6 | PRELIMINARY CONCEPTS

Three preliminary land use concepts, a framework plan, parking strategies and infrastructure planning have been prepared for the study area based on technical analysis and comments received from the community and Technical Advisory Group (TAG). A summary of the key features of these concepts include:

- Framework Plan. A conceptual framework of streets and blocks is proposed for those areas where land use change is likely or encouraged.
- Land Use Concepts. Three land use concepts with different mixes of use and density are presented.
- Transportation Improvements. A variety of transportation improvements will ensure good access to the Caltrain station and to districts and neighborhoods within the study area.
- Parking Strategies. Initial recommendations for modifications to parking requirements for all land uses is discussed.
- Utilities and Infrastructure. Probable utility improvements that will be occasioned by new development are presented.

THE FRAMEWORK PLAN

The framework plan is the system of streets and blocks that determine the structure of an urban area. It defines where circulation for motor vehicles, pedestrians, bicycles and transit will occur, and where uses and buildings will be located. All cities and towns have an urban framework. Historically, most cities throughout the west were built on a grid framework, comprised of blocks of 250 to 300 feet on a side. This resulted in a walkable pattern that was also well-suited to local vehicular travel and to development of a wide variety of uses. This pattern can be seen in the downtown area of Sunnyvale.

Following World War II, with the growth of automobile travel and the separation of uses into larger single use parcels and districts, this framework has often been lacking. Circulation by any mode other than motor vehicles is often not a priority in such situations and access by pedestrians, bicycles and transit is often virtually non-existent. This is an important issue in areas adjoining transit facilities, where convenient access by all modes is a high priority. The portion of the study area north of the Caltrain tracks is dominated by parking lots and lacks a street network accessible to all modes of travel. North and south of the station, access to the station is severely limited and there is only one below-grade crossing, at the station near San Zeno Way.

Figure 6.1 shows the limited nature of the existing street network in the vicinity of the Lawrence Caltrain Station. As a first step in the process of creating the three land use concepts, a conceptual framework of streets and blocks was established.

