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COMMUNITY DESIGN SUB-ELEMENT

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EXECUTIVE SUMMARY

The Community Design Sub-Element addresses the quality of the physical environment in both the public and private realms. Sunnyvale is a growing City where there are still opportunities to mold future development, while preserving the best of the present. The purpose of the Community Design Sub-Element is to establish design policies to guide future growth and enhance existing development. The Sub-Element is based on the premise that good design is good for everyone: that businesses, residents and visitors benefit from an environment which functions well and is attractive and engaging. The Sub-Element also recognizes that design policies and regulations must be reasonable and should promote, not discourage, economic development.

The Community Design Sub-Element is different from other General Plan Elements because it deals with many non-quantifiable issues and qualities, such as identity, comfort, beauty and fun. Good design can bring these qualities to the built environment. Good design makes the difference between a strong, positive image for Sunnyvale and a vague one; between tree lined neighborhood streets and bare asphalt; between architecture that inspires and non-descript buildings; between the playful sculpture in front of the Library and an empty bench. Sunnyvale is fortunate to have a strong economy which has created an attractive community along with future opportunities to improve. Improving the built environment may not require many grand gestures, but simply doing many little things better.

This sub-element follows the same format as Sunnyvale's other General Plan Elements and Sub-Elements. The Community Design Sub-Element has three sections: 1) community conditions; 2) community condition indicators; and 3) goals, policies and action statements. The first section on community conditions is the largest and has six chapters;

1. Historic Development Patterns
2. Development Trends
3. The City's Image
4. The View from the Road
5. Private Development
6. Public Facilities

A brief summary follows on each of these chapters, as well as the goals and policies section and the relationship of the Community Design Sub-Element with other Sunnyvale General Plan Elements.

Chapter 1. Historic Development Pattern

This chapter discusses how Sunnyvale has changed from an agrarian community to one of the high technology centers of the world. The pattern of development in the past is

still very much a part of how Sunnyvale looks and functions today. The early development pattern established Sunnyvale as a complete City with industry, commerce and housing. Sunnyvale's growth happened in two phases; early development downtown and later suburban development surrounding the downtown core.

Major Findings

1. Early development concentrated around the train lines downtown and was a fine mix of businesses, industry and homes.

2. Most of the City's growth happened in the 1950's and 1960's. Nearly 65% of the residential units and 52% of the non-residential buildings were constructed between 1950 and 1969.

3. Development after 1950 was concentrated in large tracts developed exclusively for a single type of land use. This development was horizontal, spread out and oriented to the automobile.

Chapter 2. Development Trends

This chapter discusses local development trends and their potential impact on the shape of the City. These trends indicate that Sunnyvale is entering a third growth phase characterized by increasing private redevelopment, the desire for higher and more dense buildings and a predominance of multi-family projects in new housing construction. Based on past trends, new higher density development will not encroach on existing single family neighborhoods as these projects are most likely to be built on rezoned industrial or commercial properties. The possibility of light rail and the Downtown revitalization may also have a significant impact on how the City looks and functions in the future.

Major Findings

1. Sunnyvale is the fourth largest employment center in the Bay Area.

2. The Association of Bay Area Governments predicts that by the year 2005 Sunnyvale will have 148,610 jobs, 7,600 more jobs than in 1990, and a population of 132,700 which is 12,300 more residents than in 1990.

3. Vacant and agricultural land in Sunnyvale has decreased from 813 acres in 1981 to 340 acres in 1990. As Sunnyvale becomes more completely developed, private landscaped areas, public plazas and City parks will assume more importance as compensation for the loss of greenery, open vistas and informal play areas.

4. Most of the new housing built in the past five years has been apartments or condominium type units; 72% of the new units were apartments, 23% were condominiums or townhomes and only 5% were detached single family units.

5. In the past five years, new housing has been predominantly medium or high density projects as a result of scarce, more expensive land and fewer vacant sites in existing single family districts.

6. In the past 10 years, medium and high density housing has been built on land already zoned for higher density or on land rezoned from industrial or commercial districts. Between 1980 - 1990, Sunnyvale rezoned 250 acres for multi-family housing and an additional 317 acres for mobilehome housing.

7. In the past 10 years, the amount of land zoned for single family housing has increased by 25 acres as a result of redeveloped school sites. In 1990, 23% of the land in Sunnyvale is zoned for detached single family housing and 11% is zoned for multi-family housing which includes mobilehome parks.

8. Much of the new construction is now built on privately redeveloped properties, not vacant land. In 1988 and 1989, 38% of all new projects were private redevelopment and 98% of all housing units were built on redeveloped sites.

Chapter 3. The City's Image

Chapter 3 on the City's image discusses four basic design features which can strengthen and enhance Sunnyvale's image. These features are: clear boundaries, attractive and distinctive gateways, special landmarks and unique districts. The discussion on districts includes the Downtown Specific Plan, the El Camino Real business district, Mathilda Avenue, Evelyn Avenue and Sunnyvale's neighborhoods.

Major Findings

1. Defining the City's boundaries with street trees, medians, signage or enhanced natural features will create a stronger identity for Sunnyvale.

2. Gateways on major roadways into Sunnyvale are unique opportunities to create a positive, lasting image of Sunnyvale. Gateways can be distinguished with landscaped medians, signs, unique architecture, plazas and information centers. Currently, there are no City monument signs or other features distinguishing the entries to Sunnyvale, however, a project to identify gateways has been budgeted for 1993/1994.

3. Sunnyvale's landmarks help orient people to their location and enrich the City's identity. There are possibilities for new landmarks at the Lawrence Expressway/Highway 101 site and Downtown.

4. Memorable districts heighten the awareness of Sunnyvale as a special place.

5. Sunnyvale has two historic districts; the Murphy Avenue Historic District and the Taaffe-Frances Street Heritage Housing District. Policies and regulations have been established to preserve and enhance these unique districts.

6. Specific plans and design guidelines can be used to create memorable districts. Sunnyvale has two existing Specific Plans and is developing a Specific Plan for the Downtown. A Specific Plan for the Downtown is needed to establish cohesive and attractive design standards, appropriate uses and densities, and architecture which will help revitalize the Downtown. Specific Plans or Design Guidelines would also be appropriate for the El Camino Real business district, Mathilda Avenue and Evelyn Avenue.

Chapter 4. The View from the Road

The view from the road affects the daily lives of Sunnyvale residents and is one of the most lasting images visitors have of the City. This chapter discusses City programs which improve the roadway environment. These programs include: a Public Landscaping Program for medians and other street landscaping, a Street Tree Service Program which installs and maintains the City's street trees, programs for pedestrian pathways, the City's undergrounding of utilities requirements, fencing standards and the City's sign regulations.

Major Findings

1. The Association of Bay Area Governments estimates that 120,400 people live in Sunnyvale in 1990 and 141,000 people work here. By 2005, the number of people living and working in Sunnyvale is expected to increase, resulting in higher traffic volumes on the City's roadways.

2. As part of the Street Landscaping Program, the City has installed and maintains approximately 60 acres of public landscaping on Sunnyvale's roadways.

3. Landscaped medians help identify major thoroughfares, increase traffic safety by separating oncoming cars, beautify the streetscape and make motorists more comfortable by reducing the perceived road width and providing interesting scenery.

4. The Sunnyvale Street Tree Service Program is responsible for selecting, planting and maintaining the City's street trees. There are now about 31,900 street trees in Sunnyvale.

5. Street trees add to the value of private property, provide shade and habitat for wildlife, contribute to fresher air and reduce reflected heat from buildings and pavement.

6. The City requires pedestrian walkways for new development in commercial and residential districts. Along major thoroughfares, pedestrian walkways can be made more comfortable with trees for shade, traffic buffers and benches for resting.

7. Since 1975, Sunnyvale's requirements to underground utility wires on or adjacent to private properties and the City's funding of undergrounding along major roadways has resulted in a less cluttered and more attractive streetscape.

8. Fencing is a major streetscape element along some of Sunnyvale's roadways. The City is studying ways to improve the appearance of fencing because of problems with private maintenance and design.

9. Sunnyvale's Sign Ordinance insures that signage is attractive, safe, compatible with the building architecture, not distracting to motorists and in balance with other elements in the streetscape.

Chapter 5. Private Development

The Private Development Chapter addresses development on private properties and discusses the design features of site plans and buildings. This chapter is meant to provide a vocabulary for design review and an understanding of basic design concepts, in addition to forming a basis for design policies. A well designed project will function efficiently, be compatible with surrounding properties, have architectural merit and enhance the image of Sunnyvale.

Major Findings - Site Design

1. The building location, driveways, parking, auxiliary structures, exterior mechanical equipment, lighting and service access are functional elements of the site plan influenced by the nature of the intended use.

2. Good site design accommodates natural features such as solar orientation, climate, mature trees and scenic vistas.

3. Mature trees add to the beauty and comfort of the built environment, enhance property values and help blend new development with surrounding properties.

4. Site plans which create view corridors into the site and are oriented to the adjoining street patterns generate interest and are integrated with surrounding development.

5. Private development can be integrated with the public roadway by establishing a sense of enclosure and uniform landscape standards.

6. Sunnyvale's Zoning Ordinance establishes building setbacks and coverage standards for fire safety, for privacy and to maintain light, air and open space between buildings. These standards help preserve the unique rhythm and spatial qualities of districts and neighborhoods.

7. Well designed entries to a site help avoid confusion and make a positive first impression.

8. Site plans with areas which are easily identified as public and private spaces are more legible and help people to understand how they should act and where they should go.

9. A memorable place is created through site design where each design element has a complementary relationship to the other design elements. Design features which help create an identity are clear boundaries and similar detailing such as light fixtures, railings, landscaping and signage.

10. The recently established art in private development program has resulted in artworks being required on seven sites in Sunnyvale.

11. Site plans which appeal to the senses engage people in a direct way. Landscaping, pleasant outdoor areas, artworks and a sense of mystery will create a stimulating and engaging environment.

12. Sites need to be designed to be safe and accessible. Safe environments have good public visibility, adequate night time lighting, well designed circulation systems and quick, unobstructed access routes for fire and police services. Accessible environments are designed so they can be understood, navigated and enjoyed by everyone, including people who are physically handicapped.

13. Site design requirements need to be reasonably balanced to assure a competitive economic development environment for the City.

Major Findings - Building Design

1. Good architecture has intrinsic value and is also appropriate to its context. A well designed building compliments Sunnyvale's image, raises people's spirits, inspires creativity and heightens individual as well as cultural identity.

2. The functional elements of a building are walls and a roof for structural support and protection from the weather, and openings such as windows and doors, for light, air and access.

3. Rooflines are a prime indicator of building style and one of the most critical elements in determining compatibility with neighboring buildings.

4. Legible buildings have main entries which are easy to locate and oriented to the street for visibility.

5. Windows link the exterior and interior environments. In commercial districts, visibility of the activity inside stores and restaurants draws customers and creates an entertaining street environment.

6. Below grade parking can be detrimental to the architectural integrity of a building if it is not integrated with the building features and the ground. Concrete garage walls can be integrated with the architecture by using the same building materials, colors and detailing, and be integrated with the ground through berming, landscaping and screened entries.

7. The style of a building reflects the cultural and aesthetic values of a certain time. Buildings that are nondescript lack this refinement.

8. The scale of a building is its size in relation to its surroundings and people. Tall buildings need features such as recessed spaces or extended porticos on the ground level in order to retain a comfortable human scale.

9. There is often a predominant building shape and horizontal or vertical orientation in a district. New construction needs to have a similar shape in order to blend with the district.

10. Most buildings have three components; a base, middle and top. If these components are articulated with changes in building planes, colors, materials and rhythm, it breaks the structure into smaller parts and the building will look less massive.

11. A building with order and proportion has clarity and is one where all of the functional and decorative building elements are in scale with each other.

12. Building articulation is an important means of creating interesting rhythms with changing patterns of light and shade.

13. Exterior materials are the most visible sign of quality and can enhance or detract from the architectural style and surrounding properties. Substantial, high quality materials look attractive and insure durability. Changes in texture will add richness and tactile appeal to the building surface.

14. Appropriate building colors depend on the style, size and location of the building. Colors look different depending on the amount of color and surrounding hues. Colors which look appropriate on a small color rendering can be overwhelming on a large building.

15. Building design requirements need to be reasonably balanced to assure a competitive economic development environment for the City.

Chapter 6. Public Facilities

The Public Facilities chapter addresses the design of public and quasi-public properties which includes City properties, State and Federal facilities, schools and quasi-public facilities such as utilities. The section on City facilities discusses public buildings and vital outdoor public places, including parks, courtyards, public art and downtown pedestrian enclaves. This chapter is the final piece in a comprehensive plan for the function and appearance of Sunnyvale.

Major Findings

1. Approximately, 13.4% of the land in Sunnyvale is zoned for public and quasi-public use and as a result, the design of these facilities has an important impact on the City.

2. Sunnyvale's public buildings have good accessibility and reflect the community's values of quality and efficiency.

3. Identification of the Civic Center could be improved along Mathilda Avenue and El Camino Real.

4. Sunnyvale maintains 20 acres of landscaping around the City's public buildings at an 1990 annual cost of $407,370. This landscaping is a unique feature which gives the buildings a public character.

5. In Sunnyvale, outdoor public places are found in City parks and recreational facilities, small plazas and courtyards around public buildings and downtown in public pedestrian enclaves.

6. Sunnyvale has 18 parks, 2 municipal golf courses, a municipal tennis center and Baylands Park which combined provide 370 acres of public open space.

7. The City shares in the maintenance of 14 school sites which has resulted in significant improvements to the appearance of school playing fields.

8. There are no formal public plazas or squares in Sunnyvale, but there are small informal courtyards around the City's public buildings which provide comfortable places for waiting or relaxing. The Community Center has a large courtyard area used for civic events. There may be a need for a large formal plaza to accommodate bigger civic events elsewhere in Sunnyvale.

9. As of July, 1990, Sunnyvale's public art program has resulted in 1 mural, 5 outdoor sculptures and 27 other works of art which are displayed in many parts of the City.

10. Public parking structures need to be located so that they do not block important commercial activities or vistas into the downtown from major roadways. Below grade parking is preferable because of the limited land area downtown.

11. Sunnyvale has no jurisdiction over the architectural and site design or maintenance of many public facilities owned by other government agencies. As a result, it is important that the City continue to pursue strong intergovernmental cooperation.

12. There are 11 elementary schools, 3 junior high schools and 1 high school in Sunnyvale which are open in 1990. These public schools add significantly to the quality of the City's neighborhoods.

13. State and Federal facilities occupy 192 acres within the City limits and another 650 acres within the urban service area when including Moffett Naval Air Station.

14. Flood control channels, the Hetch-Hetchy right-of-way, P. G. and E. transmission tower easements and the Southern Pacific railroad lines are all areas which generally look unattractive because of weeds, litter and the lack of landscaping. More could be done to make these areas as attractive as other private and public properties in Sunnyvale.

Relationship with other General Plan Elements

The Community Design Sub-Element is an optional General Plan element not required by California Government Code, Section 65032. It is Sunnyvale's policy to adopt General Plan Elements and Sub-Elements which go beyond the State's minimum requirements and address the broad range of physical, social and economic issues important to comprehensive planning. The Community Design Sub-Element is meant to establish

design policies for public and private properties. These comprehensive, City-wide design policies relate to many of the City's other General Plan Elements, including the:

1. Transportation Element
2. Land Use Sub-Element
3. Housing and Community Revitalization Sub-Element
4. Open Space Sub-Element
5. Cultural Arts Element

SUMMARY OF GOALS AND POLICIES

This section is a summary of the goals and policies contained in the Community Design Sub-Element.

GOAL A: PROMOTE SUNNYVALE'S IMAGE BY MAINTAINING, ENHANCING AND CREATING PHYSICAL FEATURES WHICH DISTINGUISH SUNNYVALE FROM SURROUNDING COMMUNITIES AND BY PRESERVING HISTORIC BUILDINGS, SPECIAL DISTRICTS AND RESIDENTIAL NEIGHBORHOODS WHICH MAKE THE CITY UNIQUE.

Policy A.1: Identify the boundaries of the City with attractive and distinctive features.

Policy A.2: Ensure that new development is compatible with the character of special districts and residential neighborhoods.

Policy A.3: Support measures which enhance the identity of special districts and residential neighborhoods to create more variety in the physical environment.

GOAL B: CREATE AN ATTRACTIVE STREET ENVIRONMENT WHICH WILL COMPLIMENT PRIVATE AND PUBLIC PROPERTIES AND BE COMFORTABLE FOR RESIDENTS AND VISITORS.

Policy B.1: Maintain and provide attractive landscaping in the public right-of-way to identify the different types of roadways and districts, make motorists more comfortable and improve the enjoyment of residential neighborhoods.

Policy B.2: Provide a safe and comfortable system of pedestrian and bicycle pathways.

Policy B.3: Minimize elements which clutter the roadway and look unattractive.

GOAL C: ENSURE THAT BUILDINGS AND RELATED SITE IMPROVEMENTS FOR PRIVATE DEVELOPMENT ARE WELL DESIGNED AND COMPATIBLE WITH SURROUNDING PROPERTIES AND DISTRICTS.

Policy C.1: Place a priority on quality architecture and site design which will enhance the image of Sunnyvale, create a vital and attractive environment for businesses, residents and visitors, and be reasonably balanced with the need for economic development to assure Sunnyvale's economic prosperity.

Policy C.2: Review site plans to insure the design is compatible with the natural and surrounding built environment.

Policy C.3: Ensure that site design creates places which are well organized, attractive, efficient and safe.

Policy C.4: Encourage quality architectural design which improves the City's identity, inspires creativity and heightens individual as well cultural identity.

Policy C.5: Ensure that buildings are appropriate to their context and designed to be compatible with surrounding properties and special districts.

GOAL D: PROVIDE PUBLIC FACILITIES WHICH ARE ACCESSIBLE, ATTRACTIVE AND ADD TO THE ENJOYMENT OF THE PHYSICAL ENVIRONMENT.

Policy D.1: Ensure that Sunnyvale's public facilities are easily identified, accessible, attractive and representative of the community's values and aspirations.

Policy D.2: Maintain beautiful and comfortable outdoor public places which provide a shared sense of ownership and belonging for Sunnyvale residents, business owners, employees and visitors.

Policy D.3: Work with outside government agencies to achieve attractive public and quasi-public facilities consistent with the quality of development in Sunnyvale.

HISTORIC DEVELOPMENT PATTERN

Sunnyvale began as an agrarian community. Early settlers were drawn by a mild climate, abundant sunshine and the fertile alluvium soil. Calabazas Creek and Stevens Creek ran through the area. There was also great scenic beauty in the San Francisco Bay to the north and the Diablo and Santa Cruz Mountain ranges which rimmed the valley. These natural attributes are still an important part of Sunnyvale's living environment and identity.

The development of Sunnyvale began in earnest in 1864, when the Central Railroad built a line from San Francisco to San Jose with a stop at Murphy Station. Sunnyvale was promoted as the "City of Destiny". The original vision for Sunnyvale laid the foundation for its future growth. Early Sunnyvale residents wanted their community to be a complete City where people could live, work and play. This is a much different place than a resort or bedroom community. The concept of a complete city is still at the foundation of what Sunnyvale is and strives to be.

Industry first came to Sunnyvale after the 1906 earthquake. The first industries located at the center of town, close to railroad lines and other businesses. Housing also located downtown and was laid out in a traditional grid pattern, most efficient for the flat terrain of Sunnyvale. Simple, small bungalows and revival style homes were predominant. The downtown grew as a mix of uses in close proximity and walking distance of each other.

Transportation routes also played a significant role in the City's development. The earliest transportation facilities were the railroad, the Port of Sunnyvale and El Camino Real, The Kings Highway for the early missionaries. The paving of El Camino Real in 1913 heralded the arrival of the automobile and a profound change in the pattern of development. The automobile allowed businesses and homes to spread out, rather than concentrated downtown or along transportation routes. Sunnyvale Naval Air Station, which was built in 1933 and later renamed Moffett Field, also had a significant impact on the City's future economic development.

By the end of World War II, Sunnyvale had made the change from an agricultural community to an industrial center. This change set the stage for the boom decades of the 1950's and 1960's. Nearly 65% of the City's residential units existing in 1990, and 52% of the non-residential buildings were constructed between 1950 and 1969.

New development covered large areas of Sunnyvale and resulted in dramatic changes to the character and form of the City. Unlike the mix of uses at the core, new districts were more distinct and large tracts of land were developed exclusively for residential,

commercial or industrial uses. Different uses were separated and the increased distances made pedestrian travel difficult. New development had a form which was low, horizontal, systematic and oriented to the automobile. This is still the predominant form of development in Sunnyvale.

DEVELOPMENT TRENDS

Sunnyvale has experienced two phases of development: early development downtown with a mixture of land uses on small lots and a grid street pattern, and later suburban development surrounding this core with large, homogenous districts, bigger lots and more curvilinear street patterns. Sunnyvale may now be entering a third growth phase characterized by increasing private redevelopment, higher and more dense structures, a predominance of new multi-family housing and a return to a finer grain of land uses evident in modern mixed use projects. This third growth phase will be influenced by future decisions concerning floor area ratio restrictions and the jobs and housing redistribution being considered in the "Futures" study.

In the next decades, the community will be managing crucial questions on housing and transportation which will have a direct impact on how Sunnyvale looks and functions. The City will be deciding how much of a shift to make from horizontal to vertical living, what qualities of the living environment to preserve and what parts to change. Because Sunnyvale is a place where people want to live and work, the demand for growth creates many opportunities, as well as some challenges.

Sunnyvale is one of the most prominent cities in the 9 County San Francisco Bay Area. The City is known for a progressive government and leading, high technology industries. Sunnyvale is one of the Bay Area's busiest employment centers with 140,990 jobs in 1990. Only the cities of Oakland, San Francisco and San Jose have more jobs. In Santa Clara County, Sunnyvale is second only to San Jose in size and population. The Association of Bay Area Governments predicts that Sunnyvale will have 148,610 jobs by 2005 and the City's population is expected to increase from 120,400 in 1990 to 132,700 residents in 2005. Sunnyvale will be faced with the potential of 7,620 more jobs and 12,300 more residents in the next 15 years. These figures may change depending on the outcome of the "Futures" study. Given these regional development pressures, Sunnyvale in the future will look different in some ways from Sunnyvale today.

Continuing growth has resulted in diminishing vacant and agricultural land in Sunnyvale. Vacant lots and agricultural fields or orchards provide open space and greenery within communities. Cities with scattered development punctuated by orchards and open fields look and feel different than fully developed cities. As Sunnyvale becomes more completely developed, private landscaped areas and City parks will assume more importance as compensation for the loss of greenery, open vistas and informal play areas which were provided by undeveloped land.

Vacant and agricultural land in Sunnyvale has steadily decreased from 813 acres in 1981 to 340 acres in 1990. Of this 1990 total, 220 acres are zoned industrial, 29 acres are

zoned for commercial or office use and 91 acres are zoned residential. Most vacant industrial land is owned by large corporations, such as Lockheed Missiles and Space Company, and typically reserved for their future expansion. The vacant commercial land remaining in 1990 is also concentrated on a few key parcels, the largest properties being the orchards at Mathilda Avenue and El Camino Real. In contrast, most of the 1990 vacant residential properties are small lots scattered throughout Sunnyvale. There are only 5 vacant residential sites which are over 2 acres
and two of these sites have already been approved for new housing.

The diminished supply of large tracts of vacant land has several implications for the City's future development.

1. There will be development pressure for taller and denser buildings to accommodate the continuing demand for new housing and business expansion.

2. Some industrial businesses may find it more difficult to expand given the City's FAR restrictions and the scarcity of vacant land.

3. There will be increased redevelopment pressures as existing buildings age and land prices increase, making these sites more viable for redevelopment.

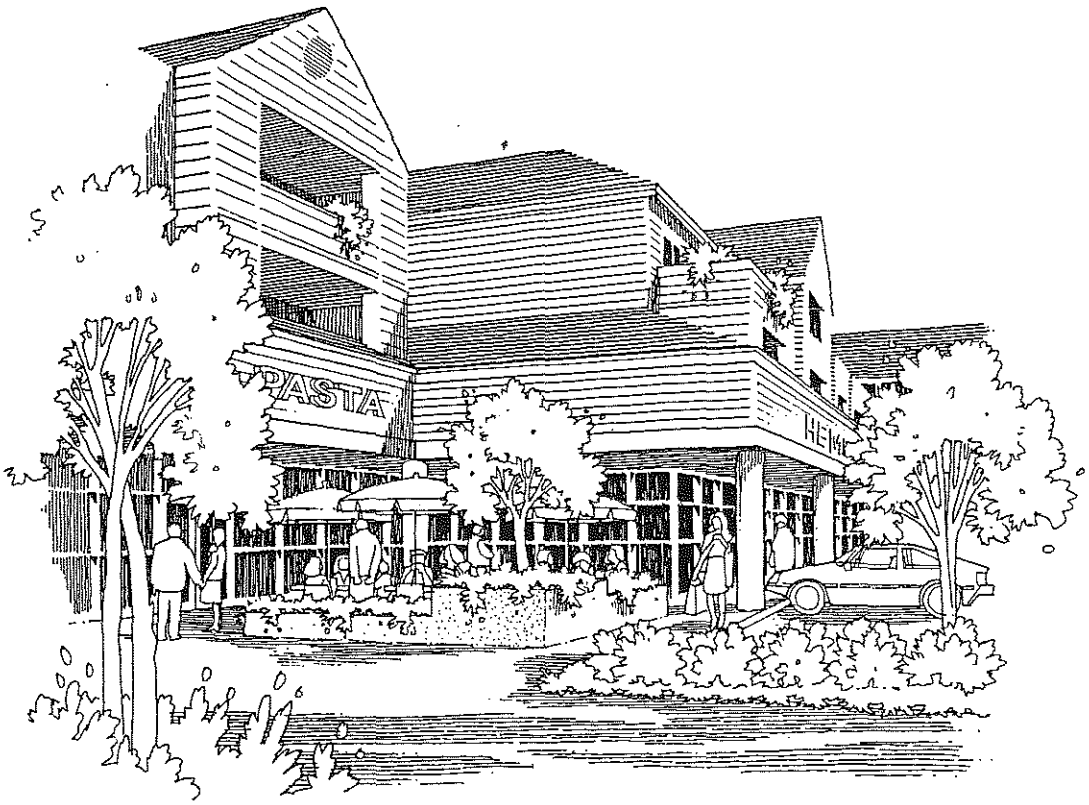
Some of these impacts are already being felt in Sunnyvale. Almost all new housing built from 1985 - 1990 was apartment or condominium type units, due largely to the demand for housing and efforts to achieve a better jobs/housing balance in the City. As shown in Figure 1 only 4.5% of the new housing constructed was detached single family homes. The net number of single family homes is only 3% when adjusted for demolitions. Most of the detached single family housing has been built on surplus school sites. Since 1980, portions of six school sites have been redeveloped for housing. At present, Sunnyvale's school districts plan only one additional school closure, so there are likely to be even fewer detached single family homes built in the future.

Figure 1
HOUSING CONSTRUCTION 1985 - 1990

	Year Constructed					
	1985	1986	1987	1988	1989	TOTALS
Single family det	48	80	22	22	23	195 (4.5%)
Single family attach	373	192	278	43	117	1003 (23%)
Duplex	4	4	0	3	0	11 (0.2%)
Multi-family	1257	525	131	411	825	3149 (72.3%)
TOTALS	1682	801	431	479	965	4358 (100%)

Almost three quarters of the housing constructed in the last five years has been apartments. Most of the remaining units have been condominium type housing. It is possible in the next decades, that the percentage of new ownership housing may change depending on tax incentives, lending practices, market conditions and City policies. However, the pressure to build higher density housing is likely to be an ongoing trend regardless of the type of tenancy. Whether new higher density residential projects are for rentals or ownership, the features of these projects are very similar. Most new housing in Sunnyvale has been large projects with two to three story structures over below grade parking and self enclosed, distinct environments. Newer, higher density projects look very different from traditional single family neighborhoods or even many of Sunnyvale's older apartment or condominium complexes.

