Creek trail, which will benefit new development, and the potential of a secondary bicycle/pedestrian trail that can provide access to Lawrence Station.

Bike Accessibility

Bike Lane on Reed Avenue

FIG 2–7: LOCAL PEDESTRIAN AND BIKE NETWORK



SITE CONDITIONS

The Santa Clara LSAP Plan Area is located northeast of the Lawrence Caltrain Station, bounded by Central Expressway to the north, Kifer Road to the South, Lawrence Expressway to the west, and Calabazas Creek to the east, encompassing approximately 72 acres (65 acres of developable land area excluding existing public right-of-way). Although the site is located entirely within the jurisdiction of Santa Clara, it is bordered by Sunnyvale to the north and south due to the interlocking nature of the boundary separating the two cities.

Site Character

The site is relatively flat and developed with one and two-story buildings, generally occupied by light industrial (including manufacturing and warehousing uses), office (including R&D and data centers), and various other commercial uses (such as the Digital Game Museum and discount furniture stores). Uses rely on surface parking lots, with on-site vegetation typically limited to small and discontinuous landscape areas. There are no residential land uses, public parks, or historic structures located on-site. Santa Clara Fire Department Station 9 is located within the boundaries of the site, on the east side of Corvin Drive. Some of the buildings on-site are vacant and the Plan Area may be described as underutilized. Visible infrastructure on-site includes local streets and utilities, such as telephone poles, wires, and streetlights, as well as a utility easement that runs north-south through the site midway between Gordon Avenue and Copper Road.

Site Adjacencies

Various commercial retail and office uses surround the property on all sides. Of particular note, Texas Instruments corporate headquarters is located west of the Plan Area, across Lawrence Expressway, while the Fujitsu campus is located to the north, across Central Expressway. Directly to the south are a surgical campus, medical and professional offices, and a Costco Wholesale store at the corner of Kifer Road and Lawrence Expressway. Across Calabazas Creek are a fitness facility (Bay Club Santa Clara) and the Qualcomm campus.

KEY OPPORTUNITIES & CONSTRAINTS

- The Lawrence Caltrain Station is surrounded by uses that do not support transit ridership; however, the LSAP Plan Area is underutilized and suitable for redevelopment.
- The LSAP provides an opportunity to introduce transit supportive land uses in proximity to the Lawrence Caltrain Station, emphasizing a diversity of housing with support retail and services.
- Connections to the transit station and surrounding land uses are weak; the LSAP offers the opportunity to strengthen area connectivity through new bicycle and pedestrian facilities.
- There is a lack of parks and open space in the vicinity; the LSAP affords the opportunity to introduce parks, plazas and trails, as well as other public space improvements.

1 *Kifer Rd. & Calabazas Creek*

2 *Kifer Rd. & Corvin Dr.*

3 *Kifer Rd. & Copper Rd.*

4 *Kifer Rd. & Lawrence Expy.*

5 *Ryder St.*

6 *Lawrence Expy. & Central Expy. Underpass*

7 *Central Expy. & Corvin Dr.*

8 *Santa Clara Fire Dept.*

9 *Lawrence Caltrain Station*

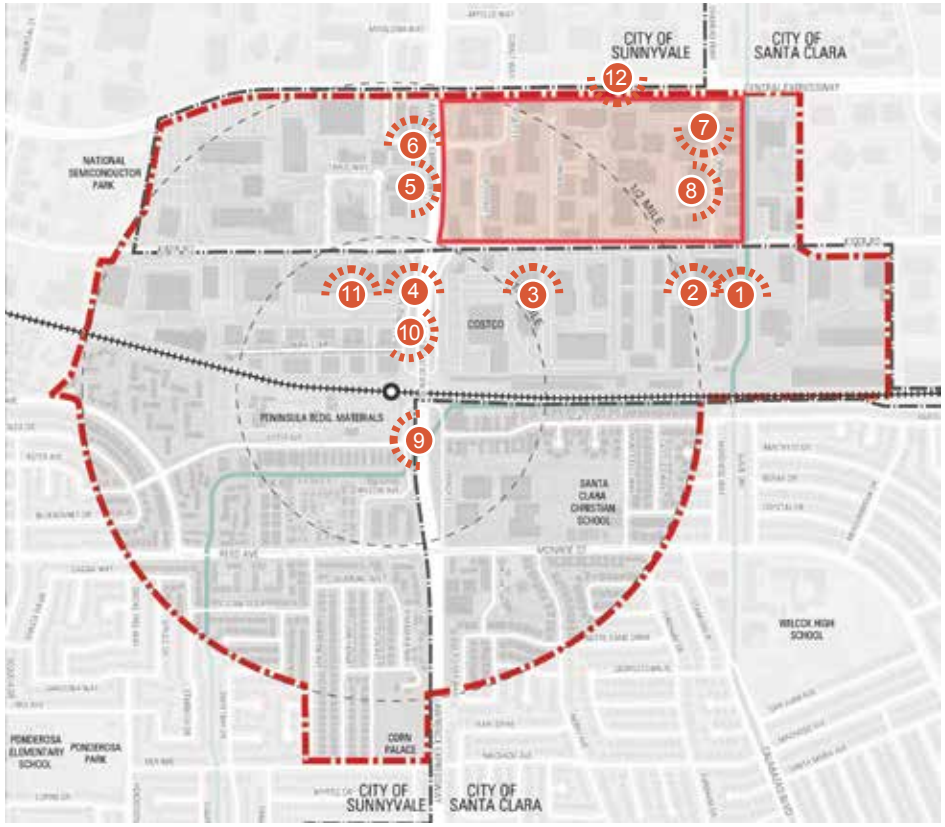
10 *Costco*

Photo Credit: Google Map

11 *Texas Instruments Corp. Headquarters*

12 *Fujitsu Campus*

FIG 2–8: SITE SURROUNDINGS



2.3 POLICY CONTEXT

The LSAP requires compatibility with regional and local government policy and programs, particularly the City of Santa Clara's General Plan. Coordination with Sunnyvale in planning the Lawrence Station area is also important to ensure a unified approach and harmonious outcome. In summary, regional and local policy are consistent in encouraging sustainable communities and balanced transportation, while both Santa Clara and Sunnyvale promote higher density in creating a vibrant, mixed-use district surrounding the Lawrence Caltrain Station.

REGIONAL PLANNING

Regional land use and transportation policy and plans are especially pertinent to the TOD Study Area. In this regard, the Metropolitan Transportation Commission (MTC) and ABAG both encourage planning for a sustainable future for the Bay Area. MTC policy in particular seeks to capitalize on transit investment by promoting transit-supportive land uses within one-half mile of rail transit stations. Pertinent MTC goals also include livable communities and equitable access. Similarly, Caltrain's strategic planning goals are supportive of transit oriented-development surrounding its stations, as well as increased connectivity and improved access to its stations. The VTA also encourages smart growth at major transit centers, and is dedicated to providing enhanced transit, bicycle, and pedestrian facilities.

SANTA CLARA GENERAL PLAN

The General Plan indicates that Santa Clara has virtually no remaining vacant land and is relatively built-out. As a result, future development is expected to emphasize reutilization and intensification of existing sites to achieve denser, more efficient land use patterns. To realize this goal, the General Plan promotes mixed-use and transit-oriented development within designated Focus Areas. These areas are regarded as the City's best opportunity to enhance the community's quality of life and foster economic vitality through intensified development, while limiting the impact on existing neighborhoods.

Land Use Designations

Santa Clara's General Plan promotes a phased approach to the City's growth, thereby ensuring provision of adequate infrastructure and services to support development. Various "prerequisite" goals and policies dictate advancement to subsequent phases. With respect to the Plan Area, Phase 1 (2010-2015) of the General Plan establishes the current designation of the Plan Area as Light Industrial, while Phase II (2015-2025) and Phase III (2025-2035) designate properties west of Copper Road as High Density Residential (allowing a range of 37 to 50 dwelling units per gross acre), and properties east of Copper Road as Medium Density Residential (allowing a range of 20 to 36 dwelling units per gross acre).

A change to the General Plan land use designation for the site will be required to accommodate LSAP development goals. This requirement is further discussed in Chapter 11: Implementation Program.

Focus Area Designation

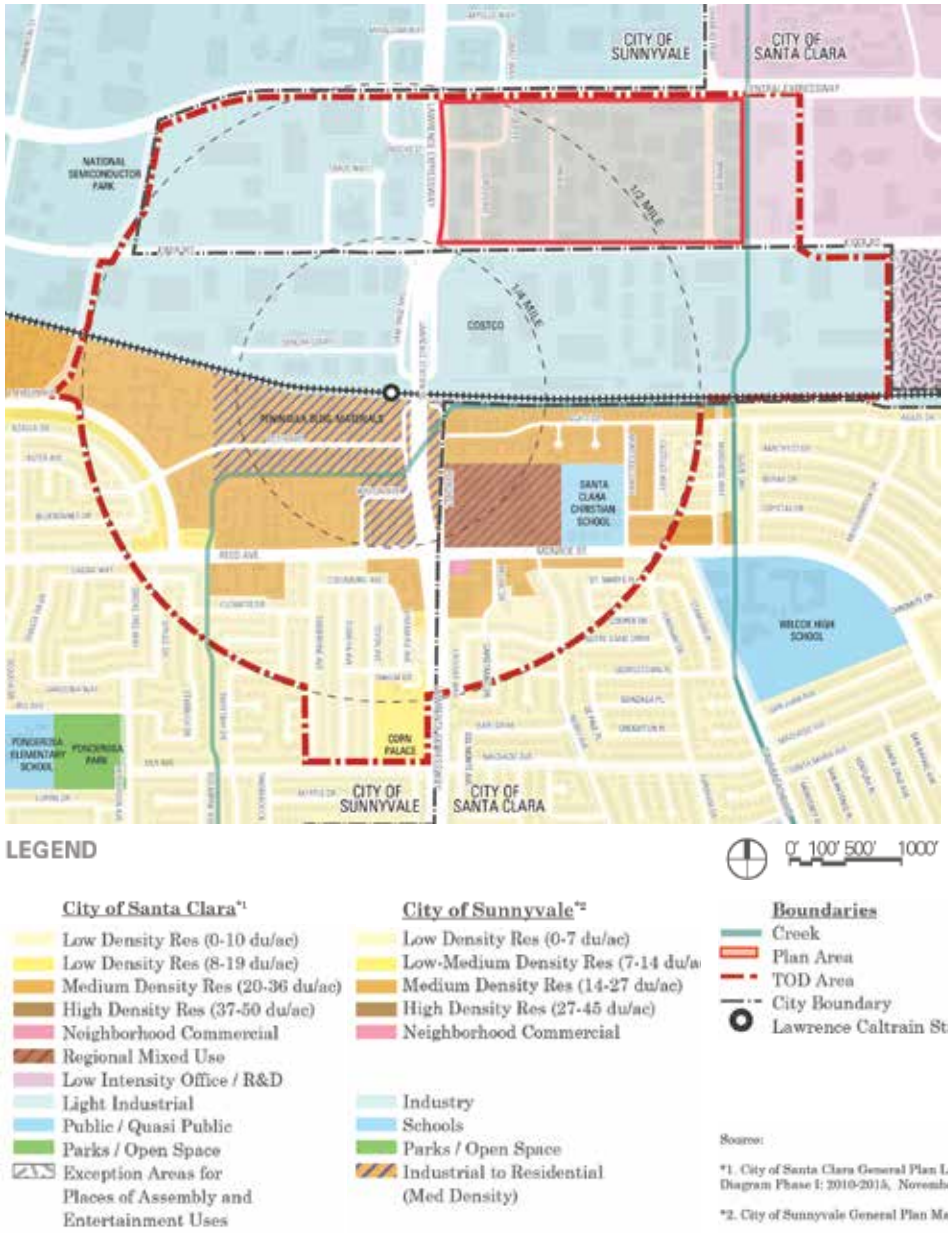
The Plan Area takes up a majority of the approximately 150-acre Lawrence Station Focus Area, one of nine such areas identified by the General Plan. A series of goals and policies applicable to the Lawrence Station Focus Area are based on the vision of a vibrant, mixed use neighborhood that contains a diversity of housing, as well as supportive retail and open space. It is anticipated that higher density development will take advantage of proximity to the transit station and provide housing for persons that work in and around the City. Lawrence Station Focus Area goals and policies also require comprehensive planning in the form of a Specific Plan and accompanying technical studies, and consistency with Sunnyvale's planning for the station area.

TABLE 2–1: LAWRENCE STATION FOCUS AREA GOALS

GOALS
• An urban neighborhood that contains a dynamic mix of housing types, supportive retail uses, and open spaces that are designed and maintained to enhance livability.
• Adequate open space areas that serve as neighborhood focal points, providing for recreation, gathering, and socialization.
• A variety of mobility choices with direct linkages to the nearby Lawrence Caltrain Station, parks, schools, open space areas and trails, encouraging walking, biking, and transit use.
• New development that is compatible with surrounding uses and consistent with the proposed Lawrence Caltrain Station Area Plan in the City of Sunnyvale.

Source: City of Santa Clara General Plan, 5.4-4 Santa Clara Station Focus Area, p. 5-56.

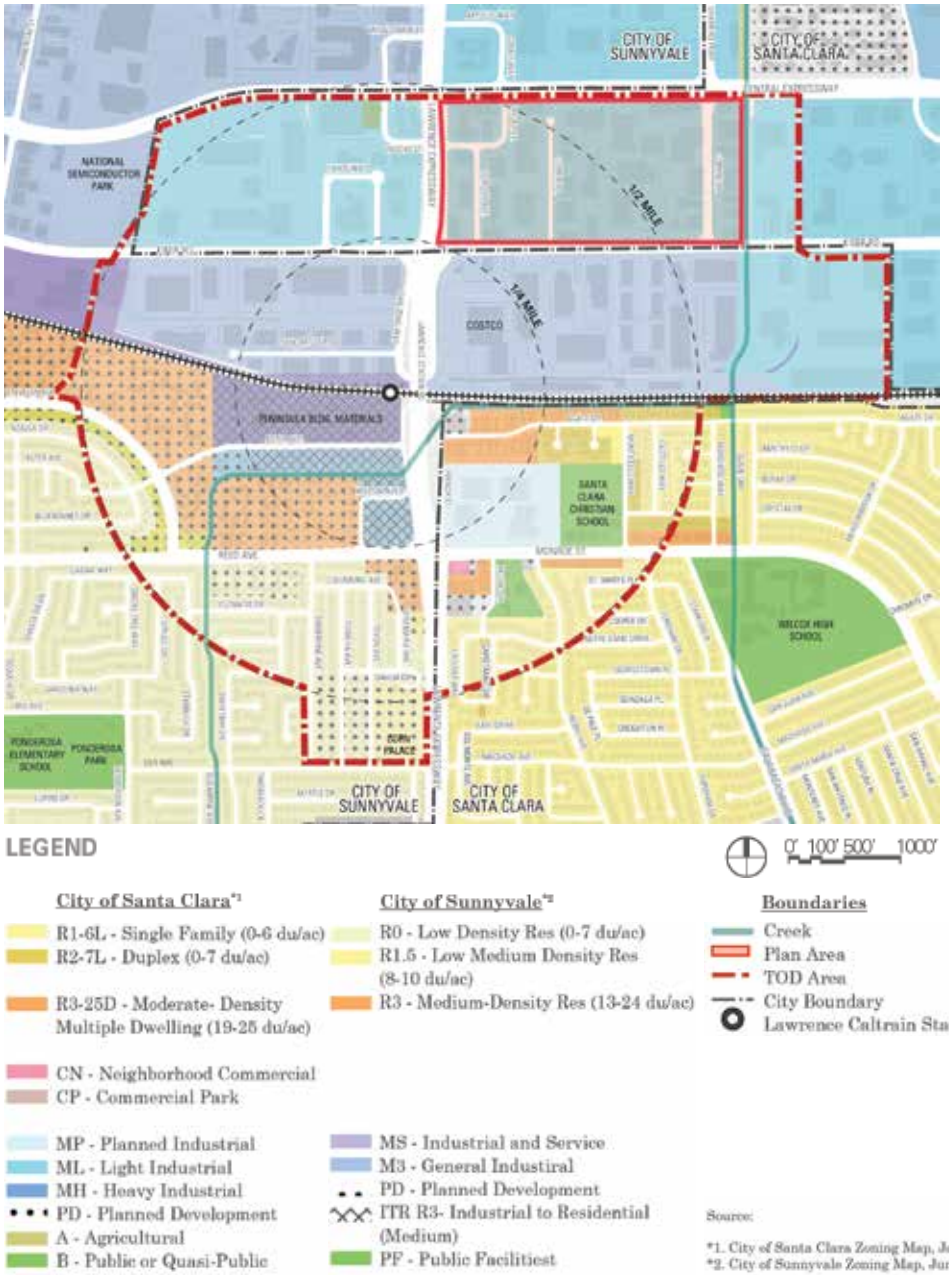
FIG 2–9: GENERAL PLAN LAND USE DESIGNATION



SANTA CLARA ZONING

The Plan Area is currently zoned Light Industrial (ML), intended for industries substantially operating within an enclosed building. Although this zoning is consistent with the General Plan's Phase I land use designation, it is inconsistent with the long-term vision for the site established by both the General Plan and the LSAP. A change in zoning designation for the site, as well as associated text amendments, will be required to accommodate development as envisioned by the LSAP; this requirement is further discussed in Chapter 11: Implementation Program.

FIG 2–10: ZONING DESIGNATION



SUNNYVALE PLANNING

The City of Sunnyvale has issued a Public Draft Lawrence Station Area Plan (Sunnyvale LSAP), dated February 2015. The Sunnyvale LSAP is intended to guide development of the area surrounding the Lawrence Caltrain Station, focusing on approximately 372 acres situated within the jurisdictional boundaries of Sunnyvale. It proposes to create a mixed-use district that strengthens the relationship between transit and land use. Key considerations include development at higher densities closest to the station, improved connectivity that relies on a gridded framework of streets, and development of an active commercial "main street" with a pedestrian orientation. Three development scenarios are proposed for the 372-acre jurisdictional area:

1) Minimum Density;

2) Maximum Density with Incentives; and

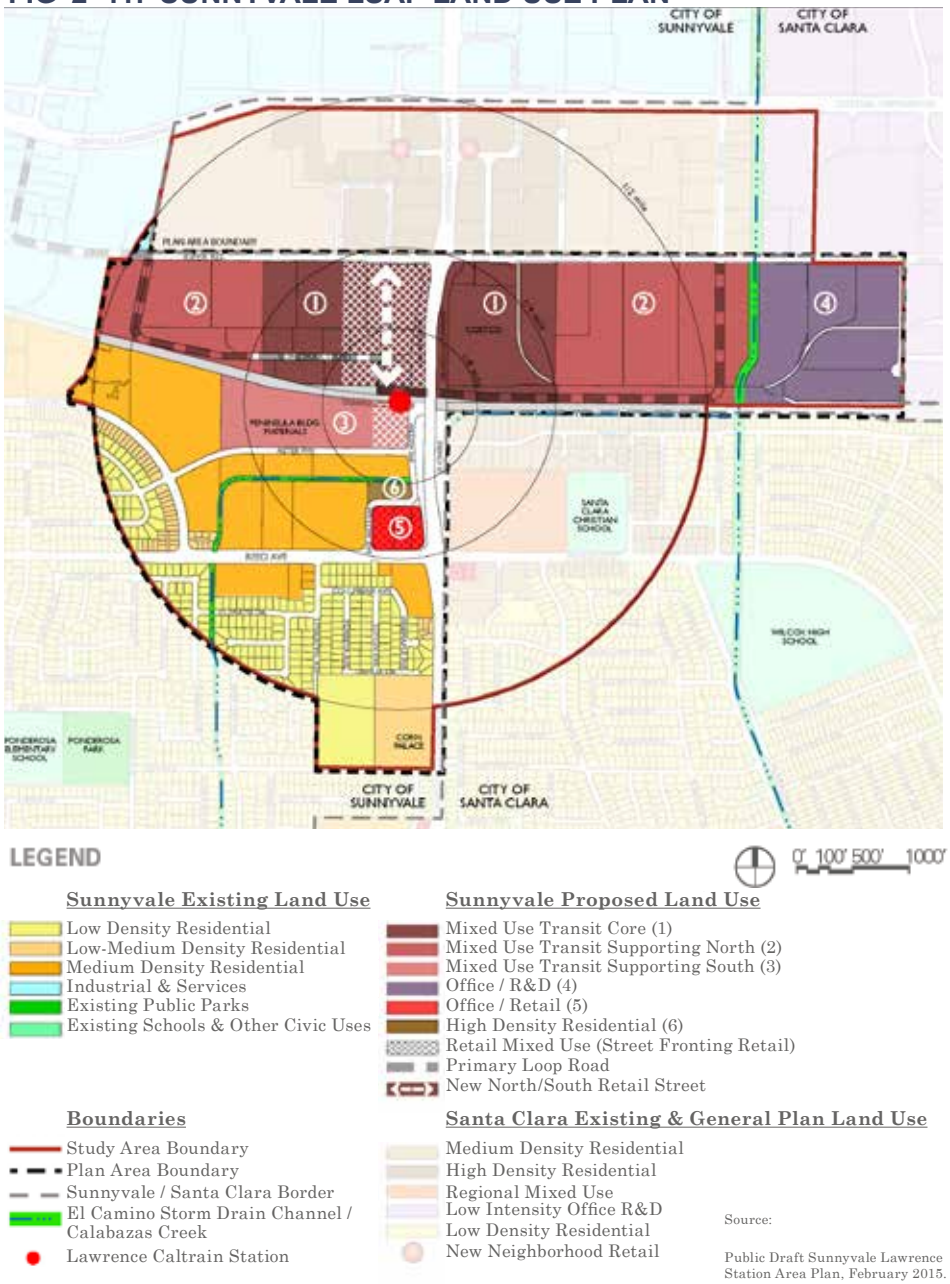
3) Estimated Likely Development

The Estimated Likely Development scenario foresees total development (including existing to remain and new development) of approximately 3,520 residential units; 3.63 million square feet of office/R&D development; 215,000 square feet of retail space; and 25,500 square feet of industrial space.

KEY OPPORTUNITIES & CONSTRAINTS

- Regional and local policy support the intensification of land use surrounding transit stations, encouraging smart growth and transit-oriented development models.
- The LSAP requires a change in General Plan land use designation and zoning to maintain consistency, but is otherwise compatible with the General Plan's vision for the area.
- The LSAP Plan Area is part of a Focus Area designated by Santa Clara's General Plan that encourages higher density residential development with support retail and open space.
- Sunnyvale's planning for the station area addresses a larger 372 acres within that jurisdiction, establishing a sound basis for creating a broader mixed-use and transit-oriented district.

FIG 2–11: SUNNYVALE LSAP LAND USE PLAN



Source:

Public Draft Sunnyvale Lawrence Station Area Plan, February 2015.

3 LSAP VISION & DEVELOPMENT OBJECTIVES

3.1 VISION

The Lawrence Station Area Plan will sit at the heart of Silicon Valley, a region known worldwide for its commitment to technology, quality of life and leadership in the area of cultural and social diversity, mobility, and the entrepreneurial spirit. These qualities have made Silicon Valley a world-class destination to live, work, and play.

Plaza & Easement conceptual design proposal

Linear Park conceptual design proposal

OVERVIEW

Lawrence Station will become a livable urban community and a model for encouraging walking, biking and transit usage. The new development will include an attractive mix of uses to spur development and build a healthy community by providing infrastructure improvements that increase safety, provide better mobility options, and support sustainable living for future generations.

Lawrence Station will provide a wide variety of residential choices for the community alongside exceptional proximity to transit and various regional attractions. The complimentary mix of uses including residential, restaurants and retail, along with civic and cultural uses will all aid in creating a well balanced community through its varied residential offerings and ease of access to goods and services. The density in housing is intended to support transit usage with a commensurate reduction in reliance on the automobile, augmented by a bicycle and open space network.

The LSAP will promote an active street environment and provide a variety of parks and open spaces for residents to use and enjoy. The 6.3 acres of new open spaces form an integrated green network of parks, plazas, gardens, and attractive streetscapes and trails. A Linear Park stretching west-east across the site, will offer areas for residents to socialize, spaces for community events, opportunities for active recreation, or simply spots to relax and enjoy the sunshine. A central green -Kifer Park - with a multi-functional "meadow" acting as the "heart" of the community, will activate the space and bring life to the site through the ground floor retail uses in the dense residential area.

SUSTAINABLE DESIGN

The Lawrence Station Plan Area will incorporate sustainable design as both an integral and emblematic part of the project. This will be achieved through sustainable site planning, landscape and building design that aims to maximize resource efficiency, promote economic vitality, and increase the quality of life for the project's visitors and residents.

Among the more visible sustainable design measures will be the project's transit and pedestrian-oriented site layout. Green building practices such as natural ventilation, shading and daylighting, and eco-sensitive landscapes that will stress the use of native, drought tolerant and adapted plant species.

The proposed land use mix, intensity, and transit orientation will support alternative modes of transportation which bring additional sustainable benefits. The project will also be designed to achieve resource efficiency and will incorporate an extensive green network of open spaces.

FIG 3–1: VISION STATEMENT

Lawrence Station will become a **LIVABLE URBAN COMMUNITY** and a model for encouraging **WALKING, BIKING** and **TRANSIT** usage. The Lawrence Station Area will embody cultural and social **DIVERSITY, MOBILITY,** and the **ENTREPRENEURIAL** spirit that has made Silicon Valley a world-class destination to live, work, and play.

*Note: This drawing is conceptual only; specifics may change during implementation.

3.2 DEVELOPMENT OBJECTIVES

1. TRANSIT HUB

Create a vibrant and desirable community that is close to transit.

Locate highest intensity development closest to the station to support transit ridership and energize station area public spaces. The new development should allow access throughout the area for pedestrians, bicyclists, transit vehicles, automobiles, and service vehicles. The transit hub involves a vibrant mix of land uses, generally encompassing residential and commercial activities, while featuring ground floor uses that maintain street vitality. Moreover, improved pedestrian and bicycle connections should readily link the transit station with major destinations and activity centers such as shopping centers and schools. Collectively, these measures will promote efficient use of land, encourage transit ridership, as well as support a diversity of land uses that are easily accessible and which meet the daily needs of residents and visitors.

2. MOBILITY CHOICE

Foster strong connections to Lawrence Station and create active, multi-modal streets that benefit cyclists and pedestrians within the neighborhood.

Inter-modal connectivity allows for seamless transfers. Connections between transit and other modes should be as easy, accessible and pleasant as possible. Wayfinding, lighting, and public artwork are important means to guide users through the Plan Area and south to the station. They create a pleasant pedestrian environment, reduce the perception of distance, and should be integrated into the design of neighborhood outdoor environment. The multi-functional Calabazas trail connections to the station should be carefully designed to promote an attractive and safe environment that caters to pedestrians and bicyclists.

3. HOUSING DIVERSITY

Encourage strong urban neighborhood by providing a range of unit types, both for sale and for rent.

Residential diversity entails a wide variety of housing to accommodate diverse lifestyles and preferences. Santa Clara enjoys a diversity of housing types, yet the community needs to address denser urban housing to attract young families, empty nesters, and singles, all of which tend to use transit, walk, or bike to a higher degree. A well-positioned mix of for-sale and rental housing will help attract a wider demographic, making the local neighborhood stronger, more affordable and more sustainable. New housing designed around walkable streets, prevailing breezes, and rooftop amenities will offer a new, attractive urban lifestyle. Different types of densities proposed at different distances from the station will support TOD objectives, offer diverse housing types, and promote greater safety and activity.

TRANSIT-ORIENTED DEVELOPMENT | MULTIPLE ACCESS | SHARED PARKING | TRANSIT AMENITIES

PEDESTRIAN & BICYCLE CONNECTIONS | BICYCLE STORAGE | PUBLIC REALM IMPROVEMENTS

LIVE/WORK | TOWNHOUSES | MID-RISE FLATS | CONDOMINIUMS | APARTMENTS | AFFODABILITY

4. COMMUNITY RETAIL

Provide up to 104,000 square feet of ground floor retail and locally focused commercial space to meet residents needs , activate the street and promote healthier urban lifestyle.

A mix of commercial uses adds variety for the consumer by bringing together key retailers, small storefronts, and local shops. The LSAP Plan Area should play a major role in the local community, providing a variety of shopping, neighborhood convenience, and dining choices, for both residents and visitors. The Plan Area will enjoy street-level shops that promote convenience and walkable streets. Area cafes and restaurants will benefit from outdoor dining areas, Santa Clara's excellent weather, and shared parking. Bringing community retail and services closest to the residence will also reduce resident's reliance on automobile, encourage walking and cycling, and promote a healthier urban lifestyle.

LOCAL RETAIL | DAILY SERVICES | GROCERIES | RESTAURANTS | CAFES | BOUTIQUES | CIVIC AMENITIES

5. OPEN SPACE NETWORK

Offer an attractive and diverse network of public active and passive open spaces for the community.

Public open spaces are venues for community events, informal interactions, play and relaxation. The LSAP will offer 6.3 acres of new open spaces to the residents and visitors of all ages. People will enjoy access to one of the most significant community parks in the City of Santa Clara - a 4-ac Linear Park stretching west to east across the site. This park will provide a variety of recreational areas, performance spaces, and much more. A Central Plaza functioning as an anchor at the west end of the site will activate the retail frontage and surrounding streets in the community. In addition, several pocket parks, semi private/public gardens will be located throughout the community. These smaller green spaces will be focused more directly to the needs of local residents and through variation in scale and design, providing a rich variety of spaces to relax and play and respite from the activity of the valley beyond.

OPEN AIR EVENT PLAZA | CENTRAL GREEN | LINEAR PARK | MINI PARKS | PLAY COURTS

6. STREET GRID

Define a legible hierarchy of high-quality streets to improve accessibility and limit through traffic.

The LSAP Plan Area includes a hierarchical grid of streets that will accommodate the automobile traffic through the area, as well as supporting other modes of travel like biking and walking. These streets will benefit from a consistent tree canopy, wayfinding, wider sidewalks, curb bulb-outs, and other amenities, such as benches, trash receptacles, etc., which promote walking and biking without significantly compromising the level of service for cars. Designing alternate paths for pedestrian and bike paths alongside or across local roads will minimize conflicts between vehicular traffic and other modes of travel.

WIDE SIDEWALKS | IMPROVED STREET FURNITURE | CONSISTENT TREE CANOPY | TRAIL CONNECTIONS | BIKE LANES

7. PARKING STRATEGIES

Develop parking strategies that meet or exceed the City's development standards.

Parking strategies will promote policies and programs that result in more efficient use of parking resources. Parking demand varies from place to place, based on a number of factors. These factors include: the price of parking (people use parking more when it is free or economical); the availability of alternate modes of transportation; the amount and quality of pedestrian networks; and demographics (poorer households tend to own fewer cars). Certain uses may also require more parking than others. Parking supplies will be managed to encourage transit use and to take advantage of shared parking opportunities. Applying a number of transportation demand management (TDM) measures, such as bicycle programs, transit incentives, ride/car sharing, etc., will further reduce parking demand and encourage alternate modes of travel on-site.

SELF-PARKED | SHARED STRUCTURE | PODIUM PARKING | VMT REDUCTION | TDM MEASURES

8. RESILIENT DESIGN

Promote a healthy, resilient community that sets a local benchmark in the planning and design of high-quality buildings and landscapes.

An important objective of the LSAP is to develop the area in a manner that is environmentally, economically, and socially sustainable. The City currently has several policies and plans in place to address sustainability, including the *Santa Clara Climate Action Plan (CAP)*, the *City of Santa Clara General Plan*, and the Green Building Program. The Lawrence Station Area Plan embraces a commitment to sustainability. The Plan focuses on conservation of resources and reduction of impacts to the local and regional environment through a number of sustainable design approaches. All new residential and commercial developments within the LSAP Plan Area should comply with the mandatory requirements in the *2013 California Green Building Standards Code*.

FLEXIBILITY | COMMUNITY RESILIENCY | DIVERSITY | GREEN BUILDING

9. PLACEMAKING

Build a community that is an asset to the City of Santa Clara.

Placemaking approaches will help strengthen the Plan Area's unique identity, reinforce the community's aesthetic character, and create a sense of "place". Integrating a well-defined signage system as well as public art and lighting installations will transform streets and open spaces into vital places and augment the value of these public assets. Cultural programs and public events draw people together and into public spaces. Within the large park on-site, a multi-functional plaza will act as the community gathering space. This will create endless potential for developing a rich calendar of events that can be programmed throughout the year. Local businesses or other entities, will help schedule, oversee, and create funding for events on the annual calendar. A rentable social hall will also benefit the area, located near the public event space, where neighborhood organizations will be able to hold meetings and other social events.

FARMERS MARKETS | CONCERTS | HOLIDAY PARTIES | BLOCK PARTIES CULTURAL CELEBRATIONS & EVENTS | FUN RUNS | COMMUNITY MEETINGS

4 DEVELOPMENT MASTER PLAN

4.1 INTRODUCTION

Lawrence Station will be a livable and walkable urban neighborhood known for its extraordinary public realm, convenient shopping options, and ease of accessibility to public transportation to the region beyond. Lawrence Station will create an opportunity for a more sustainable neighborhood focusing on alternate transportation modes and a healthy lifestyle.

DEVELOPMENT CHARACTER

The 72 acres LSAP Plan Area will present a positive opportunity for development, transforming a formerly underutilized predominantly industrial/office area into a vibrant, livable, urban community that encourages walking, biking, and use of public transit as part of an everyday routine. The development will contain a wide variety of housing types with the ability to cater to a diverse population of people from varying economic backgrounds. The LSAP will offer an integrated, phased development, comprised of complementary uses and activities that expand shopping, dining, and residential choices available to the community and the region. The Plan is expected to help sustain a balanced community by providing Santa Clara with housing and convenient access to goods and services. The location, density and mix of commercial and residential uses is intended to support transit usage with a reduction in reliance on the automobile, augmented by a bicycle and pedestrian network.

Lawrence Station will be a prime example of placemaking for the City and offer a significant amount of open spaces for residents to relax and socialize. The Linear Park on-site will receive special attention: an assortment of active open spaces, appealing storefronts, expanded sidewalks, street furniture, wayfinding signage, kiosks, pedestrian lighting, gardens, and inviting public plazas are expected to attract plentiful activity and generate pedestrian traffic. The entire Plan Area will emphasize a high quality public realm employing complementary architecture, enhanced streetscapes, shared outdoor spaces and distinctive wayfinding signage to promote identity and connectivity within this new urban neighborhood.

DEVELOPMENT FRAMEWORK

The physical framework for development of the LSAP Plan Area is depicted in *FIG 4-1: Illustrative Master Plan*. The plan is supported through a series of plan diagrams that follow throughout this chapter including:

1) land use;

2) programming;

3) mobility;

4) parking;

5) open space;

6) urban design,

The illustrative and plan diagrams are consistent with what is analyzed in the Environmental Impact Report (EIR), based on project goals and policies. However, with the exception of the land use diagram, these drawings and diagrams are conceptual and serve an illustrative purpose only. These policies and standards will be the guiding principles for any future development in this area.

4.2 ILLUSTRATIVE MASTER PLAN

FIG 4-1 depicts an illustrative schematic plan of the overall design concept of LSAP site. The proposed design will center a mixture of high-density residential units along a central open space benefiting from community retail, restaurants and services. A network of open spaces also include public gardens, sport courts, and engaging street and landscaping features throughout the neighborhood.