Figure 6.1: Existing Street Network

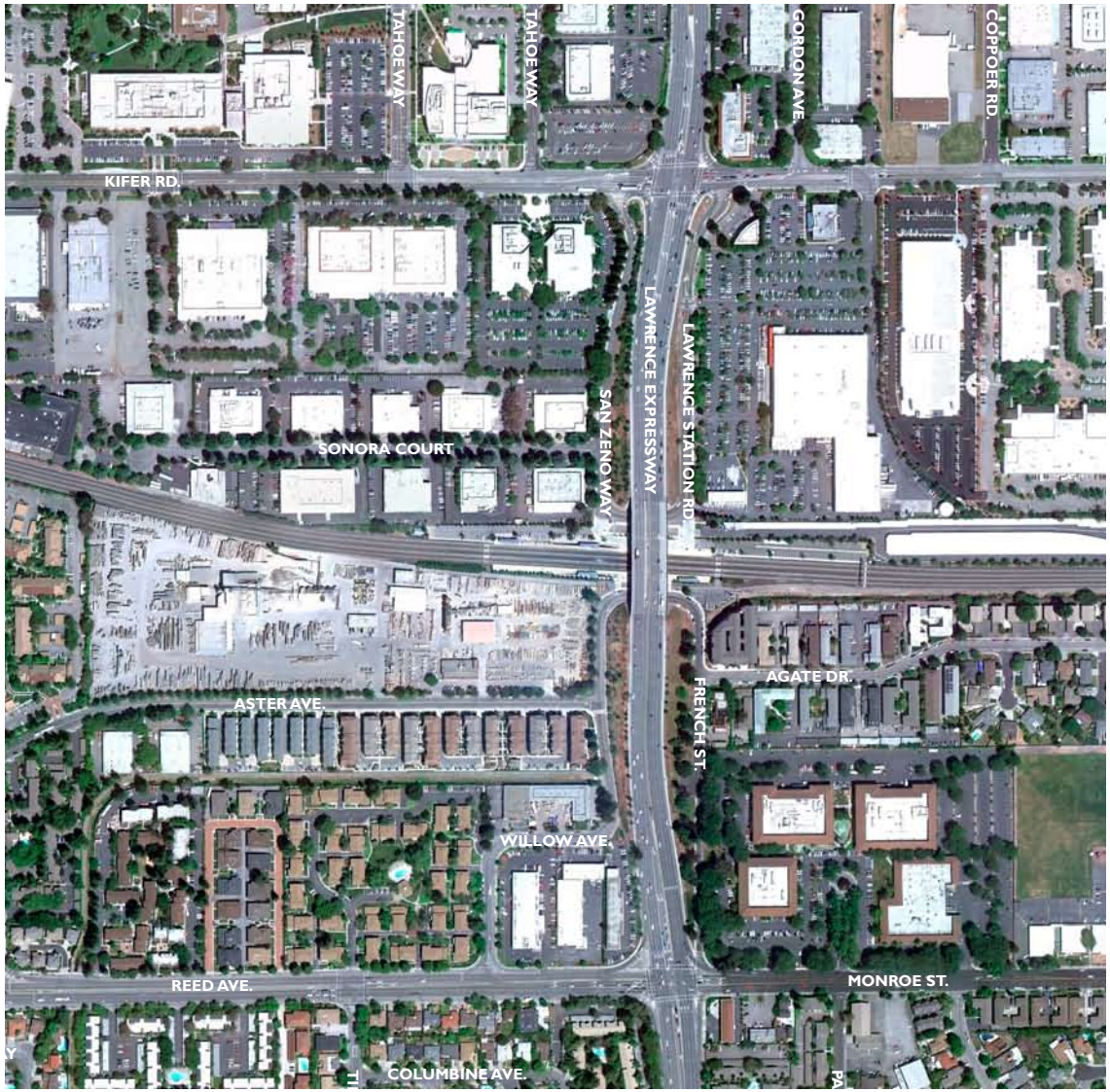
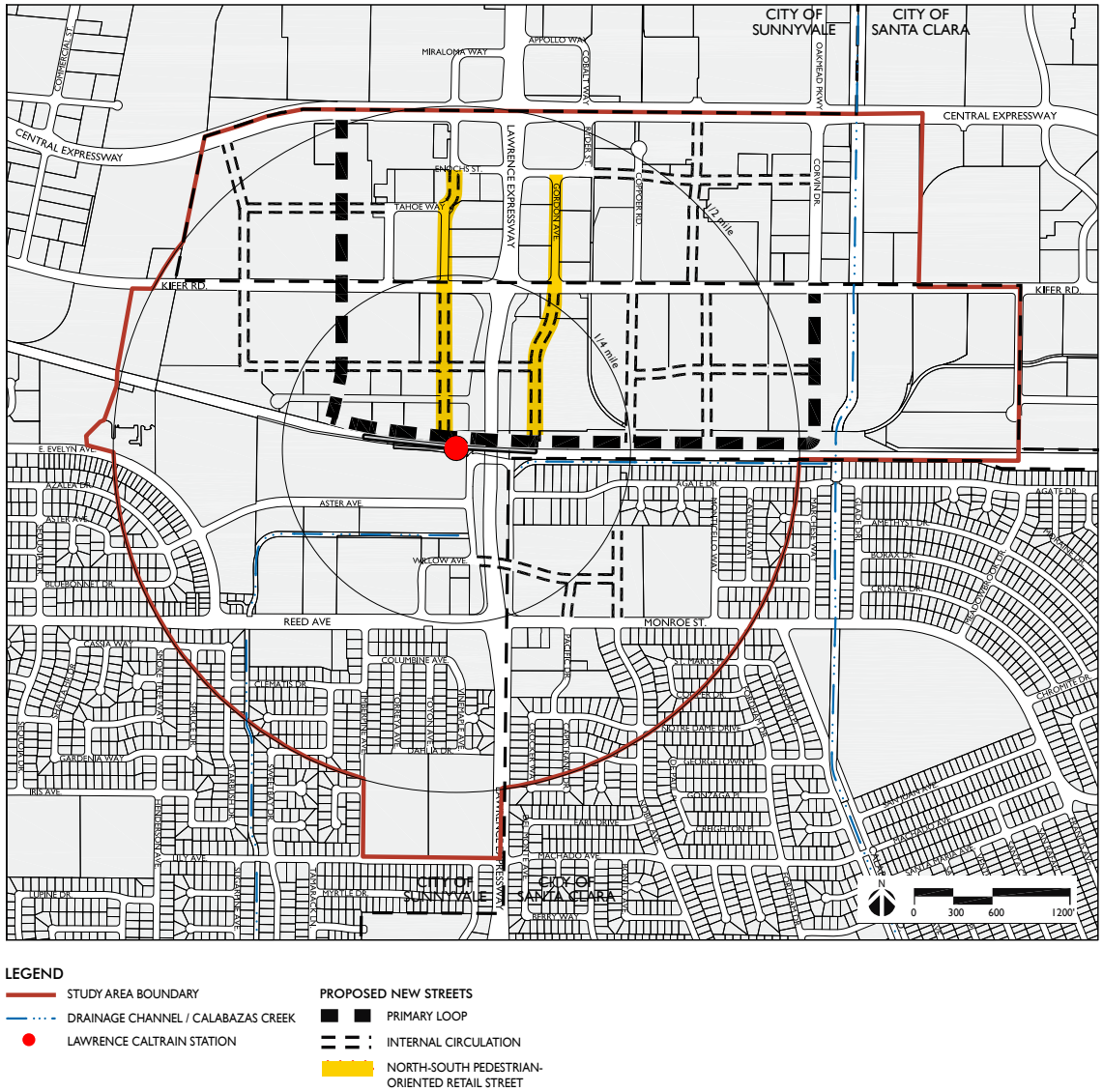