This new form of medium and high density housing is a compact environment. Many more people can live in less area and still enjoy recreation facilities, landscaping and other amenities on the site. One of the virtues of this compact form is that it can bring more people closer to vital services, such as shopping and transportation systems. This results in less dependency on the automobile. This compact housing form is also more versatile in the way it can blend with a variety of other land uses, as evident in new mixed use projects in Sunnyvale. Denser, more compact housing projects will probably continue to be the predominant type of new housing, in part because it can provide some solutions to local and regional transportation and housing problems.



Charles Avenue Center is one of the new mixed use projects in Sunnyvale

Even though most new housing has been medium or high density residential, this has not significantly changed existing single family neighborhoods. In the past ten years, only 3.68 acres have been rezoned from detached single family densities to higher densities, while 28.2 acres have been rezoned from school sites to single family residential. The net effect is that more land is now reserved for detached single family housing than ten years ago. In 1990, 23% of Sunnyvale is zoned for detached single family as shown on Figure 2.

Figure 2
ACRES BY ZONING CLASSIFICATION
December, 1989

Zoning Classification	Acres	Percent
Single Family Detached	3,377	22.7
Multi-Family	1,674	11.3
Commercial/Office	650	4.4
Industrial/Warehouse	2,863	19.2
Public and Quasi-Public	1,992	13.4
Streets and Highways	2,384	16.0
Baylands	1,928	13.0
TOTAL	**14,868**	**100.0**
Moffett NAS (not part of total)	650	

More land has also been rezoned for multi-family housing. Between 1980-1990, 567 acres have been rezoned from commercial and industrial zoning districts to multi-family residential and mobilehome park districts. New multi-family housing has primarily located in the northern part of Sunnyvale, along El Camino Real or Evelyn Avenue and in transitional neighborhoods already zoned for increased density. It is possible that more land will be rezoned from industrial and commercial to residential uses, given the City's policies and past actions to balance jobs with housing and the continuing demand for homes. The City has undertaken a "Futures" study to identify more sites for potential residential redevelopment.

Many new projects are now built on redeveloped properties, not vacant land. In 1988-1989, 38% of all projects built in Sunnyvale were private redevelopment projects, where property owners demolished existing buildings to clear the site for new development. During these same two years, 98% of the total new housing units were built on redeveloped properties. One of the first strong indications of this redevelopment trend was the 1987 residential rezoning of three properties with existing industrial businesses. Within two and a half years of the rezoning, developers had cleared the sites and built 784 new units.

Vacant land may be scarce in Sunnyvale, but there is a significant amount of development potential in private redevelopment. The rebuilding trends of the past few years are likely to continue given a healthy economy. In areas of Sunnyvale which are rebuilding there is an opportunity for positive change. This third phase, the rebuilding phase, may be as important as the previous two growth phases in determining the quality of life in Sunnyvale.

Future development will effect the way the City looks, feels and functions. There is the possibility of light rail extending through the northern employment centers and into downtown Sunnyvale. Light rail would introduce a whole new look to the City and a modern transit convenience. A light rail system could help regenerate the downtown and stimulate innovative types of residential or mixed use projects along the route. The Downtown Specific Plan may also result in positive changes to the cultural, social and business environment downtown. These changes could help create a downtown which is attune to the aspirations and future needs of the community.

Sunnyvale is not fully developed in any static sense. Private redevelopment and new transportation systems will change the way the City looks and functions. Sunnyvale is in a rebuilding phase which presents exciting opportunities to welcome and mold the future, while preserving the best of the present.

THE CITY'S IMAGE

A City's visual image is a complex relationship between private and public development patterns and the natural features of the land. Ideally, this visual image should match the values and ambitions of a community. The form and features of a city should create a place which residents can identify with and visitors can understand. A strong, clear visual image is like a firm handshake. It is a satisfying encounter.

Sunnyvale is a complete City with many positive attributes. It is a place of scenic beauty with safe, attractive neighborhoods, vital commercial districts, leading industries, efficient roadways and enjoyable recreational areas. While 98% of the City is already built, there is an ongoing process of refining and enhancing the attributes of the built environment. These refinements improve the living environment and create a clearer image of Sunnyvale. The City of Sunnyvale is well known as a progressive community and a respected regional leader. The City's visual image should match these accomplishments. A quality visual image will help Sunnyvale maintain a position of leadership in an increasingly competitive economic environment.

Sunnyvale's visual image could be improved by more defined boundaries and gateways into the City and more distinctive landmarks and districts. **Enhancing the City's boundaries, gateways, landmarks and districts will help articulate an image of Sunnyvale as a complete City and a special place to live and work.**

Boundaries

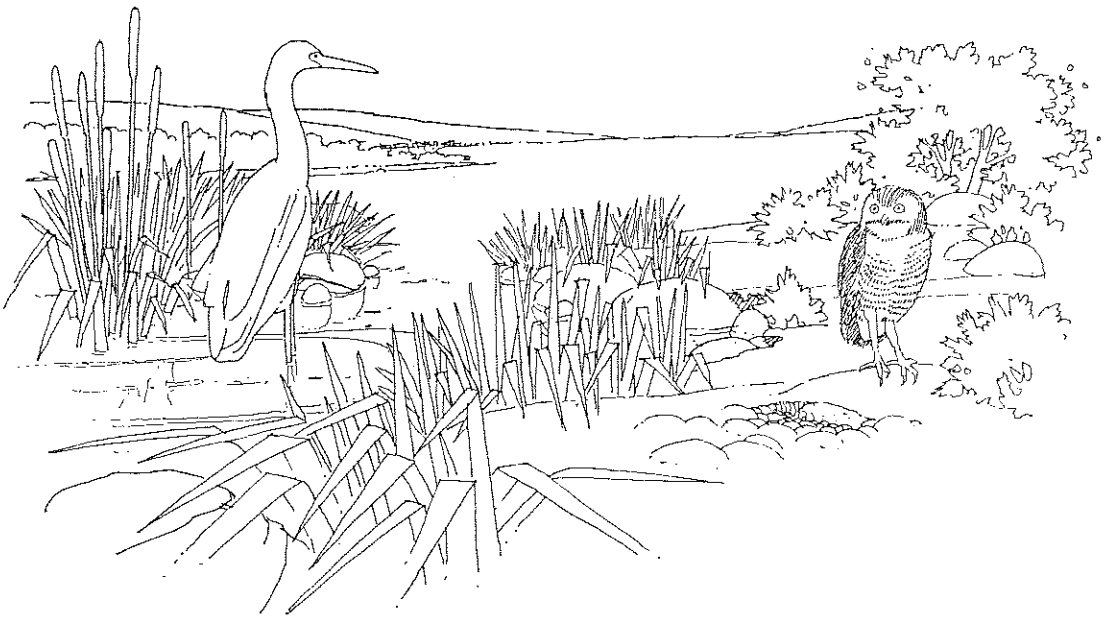
Sunnyvale is in a modern metropolitan area where the boundaries of one city blend into the next. There are few visual clues to distinguish Sunnyvale from adjoining cities. This sprawl creates confusion and a lack of orientation in the physical environment. A defined boundary helps orient travelers and also creates a stronger identity for the City. Strong edges help define an area that will stand out in people's minds as a unique place.

Edges can be natural or man made features, such as rivers or freeways. Another way edges are created is to have an inside that is different from the outside. Cities not in metropolitan areas are often defined by the difference between the rural countryside and more dense development inside the city limits. Sunnyvale is distinguished from some surrounding cities by the amount of landscaped medians, street trees, private commercial landscaping, undergrounded utilities and sign controls. These features create an attractive roadway environment which is different from surrounding cities which do not have similar programs and regulations. Sunnyvale also looks different because of the extensive use of monolithic sidewalks, instead of the curbside landscaping found in several adjoining cities.

In metropolitan areas, it is possible to clarify boundaries by using distinctive landscaping, signage and medians along the city limits and highlighting natural features on the edges. Sunnyvale's perceived boundaries are: Caribbean Drive on the northern edge, Lawrence Expressway on the eastern edge, Homestead Road on the southern edge and Highway 85 on the southern part of the western edge. The perceived edges of Sunnyvale are shown on Figure 3, a map of the City's form. Sunnyvale's real municipal boundaries are not straight lines running directly along these major roadways. Often the municipal boundaries zig-zag across the roadway, making it more difficult to define the edges. There are also two natural features, Stevens Creek and the San Francisco Bay, which run along the City limits, but do not create strong visual boundaries because they are not visually or physically accessible.

These roadways and natural features offer the best opportunities to define and clarify the City's edges and make Sunnyvale distinct from neighboring cities. Edges are opportunities to promote Sunnyvale. If these areas are attractive and interesting, it makes a visual statement that Sunnyvale is someplace special to live, work and visit.

The City already has plans for a park which will highlight the northern boundary along the bay. Baylands Park at Highway 237 and Caribbean Drive is scheduled for completion in 1992 and will celebrate the unique natural environment of San Francisco Bay. The goal of Baylands Park is to protect, enhance and interpret the natural wetlands of the Bay, while providing outdoor recreational opportunities and facilities. There is also the possibility of extending the park along Caribbean when the City's land fill closes in 1994. Sunnyvale's Public Works Department is studying the feasibility of revegetating this area to create a park. This revegetation would result in a continuous greenbelt and wetlands area extending from Highway 237 to the end of Caribbean Drive, resulting in an appealing scenic edge on the northern City limits.



Cranes, egrets and burrowing owls are part of the unique environment at Baylands Park.

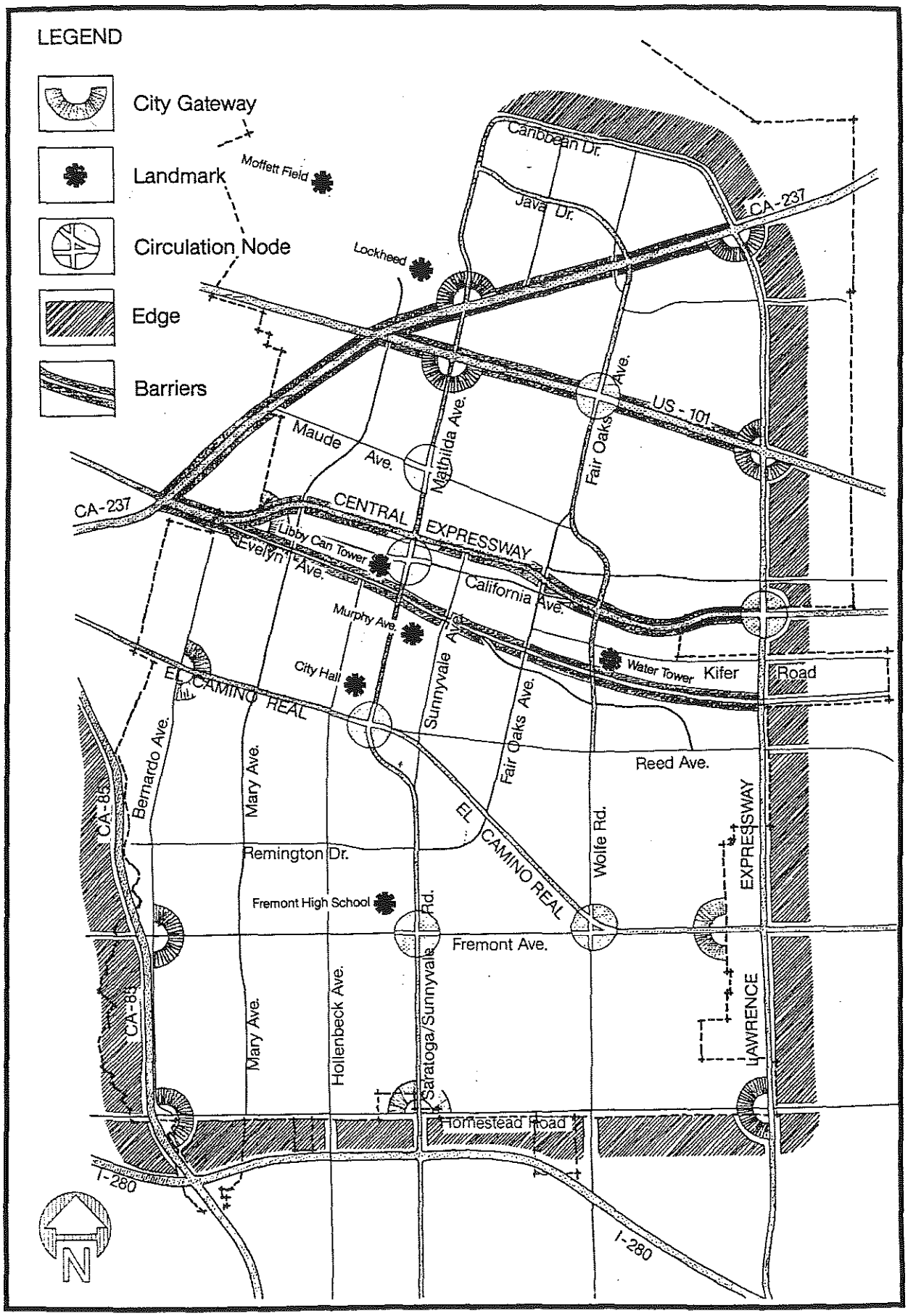


Figure 3: City Form

Stevens Creek is co-terminus with a third of the City's western border and would have been another opportunity for a scenic edge. However, homes have been built all along the Creek, obscuring the view and preventing easy access. There is an open vista of part of the Creek from Highway 85. This open area between the Creek and the Highway is generally perceived as part of Sunnyvale, but is actually a park owned by the City of Mountain View.

Roadways can also create interesting edges. There are opportunities to accentuate the City boundary along the northern side of Homestead Road and a large portion of Lawrence Expressway. One way to make this boundary distinct is with similar landscaping and medians, and with special lighting and roadsigns. Continuity of design along the roadway can create an edge. Similar street trees on both sides of a street for a significant length will create a unified identity for the street and a strong border. Unique medians, light standards and road signs can accentuate this border. Medians are not possible on Homestead Road because they would eliminate access and needed traffic lanes. Lawrence Expressway already has medians which have been scheduled for landscape improvements.

Some roadways act as barriers. Instead of unifying the City, they split it into different districts. In Sunnyvale, Highways 101, 237 and Central Expressway create barriers which visually and functionally segment the community. Neighborhoods and business on either side are separated by limited access to these roadways and the wide expanse of pavement. This separation is intensified by the noise, fumes and speed of the automobiles. The negative effect of these barriers can be minimized by introducing design elements which relate these roadways to the rest of the community and by emphasizing the roadways crossing these barriers.

Gateways

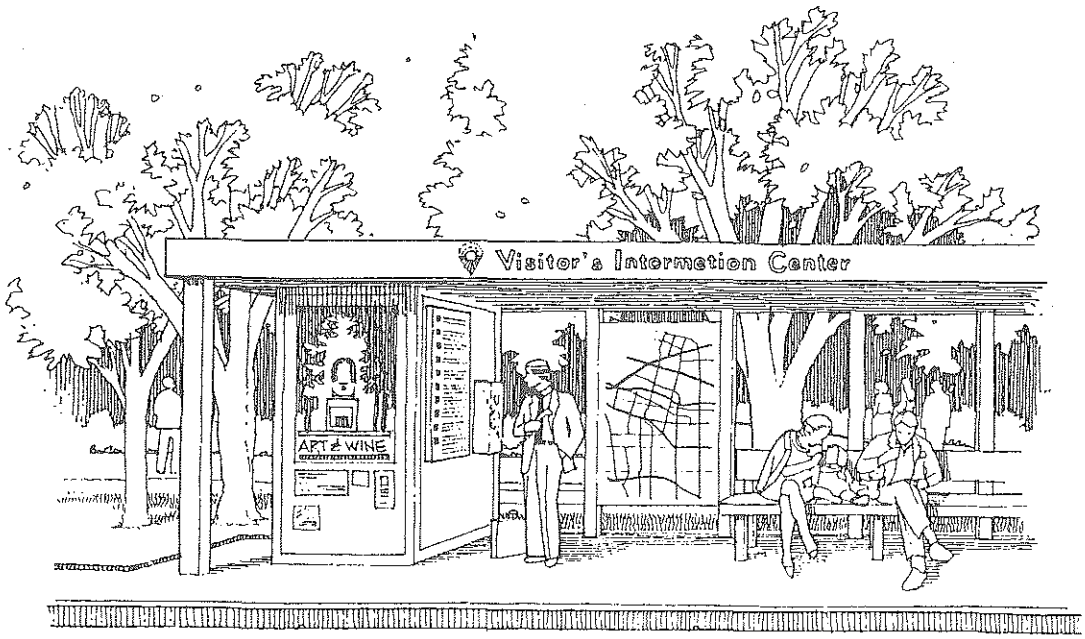
All along the edges of a city there are gateways where people enter or leave. These gateways are typically on roadways, but can be on other transportation routes, such as railroad lines and pedestrian pathways. A gateway can also be a place where motorists leave a freeway to enter the local street system.

The importance of each gateway is generally tied to the number of people crossing that location. A gateway can also be important because of historic significance or because a community would like to emphasize a certain area of the City.

Gateways are the doorsteps of a community. They are places to say hello and goodbye. Gateways are where people arrive and get their first impressions of the City, and places where people leave, taking with them a lasting image. Gateways help define the City's edges and create a heightened sense of identity. Gateways also create a precedent for design standards that follow along the major City thoroughfares. It is important to make these locations distinctive and attractive.

Gateways can take on many forms and there are many ways a gateway can be distinguished. The most common method is to install City signs at these locations. Once a City sign is installed, the environment around that sign takes on special meaning. Perceptually, the impression of that place becomes identified with the City. If it is a noisy, cluttered environment that will be a lasting image of the City. A clean, beautiful environment will also leave a lasting image, but a much more favorable one. Care should be taken in choosing sign locations for Sunnyvale so that the association between the place and the City is a positive one. Care should also be taken in designing the sign, so that the sign itself creates a positive image.

Gateways can be distinguished by encouraging unique development at these locations, such as buildings with a distinctive size or architectural design. Gateways can be made more attractive with special medians, pavements and landscaping. Monuments or sculpture could also be used to create a sense of prominence or elegance. Sunnyvale's Art in Private Development Ordinance requires artworks with new development at gateways. Since gateways are places where visitors enter the City, some gateways may be good locations for traveler's information centers, where people can stop for directions. These centers could have civic organizations directories, announcement kiosks, telephones, benches and a City map. An information center would make a strong statement about Sunnyvale's hospitality.



A visitor's information center could help identify important city gateways.

Gateway scale and design should vary depending on the location. A large scale is appropriate at freeway entries and the design should be simple so that it can be understood by passing motorists. A gateway on a smaller roadway or at an intersection will be closer to the motorist and therefore the scale can be more intimate. The design can also be more complex and still be legible. Pedestrian gateways can have an even smaller scale. Some design elements should be the same for all the gateways, so there is a unifying theme identifying Sunnyvale.

Sunnyvale is a large City bisected by many highways, expressways, arterials and collectors. Currently, there are no City monument signs or other distinctive features at these gateways to mark the municipal boundary and welcome people to Sunnyvale. Major gateways are shown on Figure 3. It may not be possible or desirable to create a distinctive gateway at each entry. The following general locations are some of the best opportunities for possible gateway improvements.

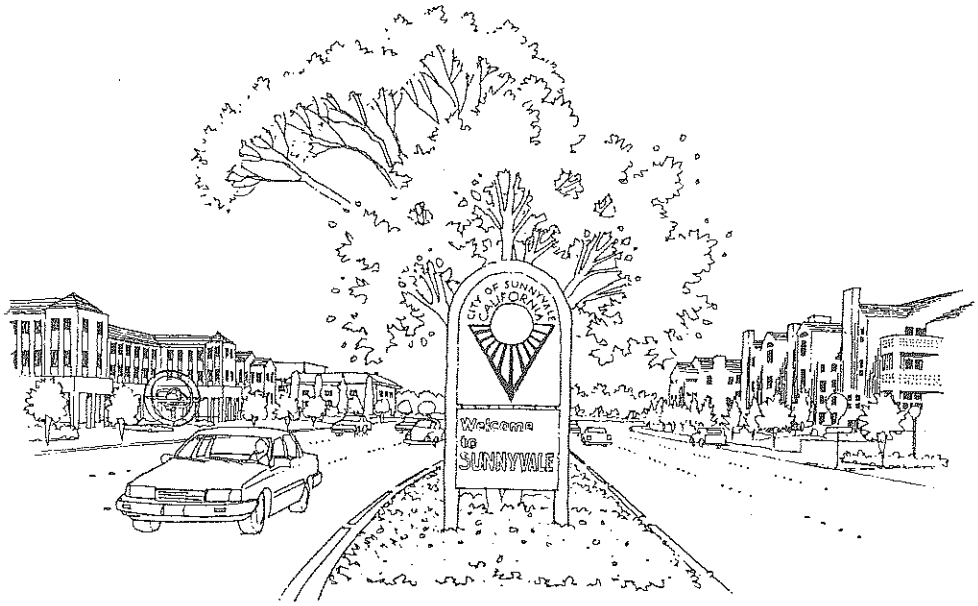
Highway 237 and Highway 101
Mathilda Avenue at Highway 101
Sunnyvale-Saratoga Road at Homestead Road
Lawrence Expressway at Highway 101
Lawrence Expressway at Highway 237
East and west ends of El Camino Real

The new Baylands Park and the existing Municipal Golf Course are good opportunities to identify the gateways at both ends of Highway 237 as it passes through Sunnyvale. Gateways on El Camino Real are also important. El Camino Real is a major commercial district, an historic regional pathway and one of the primary routes to the downtown. Gateways on El Camino would identify Sunnyvale's boundaries and promote the El Camino Real and Downtown business districts. Mathilda Avenue at Highway 101 is another important gateway. It is a major route to the Downtown district and entry to significant industrial employment centers. Hotels and services for travelers are located on Mathilda Avenue. As a result, this gateway, along with those on El Camino Real or to the Downtown may be good locations for a visitor's information center. Lawrence Expressway at Highway 101 and Sunnyvale-Saratoga Road at Homestead are two other important gateways. These are both major commute routes with heavy volumes of traffic entering and leaving Sunnyvale.

Each gateway to Sunnyvale has its own character and purpose which will influence the type of improvements to distinguish that entry. Physical infrastructure and budget constraints will also affect the design. Improving a gateway can be as simple as a special landscape treatment or could be a more elaborate confluence of many design elements.

These improvements can be made by the City in the public right-of-way or be required on private properties when those sites development or redevelop. Gateways do not need to be located right at the municipal boundaries. It is more important that the gateway be where there is the potential for an attractive environment which will compliment Sunnyvale's image.

Before gateway improvements



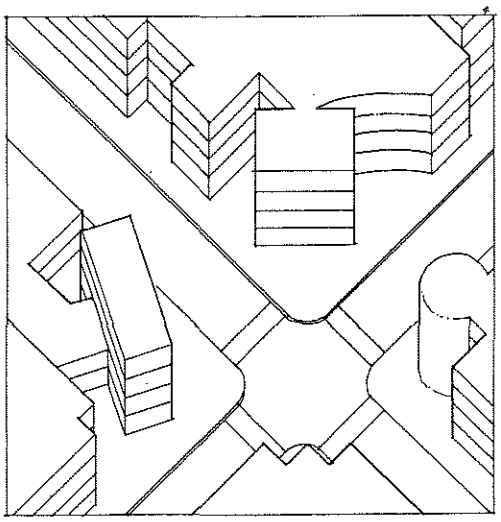
After gateway improvements.

Sunnyvale has budgeted for gateway improvements in 1993/1994. These improvements may include features such as signs and special landscaping. The City has also adopted a Specific Plan and approved a landmark project at the Lawrence Expressway/Highway 101 intersection with the intent of creating a distinctive gateway at this location.

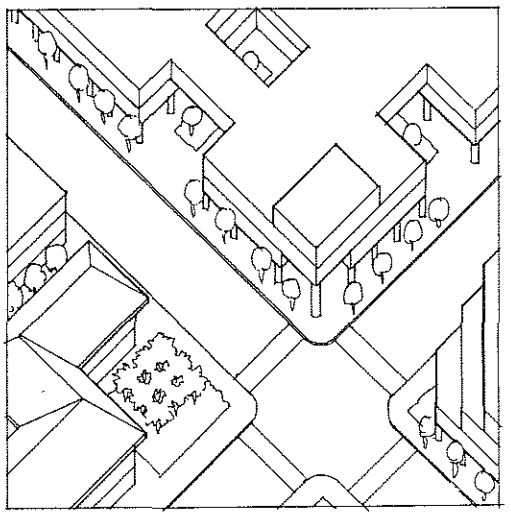
Nodes

Traditionally, nodes are defined as activity centers within neighborhoods and districts. In suburban areas, a neighborhood shopping center could be considered a node. Nodes can also be places where major roadways meet, creating a break in the transportation corridors. At these breaks, there is a heightened sense of awareness for motorists, due to the time spent stopped and the high level of activity and interchange. The intersection of Mathilda Avenue and El Camino Real is this kind of node. Circulation nodes are indicated on the maps of City form (figure 3).

The type and quality of development at a node will leave a strong impression. The nodes on Mathilda Avenue at El Camino Real, Maude Avenue and California Avenue are particularly important because they are preludes to the downtown. Development at these intersections should create anticipation and be distinctive. This can be achieved with interesting architecture, higher buildings, a coherent spatial form, and amenities, such as plazas and artwork. A coherent spatial relationship is created by building setbacks, mass and height which are consistent on each corner. Buildings should also be close to the street to create enclosure and dynamic spaces between buildings.



Poor spatial relationship.



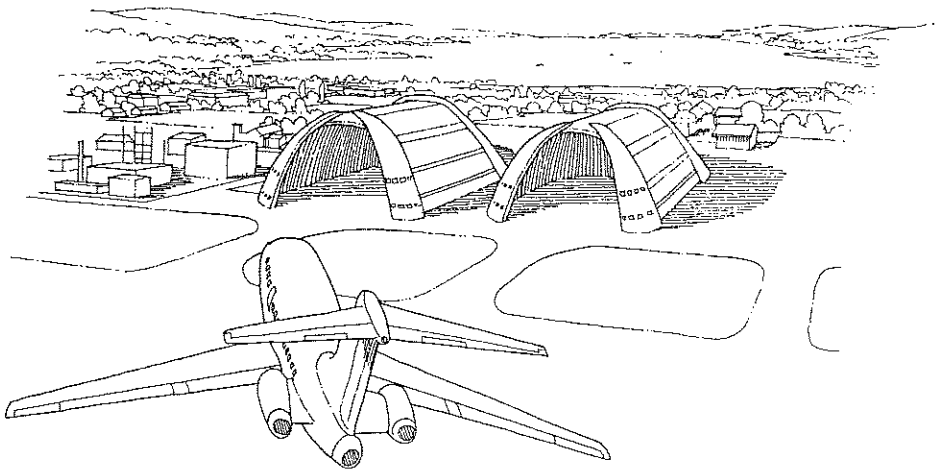
Good spatial relationship.

Landmarks

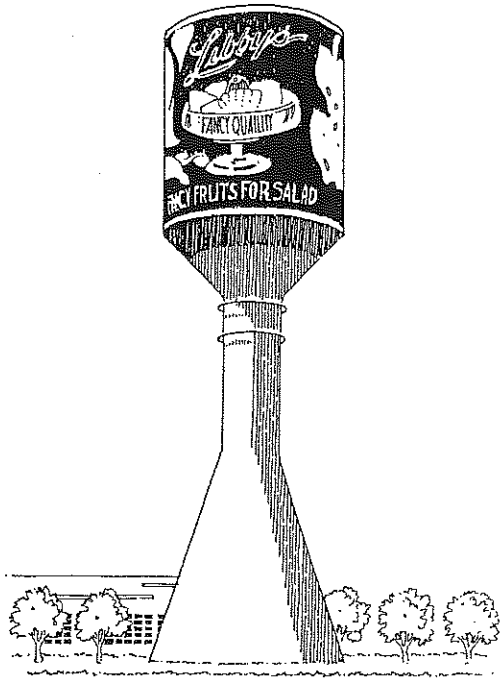
Landmarks are prominent structures or natural features which help orient people to their location. These landmarks can be different from historic landmarks, in that visibility is a defining characteristic. Landmarks have a practical as well as a cultural function. Many people navigate Sunnyvale by using landmarks, as well as other familiar buildings. Landmarks can be either vertical or horizontal. Generally, vertical landmarks are like beacons and can be seen from a great distance, while horizontal landmarks function like large sign posts along the way, providing a sense of familiarity for travelers. Landmarks are important because they help residents and visitors understand their environment and feel comfortable. Landmarks can also provide a focus for a district and enrich the identity of a city.