1 Grocery Store

2 Retail/F&B

3 Outdoor Dining

4 Multipurpose Plaza

5 Utility Easement

6 Enhanced Streetscape

7 Linear Park

8 Kifer Park

9 Sports Courts

FIG 4–1: ILLUSTRATIVE MASTER PLAN

*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

1. Grocery Store
2. Retail/F&B
3. Outdoor Dining
4. Multipurpose Plaza
5. Utility Easement
6. Enhanced Streetscape
7. Linear Park
8. Kifer Park
9. Sports Courts
10. Iconic Residential Tower
11. Santa Clara Fire Department
    (Shared Police / Fire Safety Facility)
12. Emergency Vehicle Access

1" = 300'

0' 100' 200' 300' 500'

4.3 LAND USE PLAN

The Land Use Plan defines a land use pattern and allowable development densities that will result in a compact and livable urban neighborhood adjacent to the Caltrain Lawrence Station. With provision of diverse housing options, accessible outdoor open spaces and ample community service amenities, the plan supports the overall transit-oriented development goal in the Lawrence Station focus area. The plan accommodates future population growth, and achieves a job/housing balance by providing housing and urban amenities nearby jobs and transit.

OVERVIEW

The Land Use Plan (*FIG 4-2*) designates seven land use categories for the Plan Area, four of which are residential use designations. Among these, three categories are exclusively residential-use designations (Low Density Residential, Medium Density Residential, and High Density Residential); while the other category - Very High Density Residential designation allows for retail and other compatible uses on the ground floor.

LAND USE CLASSIFICATIONS

Specific land use designation categories are described separately in this section.

Low Density Residential (8-19 DU/AC)

This classification is intended for residential densities of 8 to 19 dwelling units per gross acre. Building types may include detached or attached dwelling units. Low Density Residential development comes in the form of single family dwelling units, townhomes, rowhouses and combinations of these development types. The parcels with this land-use designation are located in the southeastern quadrant of the Central Expressway/ Avenue 1 Intersection. The height limit for buildings within this land use designation is 50 feet.

Medium Density Residential (20-36 DU/AC)

This classification is intended for residential development at densities ranging from 20 to 36 units per gross acre. This density range accommodates a variety of housing types. It is primarily intended for areas with access from collector or arterial streets or in close proximity to neighborhood centers and mixed uses. Building types can include a combination of low-rise apartments, townhouses and rowhouses with garage or below-grade parking. Parcels with this land-use designation include blocks located between Avenue 1 and Avenue 2, south of Ryder Street; a block in the southeastern corner of the site; and two blocks reserved for future development along the west side of Calabazas Creek. The height limit for buildings within this land use designation is 60 feet.

High Density Residential (37-50 DU/AC)

This classification is intended for residential development at densities ranging from 37 to 50 units per gross acre. This density range is typically located in areas adjacent to major transportation corridors, transit or mixed uses. High Density Residential development has an urban feel, with mid-rise buildings, structured or below-grade parking, and shared open space. The parcels with this land use designation are located in the southwestern quadrant of the Central Expressway/ Corvin Drive Intersection. The height limit for buildings within this land use designation is 85 feet.

Very High Density Residential (51-100 DU/AC)

This classification is intended for residential development at densities ranging from 51 to 100 units per gross acre. This density range is intended to take advantage of proximity to transit, offering an urban feel and typically comprised of mid- to high-rise buildings featuring structured or below-grade parking, as well as shared outdoor space. Additionally, retail and other compatible commercial uses that activate the street shall be permitted on the ground floor. Parcels with the very high-density residential land use designations are located adjacent to Lawrence Expressway and Central Expressway, and between Copper Road and Corvin Drive. The height limit for buildings on parcels with the very high density residential designation is 100 feet.

Public / Quasi-Public

This classification is intended for public and quasi-public uses that will serve both the LSAP Plan Area and surrounding community. It is anticipated that the land area designated Public/Quasi Public will accommodate a fire facility (Santa Clara Fire Department Station 9) and its future expansion; nonetheless, alternative uses consistent with this designation may be considered.

Parks / Open Space

This classification is intended for improved park and open space facilities and outdoor recreation areas, providing the LSAP development with active and/ or visual open space, while serving the outdoor recreational needs of both residents and visitors to the area. Parcels with parks/open space designations are located within the easement along Avenue 1 and south of the properties along Street A.

Floating Park

This designation requires placement of a neighborhood-scale park within the boundaries of the LSAP Plan Area, located on one or more parcels not otherwise designated as Parks/Open Space. It is anticipated that this park facility will be placed directly east of Avenue 2 along Kifer Road; however, alternative locations may be considered.

FIG 4–2: LAND USE PLAN

*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Very High Density Residential — 51-100 DU/AC
- High Density Residential — 37-50 DU/AC
- Medium Density Residential — 20-36 DU/AC
- Low Density Residential — 8-19 DU/AC
- Public / Quasi Public
- Floating Park
- Parks / Open Space (Phase 1)
- Parks / Open Space (Phase 2) (conceptual)
- Public Right-Of-Way
- Private Right-Of-Way
- Grade Separated Crossing (conceptual)

1" = 300'

0' 100' 200' 300' 500'

4.4 SITE PROGRAMMING

The LSAP proposes a build-out scenario that will include a total of approximately 3,500 residential dwelling units, up to 104,000 square feet of ground floor retail and locally-focused commercial spaces, 16,000 square feet of civic space (a shared fire and police substation is envisioned at the eastern edge of the study area), and approximately 6.3 acres of public open spaces on the 72 acres of land within the Plan Area.

MAXIMUM YIELD BY LAND USE *

~ 3,500 Units
RESIDENTIAL

~ 104,000 SF
RETAIL & SERVICES

~ 16,000 SF
CIVIC

~ 6.3 AC
OPEN SPACE

*Note: The programming yield is conceptual; specifics may change during implementation.

PROGRAMMING SUMMARY

The City of Santa Clara intends to achieve a targeted residential density of 45-56 dwelling units per acre within the LSAP Plan Area, accommodating up to 3,500 residential units on-site.

The Programming Concept is subject to incorporating the proposals of three separate project applicants (SummerHill Housing Group, Westlake Urban, LLC., and True Life Companies) within the Plan Area. *FIG 4-3* illustrates that the LSAP will provide diverse types of housing products, encompassing single family homes, townhouses (including traditional townhouses and elevated townhomes), loftts/flats (including traditional flats and townflats), and mid-rise residences. The proposed housing products are intended to meet the projected housing needs due to the rapid population growth in the region. Given the great housing demand in the "very low" income categories per the RHNA's projection, the LSAP encourages new developments incorporating affordable housing with other market-rate products to address the potential needs.

In addition to the housing, as shown in *Table 4-4 Development Yield Summary,* approximately 104,000 square feet of retail space will be provided within the Project Area. This retail component of the Plan Area will be focused around the Linear Park and along the main street frontages, with neighborhood-oriented shops, cafes, and restaurants. Neighborhood retail and service uses are proposed on the ground floor of several high-density residential parcels, specifically the parcels adjacent to public open spaces or major intersections, offering further accessibility and convenience for residents and visitors.

A grocery store or another larger signature retail destination will be an appropriate use for the southwestern most parcel, with a frontage along Kifer Road, helping to form a gateway to the site. In subsequent phases, the design envisions another retail node that anchors the east-west green linear park at the eastern end of the site.

The retail component of the Lawrence Station Area Plan is intended to activate the public realm, to create amenities and places for residents to relax and socialize, promote walking, and to reduce car trips within the City while creating useful and inviting urban spaces.

Approximately 6.3 acres of open space will be provided within the Plan Area to offer the residents and visitors with shaded green spaces and appealing outdoor activity environments. These include a Linear Park, acting as the east-west axis across the site, a central green - Kifer Park - with a multi-functional "meadow" adjacent to the southern gateway on Avenue 2, a multi-purpose Central Plaza located at the west end of the site, a linear open space converted from the utility easement, several public plazas, mini parks, and courtyards. The existing Santa Clara Fire Department Station 9 will be remained in place. Future expansion of the fire department may be considered (on the same site) to accommodate an increasing service demand.

FIG 4–3: PROGRAMMING CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

Residential

- Mid-rise Residential
- Traditional Flat / Loft
- Townflat
- Traditional Townhome
- Elevated Townhome
- Single Family Residential
- Retail (Ground floor)
- Public Use Pavillion
- Civic
- Public Open Space

1" = 300'

0' 100' 200' 300' 500'

TABLE 4–1: DEVELOPMENT YIELD SUMMARY*

LAND USE	# of UNITS (du)	BUILDING AREA (sq.ft.)	PARKING NEEDED (Est. Spaces)	PARKING PROVIDED (Est. Spaces)
Residential				
Single Family Homes	41	3,498,800	5,677	5,923
Townhomes	283			
Lofts / Flats	1,301			
Mid-rise Residential	1,880			
Retail & Services		99,500	398	400
Civic		16,000	32	40
TOTAL	3,505	3,614,300	6,107	6,363
Open Space		6.3 ac		

*Note: 1. The yield summary is based on the illustrative plan; specifics may change during implementation;
2. The Parking Provision includes the street parking on the private streets on each developers' properties.

DEVELOPMENT PROJECTS COMPONENT

Westlake Urban, SummerHill Homes, and True Life Companies are the three project applicants that have submitted development proposals to the City. These project proposals have been incorporated in the LSAP, and the following section summarizes the three developers' project components. *Table 4-5* provides a specific programming yield by individual entities (or subsequent property owners).

- *Westlake Urban:* The proposed Westlake Urban development project will be located on a 4-acre site at the northwestern corner of the Plan Area. The developer proposes to redevelop the site into a five-story apartment rental building with a basement, providing 328 market-rate residential dwelling units with 552 surface and subsurface parking spaces. The new building will surround two separate courtyards. A primary entrance will be on Ryder Street at the southeast corner of the site. Parking will be provided in the basement and first floor, with first floor surrounded by ground floor residential units and amenity spaces, including the leasing office and bicycle storage. A grade-separated pedestrian crossing will be built to provide a safe connection across Ryder Street given its large traffic volumes.

- *SummerHill Homes:* SummerHill Homes owns approximately 26-acre of land concentrated on the west side of the Plan Area. The developer proposes to construct 988 for-sale, rental, and affordable residential dwelling units on the site. 657 multi-family units will be provided in three proposed mid-rise residential buildings located along Lawrence Expressway. These buildings will consist of two apartment structures and one condominium. Each building will feature five stories of residence over a two-level partially subterranean parking garage, and have a central courtyard with amenities for residents. The eastern portion of the site will consist of three- and four- story townflats (174 units), elevated townhomes (E-towns, 116 units), and vertically oriented detached single family homes (E-homes, 41 units). Approximately 37,000 square feet of retail and amenity spaces is proposed on-site to activate the street level along the main entry road and around the 0.37 acre public plaza. In addition, community -serving facilities, such as a "pop-up" retail kiosk, a bicycle shop or a neighborhood meeting room will also be provided on-site.

- *True Life Companies:* True Life Companies proposes to develop 45 attached residential units within 6 building structures on a 2-acre land located at the northeastern corner of Corvin Drive and Kifer Road, immediately adjacent to Calabazas Creek. All of the buildings will include side-by-side, three- and four-story townhomes with garages and entries on the ground floor and living spaces on the upper floors. The project applicant will provide 10% of the units at an affordable rate per the affordable housing requirement of the City. A total of 96 parking spaces will be provided on-site, including 90 covered attached and 6 surface parking spaces.

**Table 4-5* Note:*

1. For new development in Phase 2 & 3, average dwelling unit size: 1 unit per 1, 000 sq. ft.;
2. The Parking Provision includes the street parking on the private streets on each developers' properties;
3. Structured Parking Space Size: 1 space per 350 square feet.

TABLE 4–2: DEVELOPMENT YIELD BY PROPERTY*

PHASE ONE

SUMMERHILL HOMES

USES	# of UNITS (du)	BUILDING AREA (sq. ft.)	PARKING STANDARD	PARKING NEEDED (Est. Spaces)	PARKING PROVIDED (Est. Spaces)
Residential					
Single Family Homes	41	82,000	2 per Unit	82	
Townhomes	116	116,000	2 per Unit	232	662
Lofts / Flats	174	174,000	2 per Unit	348	
Mid-rise Residential	657	620,700	1.4 per Unit	919	982
Retail & Services		37,500	4 per 1,000 sq. ft.	150	97
					Guest Parking: 148
TOTAL	988	1,030,200		1,731	1,889

WESTLAKE URBAN

USES	# of UNITS (du)	BUILDING AREA (sq. ft.)	PARKING STANDARD	PARKING NEEDED (Est. Spaces)	PARKING PROVIDED (Est. Spaces)
Residential					
Mid-rise Residential	328	252,700	1.4 per Unit	460	552
TOTAL	328	252,700		460	552

TRUE LIFE

USES	# of UNITS (du)	BUILDING AREA (sq. ft.)	PARKING STANDARD	PARKING NEEDED (Est. Spaces)	PARKING PROVIDED (Est. Spaces)
Residential					
Townhomes	45	90,000	2 per Unit	90	90
					Guest Parking: 6
TOTAL	45	90,000		90	96

PHASE TWO

SOBRATO

USES	# of UNITS (du)	BUILDING AREA (sq. ft.)	PARKING STANDARD	PARKING NEEDED (Est. Spaces)	PARKING PROVIDED (Est. Spaces)
Residential					
Townhomes	44	73,000	2 per Unit	88	88
Lofts / Flats	640	640,000	2 per Unit	1,280	
Mid-rise Residential	710	713,000	1.4 per Unit	994	2,494
Retail & Services		55,000	4 per 1,000 sq. ft.	220	
TOTAL	1,394	1,481,000		2,582	2,582

PHASE THREE

OTHER FUTURE DEVELOPMENT

USES	# of UNITS (du)	BUILDING AREA (sq. ft.)	PARKING STANDARD	PARKING NEEDED (Est. Spaces)	PARKING PROVIDED (Est. Spaces)
Residential					
Townhomes	75	107,400	2 per Unit	150	150
Lofts / Flats	160	100,000	2 per Unit	320	
Mid-rise Residential	510	530,000	1.4 per Unit	714	1,062
Retail & Services		7,000	4 per 1,000 sq. ft.	28	
Civic		16,000	2 per 1,000 sq. ft.	32	32
TOTAL	745	760,400		1,244	1,244

FINAL BUILD-OUT	3,500	3,614,300	6,107	6,363

4.5 MOBILITY PLAN

The Mobility Plan is intended to support the Land Use Plan and achieve the objective to provide transit-oriented, urban neighborhood by improving off-site connections to the Caltrain Station, providing suitable on-site circulation and linkages, expanding mobility services, and accommodating alternative modes of transportation to create a transit-rich urban environment.

OVERVIEW

The circulation system within the LSAP Plan Area is proposed to support future transit-oriented development and strengthen the walkable and livable urban neighborhood character by expanding mobility choices and providing a safe, convenient, and comfortable way to travel on- and off-site. The Mobility Plan incorporates a "multi-modal streets" approach for accommodating alternate modes (such as biking and walking) within a shared street right-of-way, reducing private vehicle usage and encouraging people to pursue a healthier lifestyle.

VEHICULAR CIRCULATION

The existing circulation framework of the Plan Area is limited due the industrial nature of existing uses on-site. Currently, the area is dominated by large, low-density industrial parcels and surface parking lots with very few internal streets. The circulation pattern is designed almost exclusively for the use of automobiles and trucks, less so for the use of pedestrians and bicyclists. Primary off-site linkages to the nearby Caltrain Station are through Lawrence Expressway and Kifer Road via the north-south streets - Copper Road and Corvin Drive. East-west connections on-site are limited due to large building footprints and expansive parking lots.

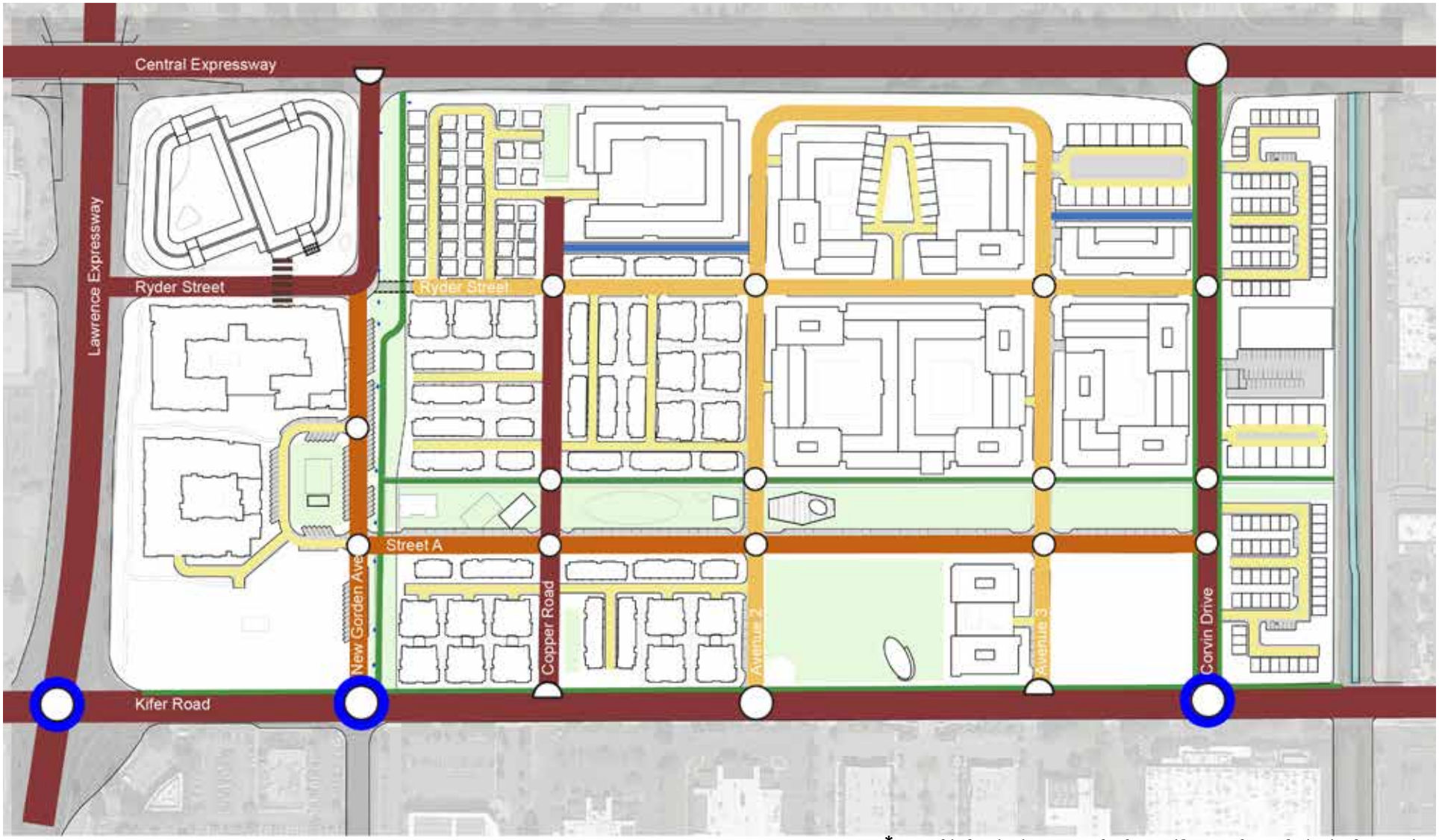
For the purpose of addressing the circulation issues in the Plan Area, optimizing the properties' value along both sides of the streets and creating better streetscape, existing streets will be re-configured and new streets will be constructed to form a street pattern as illustrated in *FIG 4-4*.

Two new public roads are proposed on-site; a north-south connection, New Gordon Avenue, and one east-west linkage, Street A (New Gordon Avenue to Corvin Road section). As complements to the public streets, three private roads, Ryder Street, Avenue 2 and Avenue 3 are proposed and will be constructed by individual private property owners. These street alignments will establish a grid street pattern that optimizes the connectivity throughout the Plan Area. New street alignments and improved existing streets will provide service appropriate for all users regardless of their mode of transportation.

A series of private driveways/alleys will be constructed within each individual development parcel. Private driveways/alleys allow drivers to access parking garages which are located behind or underneath residential buildings.

Adequate site access will depend on the phased construction of this new street network. Therefore, it will be important that roadways are designed to handle anticipated levels of vehicular traffic generation while still accommodating multiple users. The street sections included in this Plan meet those criteria but remain conceptual. As detailed design and engineering plans are prepared, the circulation plan may require small deviations from the current plan.

FIG 4–4: STREET NETWORK PLAN CONCEPT



*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Existing Road
- Proposed Public Road
- Proposed Private Road
- Private Driveway
- Paseo
- Bike Lane
- Signalized Intersection
- Pedestrian Crosswalk *
- Right in-Right out Intersection
- Grade Separated Crossing (conceptual)
- Emergency Vehicle Access

1" = 300'

0' 100' 200' 300' 500'

*Locations of crosswalks are preliminary.
Per City of Santa Clara, crosswalk locations at intersections require further review and study.

PEDESTRIAN CIRCULATION

Currently, the pedestrian activities on-site are constrained due to the barriers presented by the busy intersections, vehicle-dominated streets, and large industrial parcels with limited pedestrian pathways. In contrast, providing safe and attractive facilities for pedestrians throughout the area is an important goal of the LSAP.

A continuous pedestrian network of sidewalks, pathways, paseos, and trails will facilitate pedestrian movement throughout the Plan Area, as depicted in *FIG 4-5*. The pedestrian network will provide safe and convenient connections to shops, restaurants, open space amenities, parking facilities, and residences. Recognizing the importance of streetscape design to a high-quality public realm, and to encourage walking streets, the Plan Area will be provided with wide sidewalks, enhanced crosswalks, an integrated lighting and signage plan, and complemented by superior-quality street furniture.

Sidewalks are a critical element in the creation of good pedestrian environments. Wide sidewalks in good conditions encourage walking and socializing. Improved sidewalks will be integrated along the street alignments as shown on *FIG 4-5*. Recommended sidewalk dimension where the right-of-way permits, is 12 feet to 15 feet, including a 4-foot minimum landscaped buffer zone, a pedestrian travel zone with a width around 5 feet to 8 feet, and a 3-foot minimum utility zone along the property line. See *Table 7-3* in the Streetscape Typologies Section of Chapter 7 for specific sidewalk dimensions recommendations of each street within the Plan Area.

Crosswalk enhancements will be added at major intersections throughout the Plan Area, as shown on *FIG 4-5*, to facilitate pedestrian crossings and enhance mobility for people for all ages and physical conditions. These improvements are especially important at uncontrolled intersections to ensure the visibility of pedestrians to motorists. In addition, given the high traffic volumes anticipated on Ryder Street, which connects Lawrence Expressway and Central Expressway, a grade-separated pedestrian crossing will be provided on Ryder Street to provide safer pedestrian access to the northwest parcel.

A multi-purpose trail is proposed along the eastern edge of the Plan Area at Calabazas Creek as a future component of the circulation plan, serving a recreational function and providing an alternative link to the Lawrence Caltrain Station.

BICYCLE CIRCULATION

Excellent bicycle circulation is a hallmark of the LSAP Project Area. Currently, there are no bicycle lanes or bicycle facilities provided on-site for bicycle transportation. To improve connections to Caltrain Lawrence Station, parks, shops, community amenities on-site as well as to adjacent neighborhoods and destinations, plan elements will be provided that encourage the use of bicycle, increase transit ridership, and help expand the bicycle network throughout Santa Clara.

FIG 4-5 shows, a new bicycle network will be made to connect to bicycle facilities on Central Expressway via Corvin Drive. New bicycle lanes will be provided on Kifer Road, connecting to existing bike lanes on Bowers Avenue and the future bike facilities on Lawrence Expressway. Additionally, a potential dedicated trail along Calabazas Creek will allow cyclists to easily travel to the site from areas to the north and south.

Within the site, a bike trail will extend in an east-west direction along the northern side of the linear park, connecting the entire area to the Calabazas Creek Trail. Bike lanes will be provided on Corvin Drive, New Gordon Avenue and along the Linear Park. Bicycle amenities such as secure long-term bicycle parking and repair shops will be encouraged within the Plan Area. The Transportation Demand Management (TDM) Program described in Chapter 10 provides a variety of options for incentivizing and encouraging bicycle travel, including amenities, parking, and financial incentives.

FIG 4-6 illustrates two bicycle stations that will be provided within the Plan Area, located on the ground floor of two residence. These bicycle stations will provide residents and visitors with bike rental, storage and repair services.

ACTIVE TRANSPORTATION OPTIONS

Bike Rental /
Bike Storage

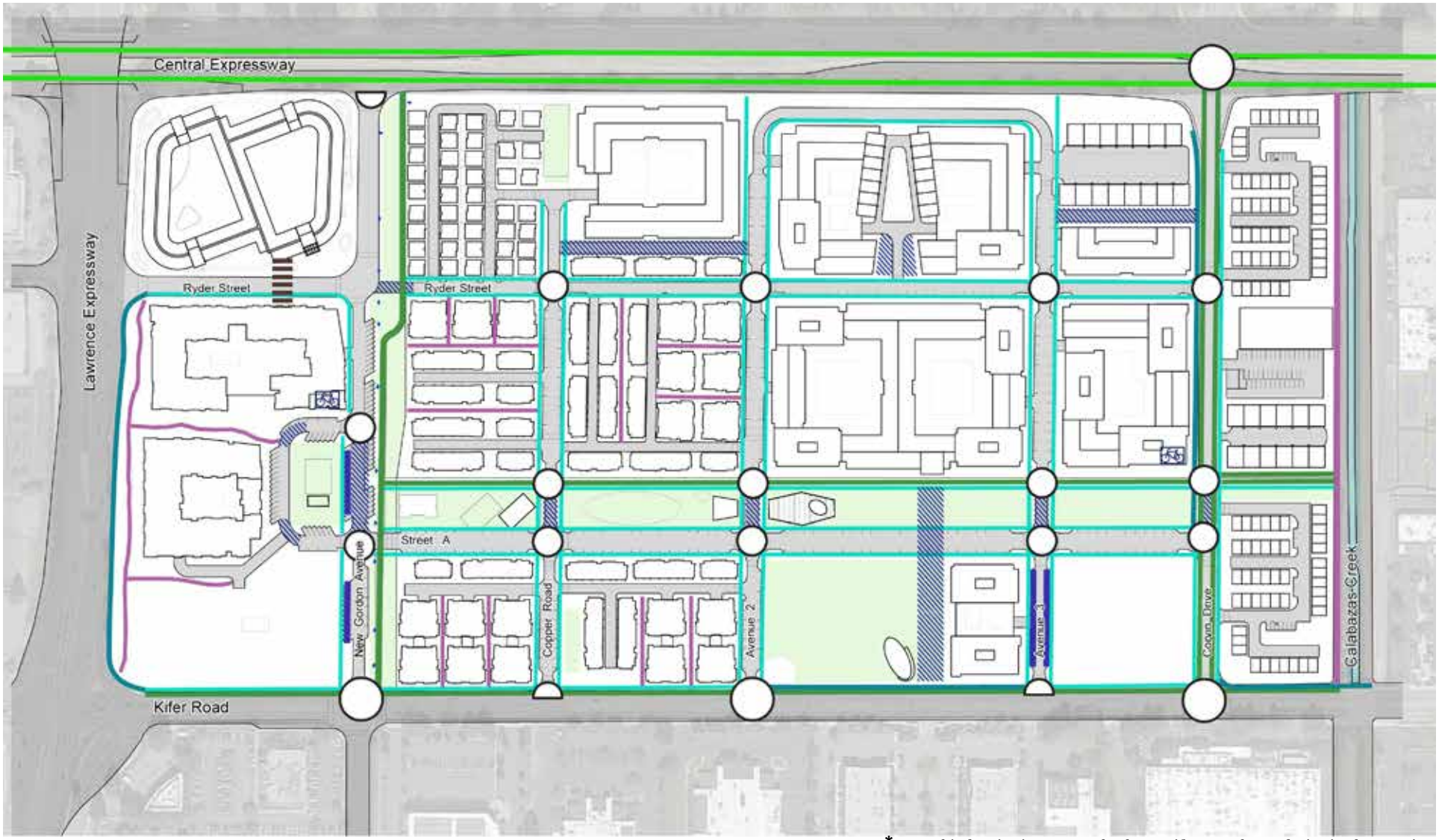

Bicycle /
Pedestrian Trail



Car-share and/or
EV Charging Stations


Pedestrian Paths /
Wide Sidewalks


FIG 4–5: ACTIVE TRANSPORTATION NETWORK CONCEPT



*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Proposed Sidewalk
- Existing Sidewalk
- Special Paving (pedestrian emphasis)
- Trail/ Pathway
- Proposed Bike Lane
- Existing Bike Lane
- Bike Storage and Repair
- Zipcar and /or EV Charging Stations
- Full Intersection w/ Crosswalks*
- Right in Right out Intersection w/ Crosswalk*
- Grade Separated Crossing (conceptual)
- Emergency Vehicle Access

1" = 300'

0' 100' 200' 300' 500'

*Locations of crosswalks are preliminary.
Per City of Santa Clara, crosswalk locations at intersections require further review and study.

4.6 PARKING PLAN

The Parking Plan is intended to promote transit-oriented development, reduce vehicle usage, and avoid the overbuilding of parking facilities within the LSAP Plan Area through the provision of the right amount of parking matched to a series of efficient parking management strategies, in conjunction with land use decisions, transit, and active transportation access.

TABLE 4–3:
CITY'S PARKING REQUIREMENTS

USE	PARKING STANDARD
RESIDENTIAL	2 spaces per 1 unit
RETAIL & SERVICES	5 spaces per 1,000 sq. ft.
CIVIC	1 space per 3 employees

*Source: *Santa Clara City Code Chapter 18.74.*

TABLE 4–4:
REDUCED PARKING REQUIREMENTS

USE	PARKING STANDARD
RESIDENTIAL	
Single Family Homes	2 spaces per unit
Multi-Family Residential	
Studios / 1 BR	1 space per unit
2 BR/ 3 BR	2 spaces per unit
RETAIL & SERVICES	
	4 spaces per 1,000 sq. ft.
CIVIC	
	2 spaces per 1,000 sq. ft.

OVERVIEW

Getting people out of their cars and on to transit is one of the aims of transit-oriented development. The City of Santa Clara's General Plan recommends flexibility in the supply of parking in order to encourage the use of alternate transportation modes (such as transit, biking and walking), reduce the costs associated with an over supply of parking, as well as reduce the negative visual impacts of parking facilities. To that end, the overriding objective of the LSAP is to provide the right amount of parking within the Plan Area; not too much so that driving is encouraged and not so little that parking intrusion occurs. This concept is essential to reducing vehicle trips and will be supported by a comfortable and convenient pedestrian and bicycle network throughout the Plan Area.

PARKING FACILITIES

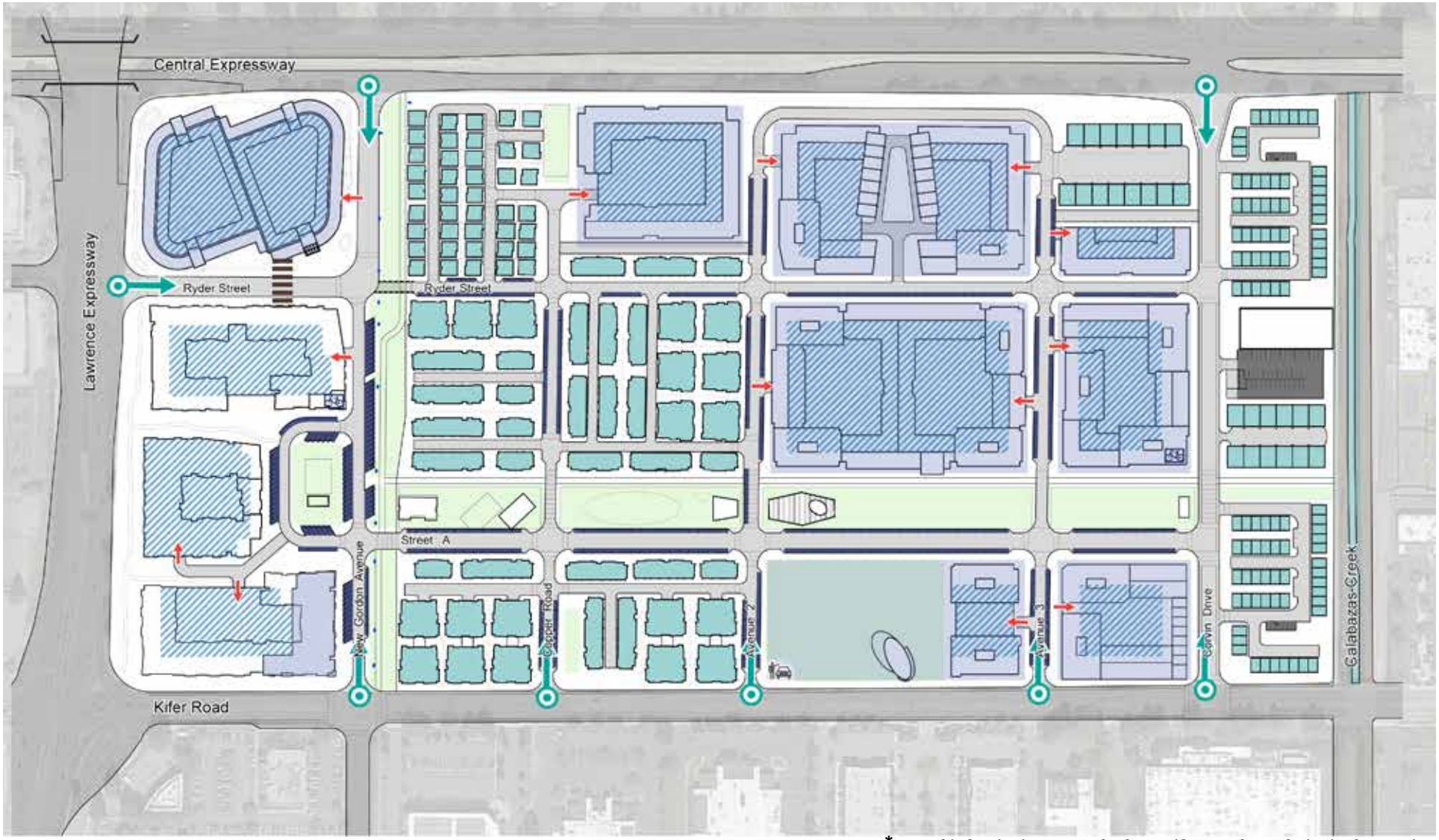
FIG 4-6 depicts a conceptual plan for the location of parking facilities, including parking garages (podium parking and basement parking), on-street parking, and surface parking. Parking facilities will be distributed separately within each development parcel, primarily accessed via the local collector roadways and private driveways to ensure that interior streets remain pedestrian-oriented. On-street parking will also be available along some local streets, especially along mixed-use sites, where it will help meet short-term parking needs and serve ground level retail; however, on-street parking shall not count toward meeting parking requirements. Residential parcels will utilize structured parking and/or one level of below-podium parking for the purpose of encouraging active uses along street frontages.

PARKING REQUIREMENTS

According to *the City of Santa Clara Parking Regulations (Chapter 18.74)*, the City requires a minimum off-street parking supply of two spaces per unit for residential land uses and one space per 200 square feet of gross floor area, or five spaces per 1,000 square feet, for retail shops, services, and restaurants land uses. The minimum parking requirement for civic uses such as a fire department is one space per three employees on the maximum shift plus one space for each vehicle permanently assigned to the facility (See *Table 4-6*).

However, the City's General Plan encourages parking standards that support higher intensity land use development and promote the use of alternative modes of transportation, thereby, allowing reduced minimum standards based on transportation demand management strategies, shared parking and transit availability to promote. Given the transit-oriented nature of the site, the provision of off-street parking on new development parcels within the LSAP Plan Area shall comply with the following reduced parking requirements (See *Table 4-7*).

FIG 4–6: ACCESS AND PARKING CONCEPT



*Note: This drawing is conceptual only; specifics may change during implementation.