Figure 6.2: Conceptual Framework Plan



Key assumptions of the framework plan include:

- Retain existing framework of streets and blocks in existing residential areas with only minor improvements to provide safer street crossings and minor access improvements.
- Establish a grid of streets and blocks at a finer grain than currently exists in the area north of the Caltrain tracks, with a pattern of blocks no longer than 400 feet.
- Emphasize missing elements of north-south access to Lawrence Station.
- To the extent possible, locate new streets along property lines between parcels to avoid impacts on building operations, and to share benefits between property owners. This will also allow phased development on a parcel-by-parcel basis at the discretion and timing of property owners as they seek to redevelop their land.

It should be noted that all new alignments of the framework plan, illustrated in Figure 6.2, are conceptual in nature and do not represent final specific alignments.

The Primary Loop

The Primary Loop is intended to provide direct north-south access linking Central Expressway with the Caltrain Station area. It will also serve as the primary north-south street through the neighborhood on the east and west sides of the Lawrence Expressway north of the Caltrain tracks.

East of the Lawrence Expressway, existing Corvin Drive will form a portion of the Primary Loop, providing full access to Central Expressway at the existing intersection. Corvin Drive will be extended south to the Caltrain tracks to complete the connection to the station area.

West of the Lawrence Expressway, the north-south leg of the Primary Loop will traverse the Sunnyvale and Santa Clara portion of the study area along a new alignment that will connect with the Central Expressway northwest of Tahoe Way. Since Central Expressway is intended to be a limited-access facility, detailed traffic and engineering analyses will be needed to determine the feasibility, type and appropriate location for this intersection. This will require coordination with Santa Clara County (whose jurisdiction controls the Expressway) and the City of Santa Clara.

The southern leg of the Primary Loop, running east-west, will be located within or directly adjacent to the Caltrain right-of-way and parking lots. This portion of the Primary Loop and adjacent Caltrain right-of-way will be designed to provide direct access to the Caltrain station for passenger pick-up and drop-off, parking, pedestrians and buses.

The design of the Primary Loop is envisioned as a richly landscaped, green boulevard. Preliminary traffic review suggests the street will contain three lanes (one lane in each direction with a landscaped center median with left-turn pockets), parking, bicycle lanes and a pedestrian zone with wide sidewalks and street trees. The Loop can also provide an important bus transit link which is currently not available, serving the new neighborhood and providing regional access to the Lawrence Station.

San Zeno Way and Lawrence Station Road

These two streets currently provide the only vehicular access to the Lawrence Station from the north. Restrictions to turning-movements at the intersection of Lawrence Expressway and Kifer Road severely limits auto access to these streets. The only driveways providing property access from either street is to the Costco parking lots. The Primary Loop will greatly improve access to the station for all modes of travel, thereby eliminating the need for San Zeno Way and Lawrence Station Road. Removal of these streets and/or conversion to service aisles will allow this land to be used for other purposes, including potential development.

New North-South Pedestrian-Oriented Retail Streets

Future retail uses and services will be focused along two new pedestrian-oriented mixed-use streets that run north-south on both sides of Lawrence Expressway mid-way between the Expressway and the Primary Loop. These streets will form the walkable heart of the new neighborhoods, and will directly connect to the Lawrence Station area.