Landmarks will be most memorable if they have a clear form which stands out from their background. Landmarks can stand out because they are much taller than surrounding structures or they have a unique architectural style or they have a natural scenic quality which contrasts with surrounding urban development. Figure 3 shows the location of significant Sunnyvale landmarks in 1990.

The most visible landmarks in Sunnyvale are the Moffett Field dirigible hangars. These hangars are often difficult to see from within Sunnyvale, but are highly visible throughout the Bay Area and orient air travelers flying into the region. It is easy to locate Sunnyvale by locating the hangars. The hangars are distinguishable by their large size and unique shape which is in sharp contrast to the flat landing fields around them. Even though the hangars are no longer used for dirigibles, as a unique air technology they are early symbols of the aerospace industry to follow and representative of an important industry in Sunnyvale.



Moffett Naval Air Field



Libby Water Tower

Other landmarks in Sunnyvale include: vertical landmarks such as the Libby Water Tower, historic landmarks such as the Murphy Avenue Commercial District and horizontal landmarks, such as the cherry orchards on Mathilda Avenue near El Camino Real.

With suburban development where uniformity is dominant, landmarks add interest, variety and clarity to the living environment. Sunnyvale does not have a large inventory of landmarks and would benefit if new development provides distinctive buildings which add to this inventory. The City has approved a residential tower at Lawrence Expressway and Highway 101 which will become a new landmark, and there is the potential for additional landmarks in the Downtown district. New landmarks at these locations should have distinctive architecture which is readily visible and unique.

Districts

Districts are special areas within a city which have a unique and unified character. Design policies should help districts to be visually distinct. If the various parts of a city are articulated then the whole image of the city will be richer and the identity of the City will be strengthened. Memorable districts create memorable cities.

Districts are most easily identified by the homogeneity of use and structures. Often districts are organized around a strong core, such as landmarks, schools, topographic features or important roadways. Districts can be distinguished from each other by the unique type and density of land use, similar architectural styles, the rhythm and spacing of buildings, similar landscaping or the type of internal street system. A district can have soft or strong boundaries. Defining the boundaries of a district is less important than the homogeneity of the internal elements. Strong edges can even hinder the transition between districts.

Sunnyvale has three basic types of districts: residential, commercial and industrial. These general types of districts are indicated on Figure 4, a map of general land uses in Sunnyvale. This map is meant to show broad patterns and does not include details on

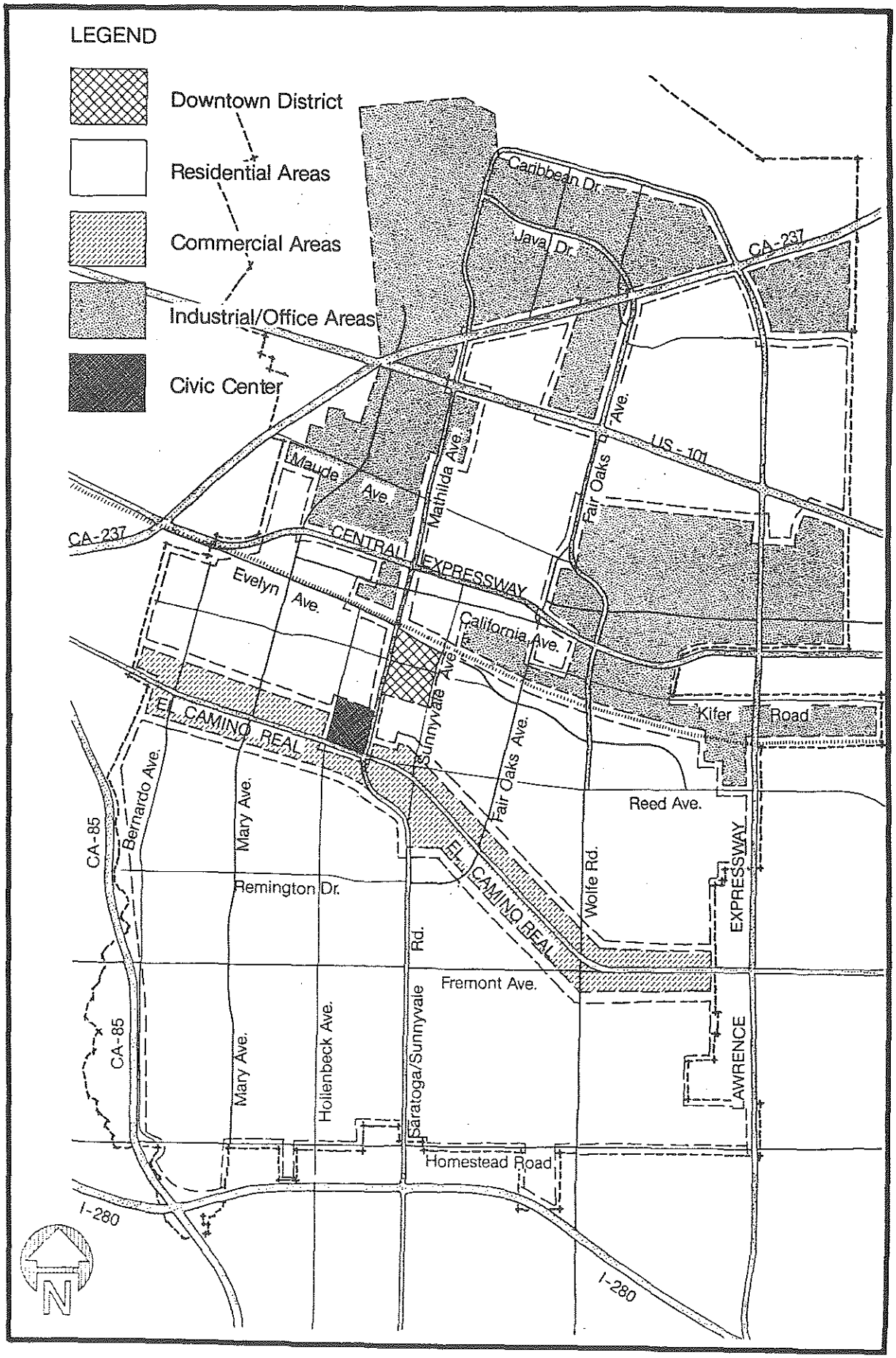


Figure 4: General Land Uses in Sunnyvale

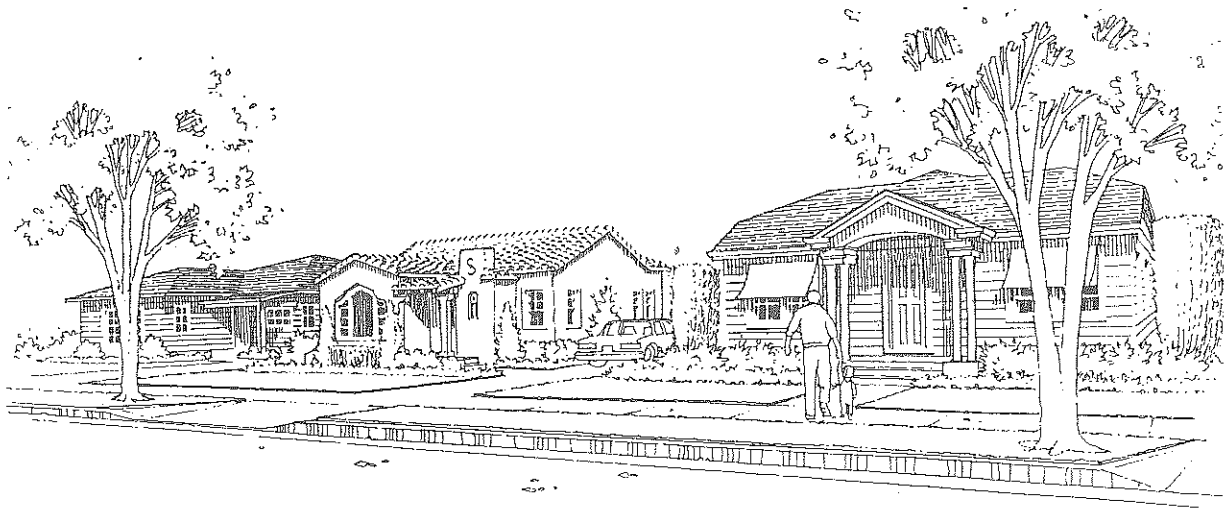
zoning or commercial shopping centers in residential neighborhoods. Within these general districts, there are also special districts such as the El Camino Real commercial district, Moffett Park industrial district, Sunnyvale's Heritage Housing District and the Downtown. While there are some differences between districts in Sunnyvale, these differences are not strong distinctions. Most districts share a predominately homogeneous form of low horizontal structures and relatively similar building styles. There are opportunities to give more emphasis to the unique character of Sunnyvale's districts through architectural and streetscape design standards, particularly in areas which are redeveloping.

Residential, commercial and industrial districts have been created by the historic development pattern in Sunnyvale and further refined by the City's development regulations for private properties and public facilities. Zoning regulations have resulted in different land uses, building height, coverage, setbacks, parking and landscape standards for each district. Engineering and transportation safety standards have resulted in different street standards for each district.

Older districts often look different than newer districts because of changes in development regulations and building styles. For instance, older Sunnyvale residential neighborhoods often have narrow streets laid out in a grid pattern, small homes and reduced building setbacks. New residential districts often have curvilinear streets, larger homes and expansive front setbacks. Zoning regulations and public improvements should be sensitive to the unique character of each district. Infill projects should also be compatible with this character.

Historic Districts, such as Murphy Avenue, are particularly vulnerable to incompatible development

Some districts are more disrupted by change than others. Incompatible development has a damaging impact on the cohesiveness of the area and erodes its special quality. Historic districts are particularly vulnerable to change. These districts require additional policies and regulations to preserve their unique charm. Sunnyvale has a valuable resource of historic buildings and has adopted wide ranging programs to protect those resources. The City has established eight Heritage Landmarks, a Heritage Landmark commercial district, a Heritage Housing district and listed approximately 100 homes and trees on the Cultural Resources Inventory. Sunnyvale also has a Heritage Preservation Commission which oversees the recognition and protection of historic resources. Design Guidelines and policies have been established for both Heritage districts to insure compatible development. The City should continue to inventory its historic resources and consider appropriate regulations to protect these resources when they are threatened.



The Taaffe-Frances Heritage Housing District.

Specific Plans and design guidelines are useful tools to enhance or create unique districts. A specific plan is like a Zoning District, but also includes design features which strengthen the identity of a district. Specific plans can identify appropriate uses, set regulations for building height, setbacks or floor area ratios and establish landscaping standards, architectural design standards, unique street lighting, public plazas and special signage. Design guidelines are more limited and would generally not affect land use or building regulations. Sunnyvale currently has two Specific Plan areas; the Southern Pacific Corridor Specific Plan and the Lawrence Expressway/Highway 101 Site Specific Plan. Design guidelines and policies have been established for both of the City's historic districts. There are other districts in Sunnyvale which would benefit from specific plans or design guidelines.

Design guidelines and specific plans also help developers understand the expectations of the City early in their project design. It is important that the City provide developers with clear information on design regulations, policies and standards.

The City is now studying a Downtown Specific Plan which would establish development and design standards to revitalize this important district. Sunnyvale's downtown already has some outstanding attributes. The downtown is geographically located at the center of the City. This central location is close to industrial parks and residential neighborhoods, making it convenient for lunch, shopping and evening entertainment. In addition, Sunnyvale has a large and affluent population which can support downtown businesses. The low crime rate in the City and other excellent City services also support a vibrant, safe and attractive downtown. These attributes lay a solid foundation for a reemerging downtown.

A highly visible and vital image is particularly important downtown in order to attract new businesses and residents. The Downtown Specific Plan is a unique opportunity to locate higher density housing next to transit, shopping and entertainment. This mix of business and residential uses would result in continuous activity downtown. Ongoing activity creates a safer night time environment and avoids a downtown which is empty at night after stores and offices have closed. Cultural activities such as art galleries, museums and theaters are also important elements for a robust downtown. A Downtown Specific Plan will help create an exciting environment and a unified image which will enhance the identity of Sunnyvale and enrich the quality of life.

Specific plans or design guidelines would also be appropriate for the El Camino Real business district, Mathilda Avenue and Evelyn Avenue. The location of these districts is shown on Figure 5. El Camino Real and Mathilda Avenue are major arterials carrying large volumes of traffic. These two arterials intersect to form a major east/west and north/south axis. Many people get their impression of Sunnyvale from these roadways. Most of the City's businesses, industrial paths and government centers are located on or just off of El Camino Real or Mathilda Avenue. Evelyn Avenue is a transitional area where residential development is replacing industrial businesses. A Specific Plan could strengthen the evolving residential character of this roadway.

El Camino Real is an important thoroughfare and business district. Many of the City's commercial businesses, as well as new apartment and condominium projects are located on El Camino Real. Along this roadway, there is a mixture of restaurants, strip commercial centers, car dealerships, auto repair shops and housing. The businesses provide essential services to residents and visitors and contribute to a strong tax base for Sunnyvale.

A specific plan or design guidelines can do many simple things to promote the El Camino business district and make it a more attractive place to live and shop. A specific plan can establish design features which can unify and enhance the identity of the district. For

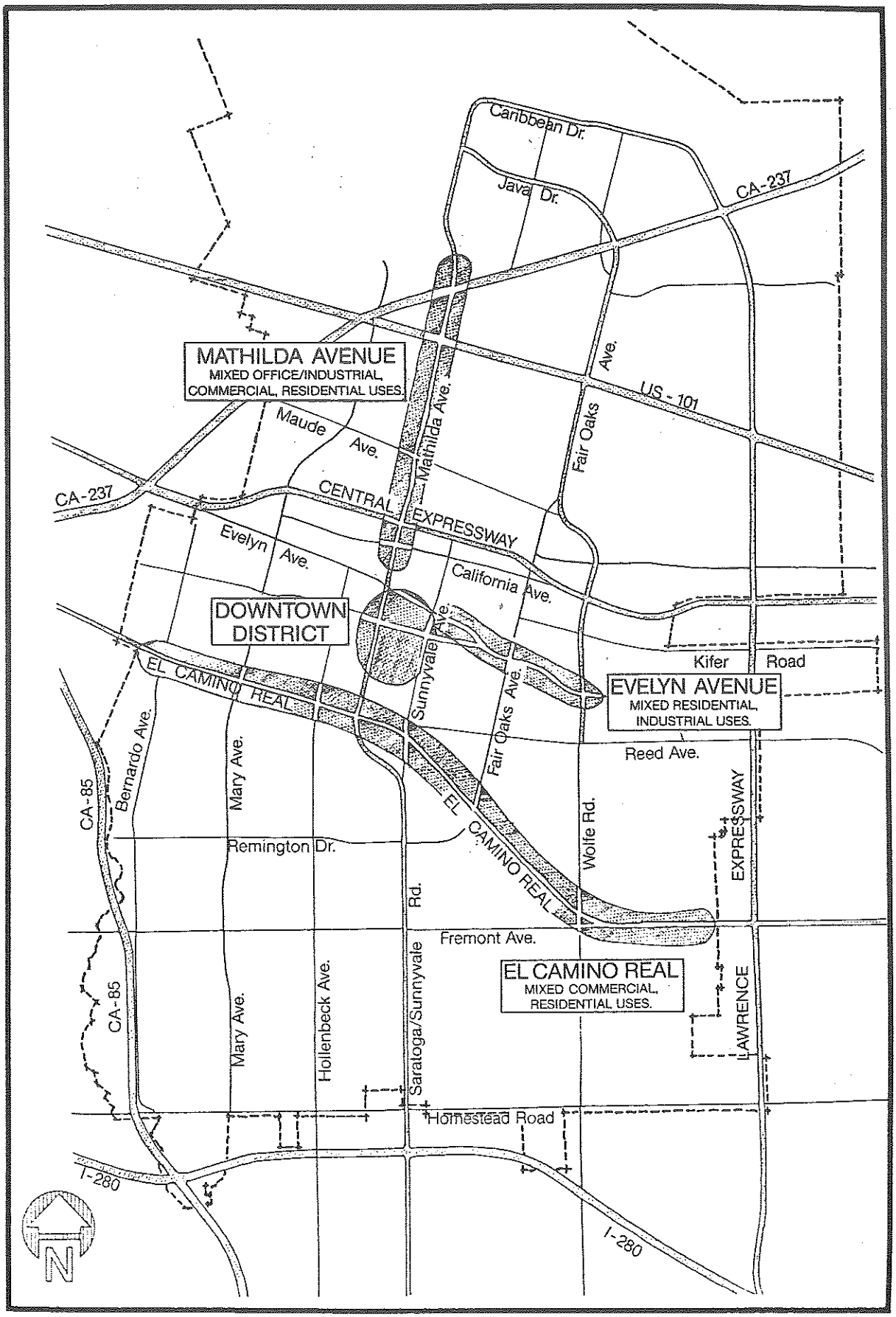
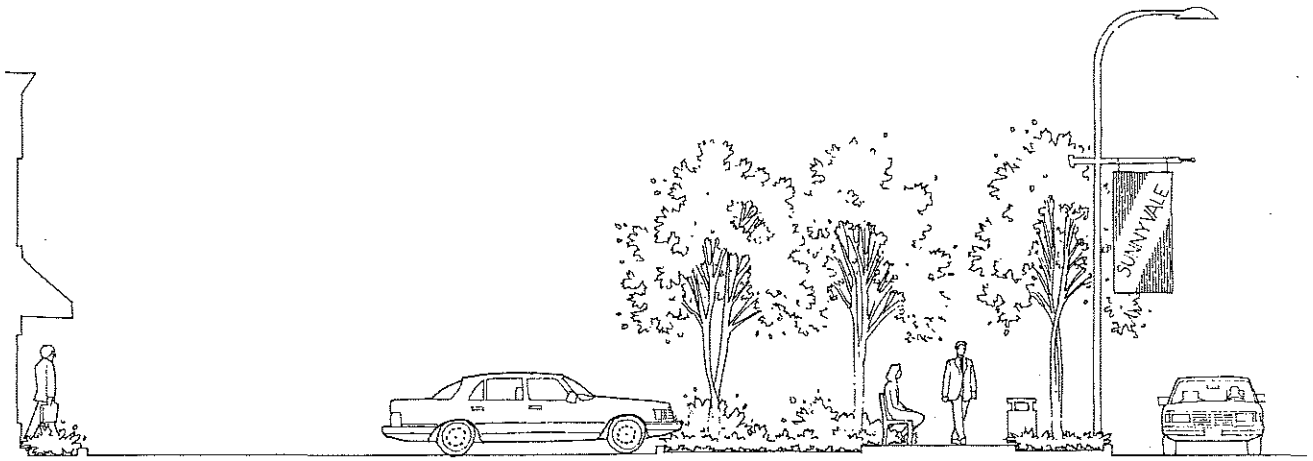


Figure 5: Possible Areas for Specific Plans or Design Guidelines

example, City of Sunnyvale monument signs could be installed at both ends of the street and include "El Camino Real" on the signs. This would identify the district and reflect its importance to Sunnyvale. There is also a distinct business or residential character to some segments of El Camino Real. Special design features could be applied to each of these unique areas. For example, areas of El Camino Real with car dealerships could have colorful vertical banners on the street lights, identifying the type of business and each type of dealership.



Specific plans can distinguish an area through unified, landscaping, street furniture, building setbacks and signs.

An El Camino Real specific plan could also address the issues of appropriate land uses and appropriate building height, setbacks and floor area ratios. Some areas such as the intersection of El Camino Real and Mathilda Avenue may benefit from taller buildings, significant architecture and public plazas. Currently most of El Camino Real is zoned for highway business and could be developed with the same uses at the same height and intensity. A specific plan could provide for a range of intensities and avoid uses which are incompatible with certain segments of El Camino Real.

Mathilda Avenue is another area which could benefit from a specific plan or design guidelines. Mathilda Avenue has less of a defined character than El Camino Real, but may be an area where there is more possibility for dramatic changes. A light rail system down Mathilda Avenue would make a significant change to the streetscape and potential development along this corridor. There are also several large properties with redevelopment potential. A specific plan would provide a context for these changes.

Mathilda Avenue is an important district: it is at the convergence of two highways, it provides access to two major industrial parks and it is one of the main routes downtown.

A unified design theme for Mathilda Avenue can provide an effective nexus which would tie two major employment centers to downtown Sunnyvale and the rest of the community. Whereas a specific plan for El Camino Real is an opportunity to promote a major commercial district, a specific plan for Mathilda Avenue is an opportunity to recognize two important industrial parks and promote the Downtown.

A specific plan may also be appropriate for portions of Evelyn Avenue east of Sunnyvale Avenue. This is a transitional area where several industrial sites have been rezoned for residential projects, leaving small pockets of industrial zoning. Many of the housing projects built on Evelyn are large, medium density apartments or condominiums which have a unique character. A specific plan could reinforce the evolving residential character of this district, in addition to addressing land use issues.

NEIGHBORHOODS

Neighborhoods are vitally important to the everyday quality of life for Sunnyvale residents. Neighborhoods are also a major part of how the City looks, since 34% of Sunnyvale is covered by single family and multi-family neighborhoods.

A defined identity can be as beneficial to a neighborhood as it is to the City. Being able to identify where you live by neighborhood is not only convenient, it promotes a sense of place and shared responsibility. Neighborhoods can be distinguished by the original subdivision, a unique architectural style or lot size, schools, geographic features, arterial boundaries or shopping centers. Many older cities have neighborhoods with a distinct ethnic identity.

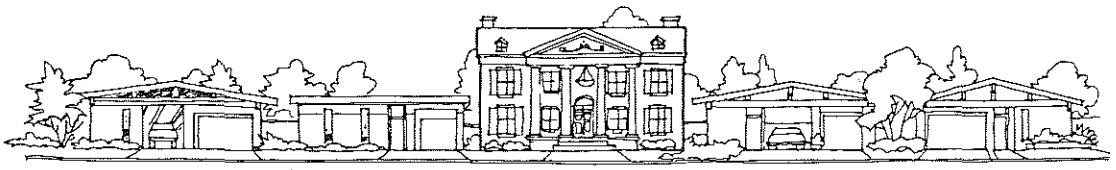
Sunnyvale does not have ethnic neighborhoods and there are not many distinguishing visual features. Sunnyvale's neighborhoods look generally similar because most of the housing was built within a limited time frame and the City has flat, uniform topography. There are some less obvious physical features which define most neighborhoods. These features can be accentuated to create a more recognizable identity for the neighborhood and at the same time, a more meaningful and interesting environment for Sunnyvale.

Neighborhood identity can be enhanced, just as the City's identity can be enhanced, with defined boundaries, entries and landmarks. Often neighborhood boundaries are disrupted or hidden by incompatible development around the borders. In some cases, it is possible to require that infill development on the borders has the same density and architectural style so that it reinforces the neighborhood boundary. In situations where commercial development hides the neighborhood, such as the El Camino Real commercial district, special entries can be used to identify neighborhood boundaries. Some neighborhoods in Sunnyvale already have distinctive entries with signs identifying the neighborhood. Some neighborhoods also have historic landmarks which give them a unique character.

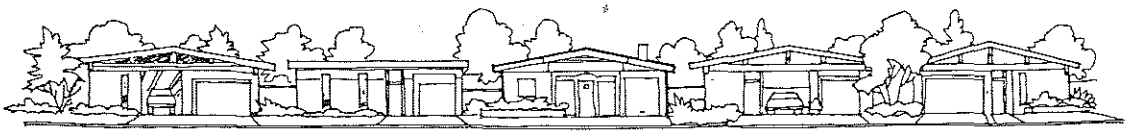
Infill projects within a neighborhood can have a negative effect on a neighborhood's

integrity if they are not compatible. Because of this, the City has rezoned redeveloped school sites to low density housing to match the surrounding neighborhood. Even with the similar zoning, some of the new infill projects look distinct from the surrounding neighborhood because of the difference in house sizes and styles.

For infill projects to blend well with the neighborhood, the new homes need to have the same general style and size in addition to similar density, setbacks and coverage. Often there is a difference between what the market wants and what would be compatible with the neighborhood. Housing fashions and preferences change, but a neighborhood is a more intrinsic, permanent part of the community. Current zoning regulations do not affect the architectural style or size of a house other than the footprint. To protect Sunnyvale's neighborhoods, it may be necessary to adopt more stringent regulations for infill development.



Different Style



Similar Style

Many of Sunnyvale's neighborhoods have a distinct architectural style which gives them a special character. Infill development can have a different style incompatible with the neighborhood.

The City has a number of programs which are meant to preserve the quality of neighborhoods. These programs are administered through the Neighborhood Preservation and Housing Divisions. Through these programs, the City assists neighborhoods with the problems of abandoned cars, illegal construction, weed abatement and code compliance of adjoining commercial uses. The City also has programs to help residents maintain their homes, including low interest rehabilitation loans and a paint grant program. Some cities have adopted maintenance ordinances which cover issues such as fence repairs and landscape maintenance in neighborhoods. Sunnyvale may want to consider a similar ordinance.

One of the best resources for developing effective programs to improve neighborhoods are the residents living in the neighborhood. Any program to enhance neighborhoods should include surveys and workshops to determine what residents think would improve the quality of their neighborhood.

THE VIEW FROM THE ROAD

The view from the road is one of the most significant factors shaping Sunnyvale's visual image. Roadways provide vital transportation routes for pedestrians and automobiles. The Association of Bay Area Governments (ABAG) estimates that in 1990, 120,400 people live in Sunnyvale and 141,000 people have jobs here. Many of these jobs are filled by people living outside of Sunnyvale. The Sunnyvale Transportation Sub-element estimates that about 75% of the 1982 peak hour traffic was made up of non-residents entering, leaving or passing through. By the year 2005, ABAG estimates that there will be 7,600 more jobs in Sunnyvale, resulting in even heavier traffic volumes on the City's roadways.

For non-residents, the view from the road is often their only impression of Sunnyvale. For Sunnyvale residents, the quality of the street environment has a more direct impact on their daily lives. City roads are used for shopping errands, by children walking to school and by residents driving to work. Roadways provide the continuity that links neighbor to neighbor, district to district and the City to the larger regional transportation systems. Roadways are an important part of the visual landscape in front of homes and businesses. The quality of the street environment affects property values throughout the City.

It is vitally important that the road network be safe, efficient, attractive and comfortable. The Transportation Element and Law Enforcement Sub-Element of the General Plan address the issues of safety and efficiency. The Community Design Sub-Element discusses policies for making the street environment comfortable and attractive.

The street environment can be enhanced through public landscaping programs, improvements in the public right-of-way, comfortable pedestrian pathways and attractive commercial signage.

Public Landscaping Programs

Traffic levels have risen steadily over the past thirty years, corresponding to increases in both population and employment. There are now approximately 270 miles of streets within Sunnyvale. As the miles and width of pavement have increased to accommodate traffic, natural open space on private properties has decreased with development. As a result, there is more need for public landscaping to bring natural features back to the hard, asphalt environment. To meet this need, Sunnyvale has two public landscaping programs for the City's roadways: the Street Landscaping Program and the Street Tree Service Program. The Street Landscaping Program provides for median landscaping and the Street Tree Service Program provides for tree planting and tree maintenance along all of

the City's roadways. These two programs will be discussed in further detail in the following sections.