PARKING SUPPLY DISTRIBUTION

FIG 4-7 portrays a parking demand and supply distribution on each parcel based on current site programming as well as development applicants' project proposals. The data shown on the diagram includes structured parking spaces associated with each individual residence/mixed-use development as well as street parking on private streets owned by these projects' developers. The total on-site parking spaces provided for residents, guests, and employees working in the Plan Area is around 6,500 spaces. An additional 71 public street parking spaces are also provided, catering to visitors who might use public parks, recreational facilities, retail shops and restaurants within the Plan Area.

BICYCLE PARKING REQUIREMENTS

The Santa Clara Valley Transit Authority (VTA) has published a *Bicycle Technical Guidelines* (VTA, adopted 1999, updated 2007 and 2012) that provides standard and guidelines to facilitate and ensure the consistency in the design, construction of bicycle projects that are a part of the Santa Clara County bicycle program. The VTA bicycle guidelines provides a bicycle parking supply recommendations which includes requirements appropriate for the Plan Area (see *Table 4-8*).

Additionally, the *2013 California Green Building Code* for new nonresidential buildings offers a five percent reduction in vehicle parking for short term bicycle parking with the addition of at least two bike parking spaces and a five percent reduction in vehicle parking for long term bicycle parking with the addition of at least one secure bicycle parking space (see *2013 California Green Building Code Nonresidential Mandatory Measures 5.106.4.1, p.32*).

Class I Bicycle Parking - A method of bicycle parking that protects the entire bicycle and its components from theft, vandalism or inclement weather. Class I bicycle parking is appropriate for long-term (two hours to all day) bicycle parking such as at employment sites, schools and transit stations/stops. It is also important at sites where bicycles are left overnight for several days such as airports, train stations and of course, multi-family residential units.*

Class II Bicycle Parking - A bicycle rack to which the frame and at least one wheel can be secured with a user-provided U-lock or padlock and cable. Racks that provide two points of contact prevent bikes from pivoting and falling over. Bike racks are appropriate for short-term parking where the typical parking duration is less than two hours. They can be thought of as serving the customer or visitor parking demand for locations such as retail stores, libraries, dental and medical offices, office buildings and at apartments/ condominiums.*

**Source: VTA Bicycle Technical Guidelines December 13, 2007, p. 10-1*

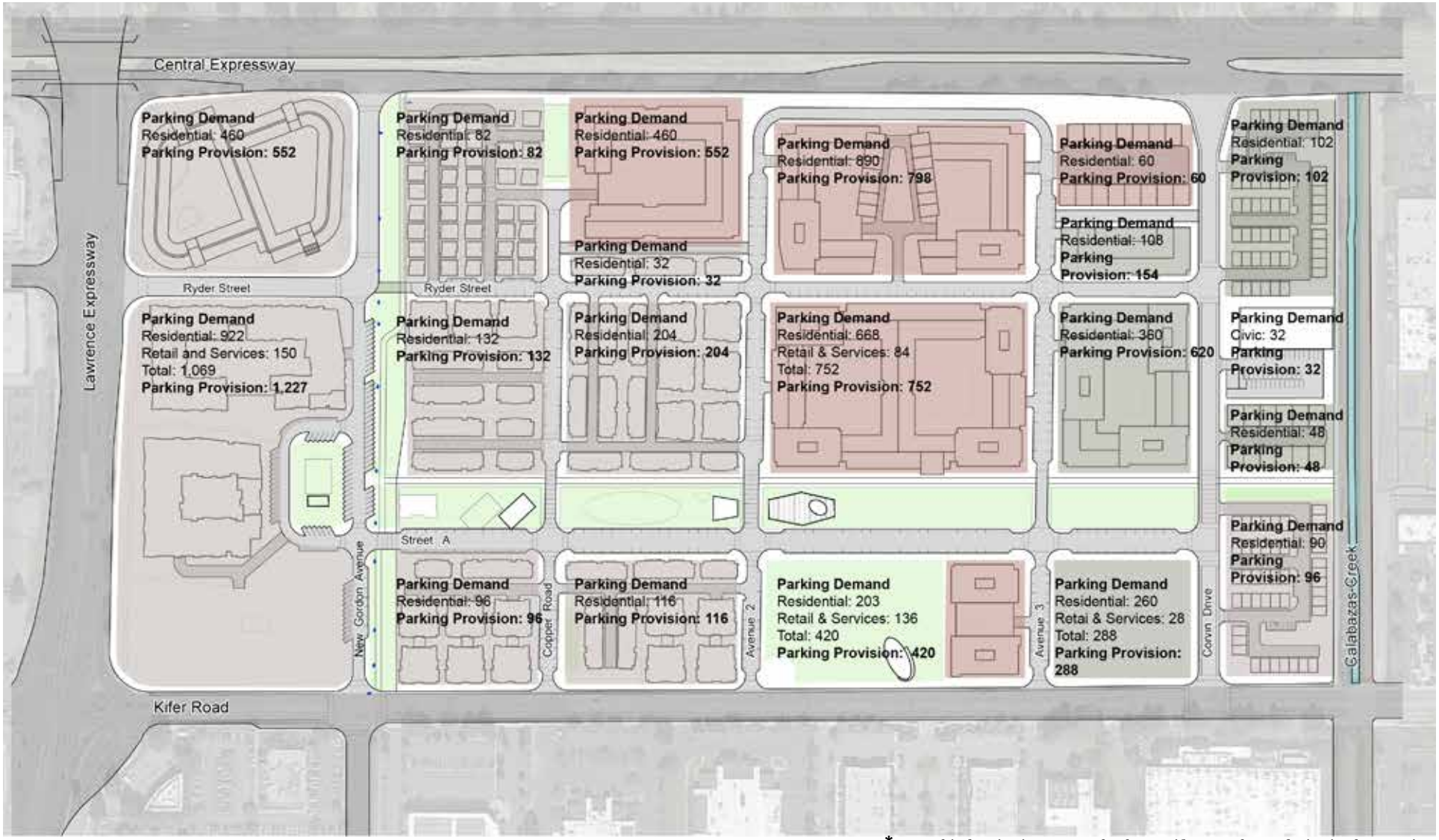
TABLE 4–5: VTA BICYCLE PARKING SUPPLY RECOMMENDATIONS

USE	REQUIRED NUMBER OF BICYCLE SPACES
RESIDENTIAL (such as apartments, condos, and townhouses)	
General, multi-dwelling	1 Class I per 3 units + 1 Class II per 15 units
Primarily for students and low-income families, multi-dwelling	1 Class I per 2 units + 1 Class II per 15 units
Primarily for residents 62 or older, multi-dwelling	1 Class I per 30 units + 1 Class II per 15 units
PARKS / RECREATIONAL FIELDS	
	1 Class I per 30 employees + Class II per 9 users During peak daylight times of peak season
RETAIL / SERVICES / SUPERMARKETS	
	1 Class I per 30 employees + Class II per 6,000 sq. ft.
RESTAURANTS	
	1 Class I per 30 employees + Class II per 3,000 sq. ft.

Note:
- The minimum number of required Class II Bicycle parking spaces is 4.
- Employees = maximum number of employees on duty at any one time.

Source: The Santa Clara Valley Transit Authority (VTA) Bicycle Technical Guidelines, December, 2007, p. 10-14.

FIG 4–7: PROJECTED PARKING SUPPLY



*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Open Space
- Phase 1 (SummerHill, Westlake Urban, True Life)
- Phase 2 (Sobrato)
- Phase 3

Parking Demand
Residential: 5,677
Retail & Services: 398
Civic: 32

Total: 6,107

Parking Provision
On-site Parking: 6,363
Private Street Parking: 394
Public Street Parking: 71

Total: 6,828 (includes street parking)

1" = 300'

0' 100' 200' 300' 500'

PARKING MANAGEMENT STRATEGIES

The integration of a series of parking management strategies will encourage more efficient use of parking facilities, reduce parking demand and shift travel mode from single-occupant vehicle (SOV) trips to non-SOV modes.

To effectively utilize the parking supply within the Plan Area, a number of parking demand management strategies will be implemented considering the feasibility and priority in phasing as summarized in the *Table 4-9* and are introduced separately in the following section. These strategies include, but are not limited to, bicycle rental and storage programs, unbundled parking, shared parking, free and/or reduced price transit passes, car sharing, and so forth. Price parking, and residential permit parking (RPPs) programs could be provided on-site in the future if the empirical data shows an unambiguous need for such measures.

Bicycle Rental and Storage Programs

Bicycle rental and storage programs include building bicycle centers on-site providing bicycle rental and repair service, storage, and changing facilities to the residents and visitors. Bicycle parking facilities can substitute for a portion of automobile parking and should be placed close to the major entry of the buildings for the purpose of increase the convenience of the use of bicycle transportation.

Unbundled Parking

Unbundling parking means that parking is rented or sold separately, rather than automatically included with building space. Unbundling parking from property costs provides transparency to the cost of parking so that people can make more informed decisions about housing and car ownership costs. It also makes better use of the parking supply by allowing parking spaces that will have been allocated to car-less households to be used by households with additional cars. Lastly, unbundling is complementary to shared parking since any excess supply of spaces can be leased or rented to outside entities. Unbundling can be applied to commercial tenants as well as residential tenants

TABLE 4–6: PARKING MANAGEMENT STRATEGIES

PROPORITY	APPLICABLE LAND USE	PARKING STRATEGY
Short-Term	Residential	• Provide Bicycle Parking
		• Unbundle Parking Costs from Property Costs
Mid-Term & Long Term	Retail	• Provide Bicycle Parking
	Residential	• Shared Parking
		• Incentives for Residential Complexes to provide Free/ Reduced Price Transit Passes
		• Car Sharing
As Needed	Retail	• Implement Residential Parking Permit Restrictions

and buyers. Similar to unbundling of parking costs for residential uses, commercial leases can unbundle parking (parking spaces are leased separately rather than automatically included with building space), and list parking as a separate line item (parking rents are listed separately from building rents).

Shared Parking

Restricting a parking pool to a single use (i.e., only residential or only retail) results in poor utilization of the parking supply. The mix of residential and retail uses provides a good opportunity for the implementation of a shared parking scheme that can help reduce parking requirements. For example, retail parking reaches its peak demand during the daytime whereas residential parking is most frequently needed in the evening and at night. Rather than providing distinct parking supplies to meet these complementary uses the same parking supply can be used by customers during the day and residents in the evenings and at night, significantly reducing parking requirements for both land uses and making their development more affordable.

Free/Reduced Price Transit Passes

Providing residents/workers within the Plan Area with free/low cost transit passes could increase the transit mode share and reduce vehicle miles traveled (VMT), emissions and congestion, and further reduce parking demand on-site. This strategy can be subsidized by developers, building managers, employers or public agencies.

Car Sharing

Car sharing is a complementary strategy to the reduction of the parking supply because it meets the needs of people who drive a car infrequently but leave it parked the rest of the time. Empirical research has found the availability of shared cars can significantly reduce car ownership, which has a direct impact on the need to provide parking.

4.7 OPEN SPACE PLAN

The Open Space Plan is intended to provide a variety of parks and open spaces within the LSAP Plan Area for residents to use and enjoy. The proposed 6.3 acres of open spaces creates an integral green infrastructure network - “a green web” - highlighted by a substantial linear park stretching west-east across the site with a central green creating a southern gateway to the north of Kifer Road. Plazas, gardens, and mini parks linked, through thoughtful and attractive streetscapes and trails, provide residents and visitors with diverse outdoor spaces for activities and socializing.

OVERVIEW

A series of neighborhood-scale, shared outdoor open spaces will be provided on-site to form an integrated “green web” network which will further enrich the public realm within the LSAP Plan Area. The proposed open space components will be neighborhood-oriented in scale and design, providing residents and visitors with shared “outdoor room” with diverse activity spaces.

A Linear Park will act as a landscape axis stretching east-west across the site. It will provide the Plan Area both passive and active open spaces. A central green named Kifer Park with a multi-functional green lawn highlights the souther gateway to the north of Kifer Road. Adjacent to the community pavilion nearby, it will function as a great community gartering space for events and activities. A multi-purpose Central Plaza functions as an anchor at the west end of the site, creating a common space in front of the denser residential buildings. A series of mini parks are proposed around the Plan Area to further enrich the outdoor environment. Additional uses like bike trail connections, a dog park, recreational spaces, semi - public/private greens, and courtyards are also proposed throughout the site, offering choices to residents and providing visual relief. Provision of parkland is subject to Chapter 17.35 of the Santa Clara City Code, Park and Recreational Land.

OPEN SPACE ELEMENTS

FIG 4-8 Open Space Concept illustrates different types of open space elements comprising the integrated open space network on-site. The primary open space elements proposed within the Plan Area are described separately as below.

Linear Park

Located in the center of the LSAP Project Area, the Linear Park will function as the site’s primary outdoor gathering space. The park stretching west-east across the Plan Area north of Street A will include a passive green, flexible event space, retail kiosk, community pavilion, recreational courts, and a bicycle rental and storage center located at the east end.

The Linear Park will provide multi-functional open spaces with areas for both active and passive activities, including informal socializing, community gatherings, special events, and programmed activities, such as community sports events, local arts/crafts exhibits, and food/cultural festivals. The Linear Park will also link the primary retail and service components of the Plan Area and provide bicycle and pedestrian linkages for pedestrians and bicyclists to access to the community amenities, the multi-purpose plaza at the west end, the proposed Kifer Park north of Kifer Road, as well as the multi-purpose trail along Calabazas Creek.

Kifer Park

A neighborhood-scale central green named Kifer Park will be provided within the Plan Area along with the Linear Park. Retail and dining uses are proposed mostly focused around this area to activate and further enliven the park area. The Kifer Park is proposed to accommodate a multi-functional community space with a mixture of hardscape and softscape surfaces that would support flexible uses and events, such as outdoor movie, live concerts, and farmers market. *FIG 4-8* illustrates that the Kifer Park is located north of Kifer Road, acting as the southern gateway of the Site. Given the LSAP aims to provide flexibility for guiding future development, alternative location of the Kifer Park might be considered during implementation.

Mini Parks / Plazas

A number of mini parks and plazas will be distributed evenly throughout the site associated with the residence projects for providing residents with multiple choices of shared outdoor rooms. These spaces are less formal secondary open spaces and more intimate in scale. They will maintain a public character often offering seating and shade, and tend to support passive uses and also some programmed activities.

Public Easement

The utility easement area on-site creates an opportunity for accommodating a variety of unique outdoor spaces and activities. These outdoor programs could include: a dog park, sculpture garden, horticulture plots, and local artist exhibition area, etc. These opportunities will all create a beautified landscaped easement area that will add value to the community's livable built environment rather than detract the aesthetic character of community.

Semi-public / -private Green

A series of well-designed courtyards / rooftop amenity decks, scaled to function as appealing outdoor rooms will occupy many of the new residential buildings throughout the site. The degree of public accessibility will vary in accordance with the location and function of each space. These semi-public / -private greens will provide residents with intimately scaled socializing and relaxing spaces directly close to their homes.

Tree-lined Streets

Rhythmic planting of moderately scaled canopy trees on primary collectors on-site provides shade for pedestrians and bicyclists, and forms a green network that links other open space components within the Plan Area. Introducing flowering/deciduous trees along the Linear Park bicycle/pedestrian trail and Street A adds a pop of color in the streetscape and brings in the aesthetic pleasure to the overall outdoor environment of the LSAP Plan Area.

PROPOSED OPEN SPACE ELEMENTS

LINEAR PARK


CENTRAL GREEN


MINI PARKS / PLAZAS


EASEMENT


SEMI-PUBLIC/PRIVATE GREEN


TREE-LINED STREETS


FIG 4–8: OPEN SPACE CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Primary Streetscape
- Secondary Streetscape
- Enhanced Landscape (located outside of designated flood control area)
- Public Open Space
- Semi Public Open Space
- Semi Private Open Space
- Public Plaza
- Special Paving
- Easement
- Grade Separated Crossing (conceptual)
- Emergency Vehicle Access

1" = 300'

0' 100' 200' 300' 500'

4.8 URBAN DESIGN CONCEPT

The Urban Design Concept will integrate high quality design with community identity, an inviting public realm, and multiple, viable, mobility options. Urban character and livability, community linkages, placemaking and project identity will support the Plan Area's urban design and will reinforce the overall vision of a new center of activity for the Lawrence Station area and the region.

OVERVIEW

Together with the Land Use, Mobility and Open Space concepts, the Urban Design concept will establish a clear organizational design structure that will connect the LSAP Plan Area to its surroundings. It will unify its disparate parts, create a walkable urban neighborhood, and provide many opportunities for activity and recreation. In doing so, the LSAP is intended to create an identifiable community character based on active, urban, mixed-use zones. The Plan Area will function as a compact, sustainable, pedestrian-friendly, and transit-oriented environment.

URBAN DESIGN CONCEPTS

Urban Character and Livability

The proposed mix of uses and walkability will be key aspects in establishing an urban character and livability of the LSAP Plan Area. Activated streetscape and a variety of open spaces will also be major contributing factors to the Plan Area's urban appeal, framing its public spaces. High-quality outdoor spaces will create an attractive setting while also serving as important nodes of activity for local residential uses and visitors.

Community Linkages

Roadways, pathways, and trails will build visual and physical linkages both internally and externally. The desired external connectivity will be achieved through strategic off-site circulation improvements and reinforced by the proposed active transportation network that supports multi-modal movement.

Internal connectivity will largely be achieved through a gridded network of pedestrian-friendly streets and a centrally-located urban parkway within the district core. Similarly, a network of bicycle connections that readily accommodate bike travel will be located internal to the site, while various pedestrian access routes will link parcels.

Placemaking and Project Identity

A key component of successful placemaking will be a clear project identity. For the Lawrence Station Plan Area, this will be accomplished through a variety of interrelated components; gateways that mark major entrances to the project; a coordinated family of wayfinding signage and environmental graphics; a unified palette of streetscape amenities; and a compelling landscape palette. Additional features may include signature structures, public pavilions, and civic art at strategic locations. These elements will allow the LSAP Project Area to become a comfortable and inviting area, adding social, cultural, and economic activity to support the mixed-use character of the site.

FIG 4–9: MASSING CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

Sustainability and Integrative Design

For achieving the sustainability goal and promoting integrative design on-site, several sustainable design strategies are suggested. Buildings within the LSAP Plan Area will be oriented and massed to reinforce the desired urban character and to establish a positive relationship between buildings and outdoor spaces; this will be key to activating the project's outdoor gathering spaces and to making walkable streets. Next, particularly in higher density structures, building orientation and massing will establish a consistent street wall along pedestrian priority streets and will help define the pedestrian experience. Finally, active uses such as retail and food and beverage will be placed along sidewalks and will line the edges of the linear park. Within each phase, buildings will be encouraged to frame and orient toward their companion open spaces, to create an open and inviting atmosphere.

URBAN DESIGN STRUCTURE

FIG 4-9 Urban Design Concept articulates a series of urban design elements. These elements, working together, constitute a strong urban design structure that strengthens the community character of the LSAP Plan Area. These elements include project gateways, activity nodes, landmark (iconic building), tree-lined streets, retail/active frontage, residential zones, and open space zones.

Gateways / Nodes

- *Project Gateway:* The project gateways mark the major entries of the site, including the entries/exits on Ryder Street from Central Expressway and Lawrence Expressway and access to New Gordon Avenue and Corvin Drive from Central Expressway and Kifer Road. Incorporating signage and wayfinding at these interactions as well as public art will help to strengthen project gateway character and provide clear directions to motorists, pedestrians, and bicyclists as they enter the site.
- *Activity Node:* Activity nodes are major outdoor gathering spaces for accommodating recreational activities and social interactions, augmented by retail/ information kiosks, public art installations, and enhanced landscaping.
- *Iconic Building:* An 8+ story, uniquely residential building with active uses on the ground floor, located at the Avenue 3/Street A intersection, adjacent to the primary open spaces on-site, will act as a landmark of the area.

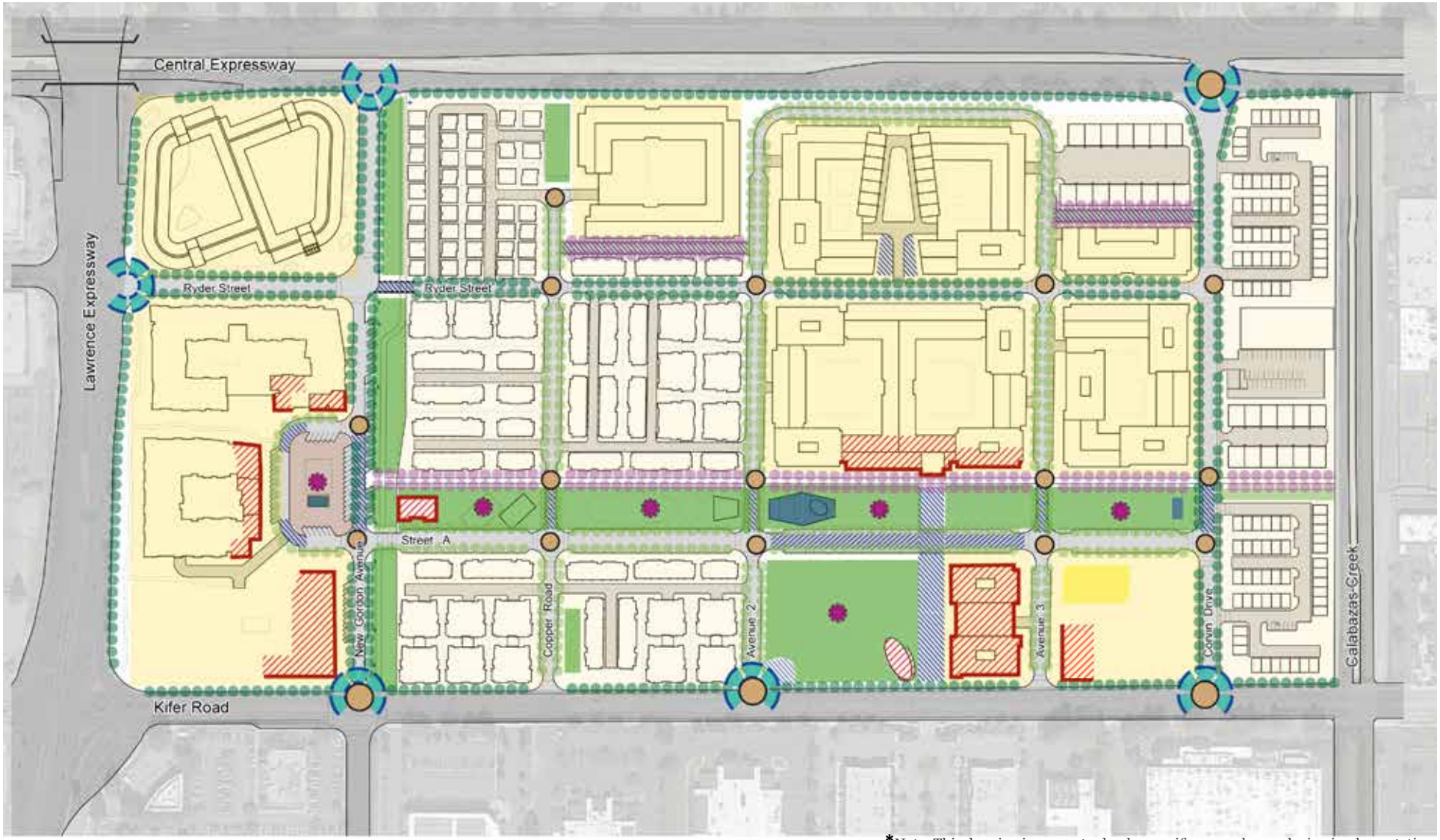
Linkages

- *Street Trees/Streetscape:* Consistent tree canopy along the internal streets, trails and paseos, with enhanced crosswalk and special paving, creates an appealing "green web" network linking the gateways, nodes, residential zones, and other open space components.
- *Retail/Active Frontage:* Retail/active frontage on the street-level are primarily clustered around the public plazas and parks, activating public spaces and providing on-site amenities.

Districts/Zones

- *Residential Zones:* Medium/High Density residential zones provide diverse housing options with distinguishing visual character, reinforcing the intense, mixed urban neighborhood identity of the Plan Area.
- *Open Space Zones (Public Parks/ Plazas):* Accommodating passive/active outdoor activities and programmed events, these outdoor green spaces play a significant role in creating a livable and community.

FIG 4–10: URBAN DESIGN CONCEPT



*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Streetscape Enhancement
- Landscape Enhancement
- Public Open Space
- Public Plaza
- High Density
- Medium/Low Density
- Retail
- Public Amenity
- Iconic Building
- Special Paving
- Active Frontage
- Project Gateway
- Crosswalk
- Activity Node
- Emergency Vehicle Access

1" = 300'

0' 100' 200' 300' 500'

5 ARCHITECTURAL STANDARDS & GUIDELINES

5.1 INTRODUCTION

This chapter provides a series of approaches, recommendations, and requirements for architectural design within the LSAP Plan Area. These guidelines will support safe and comfortable environments for all users, help establish a sense of place by providing more detailed information about architectural elements, building massing, material choices, and more.

OVERVIEW

Lawrence Station is envisioned as an active and engaging place. To achieve this goal, coordinated site planning must consider the location as well as the orientation of the buildings, service and parking facilities, as well as outdoor spaces. Proper design will encourage sidewalk activity, reduce the visual impact of services and parking, and incorporate places amenable to outdoor activity and use. Buildings should be visually appealing, exhibit enduring quality, and contribute to a cohesive streetscape.

This concept requires that every element of the LSAP Plan Area work together. It requires a harmonious transition between building uses and building scale, achieved through sensitive massing and articulation of facades. Additionally, thoughtful detailing, timeless materials, and a unique shop fronts will help create a unique sense of place.

The architecture of the LSAP Plan Area must respect the urban goals of the site. Issues of adjacency, style, and detailing should be well-considered and in concert with neighboring structures. Buildings should be oriented and massed to reinforce the desired urban character and to establish a positive and harmonious relationship between themselves and outdoor spaces. The public realm should be varied, richly detailed, and accessible to all. Circulation networks should be legible, safety-oriented, and appropriate to the users that they serve. Finally, issues related to sustainability and resiliency must be carefully considered in the planning, design, and construction of elements within the LSAP. This will ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

These elements are the keys to creating neighborhoods with character, providing engaging places to live, work, and play, and to making walkable streets that aid in the health and vitality of the LSAP Plan Area's residents and visitors.

5.2 ARCHITECTURAL DESIGN PRINCIPLES

Neighborhood Identity:
The LSAP should promote a strong neighborhood identity and establish the overall community image. The Plan should support mixed-use development that features ground floor commercial and upper floor residential uses.

Building Street Relationship:
Sidewalks should promote vitality and engage pedestrian interest. Orient development to spatially define and focus activity on the street. Establish a visual link with the streets.

Three Dimensional Quality:
Facades should enhance their visual surroundings. Articulate facades so as to introduce shadow lines and provide visual relief. Utilize a pleasing set of proportions and a clear pattern of building openings, and well-composed cornice lines.

Human Scale:
Buildings should contribute to a pleasing living environment. Encourage elements that offer a human dimension, such as frequent shop entrances, window displays, awnings, overhangs, and exterior light fixtures. Incorporate rich detail and high-quality materials, especially at eye-level.

Permanence:
Developments should make a long-term contribution to the community. Use details, materials, and colors in tune with the local environment and building traditions. Raise the level of design with materials that exhibit permanence and quality.

Outdoor Rooms:
Use building massing and architecture to facilitate social interaction and passive recreation through "outdoor rooms." Plazas and courtyards are integral to a vibrant life at Lawrence Station. Use buildings to help "contain" spaces that establish a comfortable transition between interior and exterior.

Accessibility:
Buildings should be oriented and designed to make entrances obvious and easily accessible to pedestrians and cyclists. Modulations in the building facade or other unique architectural characteristics help to create a legible and functional public realm.

5.3 ARCHITECTURAL DESIGN GUIDELINES

Examples of mixed-use streets comprised of uniform setbacks, varied roof lines, scale variety, landscape, and engaging building materials, etc. that positively contribute to the public realm.

AD 1- SUPPORT THE CHARACTER OF THE PUBLIC REALM

Intent

A compact development pattern can contribute to a distinct urban image, define public space, support a diverse mixture of use, and promote transit usage and pedestrian activity. New buildings should help reinforce the dominant character of their immediate neighborhoods and create a strong sense of urban living environment.

Recommendations

AD 1.1 - Contribute towards reinforcing or establishing a distinct architectural and environmental image for the LSAP Plan Area. The constituent parts of new projects (building, open space, landscape, parking) should be internally integrated in image and form, while relating compatibly to those of neighboring buildings.

AD 1.2 - Buildings should be oriented to positively define and frame adjacent public streets, and/or public or common spaces, while promoting the collective form of neighborhoods.

AD 1.3 - Establish attractive, inviting, imaginative and functional site arrangement of buildings and parking areas, and a high quality architectural and landscape design which provides for proper access, visibility and identity.

AD 1.4 - Buildings on corner lots should be designed to positively define and frame the public realm of both streets upon which they front.

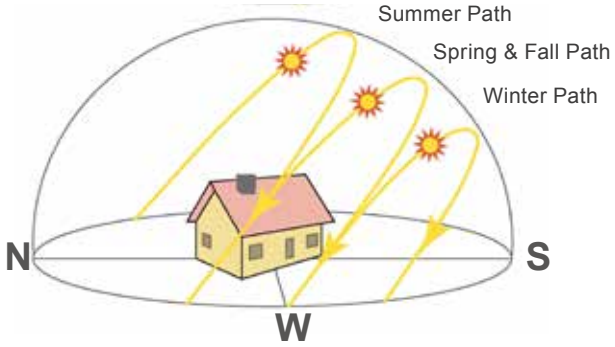
AD 1.5 - Ground floors of new buildings should be at or elevated above grade. Ground floor retail uses should be at the same grade as the adjacent sidewalk. Ground-floor residential uses may be raised above adjacent sidewalks, provided accessibility issues are adequately addressed.

AD 1.6 - Incorporate communal spaces with residential projects on-site; locate and size these spaces so that they are functional and support human occupation and use. Communal spaces can be used for social gathering, outdoor dining, and other community-oriented activities and events.

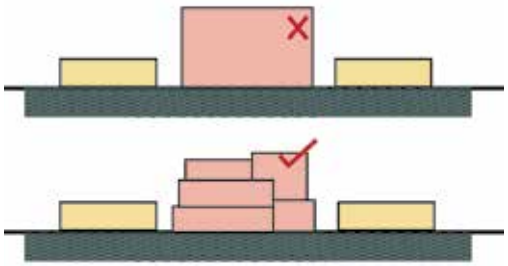
AD 1.7 - Design communal spaces to contribute to the character of outdoor rooms. Incorporate outdoor furnishings, recreational facilities and other community amenities, and attractive landscape features to make communal spaces comfortable, inclusive, and inviting.

AD 1.8 - Distinguish the design of private outdoor spaces from communal spaces. Locate a majority of code-required open space at the ground level in a manner that is equally accessible to all residential units to promote safety and the use of outdoor areas. In mid- and high-rise buildings, podiums between buildings and rooftop areas may be used as common areas.

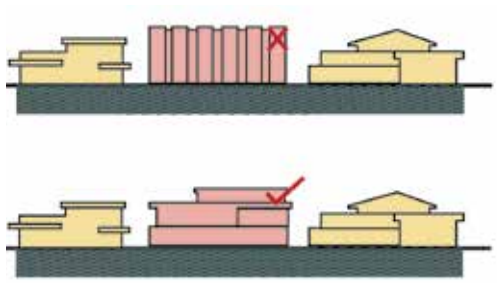
AD 1.9 - Locate parking to reduce its visibility from streets and other public and communal spaces. Parking should be located behind buildings, underground, or at the interior of the block, except where there is ground floor retail.



Sun path and building orientation



The mass of the larger building steps down near smaller buildings and the varied roof forms reduce apparent size.



Take architectural clues from surrounding buildings

AD 2- ENSURE OPTIMUM BUILDING ORIENTATION

Intent

Take advantage of the sun's seasonal movements by properly orienting the buildings. The optimum building orientation can help frame and define the streetscape and outdoor open spaces, providing residents with appealing outdoor environment.

Recommendations

AD 2.1 - Orient buildings to ensure the primary facades and entrance areas of all buildings face the street, open spaces, or other pedestrian-oriented circulation areas.

AD 2.2 - Where possible orient buildings so that longer side aligns the E-W axis allowing the winter sun into the building to warm it and provide light, while minimizing the effects of the hot summer sun.

AD 2.3 - Situate indoor and outdoor living and entertainment areas to the north where possible, to maximize winter sun and minimize summer sun.

AD 2.4W - Locate areas that have lower heating and lighting requirements (laundries, studies, covered parking, etc.) away from the northern walls, as the placement of these spaces in this way may preclude the preferred orientation of primary living areas.

AD 3 - PROVIDE VARIATION IN BUILDING MASSING AND SCALE

Intent

Achieve pedestrian-friendliness by managing building heights to provide visual interest and make a comfortably-scaled environment for pedestrians to inhabit. New developments should respect the character of existing buildings with regards to height, scale, style, and architectural materials.

Recommendations

AD 3.1 - Buildings should be scaled to respond to their context by sensitively and positively addressing the scale and massing of their adjacent neighbors.

AD 3.2 - Encourage varied building heights. Varied building heights provide visual interest and suggest the appearance and scale of smaller structures.

AD 3.3 - Building heights should create a transition from the heights of adjacent existing residential structures. The distance between the products and proposed large-scale public open spaces can also help mitigate this change in building height.

AD 3.4 - For buildings more than four stories, architectural responses should be utilized to create variation of material and color, and visual contrast to break down the overall scale of larger buildings.

AD 3.5 - Provide pedestrian-scaled architectural details at street-level for walking comfort.

AD 4 - ARTICULATE BUILDING FACADES

Intent

Proper articulation of a building's facade will add richess and variety of the architecture of the LSAP. New buildings should relate to the public realm through architectural frontage types that provide direct access into them and a transition between their private realm and the public realm of the street.

Recommendations

AD 4.1 - Building frontage should be designed consistently within the architectural language chosen for each project, in terms of structural expression, scale, proportions and materials. Add architectural details to enhance scale and interest on the building facade by breaking it up into distinct planes that are offset from the main building façade. Treat all façades of the building with an equal level of detail, articulation, and architectural rigor.

AD 4.2 - New multi-family and mixed-use buildings should be designed with frontages that activate the street by providing direct access to their ground floor dwellings and commercial spaces.

AD 4.3 - Buildings on corner lots should be designed to acknowledge their particular location. Different frontage types may be used on each of the two street facing facades, the same frontage type may be used on each facade, or a frontage type can wrap around the corner from one facade to the other.

AD 4.4 - Design multi-family residential buildings to convey individual residential uses, even when applying a modern aesthetic. Modulated façades can prevent residential buildings from appearing commercial. Layer building architectural features to emphasize certain features of the building such as entries, corners, and organization of units.

AD 4.5 - Alternate complimentary textures, colors, materials, and distinctive architectural treatments to add visual interest while avoiding dull and repetitive façades. Reinforce existing façade rhythm along the street where it exists by using architectural elements such as trim, material changes, paved walkways, and other design treatments consistent with surrounding buildings.

AD 4.6 - Orient windows on street facing units toward public streets, rather than inward, to contribute to neighborhood safety and provide design interest. Orient interior unit spaces so that larger windows for more public rooms, such as living and dining areas, face onto the street. Utilize windows and doors as character-defining features to reflect an architectural style or theme consistent with other façade elements. Windows should project or be inset from the exterior building wall and incorporate well designed trims and details.