On the east, the alignment of the new street will include the existing Gordon Avenue in Santa Clara. A new alignment will extend Gordon Avenue south adjacent to the existing Costco building to the Primary Loop near the station. This segment will thus provide front door presence along the street for the Costco store. By eliminating the need for Lawrence Station Road, it will also allow for new development, or structured parking in the parking lot area.

On the west, the new pedestrian-oriented retail street will include the existing Tahoe Way, extending south across Kifer Road to the station. Like the eastern street, it will provide adequate land depths to Lawrence Expressway for new development and improved land utilization efficiency.

(above) The Primary Loop will be a well-landscaped street with one vehicle lane in each direction, a landscaped median, bicycle lanes, parking and an attractive pedestrian zone.

(facing page) The two North-South Pedestrian-Oriented Retail Streets, located parallel to Lawrence Expressway, will include active uses such as outdoor seating, and will be attractive, pedestrian-oriented mixed-use streets.

Murphy Avenue, Sunnyvale

Shattuck Avenue, Berkeley

Santana Row, San Jose

Bethesda, Maryland

The character of the two north-south pedestrian streets is envisioned as a walkable, mixed-use neighborhood commercial street or main street similar to Murphy Avenue in Sunnyvale, Santana Row in San Jose, or Castro Street in Mountain View. Building heights and densities, however, are envisioned to be more like Santana Row than Murphy Avenue.

The streets will contain two lanes (one lane in each direction), on-street parking, and a wide pedestrian zone of approximately 15-feet with sidewalk, street furniture and street trees. Traffic speeds will be low, therefore bicycle lanes will not be needed, although bicycles will be welcome. It is also not envisioned that these streets will be bus transit streets, although further discussions with VTA and other transit providers are needed.

Internal Circulation Streets

In order to create a more accessible and pedestrian-oriented pattern of development, new internal circulation streets will be needed north of the Caltrain tracks. The primary purpose of these streets will be to provide local access through the neighborhood and to the station for pedestrians, bicycles and autos. The internal streets also provide a framework for attractive and diverse neighborhood development at a range of densities.

These streets are envisioned to be local in character with one lane in each direction, no bicycle lanes, on-street parking, and a pedestrian zone with sidewalks separated from the street with a planting zone containing street trees.

The alignment of these streets is conceptual and will depend on the development plans of

individual property owners. However, individual development plans will be required to conform to the general framework objectives of this plan to assure continuity of access throughout the area.

Improvements South of Caltrain Tracks

The major framework improvements south of the Caltrain tracks are intended to improve circulation and access in the vicinity of the intersection of Lawrence Expressway and Reed/Monroe. This includes providing a grid of streets on the Extreme Networks site in Santa Clara that align with Pacific Drive and Nobili Avenue when that site is redeveloped. In addition, a connection under the Lawrence Expressway from Willow Avenue to French Street will provide improved east-west connections between the neighborhoods. The Lawrence Expressway is sufficiently elevated on embankment today to allow a pedestrian/bicycle connection at this location. In the future if the Lawrence Expressway is grade-separated, a vehicle connection would also be feasible.

Internal circulation streets will be local, attractive streets with parking, sidewalks and street trees.

LAND USE CONCEPTS

The three preliminary land use concepts emphasize different land use patterns and densities and include the following:

- Concept One: Residential Emphasis
- Concept Two: Office/R&D Emphasis
- Concept Three: Mixed Development.

All three concepts envision a gradual change of use and density over time to uses that are compatible with a more balanced, transit-oriented neighborhood.

These concepts will be further refined into alternatives that will undergo technical analysis and additional input from the community, business and property owners, technical agencies, city staff and the City Council in future phases of the project.

The concepts are based on the following key assumptions:

- All existing residential neighborhoods will be protected, therefore opportunities for major land use change are focused north of the tracks.
- Concepts for potential land use change may result in changes to city policy documents such as the General Plan and Zoning. However, actual change and redevelopment of properties will be at the discretion of the property owner.
- All three concepts envision a higher density central or core area focused within 1/4 mile of the Lawrence Station, with densities declining as distance increases from the station.
- South of the Caltrain tracks, all concepts result in minimal change to current land use policy. Changes primarily include replacement of auto-oriented uses with residential or neighborhood-serving retail/office mixed use.
- In order to create a critical mass of local-serving retail and support services north of the Caltrain tracks, these uses are located along the new north/south pedestrian-oriented streets.
- While none of the concepts illustrate the provision of new open space, it is envisioned the areas of new development will incorporate new parks, open space and recreational areas in conformance with current city policies. A more detailed analysis of the appropriate size and location of open space areas will be conducted in a subsequent phase of the study.