Street Landscaping

Sunnyvale's Street Landscaping program was initiated in the 1960's. By July, 1990, the City will have installed approximately 60 acres of public landscaping on Sunnyvale's roadways, including 2 acres of sound wall landscaping. The annual operating budget to maintain this landscaping is $664,353 in 1990. While the City is not responsible for landscaping on County, State or Federal roadways, Sunnyvale does continue to work with these agencies to insure high quality landscaping. Some City roadways have landscape medians down the center which were either part of the original design or were installed at a later date. Other street landscaping is on street islands, at pedestrian overpasses, on cul-de-sacs and along the railroad lines. There are 14 roads which have median landscaping and 42 additional areas with other types of public landscaping. This landscaping adds variety, texture and color to the flat streetscape.

Landscape medians serve many different functions. Medians can make streets more attractive. A landscaped median makes motorists more comfortable by reducing the perceived road width and providing interesting scenery while caught in stop and go traffic. Medians increase safety by separating oncoming cars. Sunnyvale's medians also help distinguish the major thoroughfares in the City.

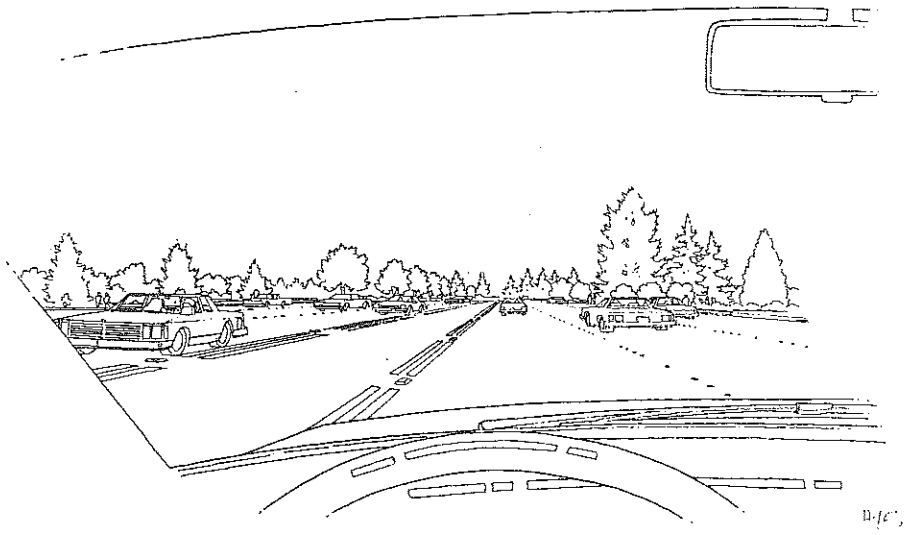
Median landscaping should compliment the surrounding natural and built environment. Residential districts generally would benefit from landscaping with low canopy and ornamental trees, while upright, formal landscaping with tall trees would be more appropriate for major office or commercial districts. Median landscaping should be in scale with the surrounding buildings and street width.

Medians are also an opportunity to showcase the variety of plants and trees that can be grown in Sunnyvale's temperate climate. Medians can be an interesting landscape area with a variety of flowering plants, as well as a mix of deciduous and evergreen trees. There can be variety in the texture and shape of trees. Berming can be useful to screen oncoming cars, but should be a moderate height and slope to minimize erosion. The City should identify areas where additional or replacement trees and shrubs could significantly enhance these medians.

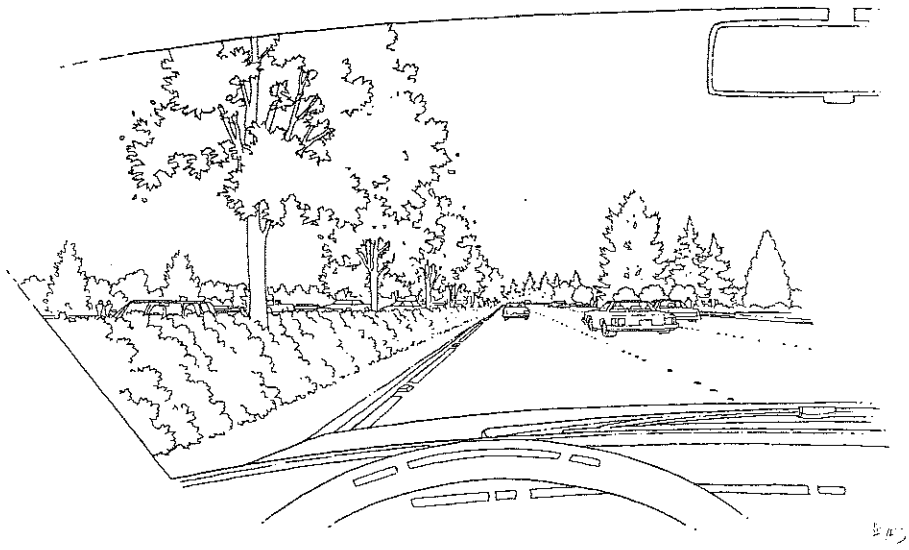
The design of median landscaping should also facilitate easy and safe maintenance of those areas. Low maintenance and water wise plants should be selected.

Landscape medians are important mechanisms for identifying major thoroughfares, City boundaries, gateways and important districts. While this landscaping benefits from a variety of plantings, it is important that there be a unified and cohesive landscape theme for these areas. This theme can be accomplished with repetitive tree groupings, or similar

hardscape materials such as paving stones. A unified landscape theme strengthens the identity of a place or area.



The view from the road without landscaped medians.



The view from the road with landscaped medians.

Over the next several years, Sunnyvale's capital improvement program includes 10 - 15 acres of additional public landscaping. The list of streets scheduled for landscape improvements, include:

Lawrence Expressway
Highway 237/Fair Oaks Avenue
Central Expressway Frontage Road

Portions of the following streets could also be considered for improvements:

Old San Francisco Road
Arques Avenue
Maude Avenue
Crossman Avenue
Duane Avenue

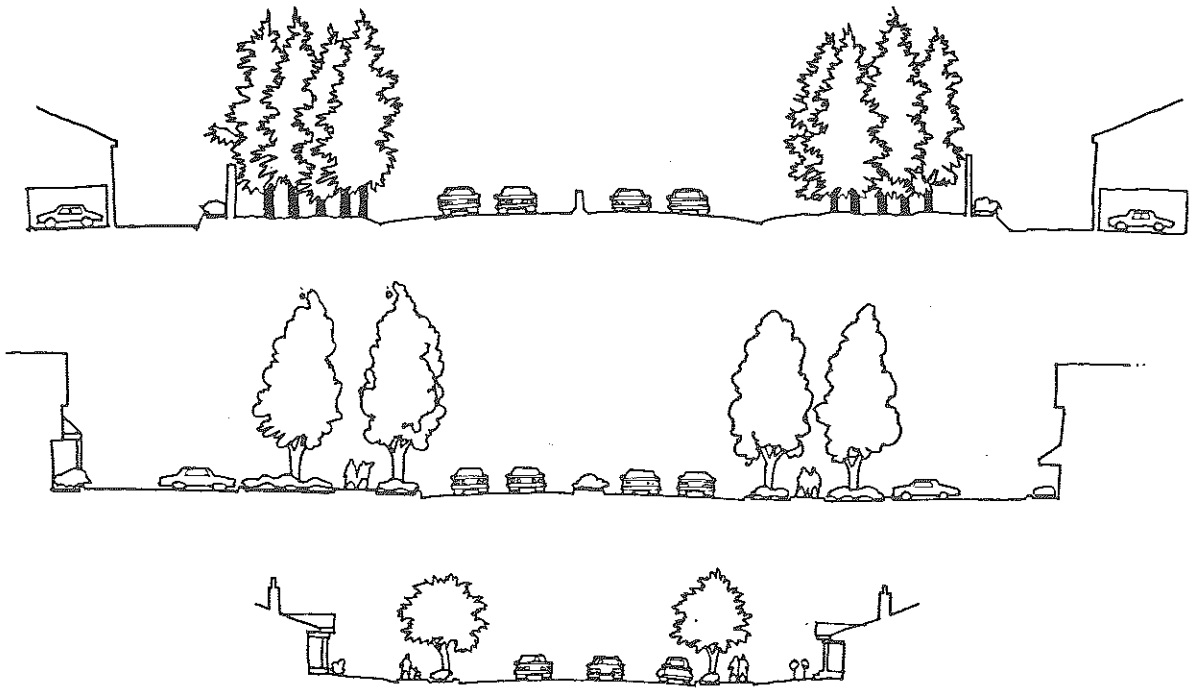
Median design and landscape standards are subject to ongoing change as traffic volumes increase and surrounding development intensifies. Weather conditions, such as the drought, also have an impact. Public landscaping should be systematically reviewed to accommodate these changes.

Street Tree Service Program

Sunnyvale's Street Tree Service Program was formally established in the late 1950's. The purpose of this program is to beautify the City's roadways by planting and maintaining trees along the public right-of-way. The program provides one tree per lot in residential and commercial areas. Trees are selected by the City from a list of approved varieties. Tree selection by the City, rather than private property owners, assures continuity in the streetscape and that the trees selected are appropriate to the surrounding area and climate. The City chooses trees based on the planting site microclimate, whether the tree species is disease and insect resistant, whether there are nearby utilities that would interfere with the tree growth, whether the variety has a root system which would result in sidewalk damage, the size of the planting site and pruning requirements.

The visual characteristics of street trees are also important in their selection. Trees can be effective in strengthening the City's form by emphasizing major roadways and important districts, and by identifying neighborhoods and gateways. Street trees should be chosen based on the scale and importance of the roadway. Taller trees could be used for major roadways and smaller, residential scale trees within neighborhoods. Trees can also be chosen for their drought tolerant and water conserving qualities.

In neighborhoods, broad spreading, deciduous trees are preferable. These trees create an attractive canopy and provide shade in the summer while admitting sun in the winter. In commercial districts, it is important that street trees have a canopy that does not obscure business signage. Industrial districts are the most flexible in terms of compatible varieties. On infill residential sites, new projects will blend better with the surrounding neighborhood if similar street trees are chosen.

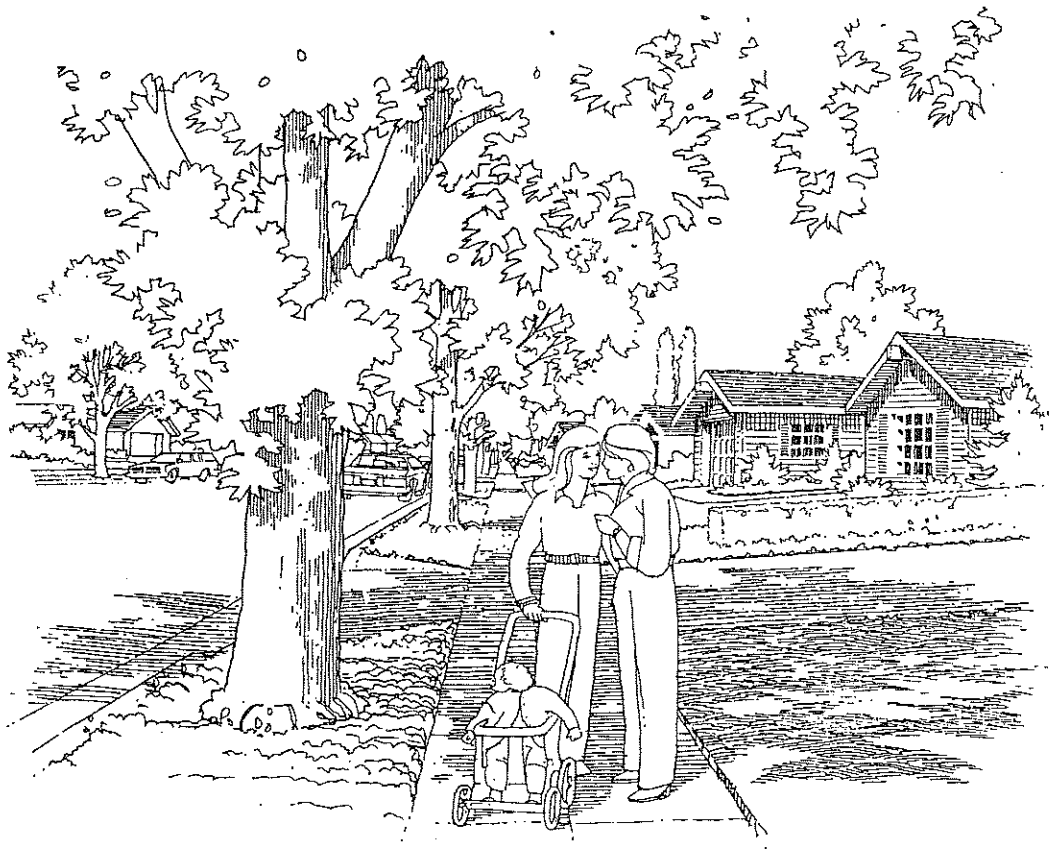


Street trees can accent major roadways and provide
a unifying theme for districts and neighborhoods.

Most of the City's street trees have already been planted. There may be areas which have sparse or incompatible trees where a replanting program would be appropriate.

Street trees can unify and help identify an area. Current City policy requires that no more than 10% of any one variety of street tree be planted throughout Sunnyvale. This policy is meant to reduce the risk of losing a major portion of the street tree population to disease or pests. It also promotes visual interest and diversity. This policy can be flexible where there are roadways, districts or neighborhoods which would benefit from more uniform tree selection.

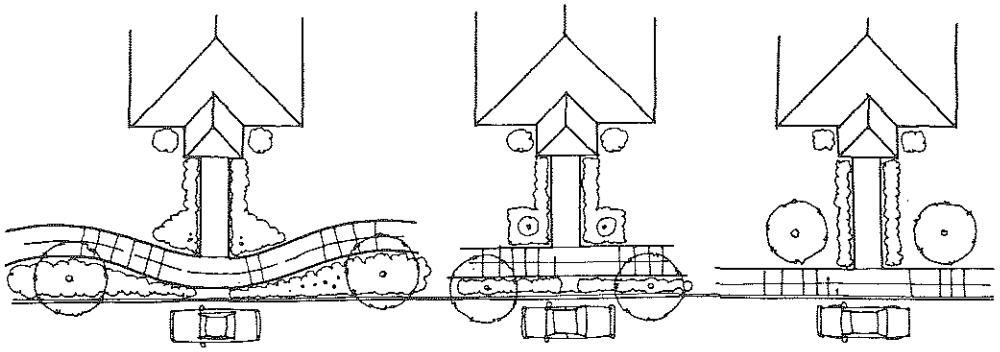
The trees lining Sunnyvale's streets represent a substantial value to the City. In 1990, the City maintained about 31,900 street trees at an annual cost of $900,000. The value of Sunnyvale's street trees is conservatively estimated in excess of $30,000,000. While many City expenditures involve capital projects that decline in value over time, investment in tree planting and maintenance increases in value. Trees also add to the real estate values of the private properties adjacent to where they are located. Trees enhance the public environment by creating comfortable outdoor spaces, serene settings and pleasant fragrances. Trees have a soothing visual impact. They provide a habitat for wildlife, shade for pedestrians and motorists, contribute to fresher air and reduce reflected heat from buildings and pavement.



Street trees create a pleasant environment in Sunnyvale's neighborhoods.

In the future, maintenance costs can be expected to increase as trees grow taller, requiring additional and more difficult pruning. The City is implementing a comprehensive City-wide pruning cycle to systematically maintain the beauty and safety of Sunnyvale's trees. The City can also undertake ongoing research on new tree varieties which are attractive, but require less maintenance and cause little or no damage to sidewalks.

Sidewalk damage is one of the difficult problems in street tree maintenance. When a tree damages a sidewalk, it is the City's responsibility to repair the sidewalk and prune any lateral tree roots causing the problem. Most planter strips in the City right-of-way are 5 feet wide. Property owners adjacent to the planter strip are responsible for maintaining the planter landscaping, except for street trees which are maintained by the City. Often, 5 feet is not enough room for the tree to grow, especially when the planter strip is located between the sidewalk and curb. Sidewalk damage is one reason the City now installs monolithic sidewalks. Monolithic sidewalks are located next to the curb and the planter strip is on the other side blending into the private landscaping. One alternative that the City is considering is a "bow" or meandering sidewalk configuration which would provide sufficient room for tree growth.



meandering sidewalk | parkway sidewalk | monolithic sidewalk

The location of street trees and planter strips is a complex issue affecting private property owners, the comfort of pedestrians and the safety of maintenance workers, as well as sidewalk repairs. The City will need to investigate innovative ideas for balancing these concerns.

Pedestrian Pathways

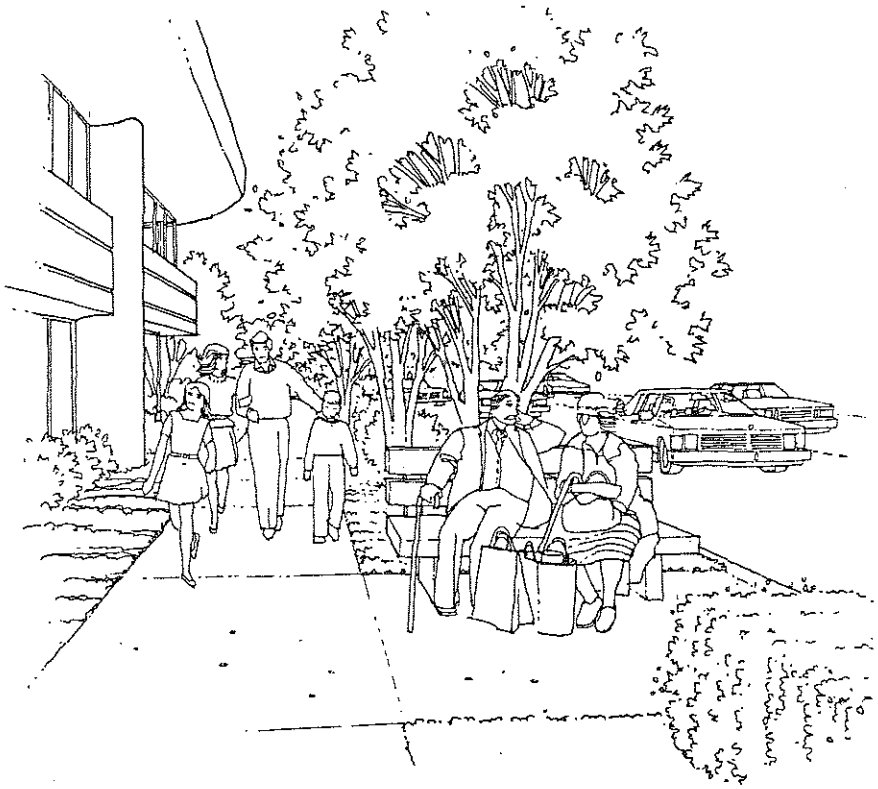
Although most people travel by automobile, it is likely that pedestrian activity will increase as more people use mass transit and health trends stimulate renewed interest in walking. There is presently an extensive system of sidewalks throughout Sunnyvale. Sidewalks have been required in residential and commercial districts and, in 1990, the City adopted an ordinance requiring sidewalks with new development in industrial districts. It is the City's policy to require developing property to install a 5 foot linear sidewalk in residential neighborhoods and wider sidewalks in commercial districts. The City assumes responsibility for maintenance one year after the sidewalk has been installed.

Pedestrian pathways should be designed to be safe, enjoyable and comfortable. Existing City sidewalks meet high standards for safety. They are well maintained, well lighted and crosswalks are visible and well marked. There are still opportunities for improving the comfort and attractiveness of the City's sidewalks.

In the downtown, sidewalks need a wide width to adequately accommodate higher pedestrian volumes, sidewalk cafes and other commercial activities which enliven the streetscape. A wider sidewalk width would help distinguish the downtown environment

from other areas of Sunnyvale. Wide sidewalks have been installed by the City on the 100 block of Murphy Avenue.

Many sidewalks in Sunnyvale have landscape strips between the curb and sidewalk which buffer pedestrians from traffic. Landscape strips are costly and difficult to maintain, but provide pedestrians with a buffer from traffic. On a monolithic sidewalk next to the curb, there is no traffic buffer. This is especially uncomfortable and threatening on high volume roadways. Even a small landscape strip with shrubs creates a sense of protection for pedestrians. Planter strips with trees provide the added benefit of shade and protection from the wind or rain. The City could investigate the possibility of adding some landscape buffers for pedestrians on major thoroughfares and important pedestrian routes.



Parkway landscaping buffers pedestrians from traffic.

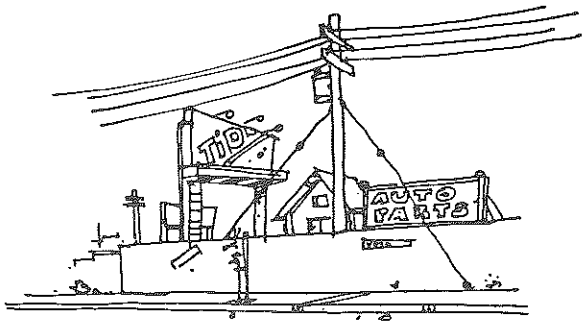
Walkways can also be made more comfortable with benches for resting. Benches are appropriate where there are transit stops, scenic vistas, plazas or areas with attractive, shady landscaping. Other street furniture such as drinking fountains, trash containers and information kiosks are also important elements in creating a friendly and functional environment for pedestrians.

In Sunnyvale, there are several historic pedestrian pathways: El Camino Real and the De Anza Trail. Commemorating these early foot paths would enrich the community's cultural identity. A portion of the De Anza Trail will be reproduced as part of the Bay Trail project. The Bay Trail project is a regional effort to construct a foot trail around San Francisco Bay. Sunnyvale will be participating in this project by installing part of the trail with the Bayland Park improvements. There may be other future opportunities to cooperate in regional and county wide efforts to heighten awareness of the natural attributes of the Bay Area and this area's unique industrial, social and cultural achievements. It may also be possible to commemorate the early pedestrian history of El Camino Real by installing reproductions of the original bell markers, plaques, special street signs or landscaping reminiscent of this early missionary trail.

Bicycles are another alternative to automobile transportation. Bicycle racks need to be included with other street furniture on public sidewalks. Bike racks encourage bicycle riding and can be an interesting design feature of the streetscape. Comprehensive policies for bicycles and bike routes can be found in the Transportation Element of Sunnyvale's General Plan.

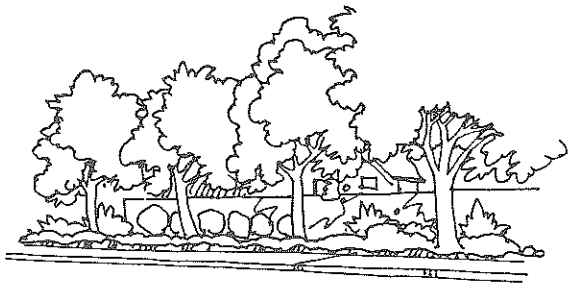
Streetscape Improvements

Utility wires, walls and fences along the public right-of-way have a direct impact on the view from the road. The design of these elements can add or detract from the visual appeal of the streetscape.



Before Improvements

Overhead utility wires are generally considered unattractive and clutter the roadway. High poles and wires, because of their scale, can dominate a roadway or neighborhood. Since 1975, Sunnyvale has adopted ordinances requiring the undergrounding of utility wires. The City also budgets approximately one million dollars a year to underground utilities along major roadways. These efforts have made a significant improvement to the appearance of Sunnyvale's roadways and the adjoining properties.


After Improvements

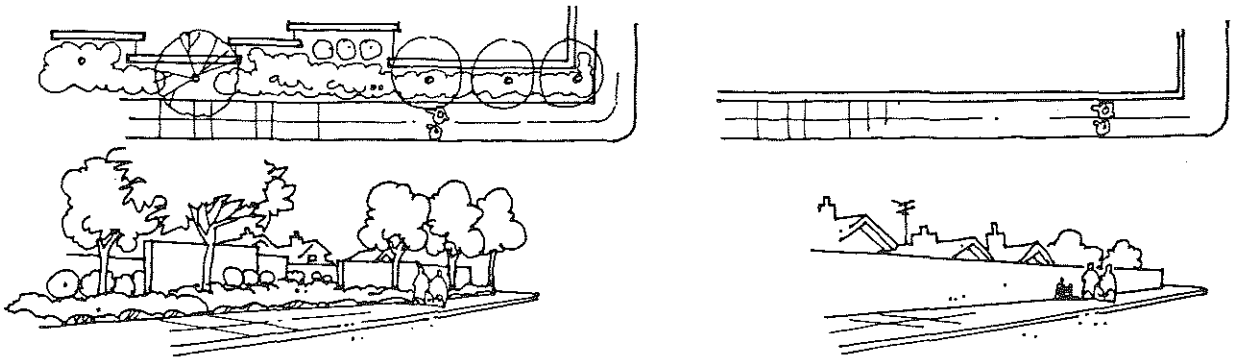
Most property owners are required to pay for undergrounding existing or new utilities when their land develops or redevelops. The City helps facilitate undergrounding utilities with private developers by paying for the undergrounding which extends beyond private property lines and street centerlines. The City's program to fund utility undergrounding

along major thoroughfares has resulted in even more significant improvements to the roadway environment and the City's image.

Private fencing often adjoins the public right-of-way and also affects the view from the rood. Many of Sunnyvale's major thoroughfares are bordered by a continuous wall of rear yard fencing. In residential areas, fencing provides privacy, blocks the view of traffic and can provide some noise buffer. It is the responsibility of private property owners to install and maintain fencing, except along some freeways or expressways where the State or County is installing soundwalls or where the City is helping to maintain rear yard fencing facing the street.

In Sunnyvale's single family neighborhoods, fence materials, design and maintenance can vary with each property owner. In some neighborhoods, rear yard fencing adjoins the public roadway. When maintenance of this fencing is neglected or the materials are incompatible with adjacent fencing, this detracts from the roadway environment and affects everyone. Because of this, in 1990, the City budgeted funds for ongoing repairs of private rear yard fencing facing the public right-of-way. Rear yard fencing along the public roadways can also create a monotonous wall devoid of landscaping or interesting features identifying the neighborhood. Additional landscaping, street furniture and unique entryways identifying each neighborhood would reduce the monotony of fencing along these roadways.

The design of most fencing in multi-family districts, including condominiums, must be approved by the City. It has been the City's policy to require attractive walls and fences along the public right-of-way. Walls and fences are required to have varied setbacks to add interest and create room for landscaping facing the roadway. Maintenance of this landscaping is the responsibility of the property owner or homeowners association. The City also requires fencing to be compatible with the streetscape and constructed with quality, durable materials.



Fencing having varying depths and attractive landscaping creates a more pleasant roadside environment for pedestrians, motorists and adjoining residents.

Sound walls are constructed to reduce the noise impacts of high traffic volumes on adjoining residences. Sound walls are constructed by private property owners along major roadways when those sites develop and with Measure A funds on freeways and expressways. The City has required sound walls as part of new development when needed for noise mitigation. State and County agencies are responsible for installing sound walls along freeways and expressways when there are substantial modifications, such as widenings.

The Santa Clara County Traffic Authority administers Measure A funds. Measure A is a half-cent sales tax passed by Santa Clara County voters for County transportation improvements. Along with other transportation improvements, Measure A funds have been used to construct new sound walls along the residential areas adjoining Highway 101, from Lawrence Expressway to Mathilda Avenue and along Route 85. These funds will also be used for sound walls on Route 237. The County is studying a Lawrence Expressway Commuter Lane and Central Expressway Commuter Lane which could result in new soundwalls along these expressways.

Sound walls are beneficial because they reduce the impact of auto noise and emissions on adjoining residents. There are also some drawbacks since, visually, sound walls can be overwhelming in scale and monotonous to look at. Because of this, the City has a policy that landscaping should be installed along the walls wherever they are visible to the public and requires that the design of the walls be approved at public hearings. Generally, the County and State have cooperated with this policy and installed this landscaping, except in one instance where the City augmented the landscaping. Sunnyvale has budgeted to maintain landscaping installed on the City's side of the walls.