AD 4.7 - Just as where the building meets the ground is important, so too is where the building meets the sky - the roofline. Seek to integrate varied roof details like modulated building heights, parapet details, roof slopes, chimney stacks, or innovative architectural solutions, as appropriate.

AD 4.8 - Avoid penetrations in primary building façades such as those from vents or rain scuppers. Where situations may exist where this is unavoidable, use high-quality covers and well-detailed strategies to minimize the negative visual impact these elements can produce.

Articulating building facades for enriching the public realm

Mixed-use buildings with ground-level store frontage for activating the street and sidewalk

LSAP allows for a mix of store frontages for enhancing streetscape and creating visual interests

AD 5 - INCORPORATE EASILY ACCESSIBLE BUILDING ENTRANCES

Create distinguishable entrances by incorporating landscaping, porches, stoops, and canopies, etc.

Above-grade building entrances with architectural details add character and interest along the street

Design the main entrance with ADA considerations

Intent

Design building entrances so that they are easily seen and accessible. Primary building entrances should be oriented to a public street or a prominent public area; and also add character, identity, and interest along the street.

Recommendations

AD 5.1 - Each primary building on a site, regardless of its size, should have clearly-defined, highly-visible primary entrance featuring at least two (2) of the following:

- Unique architectural feature (i.e. prominent tower feature or peaked roof form and/or variation in building color/material);
- Recess or projection;
- Pedestrian weather protection (i.e. canopy, overhang, or arcade).
- Architectural detail such as raised corniced parapets over the door, arches, lattice or tile work and moldings integrated into the building structure and design;
- Streetscape including outdoor patio, integral planters or wing walls that incorporate landscaped areas and/or places for sitting.

AD 5.2 - Ensure that the main entrance and entry approach can accommodate persons of all mobility levels.

AD 5.3 - Incorporate transitions such as landscaping, paving, porches, stoops, and canopies at individual entrances to residences, and from the sidewalk to the front door. These methods should not protrude into required yards or negatively impact the overall street wall.

AD 5.4 - Entries should be designed according to simple and harmonious proportions in relationship to the overall size and scale of the building. Design entries in proportion to the number of units being accessed. Ensure that pedestrian entries provide shelter year-round.

AD 5.5 - Promote pedestrian activity by placing entrances at grade or slightly above, with an unobstructed from view from the public right-of-way. Entryways below street level should be avoided at all times.

AD 5.6 - If stairs are used in common areas, such as an atrium or lobby, they should be highly visible and integrated into the predominant architectural design elements of the main building to promote active use.

AD 6 - INTRODUCE VIBRANT STOREFRONTS

Intent

Accommodating public uses at the ground floor is critical to an attractive and active streetscape, and street level facades offer the great opportunity to support pedestrian activities and enrich public spaces. Introducing vibrant storefronts, shop entrances and activities is intended to enliven the street spaces, sustain attention, and support an active day and night street environment within the neighborhood.

Recommendations

AD 6.1 - Allow for creativity and individual expression in storefront design, provided that each storefront is compatible with the overall building design. Ensure that architectural features are integral to the retail space and contribute to a harmonious design. Ornamentation and features that appear tacked-on or that are artificially thin are discouraged.

AD 6.2 - Establish a consistent “street wall” with continuous retail frontage . Minor modulations can accommodate recessed shop entrances, “eroded” building corners, etc. Introduce pedestrian-scaled details at street level.

AD 6.3 - Shop fronts may also be setback from the frontage line in order to provide covered, outdoor space. The retail frontage should be enriched with canopies or awnings, which may be fixed or retractable to shelter pedestrians and to shade the shop front glass from glare.

AD 6.4 - Establish a clear pattern of fenestration that unifies the building, including well marked and articulated building and shop entrances. Encourage inviting entries and expansive storefront windows with engaging displays that animate the adjacent pedestrian areas.

AD 6.5 - Retail area should not be negatively effected by service, loading, and storage facilities. Screen ground level mechanical and electrical equipment from view. A cohesive architectural treatment is recommended, although dense landscape may also serve as an effective screen.

AD 6.6 - Tenant identification signage should be appropriately scaled to fit the storefronts, with tenant branding elements reasonably accommodated. Coordinate signage materials and colors with the building and storefront design. In general, letters and symbols should contrast with background materials to achieve readability. Interior-lit box type signage should be discouraged.

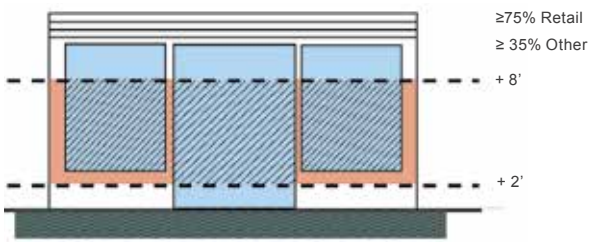
AD 6.7 - Choose a color palette that offers visual simplicity and harmony, generally emphasizing light, neutral colors. The use of bright or intense colors should normally be limited to an accent within a carefully balanced color scheme; for example, to help articulate the facade, highlight building features, or add visual interest.

A consistent “street wall” with continuous retail frontage

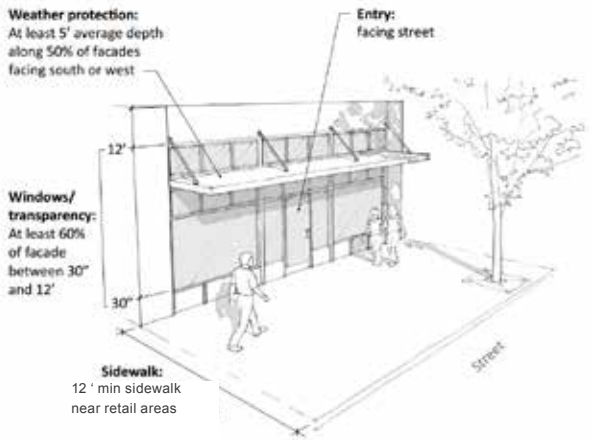
A unified fenestration well defines the shop entrance

High-quality designed corner storefront enlivens the public realm

AD 7 - INCREASE VISUAL TRANSPARENCY



Minimum percentage of transparent area of commercial structures at ground-level



Design dimension requirements of storefront transparent features

A high degree of transparency for providing pedestrians a visual connection from the street

Intent

Improvements that facilitate visual transparency from the exterior to the interior of a building can be beneficial to a business. See-through windows and doors can add visual activity to street, and provide pedestrians with connections to the urban street life and a safer walking experience.

Recommendations

AD 7.1 - The provision of windows, doors and other openings, especially at ground level, should enhance the aesthetic appeal of buildings, provide visual interest and foster a sense of security and vibrancy for pedestrians.

AD 7.2 - Windows and doors should narrate the uses inside. For example, storefront windows at the street level are more expansive, suggesting common uses while upper level fenestration is smaller, indicating more private uses.

AD 7.3 - Where appropriate, a ground-level façade may employ sculptural, mosaic, or relief artwork or other design features over 75% of the ground-level surface area in lieu of clear glass. Large expanses of undifferentiated walls are to be avoided.

AD 7.4 - Facades of all commercial structures should incorporate transparent features (clear glass on windows and doors) over a minimum percentage of the surface area at ground-level.

- For retail uses, a minimum of 75% should be transparent;
- For other uses, a minimum of 35% should be transparent.

AD 7.5 - Glass at the ground level should be clear and unobstructed to allow visual access to the building's active interior uses such as retail display, product production or residential lobby that create interest for pedestrians walking by. Mirrored glass and dark tinted glass are discouraged, as they block the view into the space.

AD 8 - USE OF APPROPRIATE BUILDING MATERIALS

Intent

Create a building materials palette, from which one may choose appropriate materials, giving each project a coherent aesthetic. Encourage the use of high-quality building materials that minimize maintenance costs and provide visual interest to the street, and promote the use of locally sourced and sustainable building materials.

Recommendations

AD 8.1 - Select building materials, architectural details, and finishes that convey a sense of permanence. Quality materials should be used to withstand weather and wear regardless of architectural style.

AD 8.2 - Apply changes in material purposefully and in a manner corresponding to variations in building mass. Miter-jointed corner materials are preferable to butt-jointed materials at corners.

AD 8.3 - Apply trim, metal- and woodwork, lighting, and other details in a harmonious manner, consistent with the proportions and scale of the building(s). Expansion joints and control joints should be carefully planned to harmonize with building facades. Dryer and other venting should occur through the roof, and not through exterior, public-facing walls, whenever possible.

AD 8.4 - Discouraged materials and details include:

- Untreated plastics, unfinished metal, corrugated fiberglass, corrugated sheet metal, or non-architectural grade plywood;
- Long expanses of fences without incorporating openings, changes in materials, texture, and/or landscaping;
- Utilitarian fencing materials such as chain link, wrought iron spears, or barbed wire or other security material;
- Inappropriate window treatments, jalousie or sliding windows;
- Windows mounted at the edge of the building envelope, conveying no sense of depth or shadow line;
- Unprotected foam-trim pieces that are within reach of pedestrians or other users.

Primary Material *- The dominant material of a building's exterior walls. A primary material will typically comprise 75% to 90% of each exterior building face excluding windows and doors.*

Accent Material *- A material utilized to provide architectural interest and variety on a building. Accent materials will typically comprise 10% to 25% of each building face. Accent materials are not to be utilized as a primary building material.*

Select quality materials that convey a sense of permanence

6 LANDSCAPE MASTER PLAN

6.1 INTRODUCTION

This chapter provides design guidance for the provision of public open space within the site. Open space areas include parks, plazas, easement, streetscapes, Calabazas Creek and more. The intent of these guidelines is to promote the health, safety, and the general welfare of the public, to conserve natural resources, to enhance properties and their values, to preserve the character of the area, and to encourage the use of the land year-round.

OVERVIEW

An interconnected network of open spaces is integral to the overall LSAP Plan Area. They serve a neighborhood destination and provide highly desirable amenities for workers, residents, and visitors. Collectively, multiple and varied landscape elements are intended to create an engaging public realm and contribute to the project's identity, functionality, sociability and visual appeal.

The LSAP encourages high-performing landscapes that simultaneously embrace social, recreational, ecological, and aesthetic values. A driving factor behind the planning and design of the landscape is the interdependence between aesthetic and recreational outdoor environments and green infrastructure, like green roofs and vegetated structures (trellis, green screens), that deliver ecological benefits.

PUBLIC OPEN SPACE

The public open spaces within the LSAP Plan Area include a Linear Park, a Kifer Park, small plazas, mini parks, a public easement, and trails. These outdoor areas give the Plan Area a unique identity and help create an atmosphere of community. The dedicated public realm accommodates a broad range of public, cultural, and commercial activities. These areas are further detailed in *FIG 6-1: Landscape Plan*.

SEMI-PUBLIC OPEN SPACE

These areas are often located at inner-block locations and include parking lots, and mid-blocks passages, and act as a transition between public and private areas. These spaces draw people through the project and serve as important connections within the LSAP Plan Area.

SEMI-PRIVATE OPEN SPACE

Directly associated with the residential components in the LSAP Plan Area, these areas are primarily terraces with views and/or connections to public areas. They are often located on the podiums of these residential buildings as the amenity deck component. Typically, amenities include a pool, spa, seating/lounging areas, and attractive planting areas, are elements in this kind of landscape.

6.2 LANDSCAPE DESIGN PRINCIPLES

Multi-functional:
Integrate a variety of high performance outdoor spaces to create distinct and assorted experiences that address the full range of anticipated users and perform numerous functions. The resulting network of green infrastructure brings added value to the project, community, and the environment.

Communal Space:
Incorporate a range of outdoor spaces encompassing public and semi-public settings that comfortably support formal and informal gatherings and social interaction. Spaces that have potential for public gathering are essential for the Plan Area.

Landscape Identity:
Employ a cohesive landscape design concept to promote project identity, including a coordinated design palette for the public realm. This principle recognizes that the landscape is an important aspect of placemaking, encouraging unique or special design qualities and features.

Spatial Enclosure:
Design active public spaces that take on the character of outdoor rooms. Surrounding buildings and trees should define streets and outdoor spaces, with pleasing transitions between interior and exterior.

Habitat Enrichment:
Introduce native landscape communities and natural systems to create a regenerative and resilient site that reduces maintenance and minimizes water and energy inputs. Habitat enrichment of this kind increases biodiversity and creates a positive environmental impact.

Enhanced Public Realm:
Establish a high standard of quality for the design of public outdoor spaces, in particular, to make a statement about the public character of the City. The public landscape should contribute to a welcoming environment and enhance visual appeal.

Regional Character:
Contribute to the authentic character of the place through the use of regionally appropriate materials, especially native and adapted plant species. To the extent feasible, rely on locally and regionally-sourced materials.

Site Amenities:
Contribute to the physical comfort and convenience of on-site users by incorporating landscape design elements such as canopy trees for shade and site furnishings for relaxation.

FIG 6–1: LANDSCAPE PLAN

*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Easement
- 1 Dog Park
- 2 Farmers Market, Outdoor Seating
- 3 Outdoor Dining
- 4 Sculpture and/or Horticulture Garden
- Linear Park
- 5 Outdoor Dining, Passive Turf, Sports Court
- 6 Play Area, Active Turf
- 7 Performance Area
- 8 Sports Courts (basketball and tennis)
- Central Park
- Public Plaza
- Mini Park
- Accent Paving
- Trail along Creek
- Park Amenities (cafe, restroom, bike storage, performance stage)
- Grade Separated Crossing (conceptual)
- Emergency Vehicle Access

1" = 300'

0' 100' 200' 300' 500'

6.3 LANDSCAPE DESIGN GUIDELINES

OSD 1- PROVIDE WELL-LANDSCAPED, PUBLICLY-ACCESSIBLE OPEN SPACE

Seating integrated into landscape

Incorporate playgrounds in open space design

Retail kiosks for activating the "outdoor room"

Intent

Well-landscaped, publicly-accessible open space is an essential component of the urban environment of LSAP Plan Area, offering visitors and residents with an appealing, shaded outdoor green spaces for accommodating both recreational and social activities. Appropriate landscaping of these open areas also increase visual interest and bring in environmental benefits.

Recommendations

OSD 1.1 - Ensure that open spaces provided within the Plan Area is publicly-accessible, well-landscaped and incorporated high-quality design. Prioritize sustainability in the design of open spaces. The natural topography of the site should be respected to avoid dramatic and unnecessary grade changes.

OSD 1.2 - Open spaces should be oriented to take advantage of views and sunshine. For safety and security consideration, open space and recreation areas should be visible from residential windows and doors, providing improved surveillance for those areas.

OSD 1.3 - To the extent possible, buildings should generally be oriented parallel to streets with varying setbacks to provide visual interest and to reduce the appearance of bulk, especially when adjacent to single family residential.

OSD 1.4 - Large projects should be broken up into groups of structures in order to form open space pockets that are visible from streets and central open space.

OSD 1.5 - For residential uses, provide private and semi-private open space. Private residential open space should be configured and designed to ensure privacy, while also providing linkages to the public open space components of the area.

OSD 1.6 - Pedestrian entries into sites should be enhanced with landscaping and decorative paving, trellis structures, pedestrian-scaled lighting and seating. Where pedestrian paths cross parking areas or driveways, the paths should incorporate landscaping and decorative paving to define the pedestrian space.

OSD 1.7 - Paving, planting and other landscape materials should be coordinated with the design of the buildings and overall site. Landscaped areas, including trees, paving, walls and fences should be regularly maintained. Seating areas should be provided and coordinated with shading, landscaping, and lighting.

OSD 1.8 - Include public art as part of open spaces improvements, per the requirements of public art design guidance in Section 8.5 and Section 8.6 of this Plan.

FIG 6–2: LINEAR PARK

*Note: This drawing is conceptual only; specifics may change during implementation.

LEGEND

1. Special Tree Canopy along Park
2. Designated Bike Lane
3. Cafe
4. Amenity Kiosk
5. Accent Paving
6. Enhanced Easement

Key Map

OSD 2 - SIZE PLAZAS AND COURTYARDS APPROPRIATELY

Intent

Plazas and courtyards are an integral part in the social life of the LSAP Plan Area. They promote civic gathering and can provide a quiet refuge from the urban environment. The location, size, and design of a plaza, courtyard or garden must be carefully considered in relation to its surroundings. Outdoor space that is excessively large or incorrectly sized may lack spatial definition, weaken the continuity of the street, or detract from the existing network of open space. Gathering places such as plazas and courtyards should be useful, as well as attractive. Consider them as "outdoor rooms."

Recommendations

OSD 2.1 - Encourage the presence of well-defined outdoor space, such as on-site plazas, interior courtyards, patios, terraces and gardens.

OSD 2.2 - Site outdoor spaces in accordance with the location and scale of adjacent streets, buildings, and uses; for instance, on-site plazas should not unduly interrupt the retail continuity of a street.

OSD 2.3 - Define and contain outdoor spaces through a combination of building and landscape, and discourage oversized spaces that lack containment.

OSD 2.4 - Design outdoor space with safety in mind; on-site public plazas should promote visibility from the street, and provide architecturally compatible lighting to enhance nighttime security.

OSD 2.5 - Locate plazas intended for public use at/or near street grade to promote physical and visual connection to the street and to attract large amounts of foot traffic. On-site plazas may also serve as a well-defined transition from the street.

OSD 2.6 - Site outdoor spaces to establish a comfortable transition between the exterior and interior of a building. Strive to design buildings that open onto plazas and their uses expand into the open space.

OSD 2.7 - Encourage public art element in outdoor plazas and semi-public courtyards; integrate a focal element such as a sculpture, fountain, or art piece to outdoor spaces for creating different visual and activity nodes.

Private courtyard provides "outdoor room" for socializing

Plazas strengthen the retail activities on-site

A water feature creates a focal point

OSD 3 - DESIGN PUBLIC EASEMENTS AS MULTI-FUNCTIONAL OPEN SPACE

Gardens gather residents and empower the community

Dog park provides a space for "fun"

Local artists exhibits enrich resident's daily life

Intent

The public easements* along New Gordon Avenue should be landscaped and programmed so that it could be used by the public throughout the year for different neighborhood-oriented events and activities, for example, outdoor art exhibitions, community gardening, and live concerts.

Recommendations

OSD 3.1 - Design the easement area as multi-functional open space through incorporating distinctive landscape characters and diverse programs, offering residents and visitors of all ages a variety of spaces to relax, socialize or be active.

OSD 3.2 - Create a welcoming pedestrian environment. Ornamental and canopy trees, contemporary shade structures, shady tree groves, water features, pedestrian scaled lighting, benches, planters and decorative hardscape paving all contribute to pedestrian comfort and create focal points.

OSD 3.3 - Provide garden plots in the easement area and assign the plots to residents for encouraging urban farming and community engagement on-site. Each gardener will be responsible for the maintenance and upkeep of their garden plot. Encourage

OSD 3.4 - Provide a dog park in the easement area with a double-gated entry to keep dogs from escaping and to facilitate wheelchair access. Shade and water for both dogs and owners, along with benches and tables should be provided. A safe, accessible location with adequate drainage and a grassy area that is mowed routinely may be proposed.

OSD 3.5 - Encourage outdoor exhibitions of sculpture and art pieces made by the locals artists in the easement park area. More details about public art can be found in 'Public Art Guidelines'.

OSD 3.6 - Small portions of the easement could be dedicated to horticulture where plants are properly cultivated and managed.

OSD 3.7 - Accommodate public on-street parking in the easement area.

*Note: For conceptual design proposal of the easement area see Section 6.4 - Easement.

OSD 4 - SUPPORT COHERENT HARDSCAPE

Hardscape with consistent color and materials palette creates a sense of harmony

Use decorative pavement for enhancing pedestrian safety

Use pervious paving for sustainable design considerations

Intent

Hardscape is to be used to provide a durable, all-weather surface to accommodate pedestrian activity and outdoor gatherings and activities. Use a consistent color and materials palette for the hardscape throughout the LSAP site.

Recommendations

OSD 4.1 - Hardscape is to be used to provide a durable, all-weather surface to accommodate pedestrian activity and outdoor gatherings and activities. Wherever possible, hardscape materials should be chosen to maximize pervious surface area to reduce stormwater runoff volume, rate, and pollutants.

OSD 4.2 - Special paving materials should be selected from a range of options, including natural stone pavers, unit concrete pavers, bricks, textured and colored concrete, and concrete with exposed or special aggregate or other finish treatments. Areas for special paving may include:

- Pedestrian crossings, especially at important locations, neighborhood commercial areas, and other special gateways.
- Mid-block and raised pedestrian crossings/speed tables.

OSD 4.3 - Pedestrian pavement should include a mix of materials like scored concrete and brick pavers. Pavement patterns on pedestrian walkways may include scored concrete and brick banding.

OSD 4.4 - Materials should be chosen based on the activities intended for the location, including such considerations as the use of a combination of materials for prominent locations and compatibility with the materials and styles of adjacent buildings.

- Most sidewalks and paths require only a concrete surface while more prominent pedestrian areas may require additional accent surfaces, such as pavers, to visually reflect their importance.
- A combination of hardscape materials should be used to distinguish building entrances, public spaces and gathering places. Suitable materials include brick, cast and natural stone, concrete pavers, or concrete.

FIG 6–3: PLAZA & OPEN SPACE CONNECTIONS

*Note: This drawing is conceptual only; specifics may change during implementation.

LEGEND

1. Tree Canopy along Park
2. Designated Bike Lane
3. Retail
4. Amenity Kiosk
5. Accent Paving
6. Enhanced Easement
7. On-street Parking
8. Outdoor Dining Area
9. Bicycle Parking Facilities

Key Map

OSD 5 - PROVIDE AMPLE TREES

Intent

Native plants and species adapted to the local climate will normally require less care than exotic species and contribute to more ecologically resilient habitats and landscape. This approach depends upon a reliance on water-conserving plants derived from native plant communities, and limiting the use of turf grass and other water-intensive landscapes.

Recommendations

OSD 5.1 - Plant street trees at regular intervals to create a pleasing rhythm and definition for the street. Use rich and coordinated palette of landscape materials to provide scale, texture, and color. The use of indigenous species is encouraged.

OSD 5.2 - Support and compliment the design intentions of the building architecture. Use landscape to screen storage facilities, service areas, and parking.

OSD 5.3 - Plant street trees throughout the project, including arterials and local streets, to contribute to the spatial definition and beauty of streets, and to provide shade and comfort for pedestrians. Choose tree species that withstand urban conditions and that are commonly used as street trees; trees that provide a shady canopy at maturity are generally encouraged.

OSD 5.4 - Select plants suited to the soil and climatic conditions of the site, emphasizing drought tolerant and adapted species that minimize water use.

OSD 5.5 - Minimize the use of water intensive landscapes such as turf grass and extensive annual beds, especially within perimeter landscape zones.

OSD 5.6 - Use low maintenance varieties of turf grass in locations where turf is necessary or uniquely advantageous.

OSD 5.7 - Install and utilize recycled water irrigation and water saving technology, wherever possible.

OSD 5.8 - In any planting area adjacent to the side of a parking stall, avoid planting trees within 4 feet of the parking stall, to allow for door swings of parked cars.

Please note, this list is provided as an information source only. Prior to the planting of all street trees, the Street Tree Program takes into consideration many factors in street tree selection. Right-of-way grow space, vertical clearance [power lines], underground utilities, street lights, traffic signs and lights and species suitability to the site are all factors. Generally, the same type of tree species are selected for entire blocks. This is done primarily for uniformity of maintenance and cost effectiveness. The City Arborist makes the final determination of type of tree species planted.

Recommended Palettes

Evergreen Trees

Typical Evergreen Trees:

- Camphor Tree (Cinamomum camphora)
- Arbutus marina
- Magnolia species
- Coast Redwood (Sequoia sempervirens)
- Cork Oak (Quercus suber)
- Deodar Cedar (Cedrus deodara)
- Italian Cypress(Cupressus sempervirens)
- Pine, Canary Island (Pinus camariensis)
- Pine, Fern (Afrogarpus gracilior)
- Sweetbay (Laurus nobilis)
- Southern Live Oak (Quercus viginiana)
- Tristania Laurina (Tristania laurina)
- Southern Live Oak (Quercus viginiana)
- Australian Willow (H=30', w= 25')
- Evergreen Pear (H=30', w= 30')
- Mayten (H=30', w= 30')
- Podocarpus (H=35', w= 30')
- Saratoga Laurel (H=30', w= 25')

Deciduous Trees

Typical Deciduous Trees:

- Autumn Gold Ginko (Ginkgo biloba)
- Autumn Purple Ash(Fraxinus americana)
- Chinese Pistache(Pistacia chinesis)
- Chinese Tallow (Sapium sabiferum)
- Red Maple, Ginko (Acer rubrum 'October Glory')
- Ornamental Pear "Chanticleer" (Pyrus calleryana 'Chanticleer')
- Tuscarora Crepe Myrtle "Red" (Lagerstroemia x 'Tuscarora')
- Muskegee Crepe Myrtle "Lavender"(Lagerstroemia x Muskegee)
- London Plane, "Yarwood" (Platanus acerifolia 'Yarwood')
- Heritage Birch (Betula nigra 'Heritage')
- Fan Tex Ash (Fraxinus velutina 'Rio Grande')
- European Pyramidal Hornbeam(Carpinus betulus)
- European Hackberry (Celtis australis)
- Copper Beach (Fagus sylvatica 'Atropunicea')

Native Wetland / Marsh


Typical Wetland Plants:

- Alkali bulrush (Bolboschoenus maritimus)
- Red willow (Salix laevigata)
- Arroyo willow (Salix lasiolepis)
- California bulrush (Schoenoplectus californicus)

Typical Groundcovers:

- Aaron's Beard/Creeping St Johnswart (Hypericum calycinum)
- Rock Cotoneaster(Contoneaster horzontalis)
- Algerian Ivy(Hedera canariensis)
- Coprosma (Coprosma kirkii)
- Lantana (Lantana montevidensis 'Carnaval')
- Myoporum (Myoporum parvifolium 'Putah Creek')
- Star Jasmine (Trachelospermum jasminoides)
- Trailing African Daisy (Osteospermum fruticosum)

Native Ornamental Plantings


Typical Native Ornamental Plants:

- Rock rose cress (Arabis blepharophylla)
- Sandhill sage (Artemisia pycnocephala)
- Berkeley sedge (Carex tumulicola)
- Beach Aster (Erigeron glaucus)
- Pacific Reed Grass (Calamagrostis nutkaensis)
- Sea pink (Armeria maritima)
- Deer grass (Muhlenbergia rigens)
- Cape Mendicino Reed Grass (Calamagrostis foliosa)
- California fescue (Festuca californica)
- Cleveland Sage (Salvia clevelandii)

Coastal Prairie / Grassland


Typical Grassland Plants:

- California Brome (Bromus carinatus)
- California Tufted Hairgrass(Deschampsia caespitosa)
- Coast Range Melic(Milica imperfecta)
- Hard Fescue (Festuca longifolia)
- Idaho Fescue(Festuca idahoensis)
- Meadow Barley(Hordeum brachyantherus)
- Molate Blue Fescue(Festuca rubra 'Molate Blue')
- Molate Fescue(Festuca rubra)
- Nodding Needle Grass(Stipa cernua)
- Purple Needle Grass (Stipa pulchra)
- Western Fescue (Festuca californica)

Native Coastal Shrub


Typical Coastal Shrub Plants:

- Photinia (Photina fraseri)
- Camellia)Camellia japonica cultivars)
- Dwarf Myrtle (Myrtus communis 'Compacta')
- Escallonia(Escallonia exoniensis 'Frades')
- Heavenly Bamboo(Nandina domestica)
- Tobira (Pittosporum tobira and cultivars)
- Wooly Grevillia (Grevillea lanigera)
- Pride of Madeira (Echium fastuosum)
- Hollyleaf Cherry (Prunus ilicifolia)
- Sandankwa Viburnum (Viburnum suspensum)
- India Hawthorn (Rhaphiolepis indica & cultivars)
- Laurustinus (Viburnum tinus 'Spring Boquet')
- Oleander (Nerium oleander & cultivars)
- Oregon Grape(Mahonia aquifolium)
- Wild Lilac (Ceanothus griseum horizonalis)

6.4 LANDSCAPE DESIGN PROPOSALS

Central Plaza

- Flexible space for formal and informal gatherings that can be used by residents and visitors of all ages for active recreation, relaxation and people watching.
- Special paving, fire pits, ornamental and canopy trees, and varied forms of comfortable seating all create a welcoming pedestrian environment.
- Contemporary pergolas, and shaded seating augment pedestrian comfort.

LEGEND

1. Turf Field
2. Tiered Turf Amphitheater
3. Contemporary Seat Wall
4. Fire Pit Lounge w/ Pergola
5. Bench Seating
6. Contemporary Pavilion
7. Concrete Paving w/ Turf Joints
8. Angled Car Parking

Key Map

FIG 6–4: CENTRAL PLAZA DESIGN CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

Linear Park

- Areas for active recreation including children's playground, recreational fields, and bike lanes.
- Quality public space with enhanced amenities including bench seating, bicycle racks, shade trees etc.
- Contemporary pavilion for formal activities.

LEGEND

1. Turf Field
2. Tree Canopy
3. Children's Play Area
4. Designated Bike Lane
5. Sidewalk
6. Contemporary Pavilion
7. Bench Seating

Key Map

FIG 6–5: LINEAR PARK DESIGN CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

kifer Park

- Functions as the heart of the project and is adjacent to retail uses that aid in activating the park.
- Community space for special events such as outdoor movies, concerts and farmers markets.
- Quality public space with enhanced amenities.
- Special paving, decorative planting, unique lighting features, and public art promote a festive character and support a community atmosphere.

LEGEND

1. Central Green
2. Drop-off Area
3. Street Tree Canopy
4. Cafe
5. Outdoor Dining Area
6. Sculpture
7. Restrooms / Public Amenity Space
8. Performance Area
9. Retail Canopy
10. Special Tree
11. Water Feature

Key Map

FIG 6–6: KIFER PARK DESIGN CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

MINI PARK

- Mini parks can serve as a source of community empowerment, give increased feelings of self-reliance, and improve levels of nutrition.
- Includes both hardscape and softscape features incorporating garden plots and specialty paving.
- Mini Parks offer quiet retreats for community members.
- Garden plots can reduce a community's urban footprint through adding to the local food system.
- Mini parks beautify the built environment and provide a shared community experience.

LEGEND

1. Raised Planter Boxes
2. Contemporary Pergola
3. Ornamental Tree
4. Garden Trail
5. Concrete Path
6. Garden Plots
7. Accent Paving

Key Map

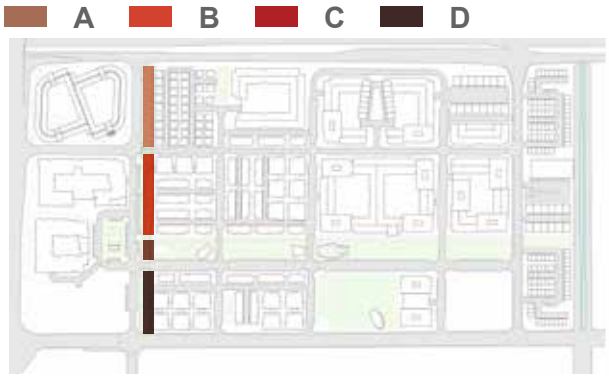
FIG 6–7: MINI PARK DESIGN CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

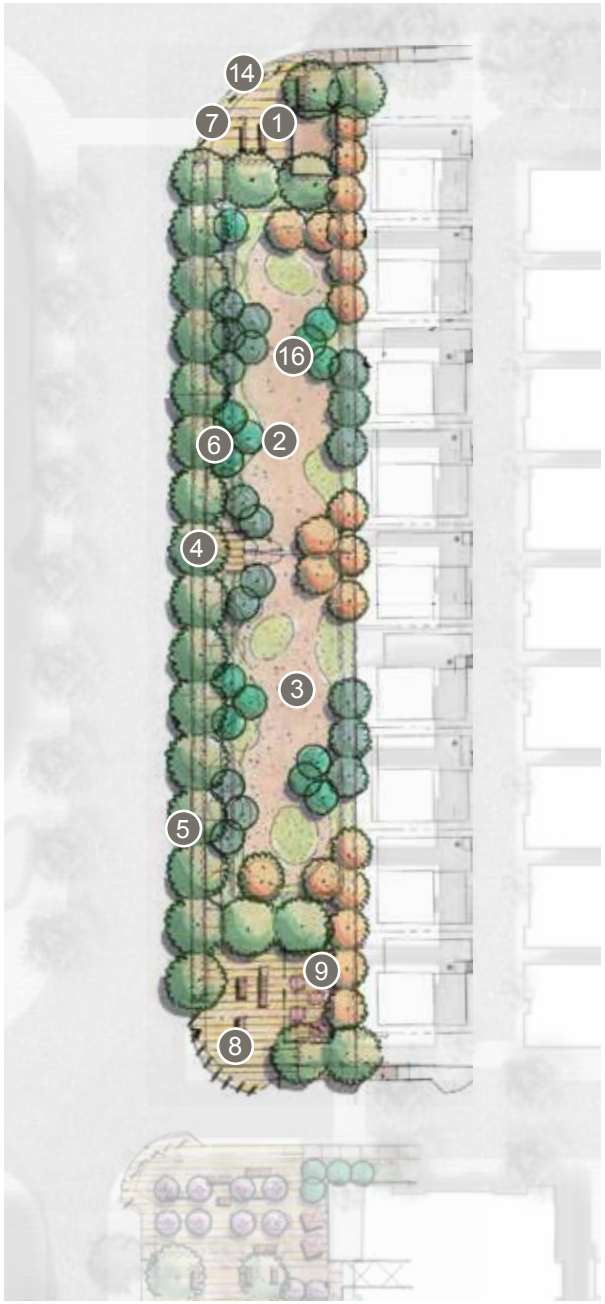
Easement

- Creates shaded “outdoor rooms” that support informal congregations and social interactions.
- Includes decorative hardscape features, plantings, water features, shady tree groves and more, creating comfortable multi-functional pedestrian areas.
- Easement area becomes usable space for dog park.
- Ornamental and canopy trees, contemporary shade structures, and shady tree groves all contribute to pedestrian comfort.
- Outdoor space framed by adjacent buildings offering sense of enclosure.
- Flexible unprogrammed spaces.
- Pedestrian scaled lighting, benches, trash receptacles, and planters all enhance the easements.
- Varied and distinctive easement areas with individual character offering a variety of spaces to relax, socialize or be active.