As discussed in Chapter 3, the City of Santa Clara recently updated its General Plan and identified higher intensity residential uses within the study area. This future development pattern is used in two of the three land use concepts: Residential Emphasis and Mixed Development Emphasis. In the Office/R&D Emphasis concept, however, uses consistent with those proposed for Sunnyvale are shown to allow testing of the feasibility of this development strategy. Any changes to the current adopted Santa Clara General Plan would be at the sole discretion of that city.

Concept One: Residential Emphasis

In the Residential Emphasis concept, illustrated in Figure 6.3, new land uses are almost exclusively residential with a limited amount of support services such as retail, restaurants, and small offices located to serve the immediate neighborhood and surrounding area. Major office/R&D facilities are not found in the study area under this concept.

The Residential Emphasis concept expands the generally residential character of the study area found south of the Caltrain tracks into the area north of the tracks, although it is envisioned that the north would develop at densities higher than the predominantly single-family detached densities found in the south. This strategy recognizes research that indicates that residential land uses, particularly at higher densities such as townhouses and above, result in higher transit ridership than other land uses.

In this scenario, existing low-density industrial, research and development (R&D) and office uses will be replaced over time by residential development at higher densities. Densities range from 19 dwelling units (dus) per acre (townhouses) to 78 dus per acre in multi-story buildings (up to six stories). The highest densities are focused nearest the Lawrence Station, declining in density as the distance from the station increases.

Retail will be located along the new pedestrian-oriented retail streets north of the Caltrain tracks and in selected areas south of the tracks.

The Calstone/Peninsula Building Materials site is shown as residential. Along Willow Avenue, small auto-serving retail parcels on the north also become residential, consistent with adjoining uses, while the parcels between Reed and Willow Avenue become office/retail mixed-use with street-fronting and pedestrian-oriented retail.

In Santa Clara, north of Kifer Road, this concept incorporates that city's recently-adopted General Plan land use policies, which envision a future land use change to higher density residential with supporting commercial. South of the station, land uses are also consistent with Santa Clara's General Plan.

Table 6.1: Residential Emphasis Summary

Sunnyvale

Land Use	Units
Residential	*5,600-9,600 dus**
Office/R&D	*88,000 sf*
Industrial	*523,000-747,000 sf*
Retail	*353,000 sf*