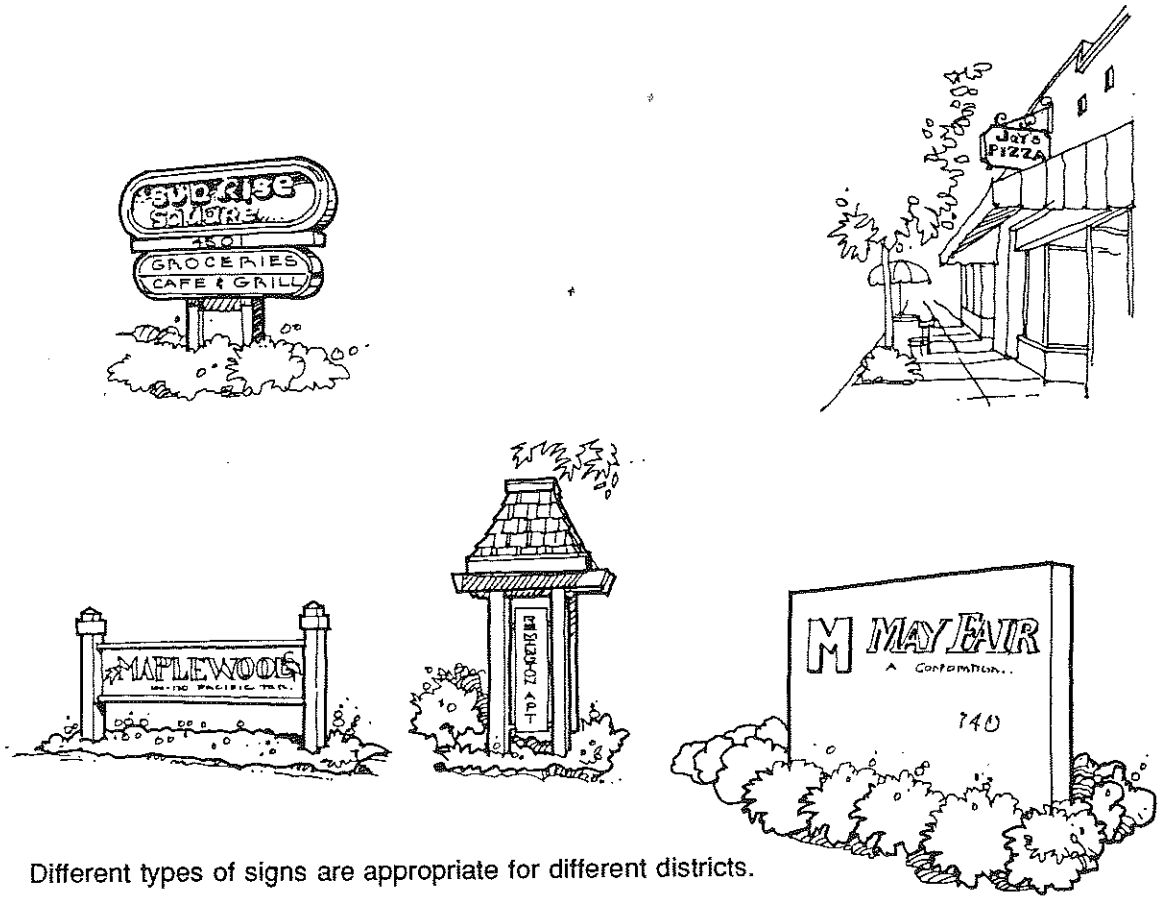
There are several design features which can make sound walls more attractive. Vines, tall shrubs and conifers can be used to provide color and variation in depth. Sound walls benefit from varied and attractive textures to make the surface more appealing. Due to the size of these walls, color needs to be chosen with particular care, since slight variations in hue can have a dramatic affect. There is also the opportunity to better identify gateways if sound walls are stepped back from intersections to create a sense of entry.

Signs

Commercial signage is a highly visible part of the roadside environment. It affects the visual quality of the roadways and the impression visitors have when passing through. Signs are generally oriented to the street and are a useful convenience to locate businesses. The difference in the types of signage often helps identify districts. Residential districts have few signs, while Commercial districts have many signs in all different colors and sizes.

Sunnyvale has adopted sign regulations to insure that signage is attractive, compatible with the district where it is located and not distracting to motorists. The premise of the Sign Ordinance is that signs should identify businesses, not advertise them. This principle is one reason why billboards are not allowed in Sunnyvale. Uniform regulations provide each business with an equal opportunity to identify its location. These regulations are necessary to avoid signs which compete for attention with overwhelming size or garish colors. This type of competition creates visual chaos and is detrimental to other businesses. Sign regulations improve the safety of motorists by eliminating distracting signage, such as blinking lights, and requiring a safe location for ground signs. The Sign Ordinance also insures that signage is compatible with the building style and site design.

Since the adoption of the Sign Ordinance and a major amendment in 1985, commercial signs are more in balance with other elements in the streetscape. Signs have a more compatible scale and do not dominate the view. The order and clarity brought by sign regulations have made it easier to identify and find businesses. The Sign Ordinance has also helped make signage an attractive element in the roadside environment.



Different types of signs are appropriate for different districts.

PRIVATE DEVELOPMENT

The quality of development on private property, together with the environment created by public facilities and roadways, combine to create a complete image of Sunnyvale. Private development is as important as public improvements in creating a vital, enjoyable and comfortable environment for residents and visitors. The design of private development has a strong impact on residents and the City's image. As a result, most communities have development standards and often require public review and approval of project design. In some communities there are specialized review boards for architectural and design review. In other communities, like Sunnyvale, the Planning Commission and City Council routinely review the design of new projects along with their other duties.

Without design policies and standards, private development may or may not produce the type of visual environment preferred by Sunnyvale. It is even less likely that the City will get outstanding development without a commitment to quality through design review. The Sunnyvale City Council has taken a number of actions meant to increase the effectiveness of design review for new development. The Council has added a design professional to the City Staff, initiated a Downtown Specific Plan and may consider design guidelines for other areas of the City.

This commitment to quality design needs to be balanced within the overall economic welfare of the City. Design policies, and the regulations which may evolve from these policies, should support the economic prosperity of Sunnyvale. Design regulations cannot be so burdensome that they discourage economic development and, as a result, become counter productive to the kind of appealing and vibrant environment those regulations seek to create. The level of design regulation of private development will be determined by the unique economic and cultural circumstance of each community.

Private development can enhance the image of Sunnyvale. Amenities which make a project attractive and livable do not need to be sacrificed in order to maximize development intensity. Projects should function well on the site, be compatible with surrounding properties and have architectural merit. Generally, there are two parts to development which determine how successfully a project meets these criteria: the site design and the building design. With good design, these two elements are fully integrated and complimentary to each other and at the same time are compatible with the surrounding environment.

Site Design

A site is generally defined by the boundaries of ownership. Site design is how buildings, parking, pedestrian and automobile circulation, landscaping and open space are

arranged on the ground. A good site design organizes and integrates all of these elements. It creates a functional and visually attractive environment. Site plans can be reviewed based on how well the functional elements accommodate the intended use and how well the design is refined to create an attractive and compatible environment.

Functional Elements

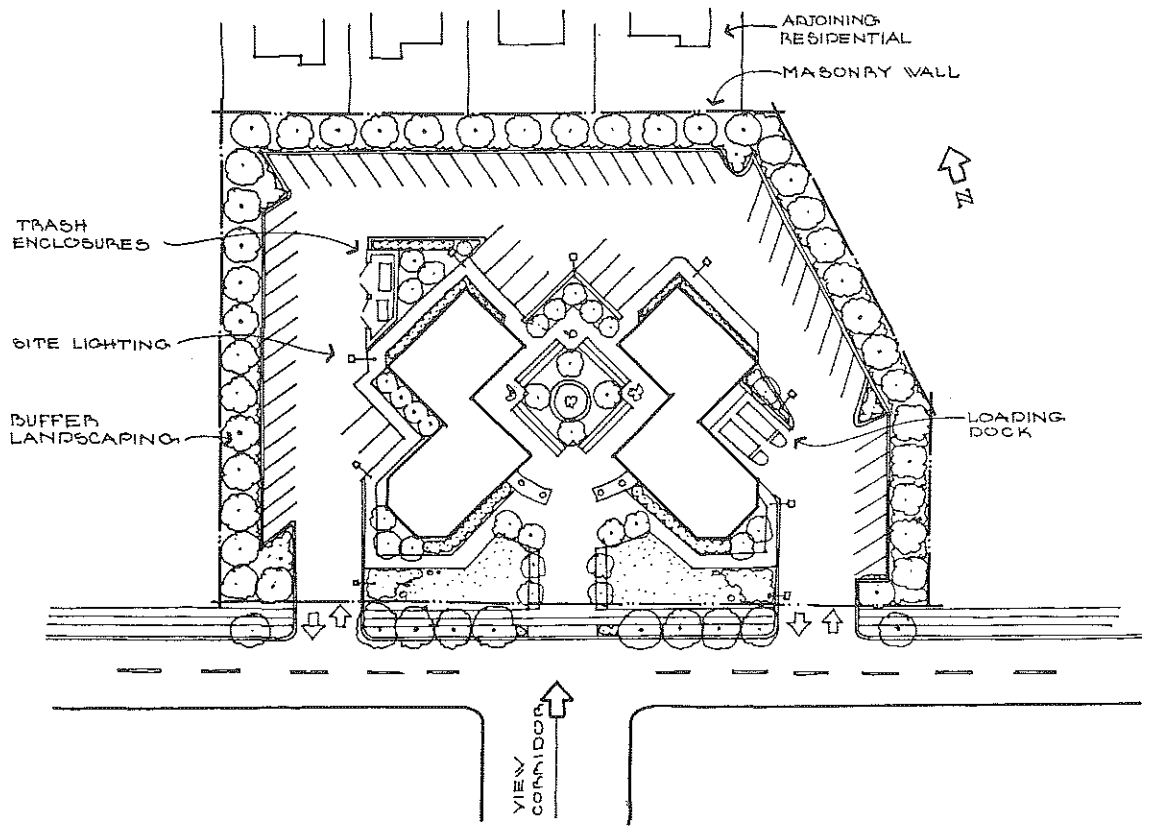
All site designs start with functional elements determined by the intended use. The functional elements of a site plan are the building location, driveways, parking, auxiliary structures, exterior mechanical equipment, lighting and service access. The design of these functional elements is often determined by practical constraints resulting from the nature of the use. The type of use determines such features as the amount of parking and building form. Commercial uses need a great amount of parking and require maximum street exposure, so they are usually located at ground level or in low, horizontal buildings oriented parallel to the street. Office use requires less parking and operates most efficiently in compact buildings, often with vertical orientations.

The types of uses allowed by zoning will influence the way an area looks because of functional requirements. If there are areas where Sunnyvale wants tall buildings, such as the Downtown or major entries, then the zoning should encourage uses compatible with that building form.

A site can be designed to insure that the functional elements do not create problems, either on or off the site. Auxiliary structures, trash enclosures and mechanical equipment can be integrated with the building, so they are unobtrusive and effectively screened. Lighting should not distract motorists or adjoining residents. Trash enclosures and service access should be located away from residential properties to avoid odor or noise impacts. A site plan can be designed for safe ingress and egress with minimal driveways into the site and with on-site parking which is adequate so that it does not spill over onto adjoining properties. A well designed site plan will have functional elements located to insure compatibility with neighboring properties.

Sunnyvale has Zoning regulations, standard development conditions and discretionary policies which address the design of each of these functional elements. These regulations have had a positive effect on making new development more attractive and compatible with surrounding properties.

As a discretionary policy, the City should consider requiring reciprocal ingress/egress easements for commercial development or redevelopment. Ingress/egress easements would allow motorists to drive between neighboring properties without having to enter the public roadway, resulting in fewer roadway curb cuts, more landscaping and improved vehicular safety.



A well designed site plan will have features compatible with adjoining properties.

Design Refinement

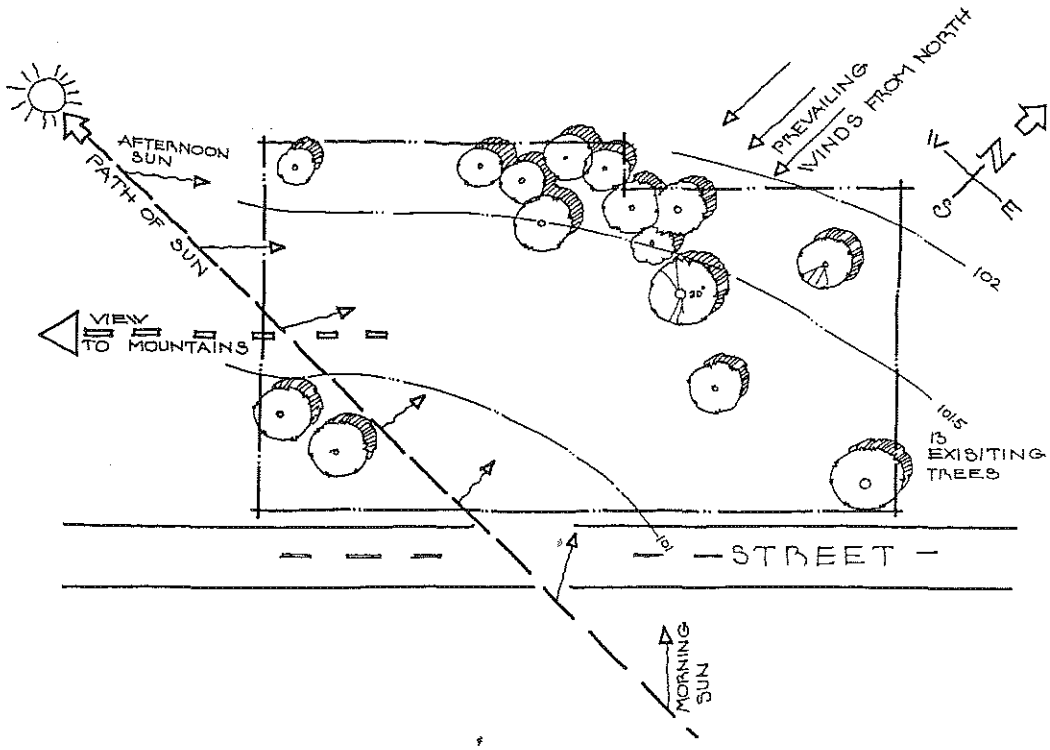
Functional elements need to be refined to create an environment which is engaging and attractive. In order for a site design to be experienced positively, it must have an appropriate relationship with the surrounding environment and produce an attractive internal environment.

Integration with Surroundings

A site plan which is well integrated with the external environment will be experienced positively if: 1) the natural features of the site are enhanced, (2) the design is sympathetic with the surrounding features of the built environment, (3) there is a smooth transition from the public roadway to private properties, and 4) the building setbacks and coverage are consistent with the rhythms of the surrounding area.

Natural Features. One of the first steps in most site design is consideration of the natural features of the property. Some of these features are subtle, such as climate, solar

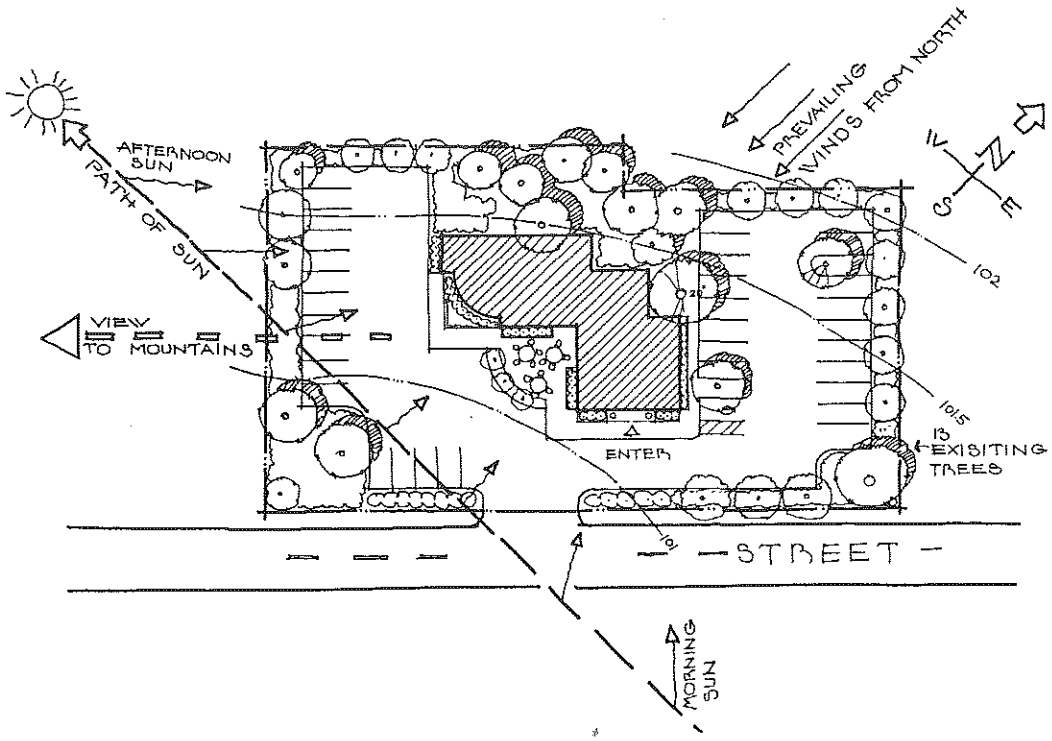
orientation and scenic vistas. Other features are more obvious, such as the shape and size of the lot, topography and mature trees. Each site has special natural features which can be enhanced to create a stronger sense of place and relationship with the natural environment.



Natural site features.

Throughout Sunnyvale there are natural attributes which can be integrated into a site plan. The mild climate in Sunnyvale provides an opportunity to include many outdoor spaces in the site plan. Vistas of the mountain range are also an important attribute and can be preserved. On some sites, there is mature landscaping which can be incorporated into the project design. Mature trees add to the value of a project and help new projects blend into the surrounding area. Incorporating mature trees needs to be considered early in the site design.

Since trees are an important natural attribute, Sunnyvale has policies which protect mature landscaping when sites develop or redevelop. The City also has a Heritage Tree program which recognizes significant or historic trees. These policies and programs are an important first step, but further efforts may be needed to protect and maintain the City's valuable resource of mature trees.

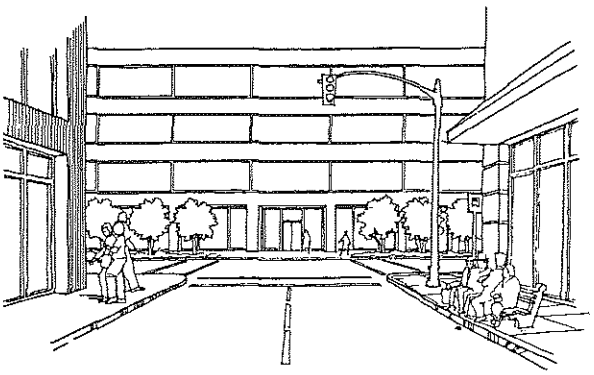


Site design that accommodates natural features.

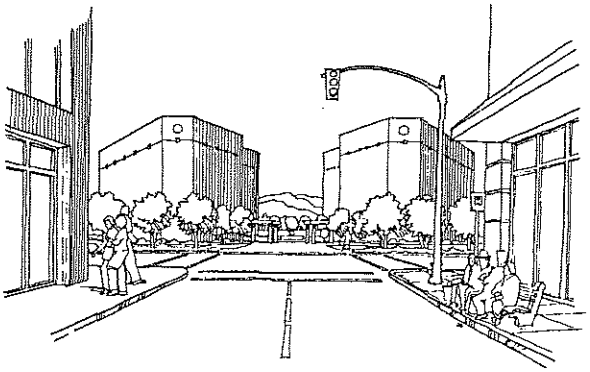
<u>Compatibility with the Built Environment</u>. Many urban designers emphasize the need for site plans to be sensitive to the features of the surrounding built environment, such as road patterns, noise and significant places or buildings. Orientation to the external environment will create a necessary linkage with surrounding development and integrate the project with the community.

The organization of a site plan should be oriented to the adjoining transportation patterns in order to integrate with the surrounding area. Where roads or pedestrian corridors terminate at the project, or at major intersections, the site design can provide focal points, plazas or entrances. The meeting place of project and roadway should be recognized, so that people can make a positive connection with the project. For large projects, view corridors into the site can be provided. View corridors arouse curiosity and extend an invitation to explore. Where project meets transportation routes, blank walls should be avoided. Site plans are more engaging if they are permeable and not closed to their surroundings.

Noise generators also need to be considered when designing a project. Project design can amplify or mitigate the impact of noise from traffic and other businesses. A good site design will contain features which minimize these impacts.



Design without
view corridors.



Design with
view corridors.

It is also important that site plans are compatible with adjoining historic structures or 1 public places. Site design should not detract from these special features. Landmarks, or features such as parks or plazas offer an opportunity to share in their unique attributes. Site plans can be oriented to take advantage of these unique places.

Integration with the Roadway. A site plan which is integrated with the roadway creates harmony and continuity, instead of a disjointed, unrelated environment. Urban designers such as Paul Spreiregen and Ian Bentley speak about enclosure as a vital element in achieving this integration. Enclosure is the relationship of the building location to the street.

Harmony is achieved when the roadway and building location together create a defined space and sense of enclosure. When roadways and buildings create a defined space, the space itself has as much importance as either of the individual elements. The exterior building walls become the interior walls of the roadway. The space integrates the roadway and buildings. This integration results in a more visually satisfying environment because there is more form and direction.

Along strip commercial roadways in Sunnyvale, buildings are routinely setback from the street to accommodate parking. Often, a sense of enclosure is lost. The building also loses its relationship to the street and appears isolated at the back of a long expanse of asphalt. Some cities have started to encourage commercial buildings closer to the street. Parking is either primarily in the back or in the middle of the complex. In Sunnyvale, some of the newer strip commercial centers have only double row parking in front and as a result are closer to the roadway. These centers have a more immediate presence and relationship to the road than many of the older centers dominated by large parking lots. Downtown Sunnyvale would benefit from buildings located very close to the street to

create dynamic, exciting spaces. The City may want to study other areas where the building and street relationship could be improved. There may be areas where a maximum setback is as useful as minimum setbacks.

Typical strip commercial development where there is little relationship between buildings and the roadway.

Buildings closer to the street create a defined space which integrates the buildings with the roadway.

Landscaping is one of the most effective devices for creating continuity and a smooth transition between public and private properties in Sunnyvale. In residential districts, planter strips and street trees link the private and public spaces. In non-residential districts, landscape strips in the public right-of-way combine with private landscaping to create an effective transition between the public and private spaces.

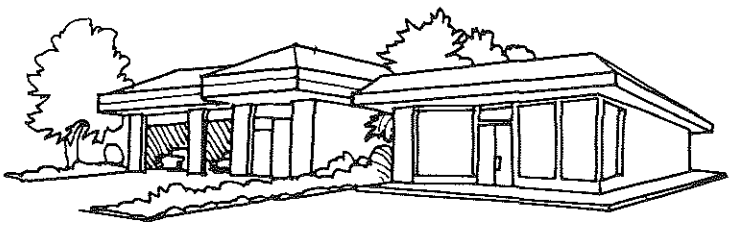
In Sunnyvale's commercial and industrial zones, roadway landscaping can lack continuity as each property develops different landscape schemes. Uniform landscape standards can be adopted in areas the City would like to distinguish. Uniform standards on both public and private properties next to the roadway would create a strong sense of continuity and a unique character. El Camino Real, Mathilda Avenue and the Downtown are appropriate areas to consider landscape standards.

Compatibility with Surrounding Development Standards. Site plans can be designed so they are compatible with the surrounding development standards. New development which does not have similar setbacks and coverage will disrupt the rhythm of the surrounding area. This disruption may be appropriate in locations where emphasis is desired, such as gateways. It may not be appropriate in other locations, such as special districts and neighborhoods. Almost all new projects in Sunnyvale are built on infill sites. As a result, the impact on adjoining developed properties is significant and compatibility more crucial.

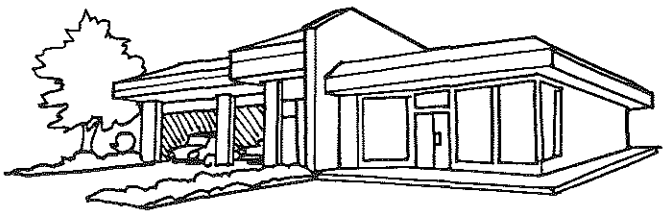
Building setbacks are specified by the Sunnyvale Zoning Ordinance. These setbacks determine the minimum distance of the building from the front, rear and side property lines. Building setbacks establish part of the visual impression of an area.

Setbacks vary in the different residential, commercial and industrial zoning districts. Sunnyvale has adopted these setbacks for fire safety and to establish standards for light, air and open space between buildings. Property owners can depend upon these uniform standards. In residential districts, setback standards maintain privacy and property values. Throughout the City, setback standards determine the unique spatial qualities of districts and neighborhoods.

Currently, there are no minimum rear or side yard setbacks in Sunnyvale's commercial and industrial zones. Typically, buildings are setback from rear and side property lines due to other functional constraints, such as parking, landscaping or service access. These functional requirements often have the most impact on building setbacks and coverage. Occasionally, commercial buildings will be constructed right at the property line with little or no setback which in some cases has created problems. Wing walls or other special construction for fire protection are required whenever a building is close to or right on the property line. Wing walls are usually solid masonry covering the entire side of the building and extending at least 30 inches above the roofline. Wing walls often ruin the architectural lines of a building. They replace the fine details of eaves, windows and building articulation with a flat, monotonous wall. Wing walls create a massive barrier between buildings rather than an attractive transitional space.



Building without wing walls.



Building with wing walls.

The quality of transitional spaces between buildings and architectural integrity can be improved with setback standards which avoid wing walls or other types of blank walls between buildings. Sheer, high walls can create a vise-like space between buildings and disrupt the architectural rhythm created by the window pattern on the rest of the building. These types of walls can be a problem in planned development residential districts when detached buildings are set right at the property. Fire codes prohibit windows on these walls. Sunnyvale has recently adopted an R-1.5 Low Medium Density Residential District which incorporates setback standards meant to avoid tall, blank walls. Additional design standards may be necessary for other zoning districts.

Building coverage is also determined by Sunnyvale's Zoning Ordinance. Coverage regulations, in addition to setbacks, establish the amount of open space by limiting the building footprint on a lot. Maximum building coverage is usually more restrictive than the coverage allowed under minimum setback standards. A closely related, but more complete design concept is floor area ratios (FAR). FAR's include building area above the first floor. Limitations on floor area ratios will determine the total mass of a building, not just the footprint. Floor area ratios will be discussed further under the building design sections.

Internal Design Elements

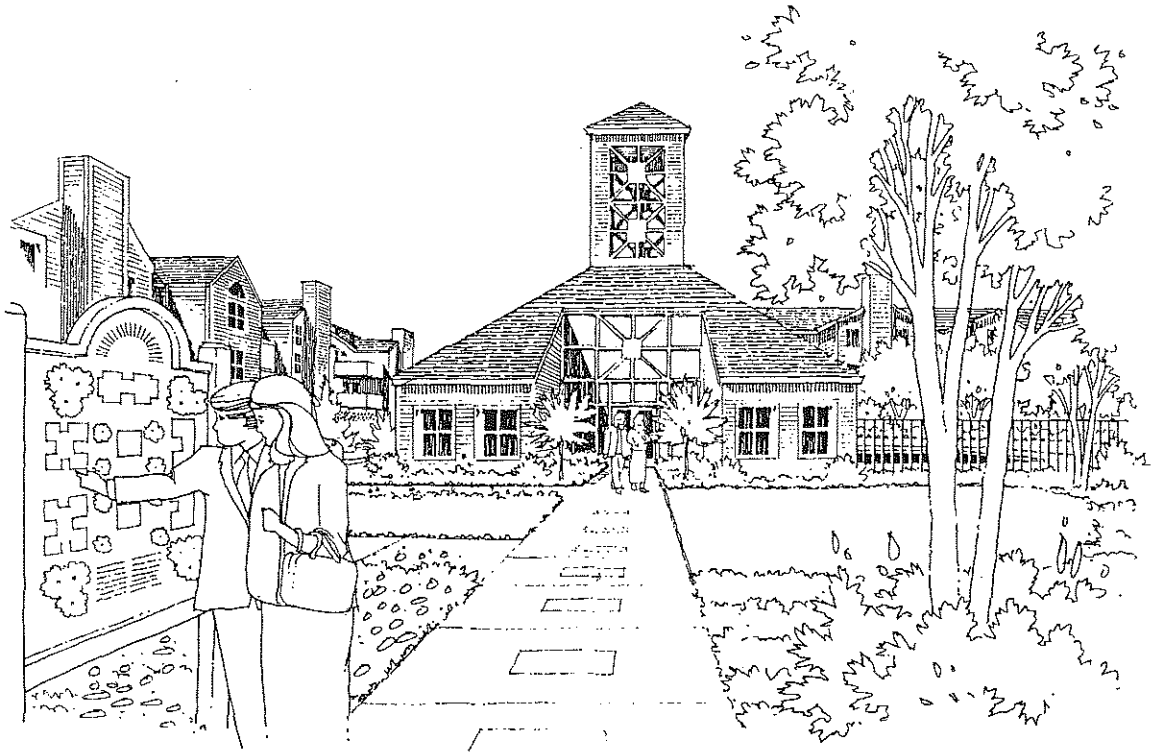
Good site plans have design elements which are compatible with each other as well as surrounding properties. Good site plans create places which are friendly, attractive, efficient and safe. For a site design to be experienced as a positive environment most urban designers suggest the following qualities: 1) a sense of entry, 2) legible organization, 3) an integrated design, and 4) attractive design features. The site also needs to be safe and easily accessible.