Key Map



A



B

C

D

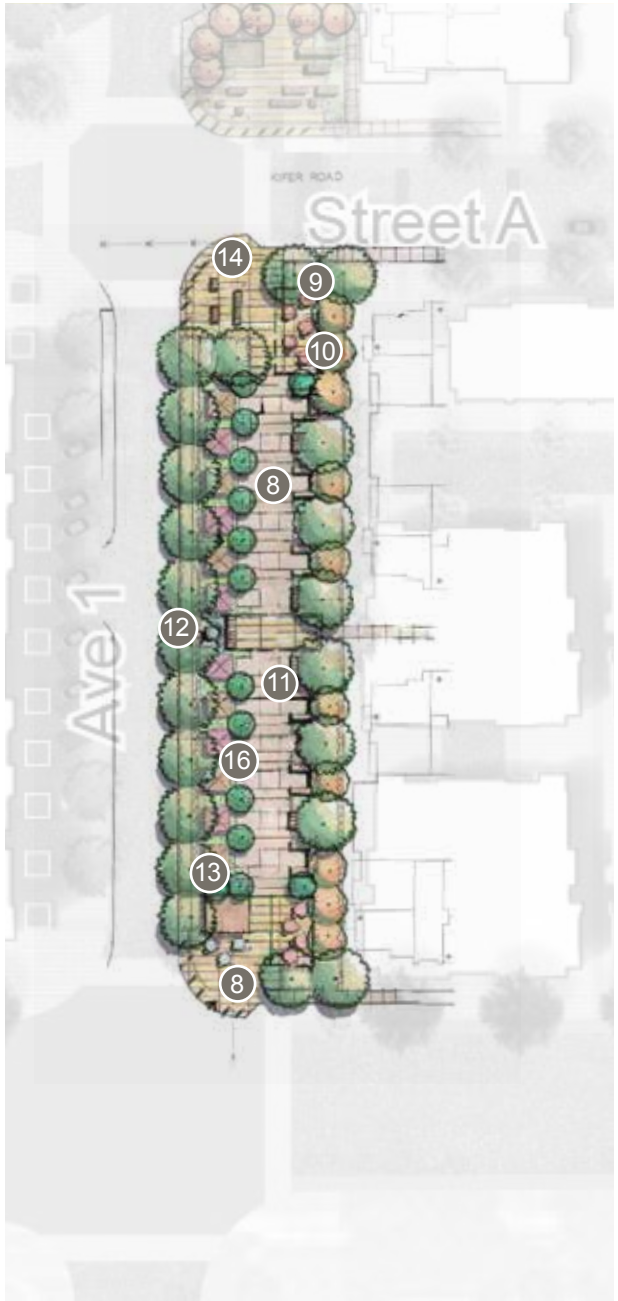


FIG 6–8: EASEMENT DESIGN CONCEPT

LEGEND

1. Project Entry Feature
2. Small Dog Park
3. Large Dog Park
4. Dog Park Entry and Gate
5. Street Trees
6. Landscape Planters
7. Contemporary Seat Wall
8. Decorative Paving
9. Contemporary Pergola & Seating
10. Seating Nook
11. Bench Seating
12. Planter / Fountain
13. Covered Comfort Station
14. Illuminated Bollards
15. Contemporary Plant Wall / Living Wall
16. Flowering Trees / Accent Trees
17. Plaza w/ Market Umbrellas, Seating, Trees and Dining Areas
18. Contemporary Shade Structure & Seating
19. Pass-Through Cor-Ten Monument
20. Tree Grove

*Note: These drawings are conceptual only, and specifics may change during implementation.

7 STREETSCAPE MASTER PLAN

7.1 INTRODUCTION

This chapter describes the proposed design treatment of Project Area streets, including roadway, bicycle and pedestrian circulation components. It includes design intent and general design requirements for the LSAP's streetscapes, with specific recommendations for the various streetscape typologies, augmented by drawings and illustrations.

OVERVIEW

A great street attends to the needs of people first. It accommodates pedestrians, bicyclists, vehicular circulation and parking in a livable and aesthetically pleasing way. The streetscapes within LSAP Plan Area are envisioned as a system of linear open spaces designed to accommodate multiple modes of travel and deliver a pedestrian-/bike-friendly experiences. Moreover, the streetscape design will provide visual appeal through the use of wide sidewalks, canopy street trees, appropriate street lighting, and comfortable benches for rest and relaxation.

GENERAL DESIGN OBJECTIVES

Pedestrian/Bike Safety & Traffic Calming

A pedestrian- and bike-friendly environment relies on creating streets that are safe for pedestrians and bicyclists that calm traffic through out the community. The LSAP will:

- Introduce traffic calming measures where pedestrian and bicycling activity is heaviest, including curb bulb-outs, raised crosswalks, speed tables and on-street parking.
- Use curb extensions (i.e., bulb-outs) at intersections, particularly in combination with on-street parking, to slow vehicular traffic and decrease the crossing distance for pedestrians and bicyclists.
- Provide a complete network of bicycle facilities encourage travel by bicycle rather than by private vehicle. Use off-street bike paths whenever possible within a hierarchy of bicycle accommodations featuring bike lanes, bike paths and shared routes (sharrows), using colored bicycle lanes in conflict areas.
- Use "protected intersection" treatments (such as concrete islands, raised crosswalks, and colored bike lanes) to create a safer pedestrian and cycling environment.
- Locate streetscape amenities in a zone adjacent to or near the curb as a physical and psychological barrier to vehicular traffic.
- Encourage on-street parking along local streets, especially in support of short-term customer access and to slow vehicular traffic along these roadways and to separate pedestrians and bicyclists from moving traffic.

Activating and Greening Street Space

The quality of a great streetscape also depends on the use and programming of that space. Street finishing and landscaping features add attractiveness to the streetscape, enhance property values, increases environmental resilience, and show a sense of care for the community. The LSAP will:

- Provide generous sidewalks with sufficient width to accommodate clear pedestrian passage while allowing sufficient room for streets trees, planters, stormwater facilities, and other streetscape amenities.
- Promote commercial activity such as outdoor seating, merchandise displays along the sidewalks as appropriate to add vibrancy and fine-grained visual interest to the public realm.
- Program street fairs, markets, parklets, street artists, and streetfood vendors operating at certain times of the year to add life and enrich the community.

7.2 STREETSCAPE DESIGN PRINCIPLES

Human Use and Comfort:
Design streets to prioritize the everyday needs of people and to support human comfort and enjoyment. Minimize vehicle intrusions on pedestrian walkways; minimize ambient noise from vehicles by calming traffic and providing buffers between the sidewalk and slower automobile traffic.

Safety:
Create an environment that supports a high level of pedestrian safety and security. Minimize injury collisions; maximize personal security by creating more activity and "eyes on the street" and appropriate pedestrian-scale lighting.

Convenient Connections:
Design to facilitate safe, accessible, and convenient connections among major destinations such as transit centers and land use and activity centers.

Accessibility:
Design for ease of use and access to destinations for all groups, particularly those with visual or mobility challenges. Follow best practices in universal design to create clear, easy, and unobstructed connections between all destinations for all users.

Ecological Sustainability:
Design holistically, enhancing the City's long-term ecological value. Employ best practices in resource efficiency and conservation in construction materials and energy systems; use durable, sustainably harvested, re-used, and/or recycled materials for paving, and site furnishings.

Placemaking:
Ensure that streets would be beautiful, create an engaging visual impression, appeal to senses of sight, smell and sound. Encourage a sense of ownership and civic pride that is reflected in streets' physical appearance and level of activity.

Community Involvement:
Encourage community members involving in the streetscape design process and later maintenance. A community commitment to maintaining plantings (such as weeding, watering, plant replacement, and litter pick up) will also help build social cohesion in the area.

Diverse Public Life:
Provide opportunities for diverse experiences and encourage people to spend time engaging in social and recreational activities. Provide spaces that are comfortable and inviting to residents from diverse backgrounds. Provide opportunities for stopping, sitting, talking, and interacting with neighbors.

7.3 STREETSCAPE DESIGN GUIDELINES

SD 1- CREATE MULTI-MODAL, COMPLETE STREETS

Intent

The streets within the LSAP Plan Area should not be limited to the singular mode of moving automotive traffic; these are highly attractive public places where a diversity of users need to be accommodated. Vehicular traffic, public transit, pedestrians, and cyclists all need to be considered in the design of streets. Most importantly, streets must be amenable to walking, strolling, lingering, meeting, and conversing. Traffic flows should not inhibit the public life of the community on the streets.

Recommendations

SD 1.1 - Maintain a hierarchical distinction in the design of streets while ensuring that all streets can accommodate a diversity of users, multiple purposes and modes of transportation.

SD 1.2 - Design all streets for safe and comfortable movement on foot by providing generous sidewalks; incorporate a high level of streetscape amenity such as street trees, street furniture, and street lights, special paving as well as commercial activity such as sidewalk dining as appropriate.

SD 1.3 - Provide adequate bicycle parking facilities along planned colored bicycle lanes and within major activity centers; encourage new developments to incorporate bicycle amenities.

SD 1.4 - If the bicycle lane symbol marking is used in conjunction with word or arrow messages, it should precede them. Posts or raised pavement markers should not be used to separate bicycle lanes from adjacent travel lanes. Minimum bike lane width should be 6 feet.

SD 1.5 - Use public landscape and streetscape improvements to communicate the public character and quality of streets. Provide high standard streetscape amenities to appeal to pedestrians. A minimum landscape buffer should be 4 feet wide and should include street trees and street furnishings.

Wide sidewalks accommodating diverse pedestrian activities.

Covert street right-of-way to a thriving public space

Enhanced crosswalks and designated bike lanes

SD 2- PROTECT AND SHADE PEDESTRIANS

Intent

The physical safety and comfort of pedestrians is critical to the success of the area. Pedestrians must feel that they are safe, and that they are a welcome presence in the community. Street trees and attractive landscaping that is harmonious with nature provide numerous benefits and are an indispensable part of the environment; they enhance the visual quality of the area, provide cooling effects and contribute to the spatial definition of the public realm to create a human-scaled space with a comfortable sense of enclosure.

Recommendations

SD 2.1 - Reinforce placemaking by locating street amenities in a zone along or near the curb as a barrier to automobile traffic; this is especially applicable to street lights, parking meters, street trees, trash receptacles, news racks, and heavy planters.

SD 2.2 - Emphasize the planting of street trees to provide overhead cover; species choices should consider access to both shade and sun along sidewalks. Select trees that are local and drought tolerant.

SD 2.3 - Plant street trees to define the street and sidewalk; emphasize the consistent use of tree species, size and spacing along a street to create a pleasant rhythm and reinforce the space of the street.

SD 2.4 - Encourage buildings adjacent the sidewalk to provide overhead cover in the form of canopies, awnings, and overhangs, especially where there is an insufficient or immature street tree canopy, or along a southern exposure.

SD 2.5 - Ensure that a minimum height clearance for mounted traffic signs and tree branches in pedestrian travel ways is 8 feet.

SD 2.6 - For clear visibility, a maximum height of shrubs and raised planters within the sight triangle should be about 3 feet.

SD 2.7 - Allow minimum 5 feet distance for tree canopies to grow without conflict with building elements, as far as feasible. Maintain a clear distance from back of curb of 1.5 feet to avoid conflicts with car doors.

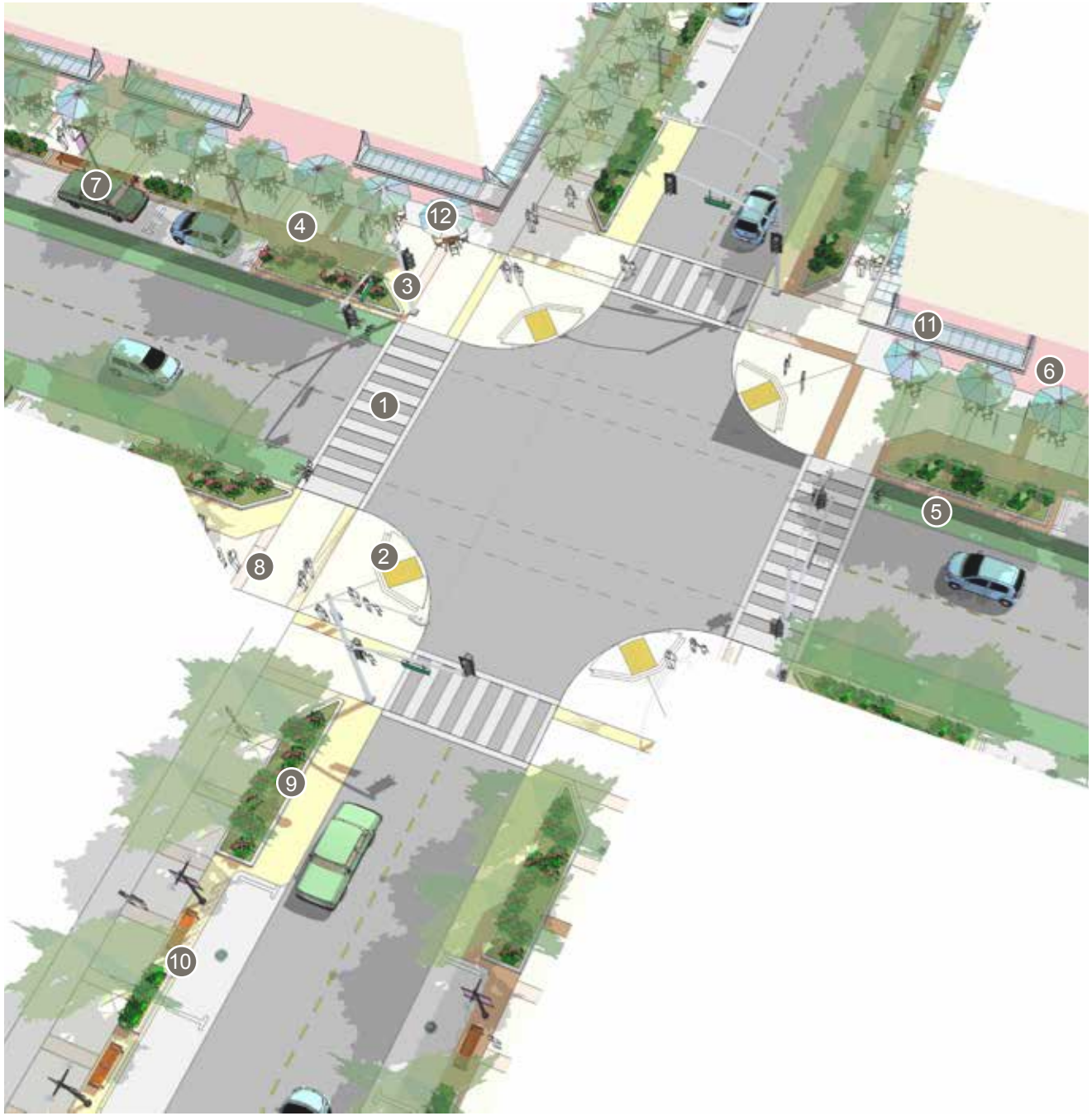
SD 2.8 - The edges of raised planters can provide informal seating. The height of the planter walls should be between 1 and 2 feet high and 18 inches wide where possible.

Low landscape buffer as barrier from vehicles

Raised crosswalk for traffic calming

Raised planters as informal seating add pedestrian comfort

FIG 7–1: CONCEPTUAL DESIGN FOR STREET INTERSECTION



*Note: This drawing is conceptual only; specifics may change during implementation.

COMPONENTS OF A GOOD STREET

1. Enhanced Crosswalk
2. Bulb-outs
3. Street Lighting
4. Tree Canopy
5. Dedicated Bike Lane
6. Retail on Ground Floor
7. On-street Parking
8. Special Paving Materials
9. Landscape Buffer
10. Seating Area
11. Retail Canopy
12. Outdoor Dining

SD 3 - MINIMIZE PEDESTRIAN CONFLICTS

Intent

Every time a car crosses a sidewalk there is potential danger and inconvenience to the pedestrian. Minimizing the number of curb-cuts along streets reduces potential conflicts in favor of the pedestrian. Utility equipment placed within the public right-of-way also creates impediments to pedestrians, especially those who may be mobility-impaired. Equipment placed on the sidewalk at or near the intersection is especially problematic, as this is a zone that needs to accommodate considerable pedestrian activity. Public utilities and streetscape amenities should be located to support safe, convenient, and unimpeded pedestrian flows.

Recommendations

SD 3.1 - Minimize the number of drive approaches along a block to reduce conflicts between pedestrians and automobiles. Introduce traffic calming measures such as bulb-outs, 10-foot vehicle lanes, median refuges, high visibility crosswalks, speed tables and other features as appropriate.

SD 3.2 - Consolidate and place driveway approaches mid-block, when necessary; alley access should be provided for service and parking, if feasible.

SD 3.3 - Provide curb extensions providing the following: increased pedestrian space, the opportunity for social interaction through the placement of benches and site furnishings, a safe refuge while waiting to cross the street, and shorter crossing distances for pedestrians.

SD 3.4 - Encourage on-street parking along local streets, especially in support of short-term customer access and to slow vehicular traffic along these roadways.

SD 3.5 - Maintain a minimum 5 feet clear pedestrian passage along private sidewalks and maintain 8 feet clear pedestrian passage along public sidewalks, without conflicts from utility equipment, street trees, street amenities, or other potential interferences.

SD 3.6 - Keep sight triangles open to facilitate safe vehicle and pedestrian movements.

Curb bulb-outs for increased pedestrian space (note hydrant)

Bollards for pedestrian safety

Parallel Street parking for convenience and safety

SD 4 - OFFER PUBLICLY ACCESSIBLE ELECTRIC VEHICLE CHARGING STATIONS

On-street EVCS (parallel space)

Provide each EVCS with regulatory signage

Intent

Within the LSAP Plan Area, Electric Vehicle Charging Stations (EVCSs) may be provided on street curbside and available to the public at large. Public access charging may be provided under either public or private management. The availability of EV charging encourages EV ownership and use and may reduce GHG emissions. The guidelines and criteria described below are intended to address the placement, design, maintenance, and other regulations of on-street EVCSs.

Recommendations

SD 4.1 - Install vehicle directional signs at appropriate information kiosk to effectively guide motorists to the EVCS space(s).

SD 4.2 - Place the EVCS at the beginning or end stall on a block face (that is, the space immediately prior to the intersection in the direction of vehicle travel). The vehicle should approach the charger on a diagonal or, if the street width and speed of traffic allows, perpendicular to the curb.

SD 4.3 - Provide an access aisle extending the full length of the charging station, with a minimum width of 3 feet (8 feet preferred) to the left of the diagonal or perpendicular space, between the charging space and the end of the block.

SD 4.4 - Ensure a minimum of 4 feet of unobstructed pedestrian passage between the EVCS and the nearest obstruction (building wall, fence, planter, vegetation, etc.).

SD 4.5 - Protect the EVCS with guard posts (bollards), wheel stops, or an equivalent protection mechanism, when the EVCS space is perpendicular or at an angle to curb face. Provide appropriate signage indicating if baking in is allowed or not.

SD 4.6 - Provide each EVCS with posted signage indicating the space is only for electric vehicle charing purposes. Days and hours of operations shall be included if time limits or tow away provisions are to be enforced. Adequate site lighting shall exist for lessening risk of tripping or damage to equipment.

SD 4.7 - EVCS equipment mounted on pedestals, light posts, bollards or other devices must be located a minimum of 24 inches clear from the face of curb.

SD 4.8 - EVCS outlets and connector devices shall be no less than 36 inches or no higher than 48 inches from the top of surface where mounted, and shall contain a retraction device and/or a place to hang permanent cords and connectors sufficiently above the ground or paved surface.

SD 5 - PROVIDE AMPLE SUPPLY OF BICYCLE FACILITIES

Class I bicycle parking - bike parking boxes / lockers

Class II bicycle parking - bike racks / bike corrals

Intent

Provide an abundant supply of bicycle parking near destinations complements the inherent flexibility of bicycles as an alternative mode of travel, enhance the cyclists' biking experience, and improve connectivity between transit stops and other destinations.

Recommendations

SD 5.1 - Provide Class 1 and Class 2 bicycle parking and other facilities to encourage people to use bicycles. Bicycle parking should be easy to understand and use for all types of bicyclists and should be provided as per VTA standards.

SD 5.2 - Provide bicycle parking in sufficient quantity to meet citywide demand. Bicycle parking should be sturdy and require little or no work to maintain.

SD 5.3 - Cyclists should easily spot short-term parking when they arrive from the street. A highly visible location discourages theft and vandalism. Avoid locations "off on the side," "around the corner" or in unsupervised parking structures or garages.

SD 5.4 - Surveillance is essential to reduce theft and vandalism. For security, locate parking within view of passersby, retail activity, or office windows. Bicycle parking areas should be well lit for theft protection, personal security and accident prevention.

SD 5.5 - Locate racks so that parked bicycles don't block the pedestrian path. Select a bike rack with no protruding bars that could trip or injure cyclists or pedestrians.

SD 5.6 - Provide 72 inches (six feet) of depth for each row of parked bicycles. Dedicate 20 feet of street parking for a 'bike corral' for each retail/commercial development.

SD 5.7 - Bicycle parking should not be:

- Painted or powder coated – to keep from rusting, racks made from steel tubing should be coated with zinc (hot dip galvanized) or made of stainless steel. Paint and powder coating do not last, eventually chipping, flaking and creating maintenance issues.
- Susceptible to pipe cutters – circular tubing, one of the most common materials for bicycle racks, can easily and quietly be cut with a relatively small, portable pipe cutter.
- Placed too closely to adjacent street furniture, walls, and curbs – racks should have an adequate buffer to easily accommodate bicycles and allow them to easily enter and exit an area without interfering others.

SD 5.8 - Bicycle racks should be placed such that parked bikes are perpendicular to the curb line. One 20 feet parking space may accommodate up to 12 bicycles on 6 U-racks without cluttering limited sidewalk space.

SD 5.9 - Where possible, bicycle parking should be built on a curb extension. Where implemented at the existing grade, the bike parking area should be protected from errant vehicles via a curb, bollards or other devices at the edge of the parking lane. On-street bicycle parking would preclude mechanical street sweeping, and additional maintenance should be accounted for.

SD 5.10 - Based on the City of Santa Clara and the VTA bicycle guidelines, the minimum quantities of bicycle parking should be provided as described in the *Table 7-1*.

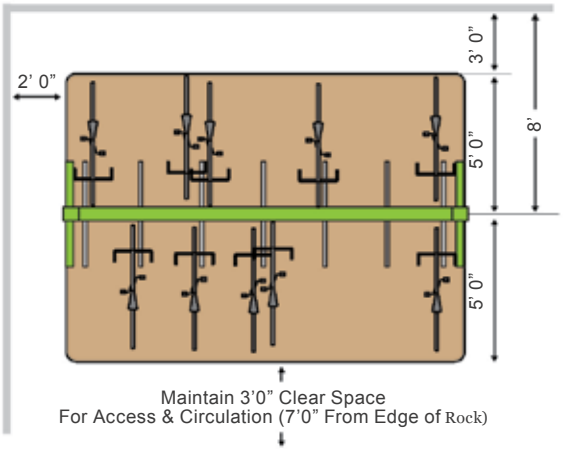
TABLE 7–1: RECOMMENDED BICYCLE PARKING

LAND USE	BICYCLE PARKING RATIOS
Residential (Except for single family units)	1 Class I per 3 units and 1 Class II per 15 units (Minimum. 4 spaces for residential developments)
Retail & Services	1 Class I per 30 employees and 1 Class II per 6,000 sq.ft.
Restaurants	1 Class I per 30 employees and 1 Class II per 3,000 sq.ft.
Parks / Recreational Fields	1 Class I per 30 employees and 1 Class II per 9 users During peak daylight times of peak season

Source: The Santa Clara Valley Transit Authority (VTA) Bicycle Technical Guidelines, December 2017.

Custom bike rack for prohibiting bicycle theft and supporting security

Incorporate bicycle racks with streetscape design



Bicycle parking space design requirements

SD 6 - EXECUTE ON-STREET PARKING DESIGN APPROPRIATELY

Intent

On-street parking facilities should be well-designed, well-integrated into the design of the streetscape, and be of a consistent and high quality to enhance the public realm.

Recommendations

SD 6.1 - Provide landscaping along the parking lanes for shade and aesthetic enhancements. Planters should not extend beyond the width of the parking lane. Tree canopies should be kept clear of conflict with passing vehicles in the near travel lane. The material selected for the parking space may be covered with a water permeable material such as granite cobbles, concrete pavers or decorative stone.

SD 6.2 - The lengths of the parking stalls should be coordinated with breaks in the parkway planters, with gaps in the planters (and associated courtesy walk) provided every 50 feet at a minimum in residential areas, and with a maximum length of 35 feet for parkway planters in commercial areas.

SD 6.3 - No stall should be closer than 20 feet from the nearest cross street (at least 20 feet from the edge of the crossing roadway). If the cross street is a major route, or if the intersection is controlled with a signal or four way stop, 30 feet is the recommended distance.

SD 6.4 - If the cross street is a major route, or if the intersection is controlled with a signal or four way stop, 30 feet is the recommended distance. These dimensions apply to both approach and departure sides of the intersection except with regard to one-way streets. In the special case where two one-way streets intersect, the City may shorten the distance between parking and crosswalk on the outbound side of the intersection if engineering judgment and guidelines determine this is acceptable in the specific case.

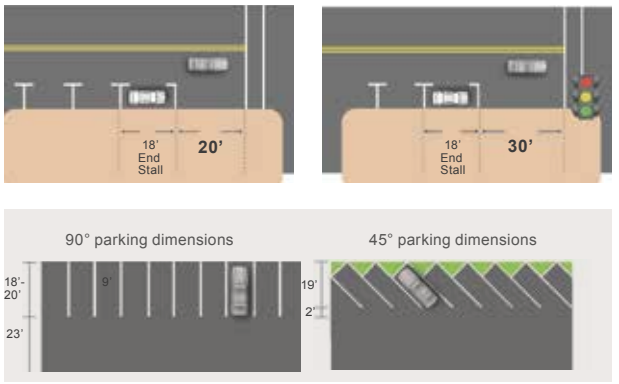
SD 6.5 - Detailed on-street parking spaces design requirements are provided in the *Table 7-2*. Disabled parking dimensions should match adjacent parking space design criteria. Disabled parking will generally be located as close as possible to an available curb ramp, along a safe path of travel.

TABLE 7–2: ON-STREET PARKING SPACES DESIGN REQUIREMENTS

VEHICLE TYPE	PARALLEL PARKING	ANGLED PARKING
Cars	• Generally assume a length of 20 feet; exceptions down to 18 feet may be granted on a case by case basis. Preferred width h is 8 feet.	• Typical Parking Lane Dimensions. 90° and 45° parking stall orientated is preferred but 60° will be considered if sufficient space is not available for 90° and 45° stalls.
Buses	• 60 feet in length and 10 feet in width.	
Motorcycles	• Parking spaces located with other vehicles should have dimensions that match adjacent parking space design criteria. • Motorcycle-only parking spaces should have a minimum length of 6 feet and a minimum width of 4 feet when individual stalls are marked. • Motorcycle parking does not need to be orientated in the same direction as other parking spaces located on the same block.	• Parking stalls should have a 4 feet minimum width and 6 feet minimum length when individual bays are marked. Motorcycle parking does not need to be orientated in the same direction as other parking bays located on the same block.

Use water permeable materials for stormwater capture

Parking lane planters for shade and aesthetic enhancements



On-street parking spaces design requirements

SD 7 - OFFER FLEXIBLE ACTIVE USE OF THE PARKING LANE

Intent

Particularly on active commercial streets, the parking lane may be used for flexible active uses such as café seating on a temporary or semi-permanent basis. These uses are sometimes called “parklets.” They may also be considered as public spaces on residential streets where property owners agree to maintain any improvements. Flexible parking may be installed by individual actors, or as part of a full street re-design. Landscaping, special materials, and elements should be used to visually and physically break the parking lane down into independent, distinct spaces.

Recommendations

SD 7.1 - Locate landscaped curb extensions or parking lane planters at least every 5 parking spaces (a maximum of 100 feet apart). Use vertical elements such as trees, raised planters, trellises, and other elements to define the visual character of the flexible spaces. Colored and textured paving materials should be used to differentiate these areas from the roadway.

SD 7.2 - Introduce a level change of 1 to 2 inches between the roadway and the parking lane to differentiate these two areas. The curb between the parking lane and the sidewalk should be designed to include a stepped change in grade, rather than the standard 6 inches grade change. Flexible space should be made accessible to pedestrians with disabilities by the provision of ramps.

SD 7.3 - Safety should be strongly considered when placing usable space in the parking lane. Flexible active use of the parking lane should be installed where there is light, slow-moving traffic, narrow roadways, and a pedestrian character. Buffering elements should be provided for patrons.

SD 7.4 - Movable planters, bollards, or other elements should be placed at the roadway edge of the parking lane at times when it will be occupied by people. Otherwise movable street furniture and planters should not be used.

Extended use of parking stalls

Temporary parklets for outdoor seating

SD 8- PROVIDE WELL-DESIGNED STREETSCAPE FURNISHINGS

Intent

Street furnishings are the various elements - such as seating, bollards, trash receptacles, and planters, etc. - which are placed along sidewalks and plazas. Street furnishings includes both public and private uses. The public furnishings are elements that provide continuity and predictability from block to block, while private furnishings generally contribute to the streetscape with a focus on enriching and enlivening a particular building/use. The quality, durability, and placement of street furnishings all influence the perception and use of an area. Streetscape furnishings should help to animate the pedestrian realm, support public use, and contribute to the social and economic vitality of a neighborhood establishing the character and identity of an area.

Recommendations

SD 8.1 - Locate street furniture and other amenities predominantly in the public amenity zone such as near intersections, key building entries, parks and plazas, important intersections, and pedestrian streets to unambiguously indicate public use and maintain a clear zone for walking.

SD 8.2 - If public furnishings are located in the front of or adjacent to private property, they should be designed in such a way that they support public use of the private open space or plaza.

SD 8.3 - Encourage a coordinated design, type, color and material of street furnishings for contribution of a sense of identity, and reflects and strengthens the character of the proposed development and complements the community context.

SD 8.4 - Incorporate unique, specially-designed street furnishings to provide a unique character in special areas, such as project gateways, activity nodes (parks and plazas), easements, pedestrian trails, and other gathering spaces.

SD 8.5 - Street furnishings needs to be designed for universal access and to facilitate use by those of all ages and abilities.

SD 8.6 - Encourage the use of durable, available materials that are easy to service or replace.

SD 8.7 - Street furniture should extend no longer than 5 feet without a break and outdoor dining areas and should be protected by bollards (SC Police Department requirements). In addition, locate street furniture in the furnishings zone not less than:

- 18 inches from the outside edge of the curb;
- 5 feet from any fire hydrant and 2 feet from a stand pipe;
- 2 feet from any driveway or ramp & 4 feet at the landings of the ramp.

SD 8.8 - Place trash and ash receptacles and recycle bins conveniently for pedestrian traffic near benches, transit stops, and other activity nodes. The trash and ash receptacles and recycle bins should comply with the requirements as listed below:

Well-designed street furnishings enrich the public realm

Private furnishings supports public use in the private realm

Coordinately - designed public street furnishings

- At a minimum, one trash/ash receptacle and recycle bin should be placed at every corner; the design should match other street furniture.
- All trash receptacles should be accessible to persons with disabilities and located immediately adjacent to an accessible path of travel.
- Where vandalism is a concern, receptacles and recycle bins should be securely attached to the pavement. They should be easily accessible for trash collection and maintenance. Covered tops and sealed bottoms should be included to keep contents dry and pests out.

SD 8.9 - Provide benches and other forms of seating (e.g. low walls, planter edges, wide steps, etc.) throughout the development with more seating in areas with active ground floor uses and at key entrances. In addition, outdoor seating design should comply with the following requirements:

- Options for those with backs and without backs should be provided in sidewalks, plazas, and parks to promote pedestrian use. Benches should be fixed in place and constructed of durable and low-maintenance materials. Benches at transit stops may be incorporated into the design of the transit shelter.
- The creation of seat walls, steps, and planters that can serve as informal seating areas is encouraged as a means of expanding the seating potential and providing diverse opportunities for social interaction.
- Seat walls and planter seating should be designed to discourage skateboard "grinding," and sleeping.

Different types of trash and ash receptacles and recycle bins

Different types of benches and outdoor seating

Environmentally responsible furniture material choices

Site furnishings should strive to use sustainable materials, including:

- **Materials with recycled content:** the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 20% (based on cost) of the total value of the materials in the project.
- **Regionally-harvested materials:** materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 20% (based on cost) of the total materials value.
- **Rapidly renewable materials:** materials and products made from plants that are typically harvested within a ten-year cycle or shorter for 2.5% of the total value of all materials and products used in the project, based on cost.
- **Certified wood:** use a minimum of 50% of Forest Stewardship Council's (FSC) certified wood-based materials for wood components.

7.4 STREETSCAPE TYPOLOGIES

PUBLIC STREETS

Public streets are the lifeblood of a community and yet are often overlooked. Well-designed public streets are instrumental in creating a public realm that engages, inspires, and helps define a district and the quality of its social, economic, and environmental resiliency.

Public streets should be designed to balance their role as thoroughfares and their role as community spaces. They must be designed to balance access and mobility, convenience and rest. Public streets must also be designed to play a major role in the environmental quality of their districts, whether that be related to shade and tree canopy, air quality, noise mitigation, or storm water management.

As part of a larger open space network, well-designed streets can be major economic drivers, generating higher revenue for businesses and higher value for homeowners. Streets are instrumental to managing the safety of a neighborhood and should be designed to prioritize safety at every level. Finally, public streets should be designed for sustainability, which should include cost-effectiveness and flexibility of street sections, utilities or amenities along the public right of way may change over time.

PRIVATE STREETS

A street approved as a private street could be constructed to the standards of a public street, specifically regarding the structural section, and drainage. Modifications to street width standards may be considered on a case-by-case basis subject to City approval. The design of private streets should include all relevant traffic safety features, including but not limited to traffic signs and markings, street lighting, and traffic signals. Private streets should be designed to maintain and/or provide adequate public access to public facilities such as parks, bike trails, transit stops, recreation facilities, etc. Private streets are not appropriate if they restrict access to public facilities.

The design of private streets should include appropriate speed control measures (roadway alignment, intersection spacing, etc.) and should provide adequate pedestrian and bicycle circulation patterns. Traffic calming devices may be required on private streets. Private streets should be designed to avoid blocking access to adjacent parcels and to allow for reasonable future development of these parcels. Private streets should maintain and/or provide adequate access for emergency vehicles.

TABLE 7–3: STREETSCAPE DESIGN & DIMENSION RECOMMENDATIONS

	TOTAL R.O.W	Travel Lane		Bike Lane		Parking Lane		Sidewalk		
								Pedestrian Travel Zone	Landscape Buffer	Utility Setback
Public Street	(ft)	#	Width (ft)	#	Width (ft)	#	Width (ft)	Width (ft)	Width (ft)	Width (ft)
New Gordon Avenue, South (w/ 31' Easement)*	116	2	12	1	12	2	8,19	8	4	3
New Gordon Avenue, North (w/ 55' Easement)*	139	2	12	1	12	2	19	8	4	3
Copper Road	66	2	10	N/A	N/A	2	8	8	4	3
Corvin Drive	74	3	12	2	6	N/A	N/A	6,8	3	3
Street A (w/ 87' Linear Park)	175	2	11	1	12	2	8	8	4	3
Private Street	(ft)	#	Width (ft)	#	Width (ft)	#	Width (ft)	Width (ft)	Width (ft)	Width (ft)
Avenue 2	60	2	10	N/A	N/A	2	8	5	4	3
Avenue 3	60	2	10	N/A	N/A	2	8	5	4	3
Internal Circulation	22	2	11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ryder Street, east of New Gordon Avenue	51	2	10	N/A	N/A	1	8	5	4	V

*Note:

1. The total street right-of-way of New Gordon Avenue includes a public easement;

2. A minimum 3-feet ADA path will be provided within the easement along New Gordon Avenue from Kifer Road to Ryder Street, and will be located east of the 12 feet bike path.