** includes 1,200 dus existing*

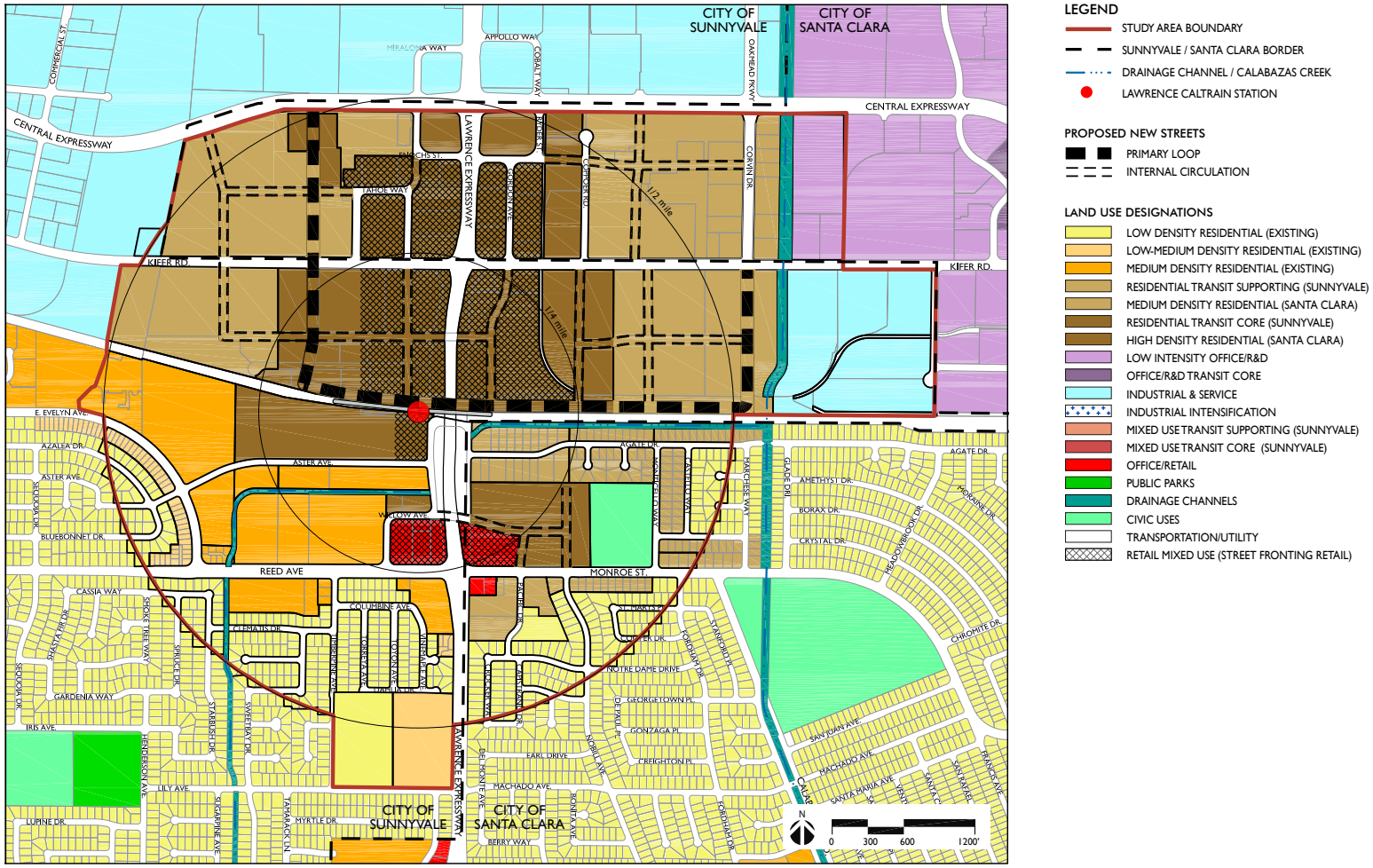
Santa Clara

Land Use	Units
Residential	*3,900 - 5,900 dus **
Office/R&D	*621,000 sf*
Industrial	*0 sf*
Retail	*148,000 sf*

** includes 600 dus existing*

Note: For a summary of existing land use quantities, see Table 2.1.

Figure 6.3: Preliminary Land Use Concept | Residential Emphasis



LEGEND

- STUDY AREA BOUNDARY
- SUNNYVALE / SANTA CLARA BORDER
- DRAINAGE CHANNEL / CALABAZAS CREEK
- LAWRENCE CALTRAIN STATION

PROPOSED NEW STREETS

- PRIMARY LOOP
- INTERNAL CIRCULATION

LAND USE DESIGNATIONS

- LOW DENSITY RESIDENTIAL (EXISTING)
- LOW-MEDIUM DENSITY RESIDENTIAL (EXISTING)
- MEDIUM DENSITY RESIDENTIAL (EXISTING)
- RESIDENTIAL TRANSIT SUPPORTING (SUNNYVALE)
- MEDIUM DENSITY RESIDENTIAL (SANTA CLARA)
- RESIDENTIAL TRANSIT CORE (SUNNYVALE)
- HIGH DENSITY RESIDENTIAL (SANTA CLARA)
- LOW INTENSITY OFFICE/R&D
- OFFICE/R&D TRANSIT CORE
- INDUSTRIAL & SERVICE
- INDUSTRIAL INTENSIFICATION
- MIXED USE TRANSIT SUPPORTING (SUNNYVALE)
- MIXED USE TRANSIT CORE (SUNNYVALE)
- OFFICE/RETAIL
- PUBLIC PARKS
- DRAINAGE CHANNELS
- CIVIC USES
- TRANSPORTATION/UTILITY
- RETAIL MIXED USE (STREET FRONTING RETAIL)

Notes:
1. Hatch on plan indicates the desired location of retail along the pedestrian-friendly retail streets.
2. Land use within city of Santa Clara per Santa Clara General Plan Phase III (2025-2035). Retail hatch overlay has been added to Santa Clara to align with Sunnyvale's retail zone. Santa Clara General Plan does not specify a retail location; however, it does indicate required square footage.

Baker Park, San Jose; 21 dus/acre

Bay Meadows, San Mateo; 37 dus/acre

California Gardens, Mountain View; 26 dus/acre

The Crossings, Mountain View; 30 dus/acre

City Center Plaza, Redwood City; 46 dus/acre