Sense of Entry. A good site plan is designed so that entries are obvious and easy to locate. The entry is usually the first feature looked for and identified on a site. People need to know how to drive onto a property and where to go to enter the building. Entries which are not well defined cause confusion. Well marked entries allow people to relax and enjoy the environment. Like City gateways, site entries should also be visually appealing to make a positive first impression.

Entries create an arrival zone which can be grand or intimate. Grand entries may have plazas or fountains creating a place filled with anticipation and excitement. Other entries can be as simple as a hedgerow along a walkway. An appropriate entry will match the building style and function.

Legible Organization. A site plan which is legible is organized so that the environment can be understood. People need visual clues to understand how they should act or where they should go. The design of outdoor spaces should clarify whether these spaces are public or private areas. Signs are helpful to identify the location of uses on the site.

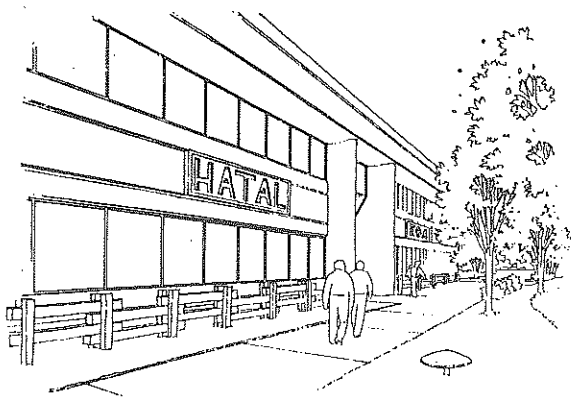
Variations in architectural features and spatial volumes also help orient people. On large sites, prominent architectural features create focal points which will help people find their direction just like landmarks orient people in a City.



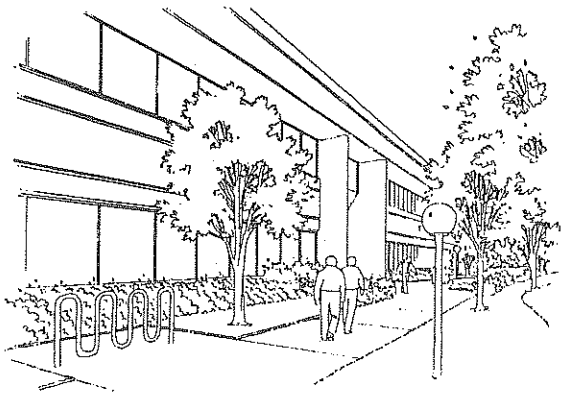
An architectural focal point helps orient visitors to new apartments in Sunnyvale.

Multi-family and condominium projects require more complex and differentiated outdoor spaces. Residential projects need to balance privacy with the opportunity for social contact. Site design should provide; private spaces where there is minimal visual or auditory contact with neighbors, transitional spaces which are semi-private and public spaces where residents have unrestricted access. When these areas are ambiguous, social friction can result. The use of an area can be clarified by the design. Special areas, such as playgrounds, should be clearly identified.

Integrated Design. When the functional and design elements on a site are integrated, this creates a sense of place and a unified whole. Each element should appear to have some relationship to the other elements. A project will be more appealing if the site design is complimentary to the building design. A site with unrelated parts will not function as a single project, but as a collection of different parts.



Poorly designed detailing.



Well designed detailing.

Some of the features which produce a memorable identity for a project are clear boundaries and similar detailing, such as light fixtures, railings, landscaping and signage. Other unifying features are less tangible, such as the relationship of the building form to parcel size and shape, the location and proportion of landscaping to hard surface or the harmony of spatial volumes resulting from building placement. If elements in the site design work well with each other there is a sense of belonging. If they do not work well, there is a sense of uneasiness that can often be difficult to articulate.

Attractive Features. Site plans can be designed to create an attractive environment with features that are pleasant to the senses. Even if a site is designed for maximum efficiency, it will not be a positive experience unless there is a human quality. Site plans which appeal to the senses have that quality because they engage people in a direct way.

Landscaping is one of the most important features that adds to the site appeal. Landscaping can provide color, shade and fragrances which are pleasurable to the senses. Trees and shrubs can compliment and emphasize the building. The amount and location of landscaping has a significant affect on the appearance of a property. Projects with minimal landscaping look barren and feel harsh. Landscaping can make the site look luxuriant with numerous plants and trees. Plants can also be used to accent entries, compliment the building design and integrate the architecture with the site. Landscaping should have adequate irrigation systems and good soil conditioning prior to planting so that it will continue to grow well. Irrigation systems can be designed for water efficiency and with automatic timing for easy landscape maintenance.

In Sunnyvale, one of the most obvious differences between older and newer development is the difference in landscaping. Newer projects have much more greenery because of City Ordinances requiring adequate landscaping. The City now requires landscaping

Landscaping, water features and places to sit
make outdoor spaces more appealing.

around the building, in parking lots, along the street and as a buffer between residential and non-residential uses. Older properties with inadequate landscape are required to upgrade to current standards when there is a change of use or redevelopment. Required landscaping is an essential part of site design and not just something to fill in left over odd spaces. Sunnyvale has periodically reviewed City landscape requirements to keep pace with the changing built environment. In 1990, the City adopted new landscaping requirements which increased the amount of parking lot landscaping and the number of plants as well as regulations to improve maintenance and irrigation.

Parking lot landscaping is practical as well as attractive. In the summer, people vie for parking spaces shaded by trees. Canopy trees with broad crowns provide the best shade. Often commercial businesses resist large canopy trees, because they obscure business signage. A solution which would provide shade without sacrificing signs is to use smaller trees, but more of them. Another possibility, is to install large landscape islands in locations which would not block signage. When there are big parking lots, large landscape islands can be used to break up the lot into smaller, more comfortable areas.

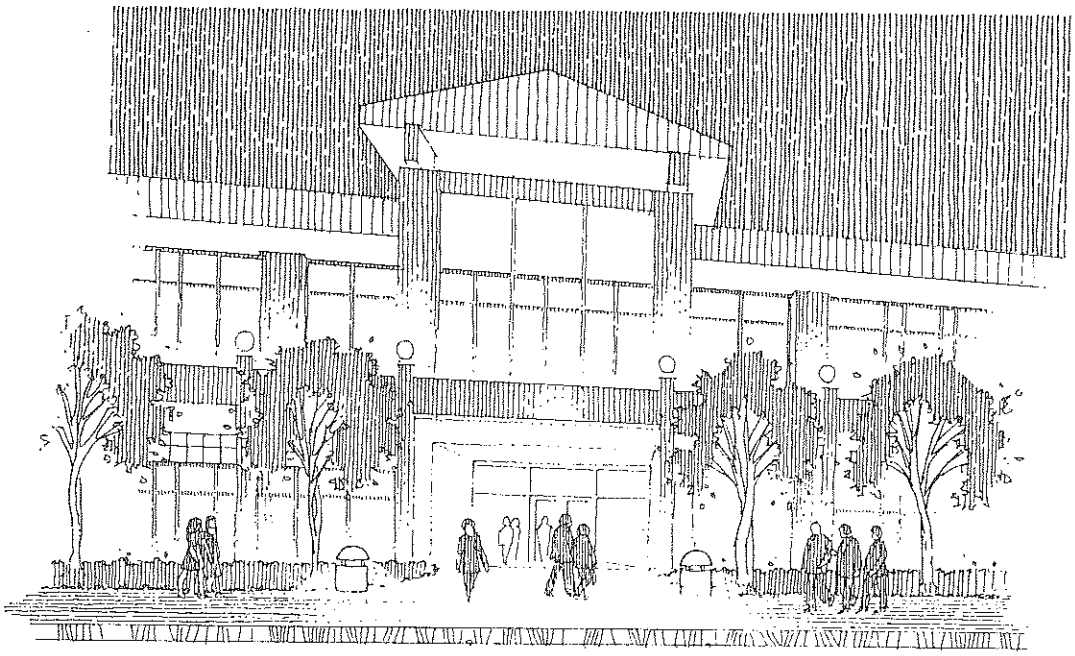
Outdoor spaces also need to be integrated into the site design and located in appropriate areas. A good site design will locate trash enclosures and service access

away from pedestrian entries or outdoor eating. Quiet places for relaxation or eating can also be sheltered from noise and traffic. If outdoor furniture is used, it should be constructed of sturdy materials with colors and a style compatible with the building architecture.

Site plans also benefit from a sense of mystery. Most people enjoy some anticipation and adventure. A site design where everything is too obvious, too soon, can be boring and monotonous. In contrast, too much mystery can be confusing. There must be a balance between the obvious and surprise. A few hidden places or movement from intimate to grand spaces can add a vital dimension to the plan. A site designed with some mystery will create an environment which is stimulating and engaging.

Artwork can also enliven a site by adding a human quality and an expressive dimension to the environment. Visible artworks on private property benefit everyone and are an important link between private development and the community. Sunnyvale has implemented a program requiring artworks for significant new development at gateways and on large commercial or industrial properties. As of July, 1990, there are currently seven sites where artworks are required, mostly in the northern industrial areas of the City. City Ordinance requires that these artworks be in locations with maximum public exposure, be compatible with the scale of the site and be an integral part of the landscaping and architecture of the project.

Safe and Accessible Environments. Site plans can be designed to be safe environments, easily accessible to everyone. If a project is perceived as unsafe, not even outstanding design will bring people onto the site to live, work or shop.



Visible, well lighted entries create a safe nighttime environment.

Safe environments have good public visibility, adequate night time lighting, well designed circulation systems and quick, unobstructed access routes for fire and police services. People feel safer when entries into a building are in clear public view. Landscaping can also be designed to promote a feeling of security by avoiding banks of tall shrubs or low evergreen trees and using more transparent landscaping, such as high canopy trees and low shrubs. Walkways, entries and parking lots should be well lighted to provide a safe nighttime environment. Lighting is more assuring if it has a soft, cast and is designed with uniform illumination.

A well designed circulation system is critical to ensuring the safety of pedestrians and motorists, as well as efficient emergency access. A good site design will have driveways located where there can be safe access to and from the property. Safe access requires good visibility and prohibiting high landscaping or signs by the driveway which obscure pedestrians and other motorists. Safe access also requires adequate stacking space for cars on site and an unobstructed driveway into the site to avoid cars stacking up on the roadway. Driveway and aisle widths should be adequate for quick access and turn-around areas for emergency vehicles. Aisles and parking spaces also need to be designed for safe parking.

Sunnyvale has standard development conditions and ordinance requirements for safe on--site lighting, circulation, parking and emergency access. These requirements have helped assure secure and efficient site design in Sunnyvale. For most properties, there is also discretionary City review of landscaping and building configuration.

One of the ongoing problems for the City is landscaping which has been planted incorrectly or is overgrown and blocking visibility at intersections and driveways. It may be necessary for the City to systematically review existing landscaping and adopt further regulations to promote safety at these locations.

It is essential that sites be designed with easy access for everyone. Sunnyvale is required to use the California Uniform Building Code (UBC) which includes minimum requirements for handicap access. The UBC requires ramps for access for the handicapped at curbs and stairs. Sunnyvale may want to broaden the requirements for handicap accessibility on some projects. Especially in large projects, shopping centers and Downtown, site environments can be designed so that they are understood, easily navigated and enjoyed by everyone.

Building Design

Buildings are typically the most dominant features on a site. They are also one of the most dominant features of a city. Buildings represent a visual inventory of a city's history. Often cities or regions become identified with a certain building style, for example, the victorian row houses in San Francisco or the adobe buildings in the southwest. Buildings can enhance or detract from a city's image and once constructed usually remain for a

long time. Buildings with good architecture will compliment Sunnyvale's image. Good architecture raises people's spirits, inspires creativity and heightens individual as well as cultural identity. Architecture which is inappropriate fails to communicate, inspire or motivate.

Good architecture not only has intrinsic value, but is also appropriate to its context. A building must relate sympathetically to its surroundings and not vie for exclusive attention to the detriment of other buildings. Buildings which blend into the fabric of a community are an essential part of a civil environment. Buildings which draw exclusive attention are appropriate in only a limited number of places, such as gateways and for a limited number of uses, such as a performing arts theater.

It is because buildings are so important that they can become so controversial. Often discussions on architectural merit are reduced to arguments on like and dislikes. Most people have strong architectural preferences based on personal experience. There are, however, some basic aesthetic principles which allow for a clearer dialogue and a more objective basis for review.

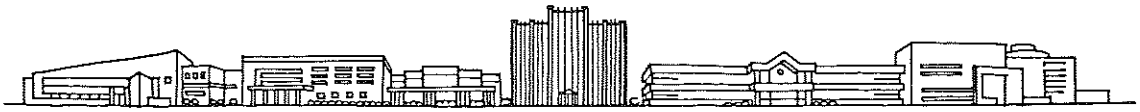
As with site design, there are functional elements to building design which must be refined to create a compatible and attractive building.

Functional Elements

The functional elements of a building's exterior design are basic. Buildings have walls for structured support and a roof for protection against the weather, and buildings have openings, such as windows and doors, for light, air and access. Today, in areas with scarce and expensive land, buildings often have parking incorporated underneath.

The intended use of a building will affect its form. Most industrial uses would not function well in vertical buildings, whereas residential uses are readily adapted to vertical structures. Warehouses do not need windows, but commercial businesses thrive with large, open storefront windows. Zoning districts in Sunnyvale assure compatible uses and because these uses are similar, this also results in generally compatible building forms.

Walls. The shape of the walls determine the perceived vertical and horizontal orientation of the building. Walls are also the largest building element and unify all of the other functional elements. Some areas in Sunnyvale, such as the Murphy Avenue Heritage District, have buildings with vertical orientations. Other areas, such as the El Camino Real Commercial District, have predominantly horizontal forms. New construction should be sensitive to the vertical or horizontal character of the district.



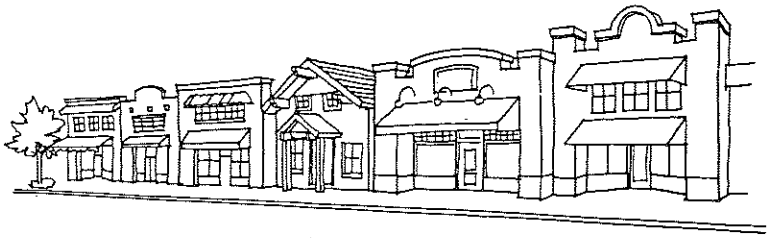
Streetscape With Incompatible Building Orientations

Streetscape With Compatible Building Orientations

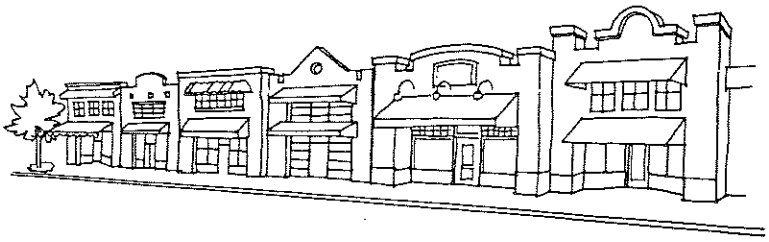
Roofs. The roof is another dominate functional feature of a building. Rooflines are the edge of a building and have a strong visual impact when silhouetted against the sky. Roofs are often a prime indication of building style. They are also one of the most critical visual elements in determining compatibility with neighboring buildings. When a roofline does not match the pattern of surrounding buildings, it breaks the rhythm of the streetscape.

Sunnyvale has two basic roof types: flat roofs with parapet or mansard features mostly on commercial buildings and peaked gable and hip roofs mostly on residential buildings.

Gabled roof in the center breaks the rhythm of the streetscape.



Parapet roof blends with the surrounding rooflines.



Roofs should be designed to be compatible with adjoining properties and with the use of the building. Infill projects will be more compatible if the roof has a similar height and shape as adjacent buildings. Different styles of rooflines can also be useful in identifying uses. Hip or gabled roofs are generally associated with residential buildings. In mixed use projects, this motif can identify the residential component. In Sunnyvale, the mixed use project at 460 E. El Camino Real has a gabled roofline with peaks over each upstairs unit. Without this type of roof, the different uses of this building would be more ambiguous.

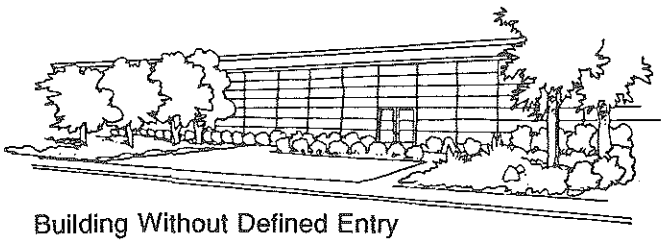
Functionally, roofs are a structure covering the whole building. Often a false mansard roof is added to commercial buildings to decorate the facade. If the mansard stops abruptly at the side wall it will look artificial and detract from the building. False roofs and other decorations should wrap around the entire building, otherwise they will not be believable as a roof and will disrupt the integrity of the building. At a minimum, a false mansard can wrap around the sides, so that it looks integrated with the building, not just pasted on.

Entries. Buildings need a defined entry so that people can find the front door. This creates a friendly relationship between the user and the building. Entries that are designed to be interesting as well as functional will draw people to that building.

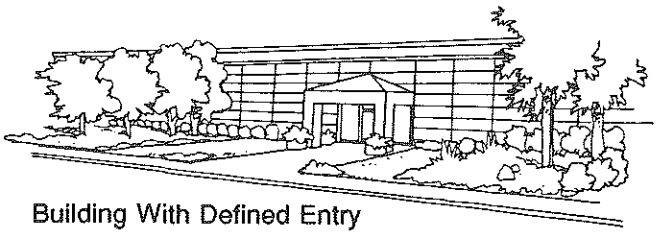
Buildings are more legible and interesting if front entrances are oriented to the street. This orientation enlivens the streetscape and creates a more vital pedestrian environment. For service entries, it is usually better if they are located away from the street so they do not detract from the pedestrian environment.

Entries can also be useful as focal points for large residential or commercial projects. It is possible to orient most of a residential project away from the street for privacy and quiet, while using an attractive entry to maintain a hospitable relationship with the street. In Sunnyvale, there are several residential projects on El Camino Real which do this. They have attractive entrances which create a focal point for the project and add to the vitality of the streetscape.

Some buildings in Sunnyvale's industrial areas would benefit from more clearly defined entries. Many companies have remodeled their buildings to add a more distinguished entrance. Under existing zoning code, projections, such as posts and canopies over the doorway, are included in Sunnyvale's floor area ratio limitations. This limitation has discouraged some companies from making entry improvements. The City could consider excluding entries from the floor area ratio calculations in order to encourage these improvements.



Building Without Defined Entry



Building With Defined Entry

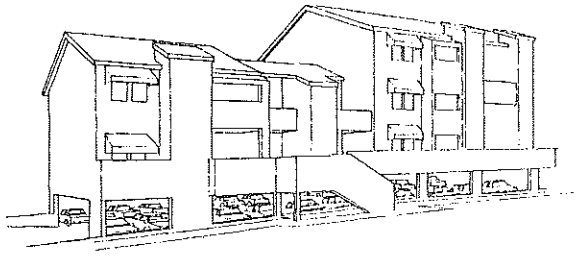
Windows. Windows are the world's view into a building and the user's view of the world outside. Windows link the exterior and interior environments. It is almost as crucial that there be some view into a building as some view out of it. Particularly in commercial districts, visibility of the activity inside stores and restaurants draws customers and creates an entertaining street environment. In most cases mirrored or heavily tinted glass would not be appropriate in commercial districts.

Large, clear glass windows create a vital link between interior and exterior activities.

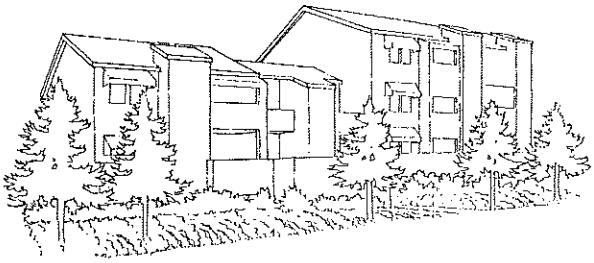
The shape and spacing of windows is also important. Different window treatments are associated with various building styles. A Georgian style has formal, rectangular windows, a Spanish style is associated with arched windows and some modern styles have triangular or circular forms. The shape and spacing of the windows should be compatible and add to the identity of the building style.

Parking. Many large projects in Sunnyvale are built with below grade parking because of scarce land and high prices. Below grade parking allows higher densities while preserving more open space and landscaping.

Below grade parking has also changed the fundamental connection of the building with the land. For most of these projects, the parking garage is sunk more that half way below grade with the concrete walls extending four or five feet above ground level. These walls have openings for light, air and visibility into the garage. The building then sits on this concrete base. If not designed well, the building looses it's solid connection with the land and looks separate from the concrete base it sits on. Landscaping and berming can help re-establish a relationship with the land so the building looks anchored. Below grade garages will also be less obtrusive if auto entrances are screened and face away from the street. To integrate with the building, concrete garage walls above grade can be designed with the same architectural detailing as the building and finished with the same materials and colors. If the garage portion is well designed, it will look like the base of the building and not like a parking garage.



Poorly designed parking



Well designed parking

At least one structure in Sunnyvale has been constructed with at grade open parking under the building. The building is raised approximately 12 feet above grade and looks like it is resting on stilts. It appears unnatural and creates an uneasy feeling about the soundness of the structure. Because buildings are usually scanned from bottom to top, the eye fixes on the blank space at the ground level and any architectural merits of the building generally go unnoticed. At grade parking under a building is usually highly detrimental to the integrity of the building design and should be discouraged in Sunnyvale.

Design Refinement

The arrangement and refinement of the functional building elements is generally described as the building style. A building has a style if these elements have been designed to reflect the cultural and aesthetic values of a certain time. This stamp of time is what gives a building its character. Buildings which are nondescript and have no style lack this refinement.

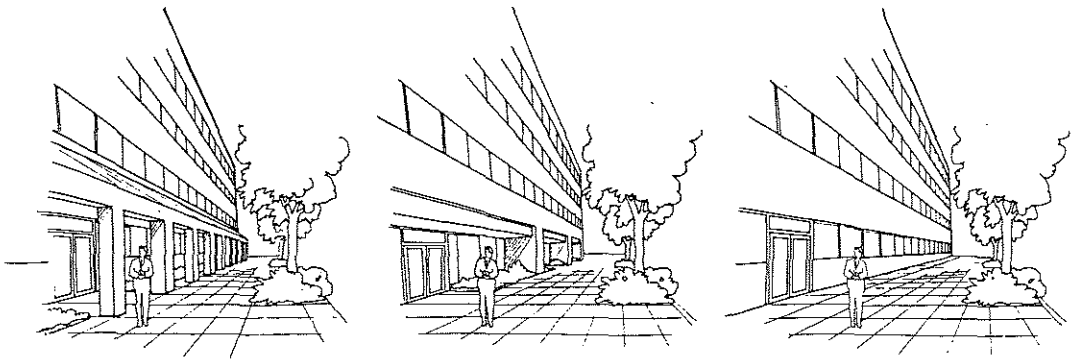
Any building style can be reviewed using some basic aesthetic principles. These principles are widely accepted as standard architectural concepts and provide a common language for discussing architectural merit. The merits of a building can be understood according to its:

1. Scale
2. Shape
3. Mass
4. Order and Proportion
5. Rhythm
6. Texture and Materials
7. Color

Scale. The scale of a building is its size relative to the surroundings. The size of a building is not perceived in feet and inches, but in relation to objects next to it, such as people, trees or other buildings. A large building in Sunnyvale would be a small building in Manhattan. Most new buildings should have a compatible scale and height with surrounding structures in order to blend with surrounding development.

There are some buildings, such as landmarks, where it is appropriate to have a grand scale. Cathedrals in Europe and the Lincoln Memorial are examples of buildings whose large scale emphasizes their importance. Buildings which have a grand scale are often placed in central or prominent locations and the use of the building reflects the cultural values of the community.

Buildings which have a human or pedestrian scale have a size in proportion to people. These structures feel comfortable, not overwhelming. Buildings start to lose a human scale when they are over two stories. Many high rise buildings create a human scale by using one or two story extensions or porticos at ground level to greet people. Some buildings have different materials, shapes or recessed spaces on the lower level to create the perception of a more intimate scale. In Sunnyvale, buildings over two stories need architectural features on the ground level which create a human scale.



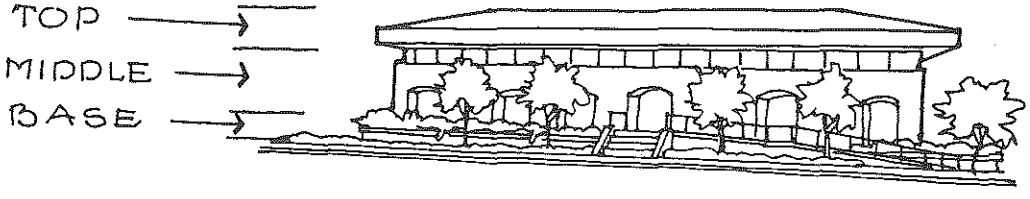
Building articulation on the ground level produces a human scale and avoids high, sheer walls that look like barriers.

The height of a building is the most obvious indicator of scale. Sunnyvale's Zoning Ordinance allows buildings up to 8 stories in many commercial and industrial zones of the City. In some of these areas, 8 stories would not be in scale with surrounding development. Some large projects may need to be tapered down to the height of adjoining buildings to avoid startling contrasts in height between neighboring properties. The City could also reconsider height regulations to provide appropriate height in certain areas. Building height should not block solar access or scenic vistas. Sunnyvale has a Solar Access Ordinance which prohibits excessive shading of residential roof areas and preserves sunlight for existing solar equipment. As buildings get taller, Sunnyvale may need to consider other policies addressing the shading of rear yards and public gathering places.

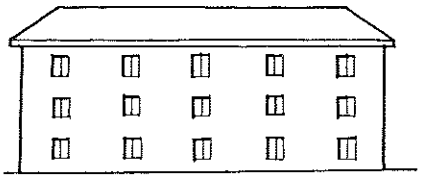
Shape. The basic shape of a building can be found in its silhouette. A building can be angular or curvilinear, horizontal or vertical. The exterior shape most often follows the interior use. A shape that is different from surrounding buildings will call attention to that structure. There are some districts in Sunnyvale where the continuity of the streetscape gives that area a special character. In these districts, building shapes need to be compatible in order to maintain that character. A building's shape should also be sensitive to the shape of the site.