FIG 7–2: PUBLIC & PRIVATE STREET DESIGNATION

*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Public Street
- Private Street
- Grade Separated Crossing (conceptual)
- Public Paseo
- Private Internal Street
- Emergency Vehicle Access

1" = 300'

0' 100' 200' 300' 500'

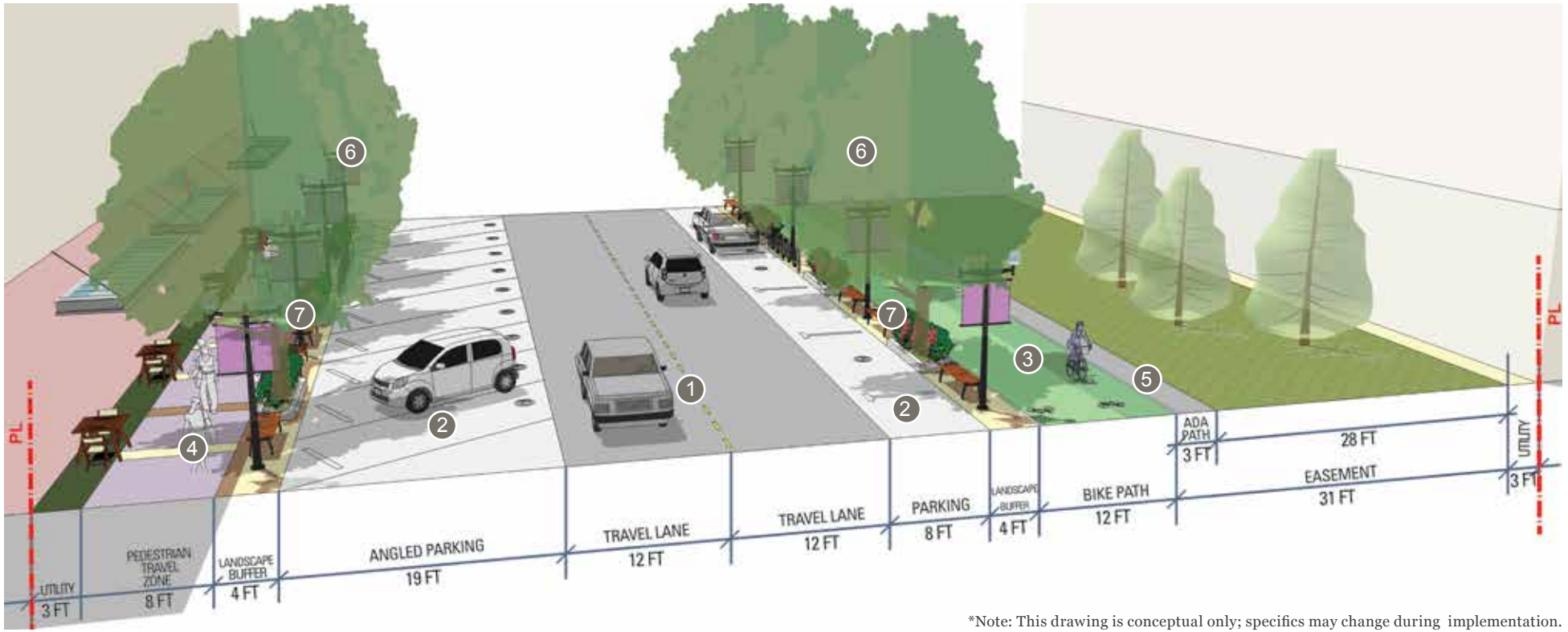
NEW GORDON AVENUE - SOUTH OF STREET A (PUBLIC STREET)

*Note: This drawing is conceptual only; specifics may change during implementation.

Design Requirements

1. **Travel Lanes:** Provide 12 feet wide 2 travel lanes, one in each direction.
2. **Parking Lanes:** Introduce on-street angeled parking 19 feet wide.
3. **Bike Lane:** Provide a 12 feet 2-way bike lane adjacent to the easement for cyclists.
4. **Sidewalk:** On the retail side, allow for ample sidewalk width of 8 feet pedestrian travel zone and space for street amenities such as benches.
5. **ADA Facility:** Provide a 3 feet ADA path within the easement.
6. **Trees:** Small to moderately scaled canopy trees in the 4 feet landscape buffer to define the street and create a prominent entry boulevard.
7. **Amenities:** Locate pedestrian scaled light fixtures capable of accommodating banners at regular intervals along the sidewalk. Add planters, street furniture, bicycle racks, and wayfinding. Provide outdoor dinning space near restaurant areas.

Key Map



*Note: This drawing is conceptual only; specifics may change during implementation.

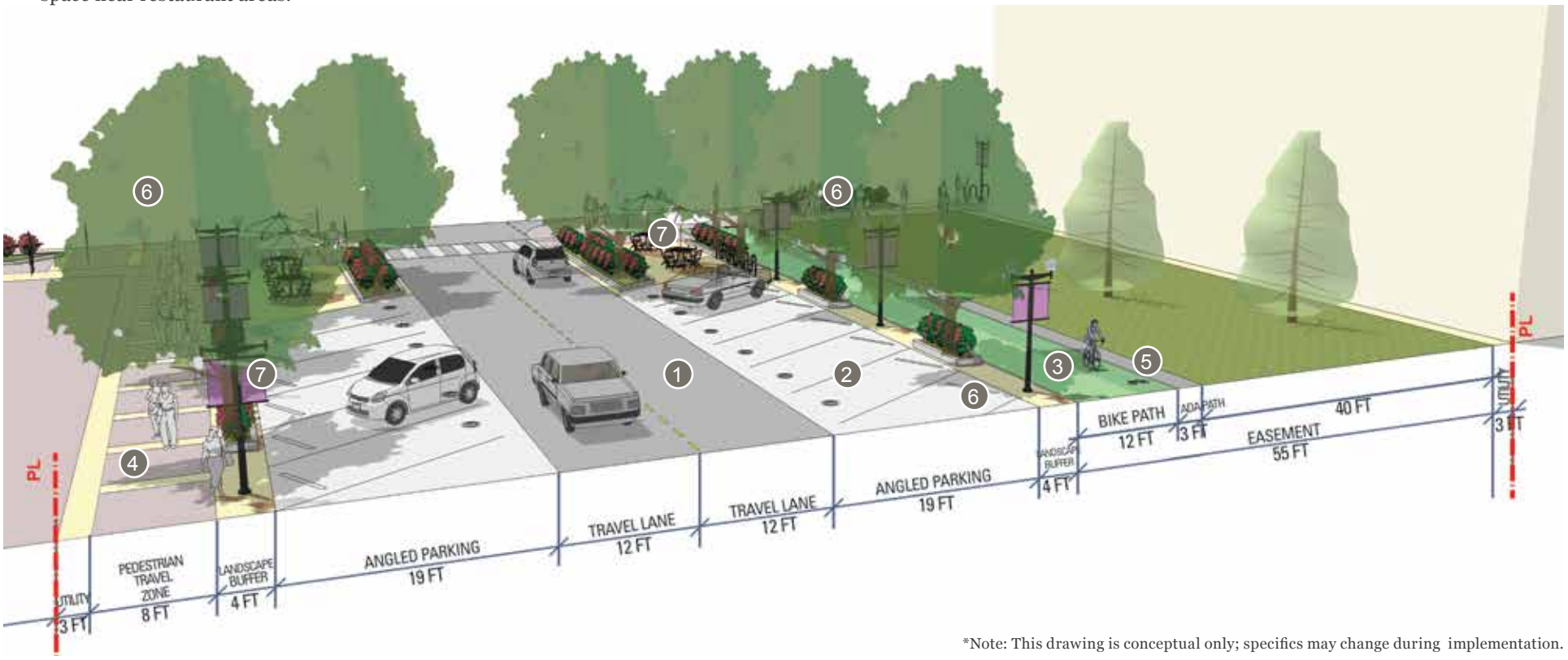
NEW GORDON AVENUE - NORTH OF STREET A (PUBLIC STREET)

*Note: This drawing is conceptual only; specifics may change during implementation.

Design Requirements

1. **Travel Lanes:** Provide 12 feet wide 2 travel lanes, 1 in each direction.
2. **Parking Lanes:** Introduce on-street angeled parking 19 feet wide on both sides of the streets.
3. **Bike Lane:** Provide a 12 feet 2-way bike lane within the easement for cyclists.
4. **Sidewalk:** On the plaza side, allow for ample sidewalk width of 8 feet pedestrian travel zone and space for street amenities such as benches.
5. **ADA Facility:** Provide a 3 feet ADA path within the easement.
6. **Trees:** Small to moderately scaled canopy trees in the 4 feet landscape buffer to define the street and create a prominent entry boulevard.
7. **Amenities:** Locate pedestrian scaled light fixtures capable of accommodating banners at regular intervals along the sidewalk. Add planters, street furniture, bicycle racks, and wayfinding. Provide outdoor dinning space near restaurant areas.

Key Map



*Note: This drawing is conceptual only; specifics may change during implementation.

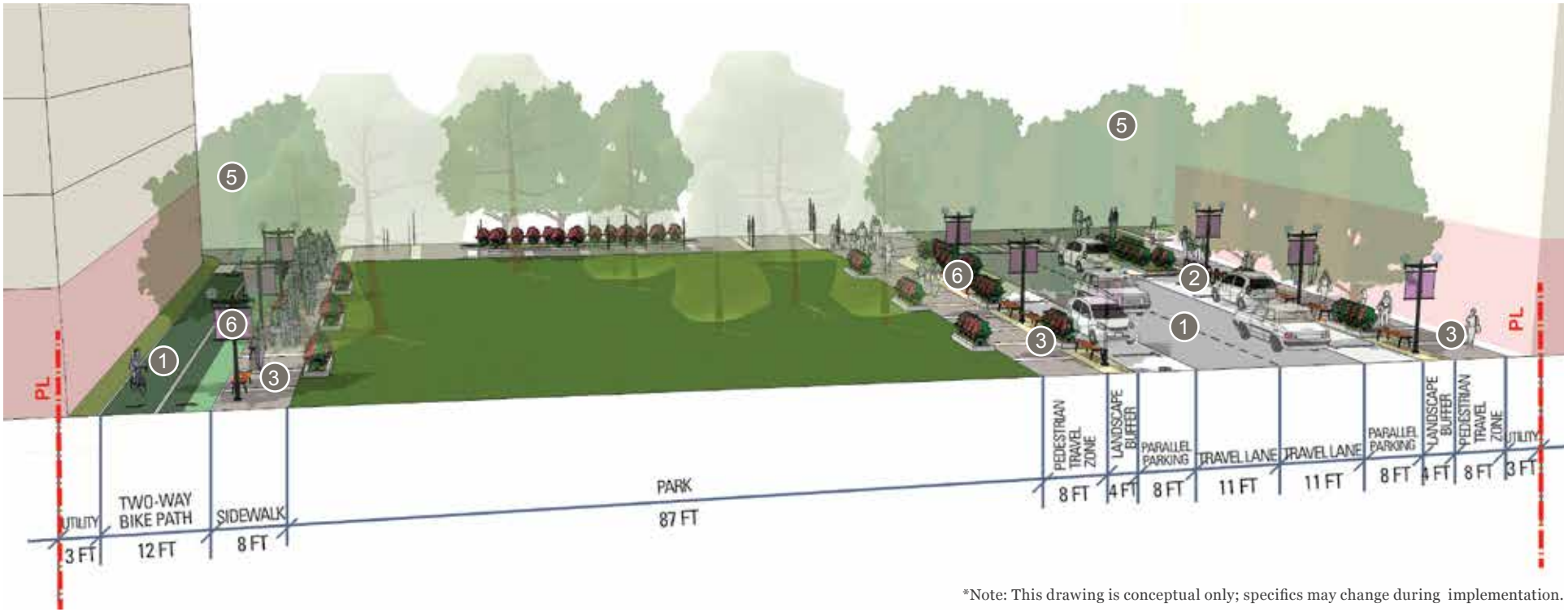
STREET A + LINEAR PARK (PUBLIC STREET)

*Note: This drawing is conceptual only; specifics may change during implementation.

Design Requirements

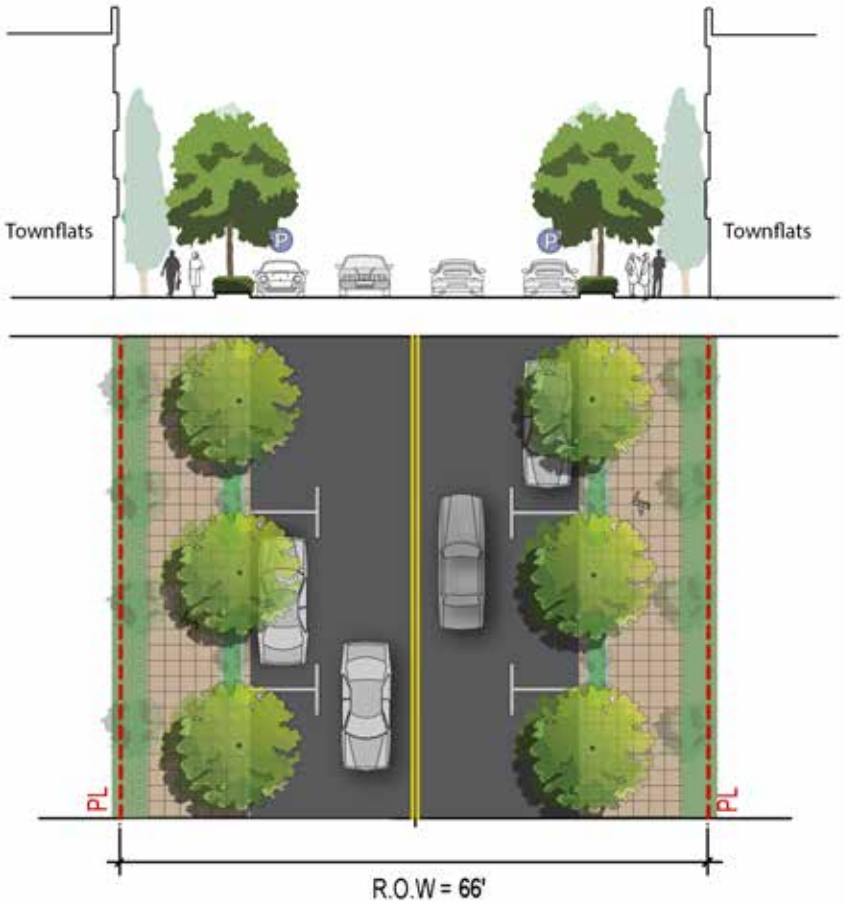
Key Map

1. **Travel Lanes:** Provide 11 feet wide 2 travel lanes on south side of the park.
2. **Parking Lanes:** Introduce 8 feet wide on-street parallel parking on both sides of the street.
3. **Bike Lane:** Provide a 12 feet wide two-way bike lane on north side of the park
4. **Sidewalk :** Allow for ample sidewalk widths along with areas for planter strips creating a barrier between the pedestrian and street traffic.
5. **Trees:** Provide rhythmic planting of moderately scaled canopy trees creating shade for pedestrians. Introduce small scaled flowering trees for an added pop of color, native landscaping, and other special landscape features.
6. **Amenities:** Hang banners on street light poles for local events. Provide pedestrian scaled light fixtures at regular intervals along the sidewalk. Add planters, street furniture, bicycle racks, and wayfinding.



*Note: This drawing is conceptual only; specifics may change during implementation.

COPPER ROAD (PUBLIC STREET)



*Note: This drawing is conceptual only; specifics may change during implementation.

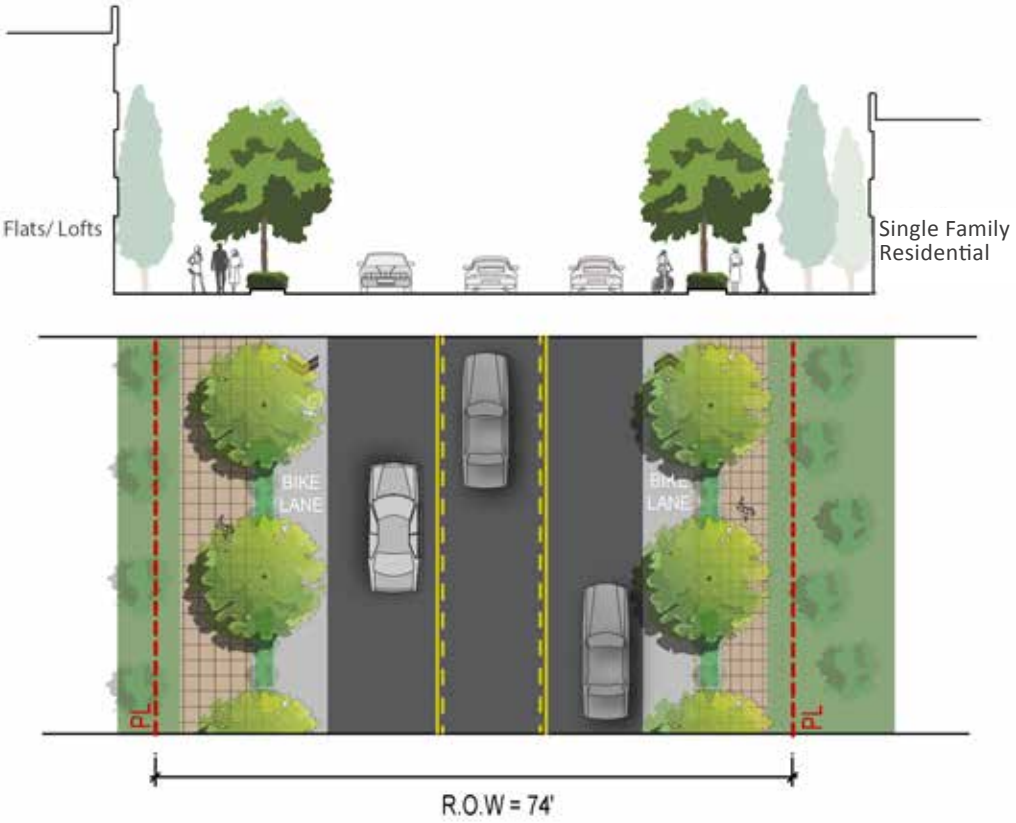
Design Requirements

1. **Travel Lanes:** Provide 10 feet wide 2 travel lanes , one in each direction.
2. **Parking Lanes:** Introduce 8 feet wide on-street parallel parking on both sides of the street.
3. **Sidewalk:** Provide about 8 feet pedestrian travel zone for pedestrian movement.
4. **Trees:** Add trees to form a tree canopy along 4 feet landscape buffer.
5. **Amenities:** Locate pedestrian scaled light fixtures capable of accommodating banners at regular intervals along the sidewalk. Add planters, street furniture and wayfinding.

Key Map

*Note: This drawing is conceptual only; specifics may change during implementation.

CORVIN DRIVE (PUBLIC STREET)

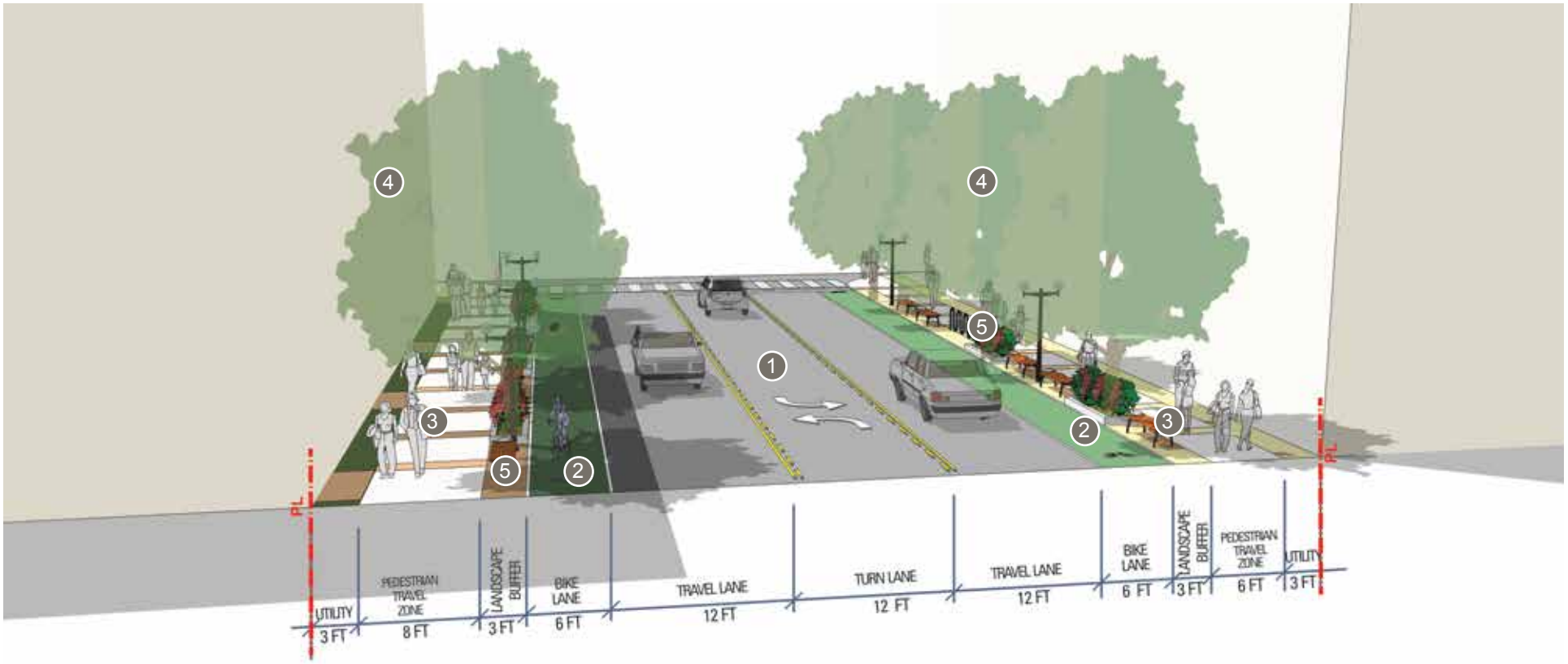


*Note: This drawing is conceptual only; specifics may change during implementation.

Design Requirements

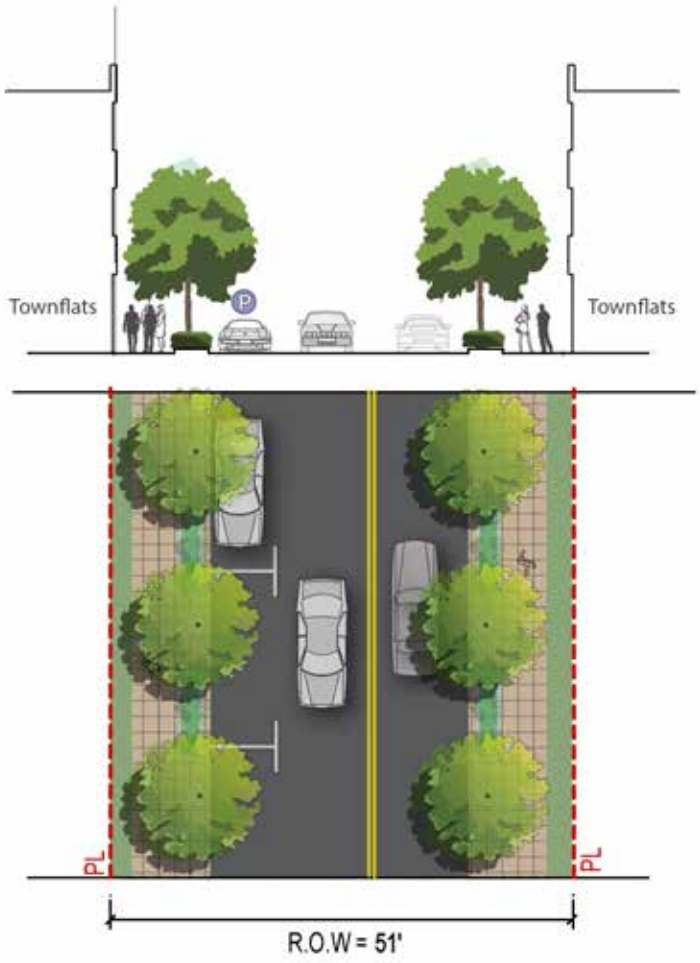
1. **Travel Lanes:** Provide 12 feet wide travel lanes with a 12 feet turn lane in the center.
2. **Bike Lanes:** Provide 6 feet wide bike lanes on both sides of the street, one in each direction.
3. **Sidewalk:** Incorporate pedestrian travel zones (no less than 6 feet) for pedestrian movement.
4. **Trees:** Provide rhythmic planting of small to moderately scaled canopy trees along 3 feet landscape buffer adding to pedestrian comfort.
5. **Amenities:** Locate pedestrian scaled light fixtures at regular intervals along the sidewalk. Add planters, street furniture and wayfinding.

Key Map



*Note: This drawing is conceptual only; specifics may change during implementation.

RYDER STREET (PRIVATE STREET)



*Note: This drawing is conceptual only; specifics may change during implementation.

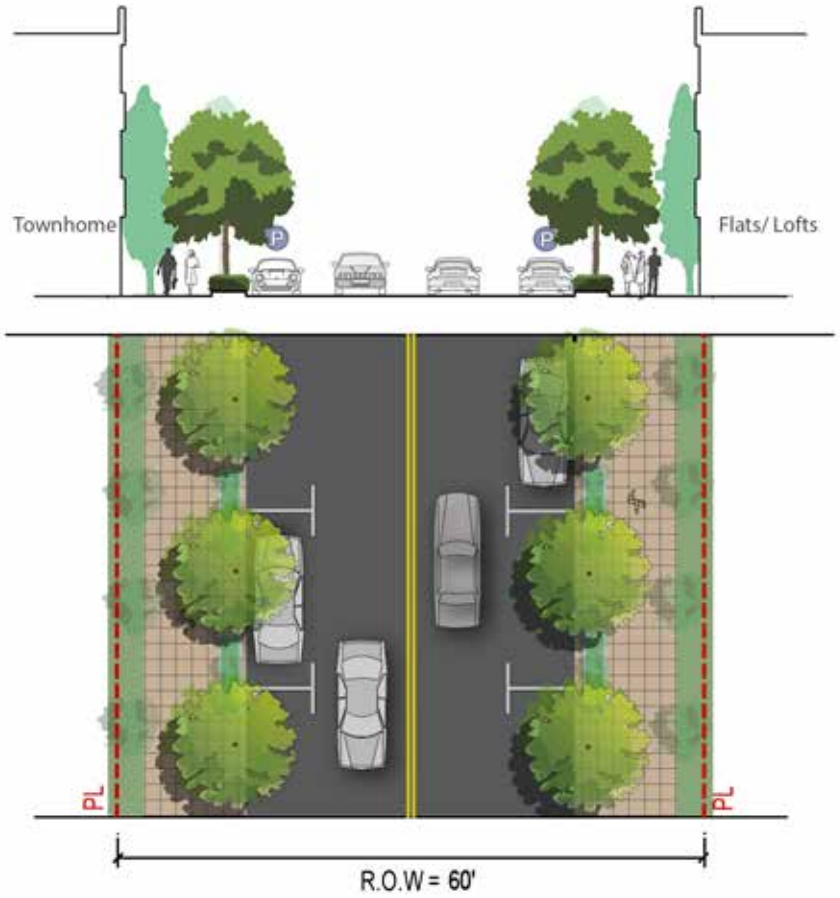
Design Requirements

1. **Travel Lanes:** Provide 10 feet wide 2 travel lanes, 1 in each direction.
2. **Parking Lanes:** Introduce on-street parallel parking on one side of the street.
3. **Sidewalk:** Provide about 5 feet pedestrian travel zone for pedestrian movement.
4. **Trees:** Provide rhythmic planting of small to moderately scaled canopy trees adding to pedestrian comfort.
5. **Amenities:** Locate pedestrian scaled light fixtures at regular intervals along the sidewalk. Add planters, street furniture and wayfinding.

Key Map

*Note: This drawing is conceptual only; specifics may change during implementation.

AVENUE 2, AVENUE 3 AND OTHER PRIVATE STREETS



*Note: This drawing is conceptual only; specifics may change during implementation.

Design Requirements

1. **Travel Lanes:** Provide 10 feet wide 2 travel lanes, 1 in each direction.
2. **Parking Lanes:** Introduce on-street parallel parking on both sides of the street.
3. **Sidewalk:** Provide about 5 feet pedestrian travel zone for pedestrian movement.
4. **Trees:** Provide rhythmic planting of small to moderately scaled canopy trees adding to pedestrian comfort.
5. **Amenities:** Locate pedestrian scaled light fixtures at regular intervals along the sidewalk. Add planters, street furniture and wayfinding.

Key Map

*Note: This drawing is conceptual only; specifics may change during implementation.

8 SIGNAGE, PUBLIC ART & LIGHTING MASTER PLAN

8.1 INTRODUCTION

This chapter establishes design guidelines and standards for the placement, design, construction, and maintenance of signage, public art installations, and lighting fixtures within the public and private realm of the LSAP Plan Area for the purpose of reinforcing the overall project identity and creating an appealing, vibrant outdoor environment with strong aesthetic character.

OVERVIEW

Signage, wayfinding, public art installations, and lighting fixtures are critical environmental elements that can be utilized to strengthen the community image of the LSAP Plan Area. Project signage based on a coordinated graphics program will reinforce project identity, serve a wayfinding function, and add to site pageantry. For example gateway signage will announce the project; and wayfinding directory signs will orient visitors and help them to navigate through the development. Well-designed tenant signage will have a positive impact on the image of the site and activate the commercial scene of the LSAP Plan Area.

Public art installations, both temporary and permanently-sited, are vital elements in the site placemaking. These art works establish an unique neighborhood identity providing physical references that create a sense of place, encourage public participation, and act as an educational, interpretive and playful expression of the open space network within the Plan Area.

Lighting installations highlight prominent gateways and linkages on-site, define specific outdoor rooms, prohibit crime, and facilitate safe movement for motorists and pedestrians. Integrating lighting fixtures with the building facade and landscape design will present a harmonious and attractive environment at night, and enhance the overall aesthetic character of the community.

SIGNAGE MATER PLAN

The Signage Master Plan is intended to address the placement, design, dimensions, construction and maintenance in both public and private realm of the LSAP Plan Area. Section 8.3 offers specific design guidelines regarding to the overall signage characters of the Plan Area, project gateway and wayfinding signage in public realm, as well as residential and commercial tenant signge in private realm. *FIG 8.1* portrays a conceptual proposal of project gateway signage and wayfinding system (including both vehicular and pedestrian directional signage and information kiosks) within the Plan Area.

PUBLIC ART MASTER PLAN

The Public Art Master Plan provides principles and guidances of the placement, design, maintenance of public art piece on-site. A number of types of art works are recommended to be incorporated in the Plan Area. These art forms include sculpture, interactive art, temporary wall art/murals, and pole-mounted banners. *FIG 8-2* illustrates a conceptual placement of the public art works that could be incorporated within the LSAP Plan Area.

LIGHTING MASTER PLAN

The Lighting Master Plan establishes design guidance and recommendations for project area, architectural and landscape illumination that responds to safe and security needs, levels of pedestrian/motorist activity, and overall ambiance of the LSAP Plan Area. Specific design guidelines and illumination requirements are articulated in Section 8.6.

8.2 SIGNAGE AND WAYFINDING PRINCIPLES

Coordinated Project Signage:
Use coordinated signage to promote identity. Signage based on a consistent unified design motif adds to a cohesive consistent look.

Complementary Tenant Signage:
Integrate tenant signage with the site design, building architecture and design theme of the district. Ensure signage is compatible in scale and character with the building and storefront.

Wayfinding System:
Wayfinding serves to orient visitors and offers a sense of familiarity to returning customers. Wayfinding creates a superior level of comfort for visitor orientation.

High-Quality Signage:
High quality signage materials offer an elevated aesthetic for tenants but also should reflect the overall high quality of design.

Legible Signage:
Create signs that present a clear and simple message. Incorporate contrasting colors for maximum legibility.

Durable Signage:
Construct signs of durable, high quality materials that withstand weathering. Durable signage conveys a feeling of permanence.

Concise Signage:
Create concise project signage with only a few words and/or a simple logo. Clear, straight to the point messages are best.

8.3 SIGNAGE DESIGN GUIDELINES

** In addition to the following signage guidelines and associated descriptions, more specific and further detailed project signage guidelines and tenant signage guidelines as appropriate should be prepared conforming to and supplementing the City of Santa Clara's Sign Regulations (City Code Title 18 Zoning - Chapter 18.08). Certain exceptions to these guidelines may be allowed on a case by case basis within the project*

A "family" of Project Signage

SID 1- USE SIGNAGE TO REINFORCE THE SITE CHARACTER

Intent

The signage design guidelines are intended to provide guidance in the way signs are placed, designed, constructed, and maintained within the public realm. The signage guidelines shall conform and supplement to the applicable *Santa Clara City Code (Chapter 18.80)**.

Recommendations

SID 1.1 - Create a "family" of signage that creates a graphic continuity throughout the project to strengthen and reinforce project identity, serve a wayfinding function, and contribute to the general aesthetic appearance of the LSAP Plan Area.

SID 1.2 - Provide vehicular directional signage that helps motorist navigate to important on-site destinations and parking facilities. Include pedestrian directional signs and maps at important information points that guide persons on foot and bicycle to important services and facilities, outdoor gathering areas, and major tenants.

SID 1.3 - Encourage high quality, imaginative, and innovative signage design. The signage should be consistent with the architectural and landscape character of the specific parcel development and with the design intent of the LSAP as a whole.

SID 1.5 - Scale signs appropriately for the building on which they are placed and the area in which they are located. Size and shape of the sign should be proportional with the scale of the structure.

SID 1.6 - Encourage a consistent, front lit or halo lit, or internally illumination of the signage fixtures. All illuminated signs should be designed, located or screened so as to limit direct light sources onto any residential units that are located within the project area.

SID 1.7 - Select signage materials for high-quality fabrication, durability, ease of maintenance, and compatibility with exterior building design, color palette, materials, and finishes.

SID 1.8 - Signage messaging should be simple and brief, and should be integrated into the site context. Color and contrast of signs should be chosen to insure proper readability and graphic consistency.

SID 2- PROVIDE PROJECT AREA SIGNAGE FOR EASY WAYFINDING

Intent

Project gateway/identity signage, wayfinding directory signs, parking and traffic control signs, and public informational signs, can provide visitors, residents with clear information and wayfinding directory.

Recommendations

SID 2.1 - Utilize project gateway/identity signage to inform visitors of the site and public area entries , such as public park, community center, public parking area and public restrooms, and strengthen the overall character of the Plan Area. Project identity/gateway signage should be oriented toward the public right-of-way. Gateway signage should only include the name of the neighborhood.

SID 2.2 - All street/traffic control signage should conform to the City of Santa Clara Standards.

SID 2.3 - Place wayfinding directory signage at essential information intersections/kiosks to navigate visitors and residents to the destinations on-site. Wayfinding directory signage should comply with the following guidelines:

- Locate wayfinding directories within or near major pedestrian gathering spaces and key intersections subject to heavy pedestrian flows.
- Vehicle directional signs should be located at or near project entrances, key intersections, and other locations that will serve to guide motorists to their destination. Vehicular directionals should be freestanding or mounted on light poles, and scaled to their surroundings for a comfortable read by slow moving vehicles and cyclists.
- Pedestrian signs should be located along major pedestrian circulation routes and other locations that will serve to guide the pedestrians toward public areas and amenities. Pedestrian signs should be scaled to their surroundings for a comfortable read by persons-on-foot and bicycle.

SID 2.4 - Locate information kiosks near pedestrian gathering spaces such as public parks / plazas and key intersections subject to major pedestrian flow. Kiosks may also function as “community boards” that advertise upcoming events.

Project Gateway Signage

Public Area Entry Signage


Traffic Control Signage

Wayfinding Signage

Parking Signage


Vehicle/Pedestrian Directional Signage

FIG 8–1: SIGNAGE PLAN CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Project Identity/Gateway Signage
- Vehicular Directional wayfinding
- Pedestrian Directional wayfinding
- Information Kiosk
- Wayfinding Directory

1" = 300'

0' 100' 200' 300' 500'

8.4 PUBLIC ART DESIGN PRINCIPLES

Interactive Art:
Use interactive art pieces to involve the viewer and create a fuller experience.

Local Artisans:
Look for opportunities to incorporate local artisan's work as well as pieces that speak to historical aspects of the site or the City as a whole.

Art as Wayfinding Device:
Wayfinding art highlighting gateways or special features serves to orient visitors and offers a sense of familiarity. Wayfinding public art creates a superior level of comfort for visitor orientation.