Mass. The perceived mass of a building is also an apparent size, not an absolute size. Mass can be described in absolute terms as the floor area of a structure. However, the perceived size of two buildings with equal floor area would be described differently depending on the shape, scale, color and building articulation.

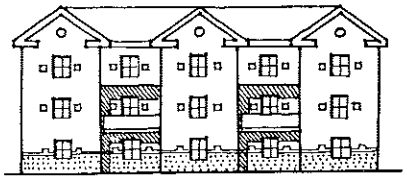
Most buildings have three components: a base, middle and top. If these components are articulated with changes in building planes, colors, materials and rhythm, it breaks the structure into smaller parts and the building seems less massive. Articulation of these components helps people understand the building by reading it in manageable pieces. In Sunnyvale, most large buildings will benefit if the base, middle and top portions are distinctive.



Building articulation can reduce the apparent mass of a structure. Changes in building plane and height, and the addition of elements such as bay windows, porches, porticos or dormers create shadow and texture which add lightness and permeability to the building mass. Rooflines can also be articulated with secondary gable or hip roof elements. Buildings in Sunnyvale should have articulation. Structures which have flat boxy surfaces or are too long are inappropriate, as they are experienced as too massive and intrusive. The bulk of buildings over two stories can be minimized if the buildings are stepped back from the roadway above the second level. This approach will avoid continuous, solid walks which give a tunnel effect. In some areas of Sunnyvale, it may also be necessary to stagger the building setbacks to avoid a tunnel effect.



Building Without Articulation



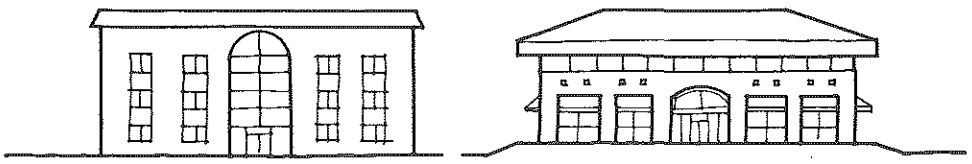
Building With Articulation

Sleek, modern office structures are often an exception to these standards for articulation. High tech, high-rises often have smooth surfaces with little or no articulation or distinction between the base, middle and top. This style forgoes these conventions in favor of simple geometric form and strong textural or color patterns. The simplicity of form and patterns makes these buildings easy to understand and often very attractive. However, the perceived mass of these buildings can be substantial. As a result, this high tech style is generally best viewed from a distance. In Sunnyvale, high tech styles are best suited for industrial parks and employment centers, rather than pedestrian environments, such as the Downtown or neighborhood shopping districts.

Along with design standards, floor area ratios are useful tools in understanding and managing building mass. A floor area ratio is the ratio of the total size of the building floor area to the size of the lot. A 35% FAR on a 10,000 square foot lot would result in a 3,500 square foot building. Sunnyvale currently has FAR standards for industrial zones which are meant to regulate employment and were not intended to address building mass. Some surrounding communities, such as Palo Alto and Cupertino, have adopted FAR's as a way controlling building mass to insure compatibility or allowing higher FAR's to emphasize certain areas. In many cities, including Sunnyvale, new and remodeled homes on infill sites often have been much larger than surrounding homes. This deviation from the typical spatial character of the neighborhood has caused controversy. As a result, some communities have adopted FAR restrictions in residential zones. Sunnyvale has

limited the floor area ratio for one residential subdivision and may want to consider City wide standards.

Order and Proportion. A building with order and proportion is graceful and easily understood. A structure with beautiful proportions is one where all of the functional and decorative building elements are in scale with each other. Just as a building will look out of context if it has an inappropriate scale for the streetscape, building elements, such as roofs and windows, will look out of context if they are not in proportion to the rest of the structure. A good proportional design allows people to easily relate each building element to the other, regardless of the overall architectural style.

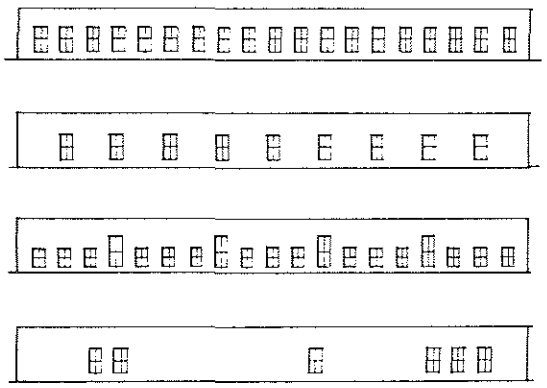


Building With Poor Proportions Building With Good Proportions

Order brings added clarity to the proportions of a building. Visual order is the result of reducing visual disparities. Order can be created with patterns of texture, light, color and materials. Even modern architecture with asymmetrical features needs proportion and order. Without this, the design would be chaotic.

Rhythm and Light. The rhythm of a building is created by architectural features such as windows, rooflines and columns, and by the pattern of light and shadow. Rhythm is established by a repetition of these elements. The rhythm of a building can be compared to music in its effect. A building with rhythm engages the viewer and elicits a response.

Different Window Placement and Sizes Creates Different Rhythms

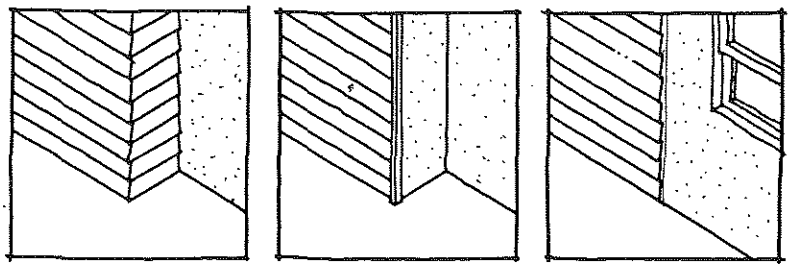


Structures with a fast paced, lively rhythm create excitement. Structure with a somber, heavy rhythm may create a more formal response. The number, spacing and shape of the building elements will determine the tempo.

Building articulation is an effective means of establishing a rhythm with light and shade. Articulation also helps avoid wind tunnels and creates sheltered areas. Most buildings benefit when windows and entries are recessed to create shifting patterns of light and shade. This simple device can make a dramatic difference. Rhythm makes a building interesting; shadow, because it changes, gives the building life. New buildings in Sunnyvale need to be designed with elements which create rhythm and have articulation for interesting patterns of light and shade. Articulation should be evident on all sides of a building, particularly those sides facing the roadway. When the end of a building faces a street, it should have an engaging form with the same level of detail and articulation as the front.

Materials and Textures. The choice and mix of the materials and textures on buildings is important in emphasizing and harmonizing the building elements. Materials and texture, along with color, finish a building. They can add or detract from the other design elements.

Texture can be used to emphasize rhythm and shape, and to distinguish the base, middle and top elements of a building. Texture adds richness and tactile appeal to surfaces.



Materials should wrap around corners and not change on outside edges or flat planes.

A building will be integrated by materials which continue around the entire building and do not change abruptly from one side to another. Piecemeal embellishment and frequent changes in materials should be avoided. Materials will appear more substantial and integral if the change in materials occurs at a change in building plane. Material or color changes at the outside corners of buildings look thin and artificial. Changes in materials on flat walls can also look awkward. A change in surfaces on flat walls may be appropriate for the base of a structure, if it is designed with compatible materials and a smooth transition.

Building materials can be used to enhance the architectural style of the structure. Every style is identified with certain types of finishes, for example, clapboard siding is associated with the cape cod style and tile roofing with Spanish styles. Materials should have integrity with the architectural style and be compatible with the predominant materials in a district.

The finish of a structure is the most visible sign of quality and construction. Building with thin, cheap materials will look poorly built and unattractive, even if the structural integrity is outstanding. A building will continue to look attractive if it is finished with substantial, high quality materials to insure durability. High quality materials for buildings at the gateways into Sunnyvale or Downtown will create an appealing visual environment in these areas.

Color. Color preference is subject to frequent changes in style. Each generation favors different color palettes for clothes, interiors and buildings. Buildings can look more dated by their colors than by their architectural style.

With building colors, it is prudent to be conservative. Some colors have a more timeless quality, especially the natural colors of building materials. Often colors which look fine on small color renderings are overwhelming when applied to large building surfaces. Strong colors should be used carefully with awareness of the surface size.

Colors need to be reviewed in context with the colors of surrounding buildings. A color takes on different attributes depending on the surrounding hues. Colors are also associated with different architectural styles and should have stylistic integrity.

PUBLIC FACILITIES

Public facilities provide essential services and impact the quality of life, as well as the physical appearance of the City. Public facilities include City owned properties, State and Federal facilities, schools and quasi-public facilities, such as utilities. 13.4% of the land in Sunnyvale is zoned for public or quasi-public use. The design of these facilities has a significant impact on the City.

This chapter will focus on design issues rather than the services provided by these facilities. Services provided by Sunnyvale facilities are discussed in detail in many of the City's other General Plan Elements and Sub-Elements. The design of public facilities is the final piece in a comprehensive plan for the function and appearance of Sunnyvale.

Sunnyvale's Public Buildings

Public buildings are the official face of a City. Sunnyvale's public buildings are centers of government, law, culture, education, recreation and other City services. The City services provided in these buildings are essential to the health, safety and welfare of the community. There are many public buildings and complexes which serve Sunnyvale. These includes the:

City Hall
Library
Community Center
Senior Center
18 Parks and Recreation Centers
Municipal Golf Course Buildings
Public Safety Building
6 Fire Stations
Corporation Yard
Water Pollution Control Plant

The City also has plans to construct an 800 seat Performing Arts Theater and lease space for an Historical Museum downtown. The location of existing City facilities is indicated on Figure 6.

Sunnyvale's public buildings have some unique characteristics which are different from other buildings in the City. Sunnyvale's buildings are open to everyone and heavily used by the community. These public buildings are not commercial enterprises, but are solely meant to provide the best possible services to Sunnyvale residents and businesses. Public buildings represent the City and strengthen the identity of Sunnyvale. These

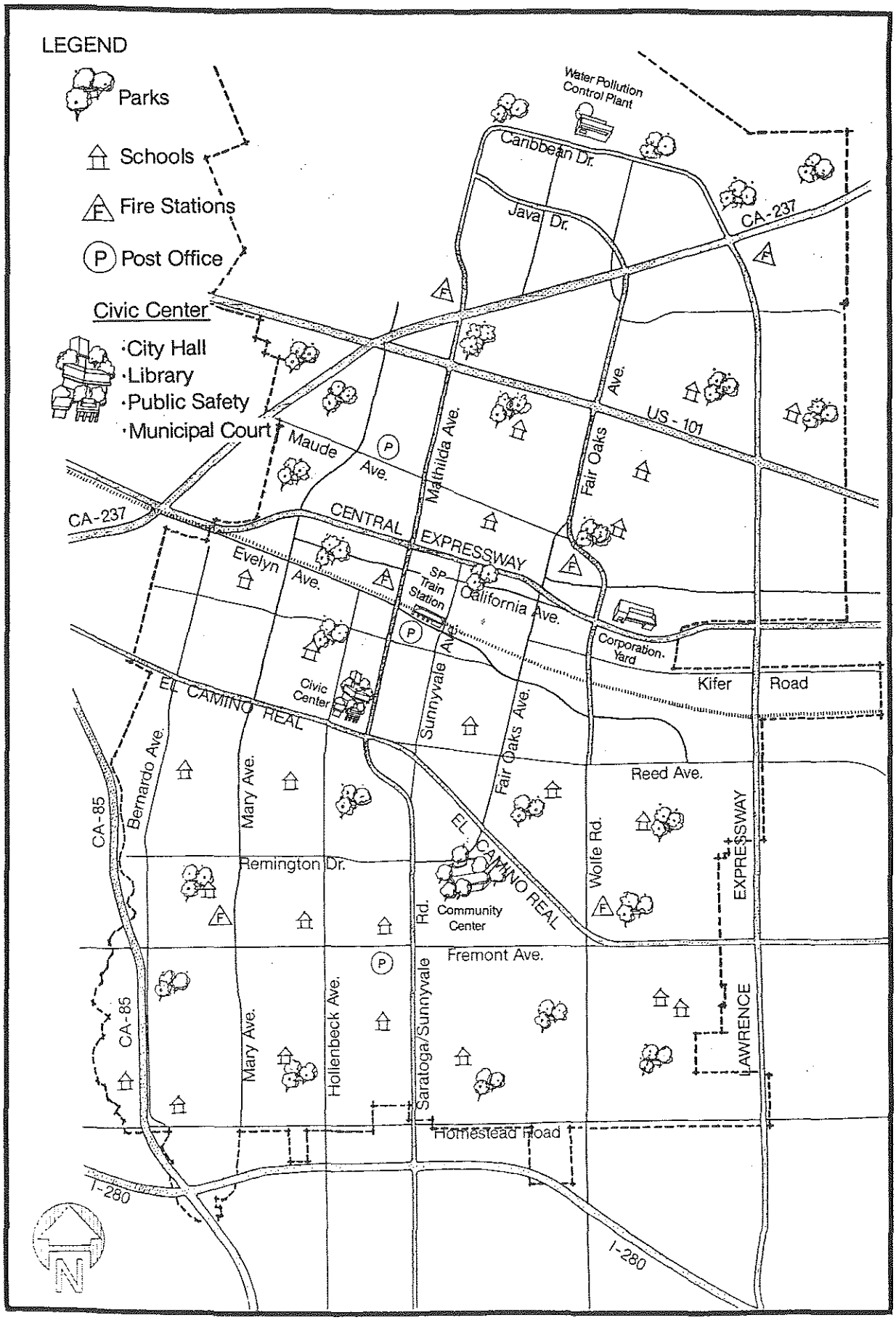


Figure 6: Sunnyvale's Public Facilities

buildings are publicly funded and owned. It is the City Council who decides on new buildings or additions and the architectural plans for those structures. These unique characteristics have an impact on how Sunnyvale's public buildings are designed.

In addition to all of the design principles discussed for private development, the public nature of these buildings also requires them to be readily accessible, easily identified, attractive and representative of the communities values and aspirations.

Accessibility. Most of Sunnyvale's public buildings need to be easy to get to because they provide essential services and the opportunity for citizens to participate in the government of Sunnyvale. The type of accessibility will depend on the use of the building. Buildings used by the entire community need to be centrally located, close to major roadways and transit lines. Other services are more effectively provided if the buildings are distributed throughout Sunnyvale. There are other buildings, such as the Water Pollution Control Plant, which are not used by the public and do not need the same level of accessibility.

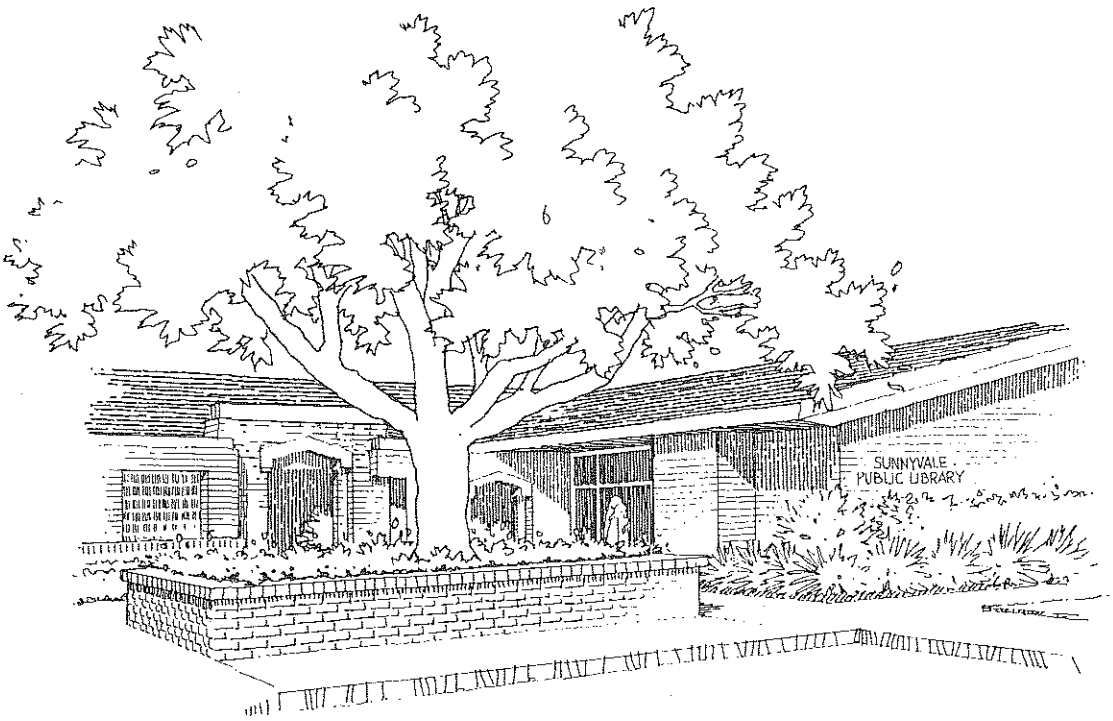
Sunnyvale's public buildings have good accessibility. Most of the City's heavily used buildings, including City Hall, the Library and the Public Safety building are located next to each other downtown along major bus routes and roadways. This ideal location makes it easy for all residents and businesses to have access to these facilities. Recreational buildings and fire stations are spread throughout Sunnyvale. Recreation buildings and parks are located to be within walking distance for children. Fire stations are strategically located to provide a prompt response to emergencies. The location of the City's public buildings provide the best access to City Services. Sunnyvale's public buildings also provide easy access for people with physical handicaps.

Identification. Public buildings which are easily identified make locating City services easier and strengthen the image of Sunnyvale. Signage, architecture and visibility are ways to identify buildings as public structures. Each public building in Sunnyvale provides services which are important to identify. Even buildings not heavily used by the public, such as the corporation yard, benefit from identification which explains the important services provided by City government.

Signage is the easiest way to identify Sunnyvale's public buildings. All of the City's public buildings have signs and there are off-site road signs directing people to heavily used buildings. The City could develop a more comprehensive and visible sign program to help locate City facilities and other major attractions, such as the Downtown. The sign program could include features such as locational maps installed at major public buildings. Directional signs were recently installed at the Civic Center to help people locate different services within this complex. The City has also studied new signs for the Civic Center to provide better identification. Some of Sunnyvale's public buildings would be more legible if the signs were more visible by being in a more prominent location or larger or made of more distinctive materials. It would also strengthen the identity of these

buildings if all of the signs had the same design theme and this design was consistent with any City of Sunnyvale entry signs.

Public buildings are more identifiable if the architectural style implies a public use. Although there is no single architectural style for public buildings, some features can suggest a public purpose. Many traditional government buildings have domes or entries with steps and columns to identify the building. This traditional style would not be appropriate for Sunnyvale, but some of the concepts may be transferable. Entries are particularly important for public buildings. Entries which are open and oriented to the public signify that the building is shared by all members of the community. Public entries should be highly visible and inviting. Plazas in front of the entry create a gathering place which welcomes people. Public buildings will also be more identifiable as belonging to the community if the architecture reflects the City's unique history and cultural values.



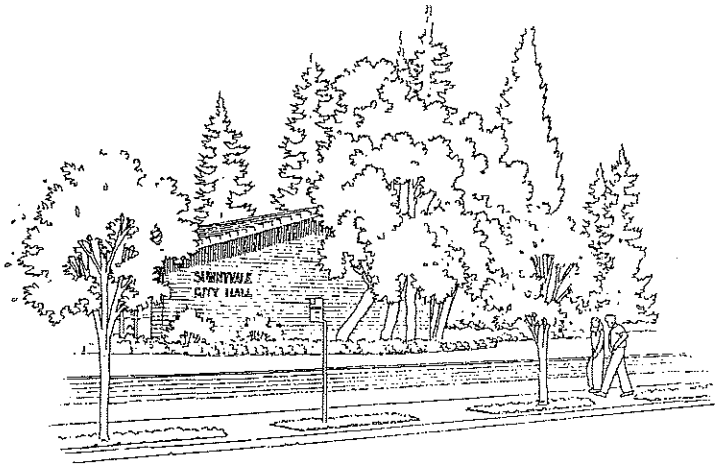
Sunnyvale Public Library

Most of Sunnyvale's public buildings have a suburban architectural style characterized by low buildings, gabled rooflines and expansive landscaped areas. This style represents the dominant residential building style in Sunnyvale and blends into the fabric of the City. The building style does not have a strong public identity, but there are features around the buildings which give a public image. These features include courtyards, information kiosks, public art and fountains. Many City buildings have paved entry courts which

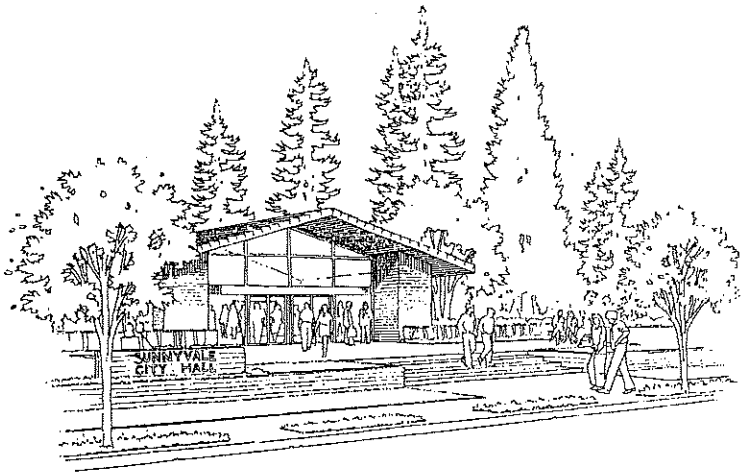
create comfortable places for sitting and relaxing. The Civic Center and Community Center have public artworks and some buildings also have kiosks and fountains which elevate the public identity.

One of the most important features which identifies Sunnyvale's public buildings is the extensive landscaping surrounding them. The City maintains 44.3 acres of public landscaping around these buildings. Few other buildings in Sunnyvale have such expansive landscaping. The handsome landscaped grounds are a valuable resource in a City where open space is scarce. This landscaping gives the buildings a public character.

Identification of City facilities will also be easier if the buildings and entries are visible.



The view of City Hall from Mathilda Avenue.



How City Hall could look from Mathilda Avenue.

Visibility is less important for some public buildings and more important for others. With heavily used facilities like the Civic Center and Community Center, it is important that these buildings are easily seen and identified. Both of these facilities are a source of pride and recognition for the community.

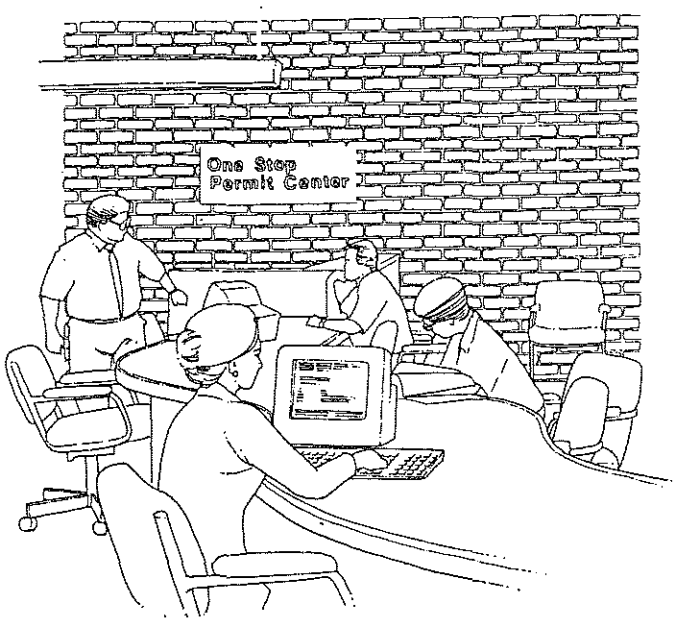
The Civic Center is bounded on two sides by El Camino Real and Mathilda Avenue, but is not easily identified from either roadway. City Hall and the Public Safety buildings are turned away from Mathilda Avenue and El Camino Real. Major entries to these buildings are oriented to Olive Avenue and All American Way. A more public orientation would be created if there were entries or focal points for these buildings on Mathilda Avenue and El Camino Real. An entry on Mathilda Avenue would be particularly useful in creating a visual and function connection between the Civic Center and downtown Sunnyvale. If

Sunnyvale wants to create a prominent visual profile for the City, increasing the visibility of the Civic Center from these major roadways would be one way to create a higher profile for the City. This increased visibility would also be expensive and difficult to achieve due to the existing interior arrangement of office space. There may also be opportunities to increase the visibility and identity of the Community Center along Remington Avenue. More distinctive signage would be one way to improve recognition.

Representation. Sunnyvale's public buildings are a symbol of the City to residents, businesses and visitors. It is important that all the City's buildings are attractive and representative of the community's values and aspirations. Sunnyvale does have attractive public buildings. They are efficient, comfortable, appealing and well maintained. Each year the City spends $1,840,000 to clean and maintain these public buildings.

Both the interior and exterior of the buildings reflect the City's values. The interior design reflects the City's commitment to provide efficient, quality services. Many building interiors have been remodeled for greater space efficiency and automatic equipment has been installed for better energy efficiency and water conservation. To make using City services easier, most interiors are designed with a central receptionist area to help people locate departments. At City Hall, an innovative sit down counter was installed to provide a centralized and comfortable area for people needing Community Development and Public Works services. The interior design of Sunnyvale's public buildings creates a friendly and professional environment.

The exterior design of these public buildings also reflects efficiency and quality. Most of the City's buildings have a simple, straight-forward design without decorative features extraneous to the use. The natural exterior materials and spacious window areas are attractive features, especially when combined with the surrounding landscaping. Sunnyvale's public buildings have a low profile. One of the questions the City may want to consider in the future is whether this low profile is still representative of the community's aspirations and whether some of Sunnyvale's buildings would benefit from a more visible profile.



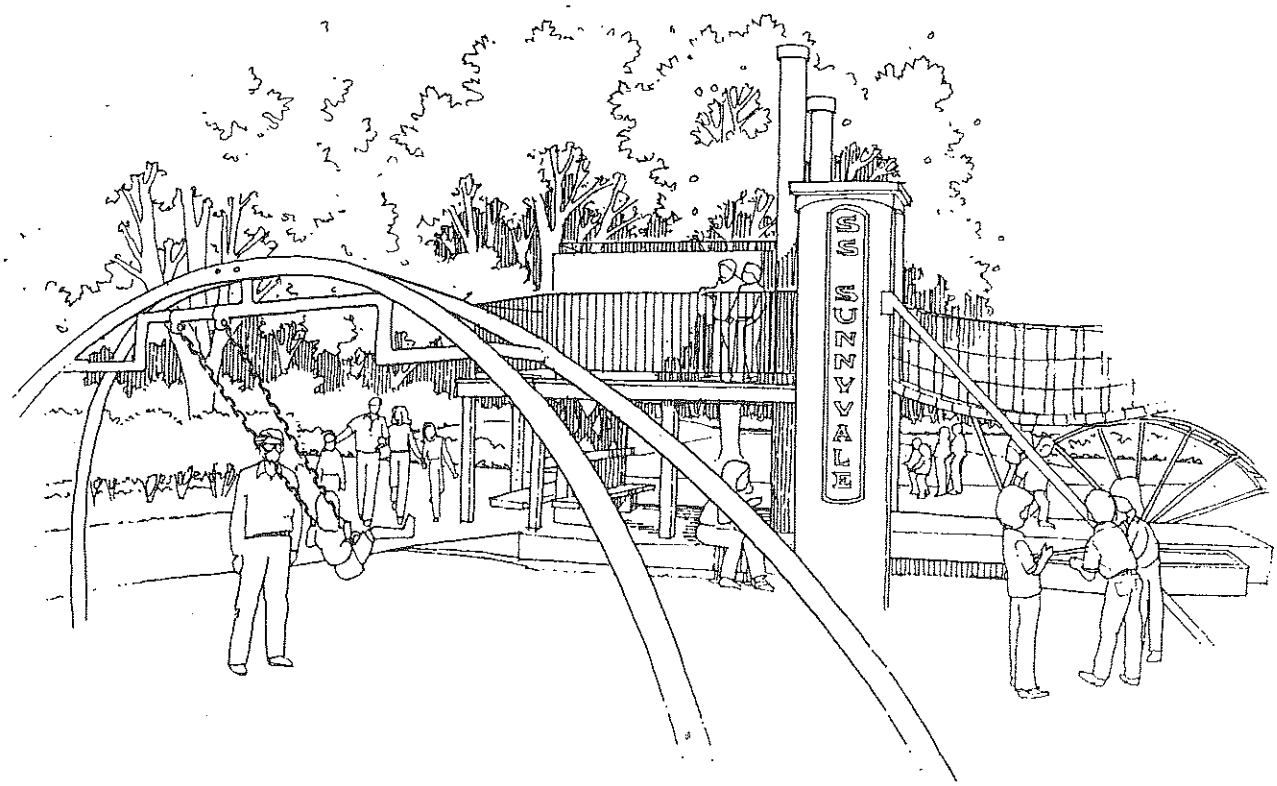
An innovative sit down counter makes using City services comfortable and efficient.