High-Quality Public Art:
High quality public art made from superior materials offers an elevated aesthetic for viewers but also reflects the overall high quality of design of the project as a whole.

Light Installations:
Create more memorable spaces through the use of light art installations which may be permanent or temporary in nature. Use installations to delineate space or simply enliven a plaza.

Broad Range of Art:
Allow for a broad range of materials and media types to be used throughout the project. Various artistic points of view add interest to the project and create several different focal points.

Landscape Art:
Promote landscape art that provides a unique the opportunity to enrich landscape details. Ensure that scale, material, and form are appropriate to the surrounding setting.

Civic Art Potential:
Civic art provides the opportunity to enrich the environment. Civic art may be used to highlight special locations such as gateways and public plazas, or to enrich architectural and landscape details.

8.5 PUBLIC ART DESIGN GUIDELINES

Integrate public art to create focal points

Public participation in community art project

PA 1 - ENHANCE PUBLIC PLACES BY INCORPORATING PUBLIC ART

Intent

Public art helps to enhance the visual environment, augment wayfinding, reinforce the overall image and project identity, create a conceptual link to disparate areas of the site. Public spaces, private development projects, and infrastructure improvements are all encouraged to include public art components within the LSAP Plan Area.

Recommendations

PA 1.1 - Use public art to highlight special locations, such as gateways, focal intersections, and important pedestrian gathering areas and enhance community aesthetic character.

PA 1.2 - Explore opportunities to integrate artisan crafted landscape and building details to distinguish the Project Area and strengthen the community identity.

PA 1.3 - Make works of public art visually, and where appropriate physically accessible, generally encouraging a high degree of interaction with the art piece.

PA 1.4 - Design permanent art pieces of durable, exterior grade materials, with consideration given to structural and surface integrity, assuring protection against vandalism, weathering, and excessive maintenance and repair.

PA 1.5 - Allow for temporary art pieces in addition to permanent works of art, potentially accommodating new or different modes of expression.

PA 1.6 - Allow for a broad range of expression, media and materials, while ensuring that the scale, material, form and content are appropriate to the immediate surroundings.

PA 1.7 - Raise and appropriately allocate special fund for the construction, maintenance and preservation of public art works within the Plan Area*.

PA 1.8 - Promote public participation in community art projects. Encourage collaboration of residents with local artists, architects, landscape architects, engineers and other design professionals in the whole planning and design process of public art projects within the Plan Area.

*Note: Any art dedicated to the City will need to be reviewed by the Cultural Commission.

RECOMMENDED PUBLIC ART FORM


Sculptural Art

Interactive Art Installations


Pole Mounted Banners


Temporary Wall Art and Gateway Mural


Paving Art & Street Furniture Art

PA 2 - INTEGRATE DIVERSE PUBLIC ART TO ACTIVATE THE OUTDOOR SPACES

Intent

Carefully select public art and integrate pieces throughout the outdoor environment of the LSAP Project Area. Selected art form could serve as a local landmark, delineate outdoor space, or add richness to the landscape. Examples of public art can include murals, banners, decorative or unique signs, and sculptures. Pavement designs, wall arts can also be included as public art.

Recommendations

PA 2.1 - Use sculpture art at project gateways to strengthen the visual identity or in primary open spaces, such as linear park, central plaza, or pocket parks/plazas to enhance the overall outdoor environment feature, and create focal points.

PA 2.2 - Apply colorful banners to light poles along prominent streets, pedestrian linkages, or building façade with active frontages. Pole mounted banners can contribute to a festive environment, activate the gathering spaces, and advertise upcoming events and festivals of the community and the City.

PA 2.3 - Incorporate interactive art installations in the open spaces, such as parks, plazas, semi-public/ private courtyards, etc, providing people opportunities directly interacting with the art pieces, and offering educational artistic activities to residents and visitors of all ages.

PA 2.4 - Introduce temporary wall art and murals where appropriate on-site to bring people together and enrich the outdoor environment. Placing wall art and murals at project gateways can reinforce the gateway image and strengthen project identity.

PA 2.5 - Explore opportunities to tastefully incorporate public art in a project logo or similar graphic element such as decorative sidewalk plaques or on-site furnishings and landscape features, such as benches, trash receptacles, tree grates, public lavatories, etc.

FIG 8–2: PUBLIC ART PLACEMENT CONCEPT

*Note: This drawing is conceptual only; specifics may change during implementation.

Legend

- Sculpture
- Interactive Art Piece
- Mural / Wall Art
- Banners

1" = 300'

0' 100' 200' 300' 500'

8.6 LIGHTING DESIGN GUIDELINES

Pedestrian-scale lighting poles along sidewalks

Taller lighting poles along vehicular roadways

TABLE 8–1: ILLUMINATION STANDARDS

LOCATION	ILLUMINATION LEVEL NEEDED
Streets	• Illumination at pavement level should be maintained between 0.5 & 1.0 footcandles. • The ratio of average to min. illumination should be no less than 4:1*. • Horizontal illumination at grade level should be no less than 0.5 footcandles.
Sidewalks, Paths, and Open Spaces	• Vertical illumination at six feet above grade level should be no less than 1.0 footcandles. Light sources should have an initial output of no more than 1,000 lumens, generally. • The ratio of average to minimum illumination should be no greater than 5:1*.
Building Entrances	• Illumination should be maintained between 2.5 and 5.0 footcandles.

*Note: The ratio of average to minimum illumination may be higher in peripheral locations, such as adjacent to natural areas or community residential edges, where decreased illumination along the site boundary would be more appropriate.

LD 1- USE OUTDOOR LIGHTING FOR SAFETY AND ENJOYMENT AT NIGHT

Intent

A series of well-defined lighting fixtures provided consistently throughout the site can help create a sense of safety and security as well as maintains an attractive and appealing community environment at night. The lighting guidelines provided are intended to reinforce the project identity of the LSAP Plan Area, define primary gateways and linkages, enhance specific outdoor areas, deter crime, facilitate safe movement for motorists and pedestrians, and minimize light pollution and unwanted glare on-site.

Recommendations

LD 1.1 - Lighting should be provided of a height, spacing and intensity so as to create comfortable, safe and consistent illumination for the Plan Area.

LD 1.2 - Utilize poles and fixtures that are ornamental and complement the character of the streetscape and the surrounding environment. Pole heights and spacing should relate to the scale of the street and its users.

- Along pedestrian corridors/trails and retail areas that are pedestrian in scale, mount luminaries on poles should not exceed 16 feet in height. Spacing between fixtures should be no greater than 20 feet.
- Along vehicular roadway, a combination fixture should be used, with the taller fixture lighting the street and the pedestrian-scale fixture lighting the adjacent sidewalk, path or open space. In no case, should fixtures taller than 20 feet be permitted.

LD 1.3 - Choose appropriate luminaire sources. Consider using white light on all streets, pedestrian pathways, and primary retail locations. White light renders colors more naturally and attractively thereby enhancing merchandizing and making street more secure. High-pressure sodium (HPS) lighting and similar luminaries are prohibited on-site.

LD 1.4 - Utilize energy-efficient lighting, such as LED bulbs, along public streets. Connect lighting to a control system. Site lighting should be connected to a photocell to turn fixtures on and a time clock to turn them off.

LD 1.5 - Design and locate fixtures for safety, service accessibility and facilitation of regular maintenance.

LD 1.6 - Design luminaire fixtures to direct light exactly where it is intended. Use appropriate shielding to avoid light trespass and glare so that illumination does not exceed 0.2 footcandles on abutting community residential edges or 0.5 footcandles on abutting community nonresidential edges. In addition, lighting should meet with the following illumination standards described in *Table 8-1* regarding to specific locations.


Integrate lighting equipment into the building design

Provide pedestrian-scale lighting in open spaces

Use lighting to highlight specimen trees

Integrate lighting equipment into landscape elements

LD 2 - INTEGRATE LIGHTING FIXTURES INTO BUILDING & LANDSCAPE DESIGN

Intent

Lighting can be used to highlight significant architectural and landscape features within the LSAP Plan Ara. The intend of integrating lighting fixtures into building and landscape design can create an integrated, attractive outdoor illumination environment at night.

Recommendations

LD 2.1 - Encourage building-mounted fixtures designed as integral features consistent with the building's geometry and architectural style.

LD 2.2 - Use architectural elements to conceal lighting fixtures and wiring, which ensures that equipment has a minimal visual impact during the daytime.

LD 2.3 - Utilize lighting fixtures to highlight a building's most prominent or unique features. "Close-in" lighting can be used to accentuate textures of building finishes such as stone and brick.

LD 2.4 - Blank wall spans and other indistinct features should not be lighted except as needed for safety.

LD 2.5 - Avoid ground-based accent lighting. Ground-based building lighting may interfere with the vision of passersby. Where lighting is desired at the lower portions of the building, fixtures should be attached to the building rather than being placed in the landscape.

LD 2.6 - Lighting in open spaces should be provided through pedestrian-scale, pole-mounted lighting, lighted bollards and, where practical, building-mounted lighting.

LD 2.7 - Selectively use lighting to highlight specimen trees and plantings. Fixture selection should strike a balance between minimizing the number of units required to accomplish the desired effect and the ability to conceal light sources from view.

LD 2.8 - Design parking deck lighting to minimize light pollution and facilitate the safe movement of pedestrians and vehicles within parking areas and prevent vandalism, auto theft and crime. The direct and indirect lighting should be contained to minimize stray light. Idle modes should be used during off-peak hours to reduce light pollution and energy consumption.

9 INFRASTRUCTURE PROGRAM

9.1 INTRODUCTION

Implementation of the LSAP will require new construction and the reconstruction of substantial infrastructure. The infrastructure program provides overall guidance for the provision of infrastructure in support of proposed land uses, addressing transportation, wet utilities, solid waste management, and energy services and systems.

OVERVIEW

The City of Santa Clara and regional utility providers directly control infrastructure systems within the Plan Area, including: wet utilities (potable water, sanitary sewer, and storm drainage), solid waste management, and dry utilities (including electricity and natural gas). Development under the LSAP will be in accordance with the provisions of the General Plan, allowing the various utility providers to determine that there is generally sufficient off-site system and supply capacity to meet future demand. Nonetheless, on-site utility infrastructure upgrades will be required to ensure delivery of adequate resources to service the Plan Area, encompassing new and upgraded water and sewer lines, storm drainage facilities, and electrical and gas systems. New roads and roadway modifications will also serve the Plan Area. Typically, infrastructure upgrades will be installed coincident with phased development, and service providers will coordinate with project developers in the design, construction, and operation of utilities.

SUSTAINABLE PRACTICES AND INFRASTRUCTURE

Implementation of the LSAP presents an opportunity to incorporate sustainable infrastructure and model the latest sustainable development practices. In particular, compliance with the latest green building and site design standards and guidelines will promote conservation of water and energy resources, and reduce waste. Sustainable measures may encompass accommodation of alternative modes of travel, transportation demand management, "water wise" landscape practices, sustainable construction materials and practices, and efficient energy systems

GRADING

The Plan Area is relatively flat, generally sloping down 0.5 percent from the southwestern portion of the site toward its northeastern extent. Some of the site's existing infrastructure will remain, while additional infrastructure will be installed to serve future development, including roads, water and sanitary sewer lines, storm drainage facilities, and electrical and natural gas systems.

As development proceeds, demolition of nearly all surface improvements will be required. Site preparation will involve removal of existing development, including certain on-site utilities and roads, as well as buildings, parking lots, and landscape. Grading will consist of excavation and fill activities as necessary to ready the site and subgrades for various project components. Fine grading will address new landscape features, and stormwater runoff from hardscape areas shall be directed toward planted landscape zones for treatment per the San Francisco Bay Regional Water Quality Control Board requirements.

9.2 TRANSPORTATION

VEHICULAR INFRASTRUCTURE

The LSAP requires improvements to the local road network to enhance access and circulation, and accommodate the proposed land uses. Two-lane public and private roads are proposed within the Plan Area, generally laid out in accordance with a grid system to facilitate ready access and ease of movement to projected residential, retail and open space uses. Roadway design recommendations are set forth in Chapter 7: Streetscape Master Plan.

- *Public Roads*: Gordon Avenue, which currently runs in the north-south direction between Kifer Road and Ryder Street, will be replaced by a new roadway ("New Gordon Avenue") located further east to run alongside the existing utility easement and make use of the existing signal regulating access to the Costco located across Kifer Road. Copper Road will be retained as a north-south roadway, although significantly reduced in width to encourage traffic calming, while Corvin Drive will be maintained as a significant north-south connection between Kifer Road and Lawrence Expressway. A new "Street A" will provide an internal east-west link along the proposed linear park running from New Gordon Avenue and Corvin Drive.
- *Private Roads*: Two private roads identified as "Avenue 2" and "Avenue 3" will be constructed in a north-south direction, joined together near the northern boundary of the site to create an internal loop accessing residential uses at the project's core. Another new private road will align with the existing Ryder Street, extending eastward from the existing utility easement to Corvin Drive, with access across the easement to Ryder Street limited to emergency vehicles. Additionally, the LSAP preliminarily identifies the location of private driveways that will serve development parcels.
- *Vehicular Access*: Eight intersections will provide vehicular access to the Plan Area. Five of these intersection are located on Kifer Road along the southern boundary of the site, one on Lawrence Expressway at the western boundary, and two on Central Expressway at the northern boundary; three of the five intersections along Kifer will result from the construction of new roads, while allowing for adequate and safe spacing between intersections. Existing signalized intersections on Kifer Road at Lawrence Expressway, New Gordon Avenue, and Corvin Drive will be maintained; the other intersections will remain unsignalized.
- *Parking Facilities*: While each block is envisioned as "self-parked," a shared parking structure may be introduced on-site in a later phase. Private parking for residents will be located within residential buildings. On-street parking is proposed along most public and private streets; however, in keeping with tradition in Santa Clara, metered street parking is not envisioned, although provisions may be made for preferentially located electric vehicle charging stations.
- *Transportation Demand Management (TDM)*: Development under the LSAP will incorporate TDM strategies to reduce vehicle trips and auto-dependency, and promote alternative modes of transportation. Chapter 10: Transportation Demand Management Program provides a more detailed discussion of proposed TDM measures and options.

BICYCLE INFRASTRUCTURE

The proposed bicycle network is expected to enhance multimodal movement and increase accessibility within the Plan Area and its surroundings. Dedicated bike paths are proposed along New Gordon Avenue and Corvin Drive in the north-south direction, and in a west-east direction along the linear park. Additionally, connections will be made to existing and proposed City bicycle infrastructure on Kifer Road and along Calabazas Creek; the bike trail along Calabazas Creek is expected to offer an important link to the Lawrence Caltrain Station. To further encourage bicycling, bike parking will be provided internal to the site.

PEDESTRIAN INFRASTRUCTURE

The proposed pedestrian network will incorporate sidewalks, pathways and trails to facilitate movement on foot throughout the Plan Area, connecting residences, shops, parking facilities, and open space amenities. Sidewalks will be provided along the entire southern perimeter of the site by closing existing gaps on Kifer Road, and along the western perimeter of the site on Lawrence Expressway between Kifer Road and Ryder Street. Existing sidewalks will be maintained and new sidewalks constructed along both sides of internal public and private roadways; sidewalks shall be wide enough to accommodate streetscape amenities and clear pedestrian passage. A series of pedestrian crosswalks are also proposed for the primary and local roadways within and around the Plan Area, subject to further study; a grade separated crossing may also be considered for Ryder Street.

MULTI-PURPOSE CREEK TRAIL

The LSAP proposes a multi-purpose creek trail along Calabazas Creek on the eastern edge of the Plan Area. This multi-purpose creek trail will provide recreational benefits for residents of the community, while also establishing an important alternative link to the Lawrence Caltrain Station. Enhanced bicycle and pedestrian access to the proposed multi-purpose creek trail will be accommodated along Street A and Corvin Drive, as well as either side of the proposed linear park.

9.3 WET UTILITIES

WATER

It is projected that development under the LSAP will not cause water demand to exceed supply; a Water Supply Assessment verifies that adequate water supply is available to the Plan Area. Phased development within the Plan Area will require installation of distribution mains in conjunction with new streets to serve fire and domestic water needs, while water mains within existing streets on-site may require upgrade.

- *Existing Service*: Santa Clara serves as the water retailer for all urban water users within its boundaries; the City's well water supply is the main source within the Plan Area. The City has adequate supply commitments to meet the projected water demand of on-site residents and businesses for the foreseeable future. Municipal water is conveyed to the business establishments present in the Plan Area and vicinity through existing water lines. Specifically, a 10-inch diameter water line runs under Central Expressway along the northern boundary of the site until it connects with Lawrence Expressway via Ryder Street, and a 12-inch diameter water line runs along the southern boundary of the Plan Area under Kifer Road. Within the Plan Area, 10-inch diameter water lines run along Gordon Avenue and Copper Avenue, and a 12-inch diameter line runs along Corvin Drive. An emergency intertie between the City of Santa Clara's water system and the City of Sunnyvale's water system is located at the Kifer Road and Copper Road intersection. While the City relies on recycled water as one of its supply sources, the Plan Area is not served by recycled water at this time.
- *Proposed Improvements*: Buildout of the LSAP in accordance with the proposed land uses will require installation of approximately 12,000 new linear feet of water line within the Plan Area. As noted above, distribution mains will need to be constructed within new streets to meet fire and domestic water needs, and existing water mains may require upgrades due to the age of the water infrastructure. Final sizing of any particular line will be subject to modeling of the system and largely determined by prescribed fire flows. In general, it is expected that new distribution mains in backbone streets will require 10 - 12 inch diameter lines, while distribution mains in local streets will require 8 - 10 inch diameter lines.
- *Sustainable Infrastructure*: Water conservation strategies will emphasize water wise landscape design, including selection of drought tolerant and adapted species, minimal use of water intensive turf and annuals, and low volume irrigation practices.

WASTEWATER

Wastewater generated by development under the LSAP will originate from residential and commercial sources, and no industrial wastewater will be generated. Installation of new sanitary sewer lines in the Plan Area will be required to accommodate project generated flows, while no specific changes to the City's wastewater treatment facilities will be necessary.

- *Existing Service*: The City of Santa Clara is responsible for the construction and maintenance of the sewer system, while Santa Clara's wastewater flows are conveyed to a regional wastewater treatment facility serving a number of sewage collection agencies, and administered and operated by the City of San Jose's Department of Environmental Services. The wastewater currently generated within the Plan Area flows toward sanitary sewer lines on Central Expressway, which vary in size from 12 to 21 inch diameter. Sanitary sewer lines along Gordon Street (connecting with Ryder Street), Copper Road, and Corvin Drive convey wastewater to the sanitary sewer lines on Central Expressway.
- *Proposed Improvements*: The wastewater conveyance system required for buildout of the LSAP in accordance with the proposed land uses will entail installation of approximately 8,400 new linear feet of sanitary sewer lines within the Plan Area to connect to the main sewer lines located off-site. Phased development within the Plan Area will require removal of existing sanitary sewer lines and replacement with new lines. Final sizing of any particular line will be subject to modeling of the system. In general, it is expected that new distribution mains in backbone streets will require 8 or 10 inch diameter lines, while distribution mains in local streets will require 6 or 8 inch diameter lines. No added capacity in the main sewer lines located off-site is required.

STORMWATER

It is anticipated that storm drain flows generated by development under the LSAP will be adequately received by existing off-site storm drain systems, although the Plan Area will require construction of a new storm drain system on-site to accommodate proposed land uses.

- *Existing Service*: Santa Clara's storm drain system consists of curb inlets that collect and channel surface water into a series of pipelines beneath City roadways. Stormwater is delivered through these underground pipelines to channelized creeks within the City, which then direct flows into the San Francisco Bay. Stormwater runoff currently generated within the Plan Area is conveyed to the network of storm drain pipe infrastructure operated by the City of Santa Clara and the County of Santa Clara. City stormwater lines vary in size between 12 to 21 inch diameter along Gordon Street (connecting with Ryder Street), Copper Road, and Corvin Drive, connecting with a 60-inch diameter County of Santa Clara stormwater line that runs along Central Expressway. There are no on-site stormwater treatment facilities in place.
- *Proposed Improvements*: Buildout of the LSAP in accordance with the proposed land uses will require removal of existing storm water facilities and installation of 7,500 new linear feet of stormwater lines within the Plan Area. Stormwater collected through these pipes will be conveyed to the existing City storm drain infrastructure.
- *Sustainable Infrastructure*: Sustainable design measures will help ensure that runoff generated by development under the LSAP does not increase runoff amounts above existing levels. Site development will incorporate planted landscape zones dedicated to stormwater infiltration, such as at-grade rain gardens and bio-swales. Moreover, impervious hardscape areas will be designed to drain to these landscape zones and other pervious surfaces so as to comply with regional permitting requirements.

9.4 SOLID WASTE

SOLID WASTE MANAGEMENT

The Plan Area is currently served by a landfill with sufficient capacity to accommodate the solid waste disposal needs of development associated with Phase 1 of the LSAP, and it is anticipated that sufficient landfill capacity will be identified by the City to support full build-out.

- *Collection Services*: Solid waste collection in Santa Clara is provided by Mission Trail Waste System through a contract with the City; Mission Trail Waste System also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. Recycling services are provided through Stevens Creek Disposal and Recycling.

- *Disposal Capacity*: Santa Clara has an arrangement with owners of the Newby Island Landfill, located in San Jose, to provide disposal capacity for the City through 2014. Development allowed under the General Plan will be served by the Newby Island landfill through 2024. The LSAP is consistent with the General Plan; therefore the Newby Island landfill will accommodate proposed Phase I development under the LSAP. The City has no concrete plans for the disposal of solid waste beyond 2024, but will undertake a process to identify a solution prior to 2024.

9.5 ENERGY

ELECTRICITY

Silicon Valley Power (SVP) provides electrical power to Santa Clara, including the Plan Area. SVP will be actively involved throughout the design, construction and operation of electrical utilities required for the project to guarantee efficient and reliable utilization of power resources. Additionally, development under the LSAP will promote sustainability through conservation of resources, incorporating "green building" and other energy saving measures. In accordance with California law, compliance with the most recent energy efficiency standards of Title 24 (The Energy Efficiency Standards for Residential Buildings) shall be achieved. Title 24 requires the inclusion of state-of-the-art energy conservation features in building design and construction, including the incorporation of specific energy-conserving design features, use of non-depletable energy resources, or a demonstration that buildings will comply with a designated energy budget. Consideration should be given to incorporating solar power, and any future residents will have the opportunity to participate in SVP's 'Santa Clara Green Power' purchase program.

NATURAL GAS

Natural gas is provided and distributed to Santa Clara by PG&E, including the Plan Area. PG&E has stated that there are no known capacity limitations to the gas system serving the Plan Area; however, gas mains may need to be upgraded to comply with current PG&E standards. PG&E will be actively involved throughout the design, construction and operation of natural gas utilities required for the project to guarantee efficient and reliable utilization of natural gas resources.

10 TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM

10.1 INTRODUCTION

The intent of the Transportation Demand Management (TDM) Programs is to provide alternative transportation options and to encourage the use of creative ways to mitigate the traffic impact of new development projects within the LSAP Plan Area.

OVERVIEW

Transportation Demand Management, or TDM, is a general term for strategies that increase overall system efficiency by encouraging a shift from single-occupant vehicle (SOV) trips to non-SOV modes, or shifting auto trips out of peak periods. TDM strategies address a wide range of externalities associated with driving, including congestion, poor air quality, less livable communities, reduced public health, dependence on oil, reduced environmental health, and climate change and GHG emissions. Some TDM strategies are designed to reduce total travel demand, while others are designed to reduce peak period demand, which may disproportionately contribute to these externalities.

TDM seeks to reduce auto trips – and vehicle miles traveled – by increasing travel options, providing incentives and information to help individuals modify their travel behavior, and by reducing the distance of travel through transportation-efficient land uses. The cumulative effect of a comprehensive set of TDM strategies can have a significant impact on travel behavior, system efficiency, and SOV rates.

CAP REQUIREMENTS

The City of Santa Clara Climate Action Plan (CAP, adopted December 2013) requires new development greater than 25 housing units or 10,000 nonresidential square feet to achieve a minimum vehicle miles traveled (VMT) reduction. The VMT reductions may be achieved through project design characteristics, land use, parking, access or TDM. Depending on the location and land use of the development the CAP calls for varying degrees of reduction. In most cases a minimum level of reduction must be achieved through the application of TDM best practices. The LSAP Plan Area is located in the Santa Clara Transportation Management District 1, "North of Caltrain" where the requirements for reductions are listed in *Table 10-1*:

This chapter provides a toolbox of measures that may be used by developers, employers, and property managers to reduce vehicle trips and promote the use of non-single occupancy vehicle modes. The intent is not to limit TDM programs, but rather provide resources for new development in the LSAP Plan Area.

TABLE 10–1: DISTRICT 1 MINIMUM VMT REDUCTION REQUIREMENTS*

GP LAND USE DESIGANTION	MINIMUM % VMT REDUCTIONS PER PROJECT
Medium Density Residential	15% reduction, 5% of which should be from TDM.
High Density Residential	20% reduction, 10% of which should be from TDM.

*Source: The City of Santa Clara Climate Action Plan, p. 51.

LAND USE MANAGEMENT AND URBAN DESIGN

Land use policy effects transportation, sustainability and public health. A properly designed community encourages walking and biking while reducing the need to drive for daily needs. Transportation-efficient development is characterized by higher density and mixed uses, access to frequent transit service, and opportunities for short pedestrian and bicycle trips to a rich mix of desired destinations. Mixing housing with other services and retail opportunities allows residents to make necessary daily and weekly trips without using a car. Nearly all strategies to promote transit ridership, walking, and bicycling are more effective when applied to households living in compact, mixed-use communities.

The following are some strategies that fall within this context:

- Reduce street setbacks locating buildings closer to pedestrian and transit facilities which encourages walking and transit use.
- Design the site for pedestrian connectivity with attractive and safe connections between buildings and to the surrounding streets can encourage people to walk more.
- Designate parking spaces and loading zones for carpools and vanpools near building entrances to prioritize non drive-alone modes.
- Locate parking in the rear of buildings so that it does not impede access to the building by other modes.
- Include amenities on-site to help reduce the number of trips an employee needs to make during the day such as: a cafeteria, grab-and-go meals (or other food access), a fitness facility, coffee bar, general store, an ATM, a barbershop, sport courts, banking, dry cleaning pick-up, health and wellness, childcare etc.
- Orient building entries towards plazas, parks or adjacent roadways with pedestrian facilities to create a more pedestrian friendly environment.

10.2 TDM MEASURES

PARKING MANAGEMENT STRATEGIES

The following parking strategies are covered in more detail above and are effective measures for reducing vehicle trips.

- Unbundled parking costs
- Requiring that parking spaces be leased or sold separately ("unbundled") from the rent or sale price which gives a financial incentive to residents who do not own cars and also encourages individuals to drive less or own fewer cars.
- Provide shared parking which reduces the volume of parking and local vehicle trips as well as the number of curb cuts on local sidewalks.
- Provide free or reduced parking fees for carpools and vanpools at sites that have paid parking which provides a financial incentive for ride-sharing.
- Reward employees with parking cash-outs (the cash equivalent of employer-provided parking) if they elect to forgo parking which provides a financial incentive to use a mode other than driving alone to work.

TRANSIT INCENTIVES

There are many proven strategies for increasing the number of people riding Caltrain and buses. They include:

- Increase transit service. Higher frequency buses, trains and shuttles, make it easier for more people to get around without a car. Shuttles within the development that stop every 15 minutes and provide service to Lawrence Station could be provided.
- Work with the transit agencies to improve facilities at existing bus stops such as benches, shelters, lighting, bicycle parking, etc. in order to make transit a more attractive option.
- Provide low cost or free transit passes. These can be subsidized by, developers, building managers, employers or public agencies. Transit passes typically provide unlimited rides for local or regional transit providers for low monthly fees. This strategy serves to increase the transit mode share and reduce VMT, emissions and congestion.
- Improve and distribute transit information utilizing the best technologies and promotional tactics, such as with real time bus and train arrival and departure times. These services make riding trains and buses easier and more customer-friendly.
- Provide transit passes for sale on-site as a convenience for residents and employees to make it easier to commute using transit.
- Provide downloadable smart phone application with schedule and stop information for private shuttles and public transit to make transit use even more convenient.

BICYCLE PROGRAMS

- Provide shower and changing rooms which help promote bicycling (and walking) as an alternative commute option by allowing cyclists to change and prepare for work after their active commute.
- Working with the City to improve bicycle infrastructure by filling in gaps in the network, upgrading existing facilities to Class I or II, providing bike parking, installing wayfinding signage, etc.
- Map routes, create biking groups or buddies, and provide financial incentives.
- Provide on-site repair stations which offer an air pump and basic tools to keep your bike in great shape.
- Host regional events, such as bike to work day, to introduce bicycle commuting and get people to start bicycling more frequently.
- Provide ample and convenient bicycle parking and storage facilities.
- Participate in a bike share program which provides employees with campus bicycles and free bicycle helmets and helps eliminate trips made by car during the day.
- Develop a site-specific guide and provide wayfinding for bicycle routes, lanes, and paths as well as bicycle parking facilities to make it easier for people to navigate the site on bicycle or by foot.
- Reimburse employees up to $20 per month for qualified bicycle commuting expenses as a pre-tax payroll deduction.
- Install charging stations throughout the site for electric bicycles which can be used for longer trips than standard bicycles.

TRANSPORTATION MANAGEMENT MEASURES

PARKING MANAGEMENT

Shared Parking Garage

TRANSIT INCENTIVES

Clipper Cards

BICYCLE PROGRAM

Bike Share

Bike Center

RIDE SHARE

Lyft

CAR SHARE

Zipcar

MARKETING & EDUCATION

Active Transportation Workshops

TELECOMMUTING

Telecommuting

RIDE SHARING

Ride-sharing can help reduce the number of vehicle trips by increasing vehicle occupancy. The following are strategies for promoting ride-sharing:

- Provide incentive programs for carpooling such as reduced cost or free parking, preferred parking, or reward programs (such as prize drawings).
- Match employees and residents together for sharing a ride. Building managers or employers can help residents and employees form carpools through ride-share matching, which helps potential carpoolers locate others nearby with similar schedules. Regional ride-share organizations, such as 511.org, allow interested people to register directly for no cost.

CAR-SHARING

On-site car-sharing helps reduce auto ownership rates and build transit ridership by providing people who chose an alternative form of transportation with another means of making midday trips. Residents who only need a car for specific errands and use alternative means to get to work can rely on car-sharing program, such as zipcar, rather than taking on the added expense of car ownership.

MARKETING & EDUCATION

Social marketing and incentive programs are proving increasingly popular and effective at promoting a culture of sustainable transportation behavior. Social marketing seeks to influence individuals' behavior to achieve a broad social good (in the case of TDM, reducing drive alone trips). Some marketing strategies include the following:

- Hosting awareness and educational campaigns, workshops, and community outreach efforts which may take the form of promotional campaigns similar to product advertising. Focus on encouragement, benefits of carpooling/ transit/ active modes in order to make people feel good about their choices to use alternative modes.
- Provide permanent locations for updated TDM information, either online or available through the property manager, which creates easy access to information and makes alternative modes easier to use.
- Guarantee employees who use transit, carpools, or vanpools a ride home in case of emergency or if they need to work late which helps to reduce concerns about using alternative modes.
- Create competitions around active modes (bike-to-work competition, pedometer/walking challenges), develop recognition programs (Commuter of the Month, etc.), and create competitions with prize drawings to engage people in the TDM options provided.
- Host transportation fairs to provide alternative mode information in a fun event.
- Write articles about TDM in company newsletters which fosters a culture of awareness.
- Survey employees and residents to understand what TDM strategies are working, which allows customization of the TDM program and targeted marketing messaging.
- Market and increase awareness of real-time platforms making it easier for people to use transit. 511, NextBus, and Twitter are all examples of existing real-time platforms that many commuters are unaware of.
- Publish an annual report after one-year of project occupancy to show that the projected VMT reductions having been met through the implementation of the TDM strategies.

TDM COORDINATORS

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.

- Introduce new employees to the TDM program creates an awareness and culture of drive-alone alternatives.
- Provide an on-site, one-stop shop for transit and commute alternatives information provides education and support for easy use of alternative modes.
- Develop an ambassador/buddy program eases people into commuting alternatives and can provide incentives for new commuters referred by a friend.

TELECOMMUTING & ALTERNATIVE WORK SCHEDULES

Telecommuting allows employees to work from home or from neighborhood co-working spaces and reduces trips made to the employer site. Flextime allows employees to set or modify their arrival and departure times and can provide the flexibility people need to use alternative modes. Staggered work hours allows work units or groups to be assigned different starting and ending times for their work day which can provide the flexibility people need to use alternative modes. Compressed work schedules are when employees work more hours in a single day, but fewer days of the week reduces trips made to the employer site.

11 IMPLEMENTATION PROGRAM

11.1 INTRODUCTION

Specific plans shall include a program of implementation per *California Planning Law* (Section 65450 et seq. of the California Government Code). This chapter fulfills this requirement by describing processes and procedures for approval and administration of the LSAP, and outlining strategies to ensure coordination between private development and the provision of necessary public improvements within the Plan Area.

IMPLEMENTATION OVERVIEW

The objectives of the implementation program are as follows:

- Detail processes and procedures for review, adoption, and amendment of the LSAP, including related approvals for achieving consistency with the General Plan and the Zoning Ordinance.
- Clarify the processes and procedures for review and approval of development projects within the Plan Area to ensure substantial conformity with the LSAP's planning concept, policies and guidelines, as well as other applicable City regulations and standards.
- Introduce a conceptual program of development phasing that will inform the planning and design of public infrastructure improvements, allowing flexibility to adjust to changing economic and market conditions.
- Present strategies for funding and financing public improvements in a timely manner, identify potential sources of funding, and recommend methods of allocating costs to private developers and property owners that will benefit from these improvements.

ROLES & RESPONSIBILITIES

Following adoption of the LSAP, the City of Santa Clara's Department of Community Development shall be responsible for administering and enforcing the Plan, including coordination of architectural review and other applicable planning entitlements. The City and responsible public agencies may also engage in other activities as necessary to move development forward in a timely manner, including the planning, financing, construction, and maintenance of public improvements, provided that costs will be allocated among property owners within the Plan Area based on a fair share allocation of benefit. Public improvements may be supplemented by governmental grant programs and other public funding sources to the extent available.

Developers and/or property owners shall be responsible for construction and maintenance of improvements on their properties, including on-site utilities. Additionally, private development shall participate in funding the costs of public improvements such as streets, utilities, and parks and open spaces, including payment of applicable development impact fees. To ensure proper coordination between private development projects and public improvements, the City shall prepare and adopt a detailed Public Improvements Financing Plan.

11.2 PLAN CONSISTENCY AND CEQA COMPLIANCE

The LSAP is inconsistent with current land use and zoning designations, necessitating General Plan and Zoning Amendments. However, adoption of the LSAP and corresponding amendments to the land use and zoning designations are sustained by the General Plan's Major Strategies, as well as the site's inclusion within an identified Focus Area.

GENERAL PLAN CONSISTENCY

The California Government Code requires consistency between a jurisdiction's general plan, the zoning ordinance and map, and proposed development projects. *Santa Clara's General Plan Land Use Diagram Phase I (2010-2015)* designates the site for Light Industrial. *Phases II and III (2016-2035)* designate the western portion of the site as High Density Residential and the eastern portion of the site as Medium Density Residential, with Copper Road as the dividing line; properties designated for High Density Residential will also accommodate neighborhood retail and open space. Per the General Plan's prerequisite goals and policies, the Phase 1 designation currently applies to the Plan Area; the Light Industrial designation applicable to the Plan Area is inconsistent with the LSAP proposal.

General Plan Amendment

To maintain the mandated consistency, an amendment to the General Plan text and land use diagram that recognizes the uses and densities indicated in the LSAP is necessary. In particular, the requisite amendment needs to accommodate the land use categories described in Section 4.3 (Land Use Plan), thereby allowing densities up to 100 dwelling units per gross acre on specified development parcels. This approach is compatible with the General Plan's Major Strategies, as well as its policy in support of higher density, mixed-use and transit opportunities within identified Focus Areas.

General Plan Policy Support

The General Plan presents seven Major Strategies that are the "foundation for civic priorities and a framework for decisions that shape the future growth and development of the City of Santa Clara." The LSAP and its development objectives are consistent with each of the Major Strategies.

- *Major Strategy 1:* Enhance the City's High Quality of Life. The LSAP provides for a range of amenities that will serve residents of the Plan Area and contribute to the social well-being of the broader community. Local serving and neighborhood convenience retail will help meet day-to-day demands for shopping and services by area residents and transit riders, while a variety of open space amenities in the form of a central green, public plaza, pocket parks, and paseos and trails will provide active and passive recreational opportunities for the immediate neighborhood and its surroundings.
- *Major Strategy 2:* Preserve and Cultivate Neighborhoods. The LSAP provides for the development of a mixed-use urban neighborhood that will extend and diversify Santa Clara's housing stock. In particular, up to 3,500 residential dwellings at urban densities are proposed, incorporating a mixture of housing typologies that will create a distinctive residential living experience. Additionally, the Plan Area will absorb growing demand for residential development in the region, thereby decreasing pressures to develop denser housing in Santa Clara's established neighborhoods.

- *Major Strategy 3:* Promote Sustainability. Implementation of the LSAP will transform the Plan Area into a pedestrian-friendly, mixed-use neighborhood that strengthens and broadens the range of viable transportation choices in the area. Most significantly, the development will place substantial residential development in close proximity to a major transit facility, thereby creating a transit hub that promotes the efficient use of land and encourages transit ridership. Moreover, the Plan Area will feature strong connectivity to Lawrence Station, including active multi-modal streets that accommodate both cyclists and pedestrians.
- *Major Strategy 4:* Enhance City Identity. As a new center of activity located in close proximity to a major transit station and part of an identified Focus Area, the site has the potential to positively define the City's identity. In particular, LSAP development will serve as an important gateway to Santa Clara from the west; consistent application of design standards and guidelines will promote high quality design in both public and private realms.
- *Major Strategy 5:* Support Focus Areas and Community Vitality. The LSAP will create a vibrant neighborhood within the Lawrence Station Focus Area. It will bring together diverse types of dwellings, likely attracting young families, empty nesters and singles to the area, augmented by ground floor commercial space, and public outdoor gathering and recreational facilities.
- *Major Strategy 6:* Maintain the City's Fiscal Health and Quality of Services. The mixture of uses accommodated by the LSAP will contribute to a more balanced community, and the inclusion of commercial uses will have a positive impact on the City's General Fund. In addition to local shopping and community gathering and recreational facilities, the existing fire station will be maintained and upgraded with opportunity to incorporate a police substation, thereby improving the availability of public services in the area.
- *Major Strategy 7:* Maximize Health and Safety Benefits. The LSAP supports development of a healthy, resilient neighborhood. In particular, walkable streets, bike routes, trail connections and recreational amenities will become an integral part of the community, offering health and safety benefits.

General Plan Focus Area Designation

The LSAP Plan Area is part of the larger (92-acre) Lawrence Station Focus Area as defined by the General Plan. This location is seen as an opportunity for more intense development with limited impact on existing neighborhoods, and is targeted for Phases II of General Plan implementation. It is intended that the Focus Area will be redeveloped into a "lively neighborhood that contains a mix of housing, commercial and open space." Properties situated east of the Lawrence Expressway are to include a diversity of housing types at medium to high density that serve employees in and around the City. A high quality public realm, multi-modal connections, on-site recreational opportunities, and neighborhood retail amenities are also considered key attributes of this Focus Area. The LSAP is consistent with these and other applicable goals and policies as set forth in the General Plan; of particular note, it provides the required comprehensive planning and prerequisite studies for a significant portion of the Lawrence Station Focus Area.

ZONING CONSISTENCY

The current zoning designation for the site is Light Industrial (ML). This zoning is consistent with the General Plan's Phase I land use designation; however, it does support the long-term vision for the Lawrence Station Focus Area as described by the General Plan. Additionally, the ML zoning designation is inconsistent with the vision, policies, and guidelines of the LSAP. Amendments to the Zoning Ordinance are required, involving changes to the zoning designation for the site and accompanying text amendments that will provide for the uses and densities proposed in the LSAP.

CEQA COMPLIANCE

In its capacity as "Lead Agency" the City of Santa Clara has determined that an Environmental Impact Report (EIR) is required to proceed with approval of the LSAP. The principal use of the EIR is to provide the City's decision makers and the public with sufficient information regarding the environmental consequences of the project. The City Council must certify that the Final EIR has been prepared in compliance with *the California Environment Quality Act (CEQA)*, and that it has reviewed and considered the document prior to approval of the LSAP, and the associated amendments to the General Plan and Zoning Ordinance.

- *Program-Level Analysis:* The LSAP EIR incorporates a program-level analysis that considers the proposed overall development concept and future build-out of the site. This program-level analysis may be used in the future to simplify the task of preparing environmental documentation for specific development proposals that implement the LSAP; subsequent activities and approvals in the Plan Area may be examined in light of the Program EIR.
- *Project-Level Analysis:* Additionally, the EIR encompasses a project-level analysis for significant portions of the Plan Area, wherein development plans have been submitted by three applicants and integrated into the LSAP's development concept. It is anticipated that the level of analysis provided in the EIR will satisfy environmental review for each applicant's proposal, provided that further environmental review may be required in response to substantial changes or new information.

11.3 SPECIFIC PLAN APPROVAL AND ADMINISTRATION

Following adoption of LSAP, procedures will be in place to help facilitate the development of the Plan Area with consistency and transparency.

LSAP ADOPTION

The Planning Commission shall hold a public hearing with proper public notice, and issue a report on its findings and recommendations to the City Council on the following applications for approval: 1) the LSAP, which shall legally function as a Specific Plan applicable to properties addressed herein; 2) a General Plan Amendment, involving revisions to both text and land use diagram in order to achieve consistency with the LSAP; and 3) a Zone Change and Zoning Text Amendments that will maintain consistency and support implementation of the LSAP. Subsequently, the City Council shall hold a public hearing to consider the Commission's report and approvals. The LSAP and General Plan Amendment shall be adopted by Resolution, while the Zone Change and Zoning Text Amendments shall be adopted by ordinance.

LSAP AMENDMENT

Modification to the LSAP shall be subject to the same procedures as described for Plan adoption, including a public hearing and recommended action by the Planning Commission, and a public hearing and approval by resolution by the City Council. Amendments to the LSAP shall be analyzed for consistency with the General Plan and Zoning Ordinance, and may require corresponding amendments to those documents.

ARCHTECTURAL REVIEW

All development projects within the LSAP Plan Area shall be subject to Architectural Review in accordance with the procedures described in Chapter 18.76 of the Santa Clara Zoning Ordinance. These procedures are intended to promote development in accordance with the LSAP concept, policies, and guidelines, as well as any other applicable City ordinances and standards. In particular, proposals shall meet the development standards and substantially conform to the design recommendations as set forth in the LSAP.

ADDITIONAL APPLICANT APPROVALS

Further approvals may be required for a development project to move forward. In particular, it is anticipated that subdivision approvals may accompany an applicant's proposal.

- *Subdivision Approval:* Approval of any proposed Subdivision Map shall be in accordance with procedures adopted by State Law and *the Santa Clara City Code* (Chapter 17.05). The subdivision of property shall be consistent with the intent and requirements of the LSAP, and other applicable regulations and standards.
- *Use Permits:* Application for a Use Permit shall be processed in accordance with *the City of Santa Clara Zoning Ordinance* (Chapter 18.110). Additionally, approval of a Use Permit shall be consistent with the intent and requirements of the LSAP, and other applicable regulations and standards.

11.4 DEVELOPMENT PHASING

The size and extent of the LSAP suggests the need for phased development, the timing of which will ultimately depend upon a variety of factors including the regional economy, real estate market conditions, and capital markets. For this reason, phasing is difficult to predict with certainty; therefore, the LSAP presents a conceptual phasing plan that is adaptable to changes in market conditions and permits adjustments in the sequencing of development.

PHASED APPROACH

It is important to consider that most of the property in the Plan Area is owned or controlled by four entities: 1) SummerHill Housing Group (25.6 acres); 2) The Sobrato Organization (20.7 acres); 3) Westlake Urban, LLC (3.9 acres); and 4) True Life Companies (1.8 acres). These entities (or subsequent property owners) will dictate the timing of development on their respective properties that will trigger the need for construction of public improvements. SummerHill Homes, Westlake Urban and True Life Companies have already submitted development proposals which have been incorporated into the LSAP, and it is anticipated that development will commence with their properties shortly after approval of the LSAP.

PHASING CONCEPT

FIG 11-1 presents a preliminary phasing concept for the LSAP's ultimate build-out of up to 3,500 residential units, and approximately 100,000 square feet of neighborhood-serving retail, restaurant, and services uses. It is expected that build-out will occur over a roughly 15-20 year period. The necessary public improvements will need to be fully funded and built in a timely fashion that is coordinated with the project's overall phasing.

- *Phase 1* is projected to be comprised of the SummerHill Homes, Westlake Urban, and True Life Companies proposals, covering most of the western half of the Plan Area (equal to about 48% of the 65-acre site). It is anticipated that these developers will seek entitlements immediately following approval of the LSAP; construction is assumed to commence at the end of 2016, with completion by 2022. Altogether, the three development proposals will provide 1,364 residential dwelling units, 37,500 square feet of retail space, and 4.3 acres (187,015 square feet) of public open space (consistent with the numbers analyzed at the project level evaluation of the EIR).
- *Phase 2* is projected to consist of the Sobrato controlled properties. To date, this entity has not submitted a proposal for development; therefore commencement of development of these properties is expected to occur subsequent to the proposals described in Phase 1. It is estimated that this phase will provide somewhere between 1,200 and 1,500 dwelling units, 55,000 square feet of retail space, and 1.0 acre of public open space.
- *Phase 3* is anticipated to encompass development of the balance of the Plan Area; no development proposals have yet been submitted for these properties. It is estimated that this phase will provide nearly 495 dwelling units, 7,000 square feet of retail space, and 1.0 acre of public open space.

FIG 11–1: PHASING STRATEGY

PHASE 1 BUILD-OUT

Residential: 1,364 dwelling units +/-
Retail + Services: 37,500 sq.ft. +/-
Open Space: 4.3 acres +/-
(187,015 sq.ft. +/-)

PHASE 2 BUILD-OUT

Residential: 1,147 dwelling units +/-
Retail + Services: 55,000 sq.ft. +/-
Open Space: 1.0 acre +/- *

PHASE 3 BUILD-OUT

Residential: 495 dwelling units +/-
Retail + Services: 7,000 sq.ft. +/-
Open Space: 1.0 acre +/-

*Note:

1. The phasing drawings are conceptual only; specifics may change during implementation;

2. Phasing strategy is based on the conceptual development yield summary (*Table 4-4*);

3. Alternative locations of the floating park may be considered during implementation.

11.5 DEVELOPMENT FINANCING

The following strategy and tools for development financing are intended to provide a framework that will guide the timing and delivery of required on- and off-site infrastructure and other public improvements. As each of the property owners within the LSAP moves forward with their respective development plans, more certainty will be brought to the development program, to the specific infrastructure improvements required, and to the associated costs of construction. It is expected that a more detailed Public Improvements Financing Plan will be prepared as a part of the next stage of implementation.

FUNDING & FINANCING STRATEGY

The funding and financing of infrastructure and other public improvements associated with development of the LSAP will proceed based on the following strategies:

- *Strategy 1:* Public infrastructure improvements shall be built in a timely fashion to serve future residents, workers, and visitors of the LSAP.
- *Strategy 2:* Future private development is expected to play a major role in funding the costs of required public improvements, including payment of applicable development impact fees.
- *Strategy 3:* Private development funding for public improvements will be supplemented by governmental grant programs and other public funding to the extent available.
- *Strategy 4:* The costs of public improvements shall be allocated among the property owners in the LSAP based upon a fair share allocation of benefit.
- *Strategy 5:* If there is a need for any developer to oversize public improvements beyond its fair share allocation, that developer will be reimbursed by future developers' fair share as projects are developed, or receive applicable City fee credits.
- *Strategy 6:* Construction of all public improvements shall conform to existing City-wide standards as set forth in the General Plan, Zoning Code, Public Works standards, and elsewhere, except as otherwise specified in the LSAP.

REQUIRED PUBLIC IMPROVEMENTS

The LSAP identifies a variety of public improvements that are required for successful project implementation; reference Chapter 9 (Infrastructure Program) for a description of public infrastructure improvements. In summary, public improvements will encompass roadway and circulation improvements; water, sewer, and storm drain improvements and upgrades; as well as streetscape, open space, and landscape enhancements. In addition, implementation of the LSAP will necessitate upgrades to the existing Fire Station 9 located on Corvin Drive within the Plan Area. A specific scope of work has not been determined for the fire station upgrade; however it is expected to encompass improvements to seismically reinforce the building structure.

PUBLIC IMPROVEMENT COSTS

Estimates of the cost for required public improvements have not been prepared as part of the LSAP. It is recognized that the scope of public improvements will be refined over time to better reflect more definitive development proposals by each of the property owners in the Plan Area. As such, detailed cost estimating is expected to take place in the next phase of project implementation as part of a Public Improvements Financing Plan. Costs will need to account for: 1) pre-development engineering and design; 2) indirect and administrative costs (i.e., "soft costs"); 3) direct labor and materials for construction; and 4) financing costs, such as bond issuance.

Costs incurred by the City in the delivery of public improvements shall be subject to reimbursement, including planning studies and land acquisition for public improvements. In addition to upfront capital costs to construct improvements, there shall also be a proper accounting of costs associated with ongoing maintenance and long-term lifecycle costs. As appropriate, property owners within the Plan Area shall dedicate land to the City upon completion of public improvements.

TABLE 11–1: REQUIRED PUBLIC IMPROVEMENTS

	Quantity	Cost	Implementing Agency
Roadways			
New Roads	389,075 SQ.FT	TBD	City Public Works
Streetscape			
Sidewalks	114,230 SQ.FT	TBD	City Public Works
Curb/Gutter	10,070 LF	TBD	City Public Works
Street Lighting		TBD	City Public Works
Signage and Wayfinding		TBD	City Public Works
Utilities			
Storm Drain	7,545 LF	TBD	City Public Works
Sanitary Sewer	8,450 LF	TBD	City Public Works
WaterMain	12,065 LF	TBD	City Public Works
Parks and Open Space			
Landscape Area	64,327 SQ.FT	TBD	City Parks and Rec
Creek Trail Improvements		TBD	City Parks and Rec
Bioretention Area	20,938 SQ.FT	TBD	City Public Works
Other Improvements			
Fire Station 9 Upgrade	16,560 SQ.FT	TBD	City Fire Dept

ALLOCATION OF COSTS

Because public improvements will provide benefit to all or most future development in the Plan Area, it is appropriate that the cost of public improvements is shared among future developments. This shall be accomplished through a fair share allocation of benefit; *TABLE 11-2* outlines a methodology to allocate fair share costs within the Plan Area. Cost allocations will be calculated based upon engineering studies conducted as part of the Public Improvements Financing Plan.

TABLE 11–2: ALLOCATION METHODOLOGY FOR PUBLIC INFRASTRUCTURE COSTS

Public Improvement Type	Basis for Allocation
Roadway Improvements	Average Daily Trips (ADTs) generated from Proposed Development
Streetscape Improvements	Average Daily Trips (ADTS) generated from Proposed Development
Parks & Open Space	Equivalent Dwelling Units (EDUs) from Proposed Development
Sewer	Gallons / Day usage from Proposed Development
Water	Gallons / Day usage from Proposed Development
Storm Drain	Impervious Area of Proposed Development
Planning Study Costs	Developable Acreage

FUNDING & FINANCING SOURCES

A wide range of sources is potentially available to fund the costs of necessary public improvements. A summary of the most common approaches and tools for financing public improvement is provided in *TABLE 11-3*. It is often preferable to fund public improvements on a "pay-as-you-go" basis, whereby improvements are built as funding sources become available. Nonetheless, it is possible that some form of debt financing will be needed to generate the significant upfront funding to proceed with public improvements in a timely fashion.

TABLE 11–3: OVERVIEW OF POTENTIAL FUNDING AND FINANCING SOURCES

	Source Description	Implementation Considerations
Mello Roos Community Facilities District Financing (CFD)	A land secured financing mechanism used to generate a long term funding source for needed public facilities. Funds are collected via an assessment on all properties within the district. Funds can be used for both construction as well as ongoing maintenance.	Generally requires agreement of two-thirds of property owners or registered voters to form the CFD.
Landscaping & Lighting District (LLD)	A funding source for ongoing operational and maintenance costs of various public facilities.	Requires agreement of a majority of property owners to participate in the LLD. Assessments must be benefit based.
Developer Contributions	Developers may directly fund the construction of public improvements that need to be built as a precondition of constructing their private projects.	
Reimbursement Agreement	If oversizing on infrastructure is required, reimbursement agreements can be put in place so that there is a mechanism for early developers to be reimbursed a fair share of costs from developers of future projects.	The need to oversize infrastructure will depend upon the extent to which infrastructure can be phased. Ideally, oversizing of infrastructure will not be necessary.
Business Improvement District (BID)	Assessments to provide for marketing, promotion, special events, security and additional maintainace costs of a commercial district.	Subject to approval by affected commercial property owners and /or bussiness owners.
City Development Impact Fees	Fee revenue generated from new development projects to mitigate impacts. Can be from both existing impact fees as well as newly adopted impact fees. The City of Santa Clara has existing impact fees for traffic mitigation, sanitary sewer, strom drain and parks.	New impact fees will require a nexus study consistent with Mitigation Fee Act (Government Code Section 66000). Fees cannot be used to correct existing defeciencies.
Government Grants	Grants available through federal, state and regional programs. Examples include the second round of MTC's One Bay Area (OBAG) grant program for roadway and other traffic improvements and AB 32 Cap and Trade Auction Funds. The latter program will reserve funds specifically for affordable housing projects and sustainable community development projects.	Government grant programs are competitive and therefore difficult to rely upon as a certain funding source. Nonetheles, the City and property owners in the plan area can position themselves to secure grant funding based on the allocation criteria.
City Contributions	The City of Santa Clara may contribute to certain public facilities to the extent funding is available.One infrastructure finance tool available to public jurisdictions is the Enhanced Infrastructure Finance District(EIFD), a form of property tax increment financing.	Priority projects that could potentially be funded by the City should be included in the City's Capital Improvements Program(CIP). If property tax increment financing is utilized, the City will need to consider the fiscal impacts that might result.

For financial planning purposes, it is useful to evaluate and identify the sources of funding and financing considered most applicable to the LSAP, as well as the types of improvements for which those sources are likely to be targeted. *TABLE 11-4* identifies some of these sources, recognizing that the ultimate strategy for funding the LSAP's public improvements will depend upon a variety of factors; these factors include the phasing of development; the timing and cost of public improvements; and the capacity of the project to secure outside funding, including government grants. It is advisable that development of the LSAP take into consideration a wide range of funding and financing tools, with contingencies set in place if certain funding sources prove unavailable.

TABLE 11–4: HIGH POTENTIAL FUNDING AND FINANCING SOURCES

	Community Facilities District	Landscaping and Lighting District	City Impact Fees	Developer Direct Funding
Roadways				
New Roads	●			●
Grade-separated Crossing	●			
Streetscape				
Sidewalks	●			●
Curb/Gutter	●			●
Street Lighting	●	●		●
Signage and Wayfinding	●	●		●
Utilities				
Storm Drain			●	●
Sanitary Sewer			●	●
WaterMain			●	●
Parks and Open Space				
Landscape Area	●			●
Creek Trail Improvements	●			●
Bioretention Area	●			●
Other Public Improvements				
Fire Station 9 Upgrade				

*Note:

● Funding and Financial Sources for Construction

● Funding and Financial Sources for Maintenance

IMPLEMENTATION STEPS

The following outlines recommended implementation steps to ensure that public improvements are delivered in an orderly manner.

- Prepare a Public Improvements Financing Plan to address: infrastructure sequencing; cost estimates based on preliminary engineering studies; cost allocation methods; and detailed funding and financing measures.
- Undertake the required nexus studies and adopt development impact fees, if appropriate.
- Conduct the necessary property owner vote to create a Community Facilities District and/or other assessment district, if applicable.
- Secure funding, complete the engineering and design of public improvements, and commence construction per approved phasing.
- Condition the approval of private development projects on the provision of on-site infrastructure improvements.
- Update the Public Improvements Financing Plan in the event of a significant change in conditions, such as: an adjustment in land use and development intensity; modification in the development program; and identification of additional infrastructure needs.
- Update the Fiscal Impact Study to assess whether the project will continue to yield a positive fiscal impact on the City's General Fund if there are significant changes to the overall development program, such as the mix of residential and retail uses.*

** As part of preparation of the LSAP, Keyser Marston Associates prepared a fiscal impact study which determined that the LSAP land use plan will generate a positive fiscal impact for the City General Fund.*

APPENDICES

A. GLOSSARY

A

Association of Bay Area Governments (ABAG): A regional planning agency incorporating various local governments in the San Francisco Bay Area in California, develops regional plans regarding to land use, housing, environmental quality, and economic development.

Altamont Corridor Express (ACE): California's newest commuter rail service, linking the Central Valley with the Silicon Valley using existing rails.

American Disabilities Act (ADA): A civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public.

Arcade: A covered walkway enclosed by a line of arches on one or both sides.

Arterial: A roadway that typically accommodates 10,000-40,000 intra-community and highway access vehicle trips daily at speeds of 30-40 mph. Access to arterials is preferred via collector and local streets, but direct access to adjoining parcels is common.

B

Balcony: A platform extending from the façade of a building and surrounded by railing.

Bicycle Lane (Class II facility): A lane expressively reserved for bicycles identified by special signage, pavement markings or lane stripes on a street or roadway in addition to any lanes for use by motorized vehicles.

Bicycle Path (Class I facility): A paved route not on a street or roadway, and expressively reserved for bicycles traversing an otherwise unpaved area. Bicycle paths may parallel roads but are typically separated by landscaping or physical barriers.

Bicycle Route (Class III facility): Roadways recommended for bicycle use and often connecting to bike lanes and bike paths are defined as bike routes. Routes are designated with signs only and may not include additional pavement width.

Buffer: Open spaces, landscaped areas, fences, walls, berms or any combination thereof used to physically separate or screen one use or property from another so as to visually shield or block noise, lights, or other nuisances.

Building Height: The vertical distance from the average contact ground level of a building to the highest point of the structure, excluding features that are removable such as roof equipment, equipment screens, antennae and the like.

Bulb-outs: Curb extensions that extends the sidewalk into the parking lane to narrow the roadway and provide additional pedestrian space at key locations; they can be used at corners and at mid-block.

Butt-joint (building materials): A joint formed by two pieces of wood or metal united end to end without overlapping.

C

California Environmental Quality Act (CEQA): The goal of CEQA is to develop and maintain a high-quality environment now and in the future, while the specific goals of CEQA are for California's public agencies to: 1) identify the significant environmental effects of their actions; and either 2) avoid those significant environmental effects where feasible or 3) mitigate those significant environmental effects where feasible.

Caltrain: A commuter rail line serving the San Francisco Peninsula and Santa Clara Valley. Caltrain is governed by the Peninsula Corridor Joint Powers Board (PCJPB).

Canopy (architecturally): An overhead structure with a fabric or metal covering attached that provides shade or shelter from weather conditions. (landscaping) Trees coverage that frames landscaping and provides shading.

Climate Action Plan (CAP): A set of strategies intended to guide efforts for climate change mitigation. Santa Clara Climate Action Plan (adopted December 3, 2013) outlines the strategies which will reduce greenhouse gas (GHG) emissions and provide energy, fuel, and monetary savings while improving quality of life for the Santa Clara community.

Collector: Streets providing traffic circulation for residential and commercial uses at travel speeds of 25 to 35 miles per hour. Typically, with two to four lanes and rights-of-way of 55 to 75 feet, collector streets penetrate residential neighborhoods, distributing trips from Arterials into local streets and neighborhoods. They usually channel traffic from local streets to Arterials and provide pedestrian and bicycle links between destinations.

Complete Streets: Also known as livable streets, complete streets are designed to be shared by cars, transit, bicyclists, and pedestrians. Complete Streets include facilities that provide space for all transportation modes and often include sidewalks, bicycle lanes, street trees, and landscaping.

D

Density: The average number of resi--ential dwelling units per acre. Densities specified in the General Plan are expressed in units per gross developable acre.

Design Guidelines: Criteria established to guide development toward a desired level of quality through the design of the physical environment, and which are applied on a discretionary basis relative to the context of development.

Dwelling Unit: A room or group of rooms (including sleeping, eating, cooking and sanitation facilities, but not more than one kitchen), which constitutes an independent housekeeping unit, occupied or intended for occupancy by one household on a long-term basis. The place of customary abode of a person or household which is either considered to be real property under State law or cannot be easily moved.

E

Easement: The right to use property owned by another for specific purposes or to gain access to another property. Utility companies often have easements on private property to install and maintain utility facilities.

Elevated Single Family Home: Or "E-homes," refers to vertically-oriented, detached, single family homes on small lots.

Elevated Townhome: Or "E-towns," - usually refers to three-level townhomes with garages on the ground level, living room, kitchen and patio on the 2nd level, and bedrooms on the 3rd level.

Electric Vehicle Charging Station (EVCS): a public or private parking space that is served by battery charging station equipment that has as its primary purpose the transfer of electric energy (by conductive or inductive means) to a battery or other energy storage device in an electric vehicle.

Environmental Impact Report (EIR) : A report required pursuant to the California Environmental Quality Act (CEQA) that assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action and identifies alternatives or other measures to avoid or reduce those impacts. (See "California Environmental Quality Act.")

F

Façade: The face of a building, especially the principal front that looks onto a street or open space.

Fenestration: An arrangement of windows and doors on the elevations of a building.

Flat: A traditional multi-family residential building type that features dwelling units with all rooms on one floor or level; flats may encompass either rental product or a condominium form of ownership.

Floor Area Ratio (FAR): The gross floor area permitted on a site divided by the total net area of the site, expressed in decimals to one or two places.

Focal Point: A prominent structure, feature or area of interest or activity.

Frontage: The boundary between a plot of land or a building and the road onto which the plot or building fronts. In applying zoning bylaws and property tax, the distance is considered important for certain types of commercial and retail real estate.

G

Gateway: The design of a building, site or landscape to symbolize an entrance or arrival to a special district (area).

General Plan: A compendium of city or county policies for its long-term development, in the form of maps and accompanying text. A general plan is a legal document required of each local agency by the State of California Government Code Section 65301 and adopted by the City Council or Board of Supervisors.

H

Hardscape: Hard landscape materials in the built environment that are incorporated into a landscape.

J

Jalousie: A blind or shutter made of a row of angled slats.

Joint Powers Board (JPB): One of VTA's partner agencies that provide residents of Santa Clara County with transportation alternatives.

L

Landmark: Building, structure and space which creates distinct visual orientation points that provide a sense of location to the observer within the neighborhood or district, such as that created by a significant natural feature or by an architectural form which is highly distinctive relative to its surrounding environment.

Landscaping: Planting (including trees, shrubs and ground covers) suitably designed, selected, installed, and maintained to permanently enhance a site or roadway.

Land Use: The activity or purpose for which land or a building is used or intended. Common types of land use include residential, commercial, industrial and open space.

Land Use Designation: One specific category in a classification series of appropriate use of properties. A designation has an associated list of applied land use and management policies.

Lattice: A structure, such as a window, screen, or trellis, made of or containing such a framework.

Light Trepass: Light emitted by a luminaire that shines beyond the property on which the luminaire is installed.

Local Street: Streets whose primary intended purpose is to provide access to fronting properties are designed for lower traffic volumes and provide primary access for abutting residential and neighborhood commercial properties. Typically, these streets are two lanes and have a 40- to 60-foot right-of-way, with travel speeds of 25 miles per hour.

Lofts: Or "loft-style homes," a multi-family residential building type that features dwelling units characterized by high ceilings, large windows and open floor plans.

Luminaire (fixture): A complete lighting unit consisting of a light source, pole, and all mounting brackets, if appropriate, and necessary mechanical, electrical and decorative parts.

M

Mass: The combination of the three dimensions of length, height, and depth which give a building its overall shape; a building is often composed of many masses, hence the term massing, which is often used to describe the form or shape of structures.

Median Refuge (pedestrian refuge): A pedestrian refuge is a median typically located in the middle of the road to allow pedestrians to cross in two stages.

Metropolitan Transportation Commission (MTC): A government agency responsible for regional transportation planning and financing in the San Francisco Bay Area. It was created in 1970 by the State of California, with support from the Bay Area Council, to coordinate transportation services in the Bay Area's nine counties.

Miter-joint (materials): A joint made by beveling each of two parts to be joined, usually at a 45° angle, to form a corner, usually a 90° angle.

Mixed-Use: The combination of various uses, such as office, commercial, institutional and residential, in a single building or on a single site in an integrated development with significant, functional interrelationships and a coherent physical design. A "single site" may include contiguous properties.

Modulation: Variation in the plane of a building wall, often used to provide visual interest.

Multi-family Residence: Any type of residential construction with multiple dwelling units owned by one or more parties.

Multi-modal: Planned or developed to support multiple modes of transportation, such as movement by automobiles, mass transit, bicycles or pedestrians.

N

Nook: A small space or corner that is inside something. : a part of a room (such as a corner) that is used for a specific purpose.

O

Open Space: Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation or (4) public health and safety.

Ornamental Planting (Trees): Shrubs or other planting (trees) with unique decorative characteristics, such as colorful berries, flowers, or foliage.

P

Parcel: A lot, or contiguous group of lots, in single ownership or under single control, usually considered a unit for purposes of development.

Parapet: A low protective wall along the edge of a roof, bridge, or balcony.

Pavement: A created surface, such as brick, stone, concrete or asphalt, placed on the land to facilitate passage.

Pedestrian-oriented: An environment designed to make movement by pedestrians fast, attractive and comfortable for various ages and abilities; considerations include separation of pedestrian and auto circulation, street furniture, clear directional and informational signage, safety, visibility, shade, lighting, surface materials, trees, sidewalk width, intersection treatment, curb cuts, ramps and landscaping.

Pedestrian Passage: Pedestrian-only connectors located between buildings providing shortcuts through long blocks, or connecting rear parking areas with street frontages.

Pergola: A landscaping structure consisting of four columns or posts to define a space, topped with beams and open rafters.

Podium: A section of a building at its base, which is differentiated from the spaces above it by its physical form or by the type of space inside it.

Private Realm: The private realm includes all privately owned land and improvements, including buildings, private parking lots, and landscaping.

Public Realm: The public realm includes all publicly owned land and improvements, including roads, sidewalks, public parking lots, open space, etc.

R

Right-of-Way: A continuous strip of land occupied or intended to be occupied by certain transportation and public use facilities, such as roadways, railroads and utility lines.

Raised Crosswalk: A raised crosswalk is a facility designed to make crossing the road easier for pedestrians and which typically raises the pavement to the level of the sidewalks. Raised crosswalks are often made of a textured and colored material to indicate clearly that the space is meant to be shared with pedestrians.

Regional Housing Needs Allocation (RHNA): The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its Housing Element. As part of this process, the California Department of Housing and Community Development (HCD) identifies the total housing need for the San Francisco Bay Area for an eight-year period (in this cycle, from 2014 to 2022).

S

Santa Clara Valley Transportation Authority (VTA): The regional Congestion Management Agency for Santa Clara County. Responsibilities include the development, operation and maintenance of the bus and light rail system within the County and managing the County's blueprint to reduce congestion and improve air quality.

Scale: The relative relationship in size of buildings and other objects to one another.

Setback: A line parallel to each property line on the perimeter of a Block and rising vertically from the ground at a distance regulated by the Setback requirements set up in the Development Standard.

Sharrow: A street marking placed in the travel lane to indicate a shared lane where bicyclist would preferably cycle any portion of the full width of the lane.

Sight Triangle: A triangle at an intersection, formed by the two roads or rights-of-way and a third line, which must be kept clear of obstructions such as hedges so that people in one road can see cars approaching on the other.

Specific Plan: As described in Government Code Section 65451, a specific plan is a regulatory document that provides detailed guidance and standards for a specific area or project. A specific plan details the overall development scheme, establishes development standard and guidelines that future projects in the plan area will follow, and identifies the public facilities and infrastructure that required to support the development of the project.

Speed Table: A raised crosswalk/road hump that is an effective means of retrofitting streets to encourage reduced speeds in a pedestrian oriented areas.

Stoop: A small staircase ending in a platform and leading to the entrance of an apartment building or other building.

Storefront: A street facade with the appearance of multiple stores, including significant display windows and multiple entrances.

Streetscape: The distinguishing elements and character of a particular street as created by its width, degree of curvature, paving materials, design of the street furniture, pedestrian amenities and setback and form of surrounding buildings.

Street wall: The condition of enclosure along a street created by the fronts of buildings, and enhanced by the continuity and height of the enclosing buildings.

Subdivision: A subdivision is a parcel of land divided from a larger area. Its purpose is to split a large tract of land into smaller ones that are easier to develop and can be developed independently of one another to increase growth and maximize the use of space.

T

Townflat: A residential building type that usually refers to a single-story to three-story condominium-style townhomes, which may or may not have a shared entry space.

Townhome (Townhouse): A type of home that is usually constructed as a two or three-story unit with a common wall or walls bordering the adjacent unit, with a ground floor entry. The property owner not only owns his or her respective unit, but also an undivided interest in the associated common area.

Transportation Demand Management (TDM): A program of actions designed to maximize the efficiency of the transportation system (infrastructure and public transit) by promoting alternatives to single occupancy vehicle commuting, such as car and vanpools, transit ridership, bicycling and walking.

Traffic Calming: A combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users

Transit-Oriented Development (TOD): A mixed-use community within an average of 2,000 feet of a transit stop. TODs mix residential, retail, office and public uses in a walkable environment, to promote travel by transit, bicycle or foot as an alternative to single occupancy vehicles.

Transit-supportive: The elements of urban form and design which make transit more accessible and efficient, these ranging from land use elements (i.e. locating higher density housing and commercial uses along transit routes) to design (i.e. street layout which allows efficient bus routing) and encompassing pedestrian-oriented features as most transit riders begin and end their rides as pedestrians.

Trellis: An architectural structure, usually made from an open framework or lattice of interwoven or intersecting pieces made to support and display climbing plants.

U

Urban Design: The planning and design of built environment focusing on the three dimension form and function of public and publicly accessible space.

V

Vehicle Miles Traveled (VMT): A measurement of miles traveled by vehicles in a specified region for a specified time period.

W

Wayfinding: The information available to people which they need to find their way around the city (area) and can be verbal, graphic, architectural and spatial.

Z

Zoning: Division of the city into areas for which allowable uses and building limitations are specified.

Zoning Ordinance: Written regulations and laws that define how property in specific geographic zones can be used. Zoning ordinances specify whether zones can be used for residential or commercial purposes, and may also regulate lot size, placement, bulk (or density) and the height of structures.

B. PLAN CONTRIBUTORS

PREPARED FOR:

The City of Santa Clara

PREPARED BY:

CALLISONRTKL, Inc.
Los Angeles- Planning and Urban Design Studio

In collaboration with:

Circle Point

BKF Engineers

Fehr & Peers

Keyser Marston Associates