Sunnyvale's Outdoor Public Places

Public places are essential to the social cohesion of a City. Outdoor public places are special areas where everyone can share a sense of belonging with the community. These special areas provide a context where children, adults and senior citizens can participate together. In these places, children can develop social skills and a sense of community. In outdoor public places, different people and groups can learn about each other. Outdoor public places can be made comfortable and beautiful with benches, trees, fountains and art to refresh and uplift people. Outdoor public places can also be used to stage festivals and civic events which celebrate the diversity and cultural values of the community.

In Sunnyvale, outdoor public places are found in City parks, small plazas and courtyards around public buildings and downtown in public pedestrian enclaves. These places enrich the quality of life. One of the essential aspects of these outdoor places is that they are clearly open to everyone. Everyone in the community can have a sense of ownership. This common ownership creates a shared sense of responsibility and appreciation between Sunnyvale residents and their City government.

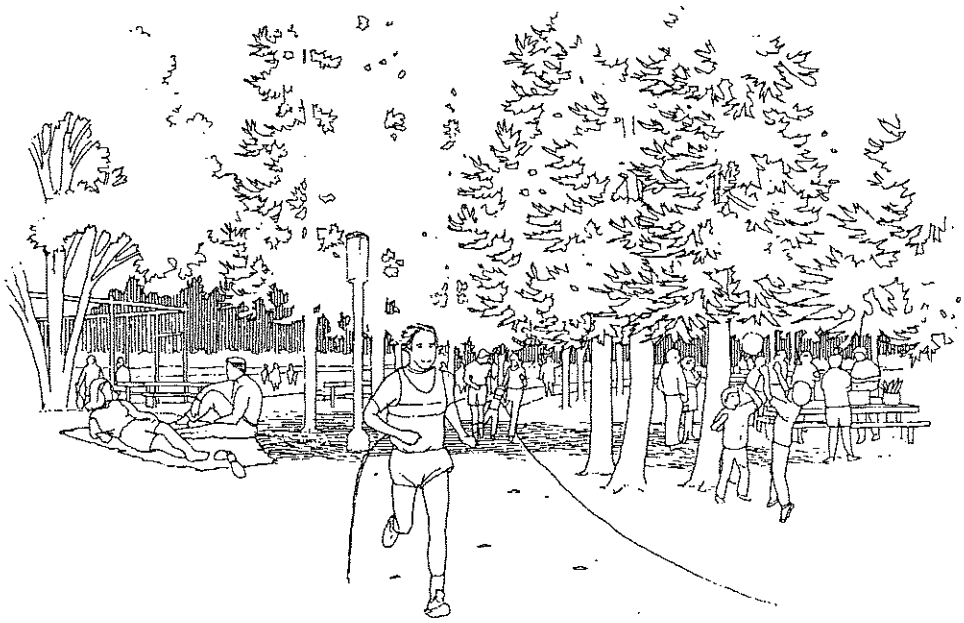
Parks. Parks provide open space, greenery, sports fields, playgrounds and other recreational facilities. They are places where people can enjoy nature, exercise, socialize and relax. Sunnyvale has 18 public parks, an 18 hole and a 9 hole municipal golf course, a municipal tennis center and is developing the Baylands Park owned by Santa Clara County. These facilities provide 370 acres of public open space. City parks and the golf courses are maintained at a 1990 annual cost of about $4,780,000.



Sunnyvale's neighborhood parks give children a healthy place to play.

Sunnyvale's parks have received national awards for their innovative and quality design. Each park has a unique character which compliments the surrounding neighborhood. Distinctive signage for each park would further emphasize their unique qualities. City parks are landscaped and maintained beautifully. They are also designed to be safe with good visibility from adjoining streets and homes. Sunnyvale's parks are a valuable asset to the way the City looks and an enjoyable service for City residents.

The City parks and recreation system closely cooperates with the public schools in Sunnyvale. Many parks are located next to school sites and share facilities. The City has cooperative maintenance agreements with 12 schools and improvements to the appearance of the school grounds has been significant. In 1981, when school closures threatened playing fields and open space, the City adopted the Open Space Sub-Element outlining a plan to preserve open space and to acquire portions of some closed school sites. To date, portions of three school sites have been acquired for public open space. Sunnyvale's Open Space Sub-Element and Recreation Sub-Element contain more complete information concerning the comprehensive plan for parks and recreation services.



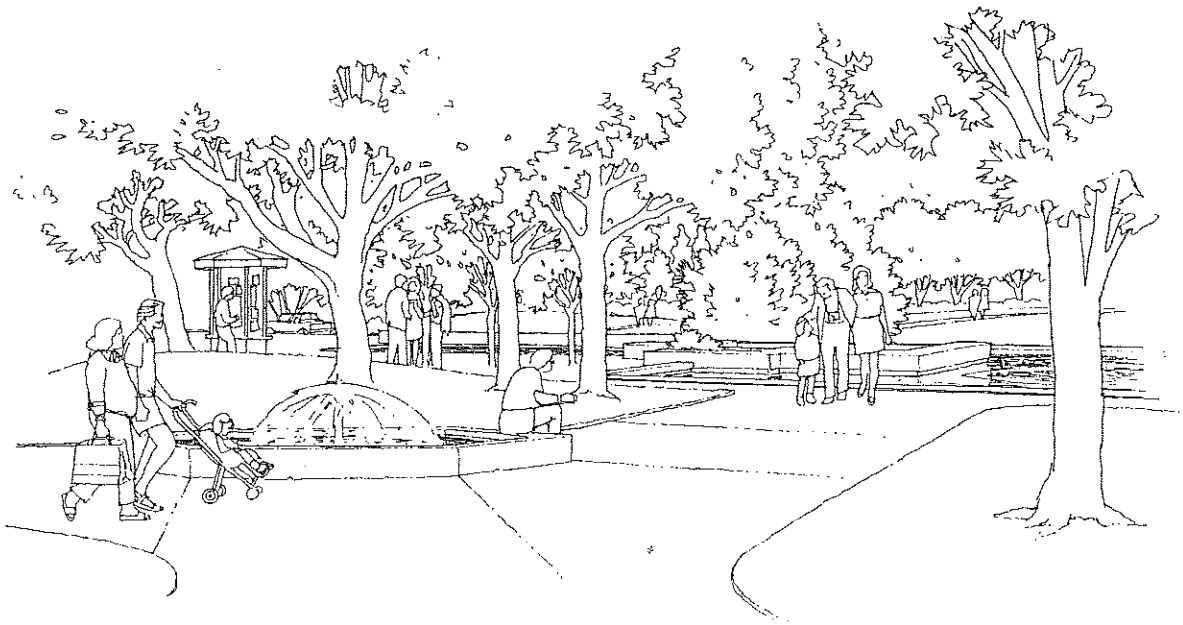
Parks provide recreational facilities for everyone.

Plazas and Courtyards. Sunnyvale has a temperate climate which is ideal for outdoor activities. Many cities have traditional public squares and plazas which serve as special places for civic events, outdoor relaxation and informal gatherings. There are no large public squares or plazas in Sunnyvale, but there are small informal courtyards around many of Sunnyvale's public buildings. These courtyards serve some of the same functions as traditional town squares and have many of the same features. Some of the courtyards around City buildings have artworks, fountains, places to sit and attractive landscaping. People use these spaces for waiting, watching or just relaxing.

People will be drawn to outdoor areas which are refreshing, comfortable and have enclosed boundaries or a focal point. Landscaping and water elements can make an outdoor area relaxing and refreshing, especially in summer when these areas are heavily used. Outdoor public spaces also need comfortable seating for conversation and places to rest. Public places with defined boundaries and protection from automobile noise and fumes will also be more attractive. Monuments and artwork make outdoor spaces interesting and give them a unique identity.

Fountains and water features are an important element for public outdoor places. Water features are refreshing and bring a natural element to the urban environment. Children are particularly drawn and fascinated by water. Some cities have provided water elements which are made for children to play in and explore. As evident by the drought, water elements need to be designed to look attractive without water for those times when water conservation is necessary.

Sunnyvale has incorporated many water elements in City parks and around public buildings. There are extensive ponds and fountains at the Community Center and a water sculpture in front of the library. These water features and the surrounding landscaping creates relaxing, enjoyable outdoor areas for Sunnyvale residents.



Water elements enliven the outdoor areas
around the Community Center.

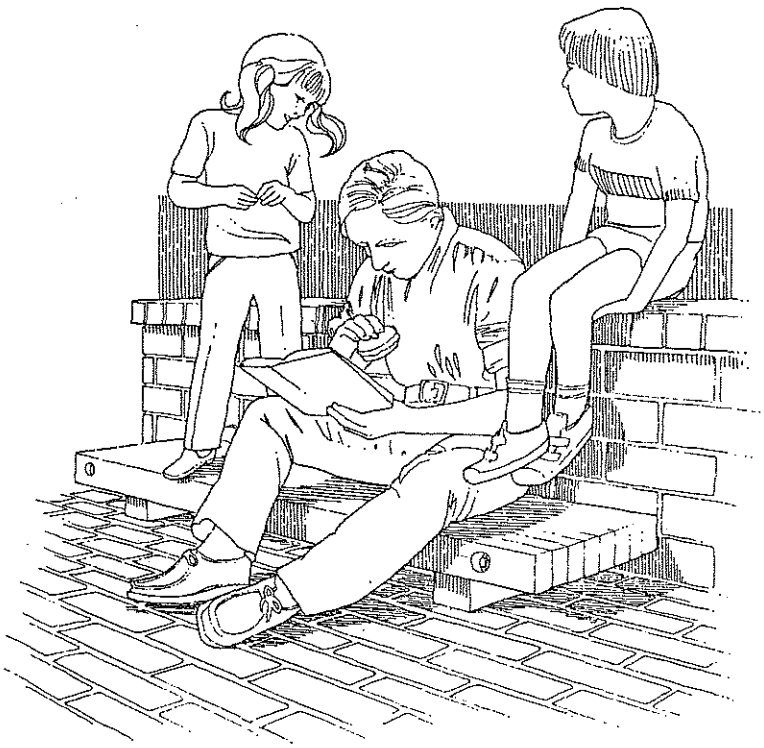
The courtyards around Sunnyvale's public buildings are generally small areas not intended for large public gatherings. The Community Center does have a large outdoor courtyard which is used for civic events. There are no formal public plazas, squares or amphitheaters in Sunnyvale intended for festivals or outdoor concerts. The City may want to consider whether there is a need and location for a public plaza to accommodate these types of outdoor events, particularly in the downtown area.

Public Art. Sunnyvale has an extensive program to acquire public art for the enrichment of the community. In 1990, there are 33 original pieces of public art on display at many of the City's public facilities, including the Community Center, Civic Center and Library, and downtown. These artworks include 1 mural, 5 outdoor sculptures and 27 other artworks, such as paintings, watercolors, tapestries and collages. Outdoor sculptures have the highest profile and are seen by the most people. These sculptures add a unique expressive dimension to the areas around the City's public buildings and emphasize downtown Sunnyvale as an important public place. The Public Art program

in Sunnyvale is part of a comprehensive arts program addressing the varied cultural interests of the community. This program is described in the Cultural Arts Sub-Element of the General Plan.

Public art can capture the aspirations of the community and express the City's cultural and social heritage in a widely understood universal language. Because of this, artworks can contribute significantly to the public identity of a place. Public art can stimulate creativity and imagination. Artworks can be whimsical and fun or serious and uplifting. In either case, the artwork adds a unique human dimension to the outdoor environment. Public art can also be utilitarian and functional. Artworks can be fully integrated into the surrounding environment. Some cities have used sculptures for impromptu seating and shelter from the rain. It is important that there be some public art meant for touching and playing, especially for children.

Artworks which are given to the public have a unique purpose and are most appropriate when they are engaging and have a broad appeal rather than a limited aesthetic focus. Because public art can be controversial, all of Sunnyvale's public artworks are chosen through a participatory selection process involving citizen surveys and public hearings with the Arts Commission and the City Council.

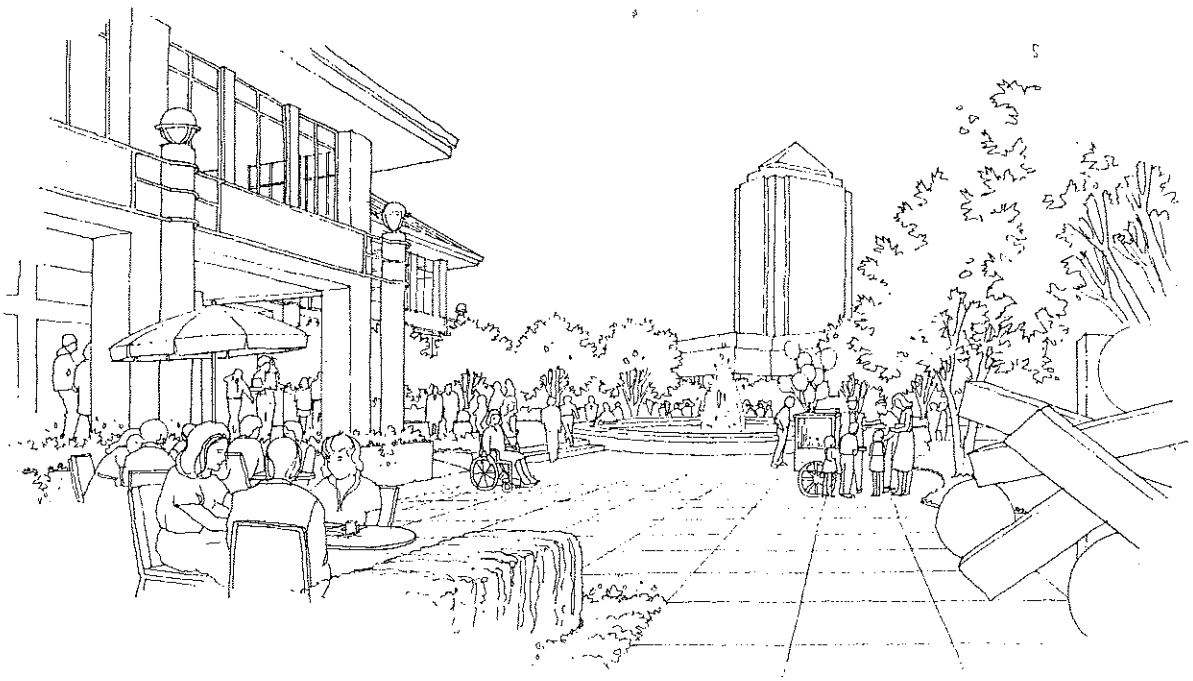


"Out to Lunch" bronze sculpture by J. Johnson.

The "Out to Lunch" sculpture in front of Sunnyvale's Library illustrates many of the best aspects of public art. This sculpture is widely enjoyed by children and adults. It represents a common scene understood by everyone and subtly teaches a respect for books and learning. The subject of the sculpture fits with the Library location. The sculpture has cultural and social significance for people in Sunnyvale and has a scale which blends beautifully with the small courtyard and architecture of the library. There is seating around the sculpture which gives people the opportunity to interact and creates a special gathering place. This sculpture is ideal for the location and an excellent example of public art.

Downtown Public Places. Downtown districts are appropriate areas for outdoor public places as well as private commercial activities. The Downtown is also an appropriate area for public parking to assure easy access and the economic vitality of the district.

Public pedestrian enclaves, such as plazas, can compliment downtown businesses by attracting people with comfortable and attractive public places to sit and relax. Like other outdoor public places, pedestrian enclaves downtown provide areas for resting and conversation, however, the design and use of these downtown spaces will be different.

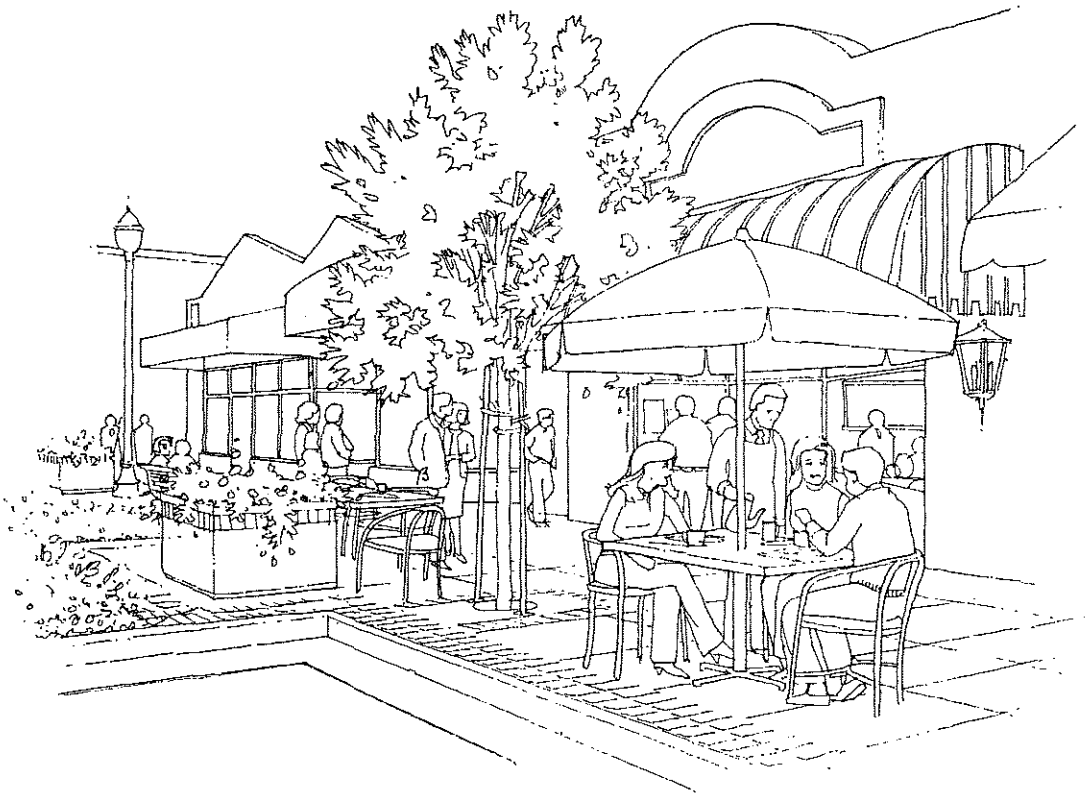


A large plaza downtown could create a diverse and exciting environment.

Downtown public places will have less landscaping and more hard pavement and will also have a more commercial character. Some cities encourage commercial businesses, such as outdoor dining, vendors and farmers markets to use portions of these outdoor public places.

In downtown Sunnyvale, there are several special pedestrian enclaves: the Murphy Avenue Historic District and a small plaza on Washington Avenue by the parking structure.

The 100 block of Murphy Avenue was designated a Heritage Landmark District to preserve the traditional mainstreet character and the historic collection of early 1900's buildings. In 1987, the City's Redevelopment Agency installed street and pedestrian improvements costing approximately $1,000,000. The City installed benches, trees, flower pots, historic lighting fixtures, patterned street and sidewalk pavement, unique signage and a fountain. Wide sidewalks were also installed to accommodate outdoor dining. These improvements have created an invigorating and attractive pedestrian environment which promotes businesses on the street.



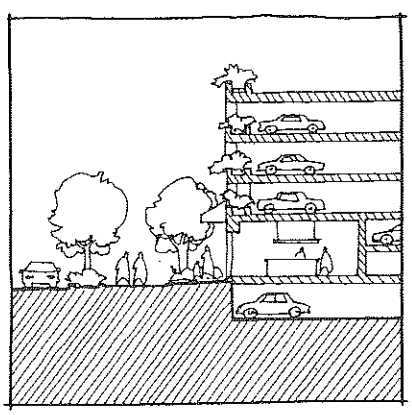
Outdoor dining on Murphy Avenue.

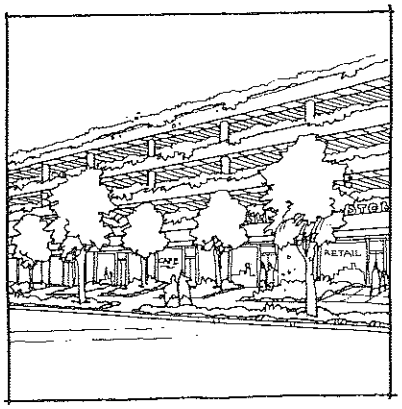
Another public pedestrian area is located on Washington Avenue by the parking structure. This is a small, shady courtyard which is beautiful, but easy to overlook. Future redevelopment near the courtyard could be oriented to increase the visibility and use of this courtyard. Downtown Sunnyvale is an excellent location for new plazas or other pedestrian enclaves. The City is studying a Downtown Specific Plan which may result in more public outdoor places downtown.

The parking district is another important public area for a vital downtown. The first parking district was formed downtown in 1951 to provide adequate, attractive and convenient parking. Two additional districts were added in 1958 and 1964, and later the three districts were merged into one. The current boundaries of the district are roughly, Mathilda Avenue, Evelyn Avenue, Carroll Street and Iowa Avenue. In 1982, the City Council approved a ten year parking district master plan.

Sunnyvale's downtown parking district was financed by bonds paid through an assessment district. No General Fund tax dollars are used to support the district. Ongoing maintenance is paid for through assessments levied on the benefitting properties. Properties within the district are then entitled to use the public lots for customer parking.

Businesses downtown benefit from the parking district because it maximizes the available parking and provides consistent, high quality parking for their patrons. Public parking lots identify the downtown as an important entertainment and shopping district. Public lots within the district have approximately 1.5 acres of attractive landscaping which also benefits downtown businesses and their customers.





Parking structures can be designed with shops on the street level to help screen cars and create an attractive commercial environment for pedestrians and motorists.

There is currently one parking structure downtown which is owned by the Redevelopment Agency and leased to Town Center. While the parking provided by this structure has

been essential to commercial development downtown, the location of the structure has caused some problems. The parking structure has isolated the Town Center Shopping Center from Mathilda Avenue. Instead of a high profile or strong entry from Mathilda Avenue, Town Center is hidden by the structure. Pedestrian access from Mathilda Avenue is also inhibited.

The location and design of any new parking structures downtown needs to be carefully planned. When possible, parking structures should include stores or other commercial business on the ground floor, so that the parking is less visible and does not detract from the vitality of the streetscape. This is especially important in small downtowns like Sunnyvale, where parking structures are more noticeable and the gaps in commercial activity more intrusive. Parking structures can also be made more attractive with plantings, quality exterior finishes, architectural detailing and building articulation.

Below grade parking is another good alternative for new parking structures because the parking is hidden and does not block or preclude commercial businesses. Recent conceptual and draft plans for downtown Sunnyvale have suggested below grade parking or highly integrated parking structures for new development. Below grade parking is well suited for downtown Sunnyvale because the available land area is limited. Using the limited space for commercial, office, entertainment or public uses would create a more vibrant downtown, than using much of this same space for parking.

Public and Quasi-Public Facilities

Federal, State and County agencies and most Special Districts are autonomous. The City has no jurisdiction over the architectural and site design or maintenance of facilities owned by these agencies. The public and quasi-public buildings do not require design approval or building permits from the City. In the past, most of these other agencies have consulted with the City concerning development of their properties and have cooperated with many of the City's development standards. It is important that Sunnyvale continues to pursue strong intergovernmental cooperation with other government agencies.

Schools. There are 11 elementary schools, 3 junior high schools and 1 high school currently open in Sunnyvale. Sunnyvale schools add significantly to the quality of life in the community. These schools provide open space and a focus for many of the City's neighborhoods. Some schools have an important architectural and social history. Fremont High School was designed by noted architect William Weeks and the distinctive Spanish style architecture is one of Sunnyvale's most significant buildings.

Open space, play fields and landscaping generally occupies 50% to 60% of most school sites. There has been a gradual decline of educational funding available to maintain school grounds. Because of the importance of this open space to the community, the City shares in the maintenance of school sites in Sunnyvale. This assistance helps insure that Sunnyvale schools can continue to be a valuable community resource.

State and Federal Facilities. State and Federal facilities occupy 192 acres within the City limits and another 650 acres within the urban service area when Moffett Naval Air Station is included. State and Federal facilities include buildings such as the U. S. Post Office, State Employment Office and Navy buildings in the Moffett Field area.

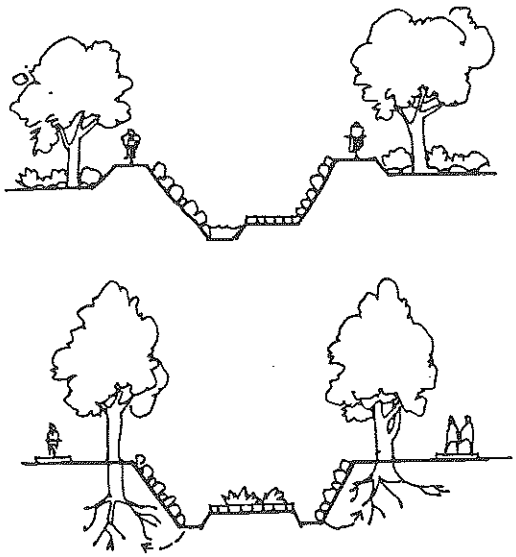
Moffett Naval Air Station has a significant effect on the way Sunnyvale looks and functions. The part of Moffett Field within the City's urban service area is currently unincorporated, but would be a part of Sunnyvale when annexed. In 1989, the U. S. Department of Defense announced that they are considering closing Moffett Field. If Moffett Field were to close, this would reduce noise levels in the existing flight path over Sunnyvale and allow different types of development in the Air Installation Compatible Use Zone (AICUZ). Closure could also affect the balance of land uses in Sunnyvale, depending on the disposition of the airfield and possible redevelopment.

County Facilities. Santa Clara County operates the Municipal Court House located within the Civic Center and the Santa Clara County Water District is responsible for creeks, streams and flood control channels in Sunnyvale.

The County Court House is difficult for people to locate because it is not well marked. Better signage and instructions to courthouse users could alleviate this problem.

The Santa Clara County Water District is responsible for the waterways in Sunnyvale. This responsibility is limited to maintenance and flood control and does not extend into improving these areas for recreational purposes.

There are only two creeks running through Sunnyvale; Steven Creek on the west edge of town and Calabazas Creek on the eastern edge. The Water District also maintains flood control channels throughout Sunnyvale. Most of these natural drainage swales have been channelized with concrete embankments to restrain runoff from adjoining properties. While the channelization has had a practical purpose, it has been disruptive to the natural ecosystem and appearance of these seasonal streams and drainage swales. During the summer, these flood channels are often overgrown with weeds and littered with trash. These areas look barren and unattractive.



Flood control channels can become attractive recreational areas.

It may be possible to work with the Water District to beautify these drainage channels with indigenous plants and trees which would use the seasonal water supply. The City and County could also investigate other innovative ways to maintain and use the flood channels, so they would be a natural resource for the City rather than an eyesore. As open space becomes more scarce in Sunnyvale, it becomes more important that the remaining open space is well utilized and attractive.

The Hetch-Hetchy Right-of-Way. The underground Hetch-Hetchy aqueduct runs across the northern part of Sunnyvale for 4.75 miles. The City and County of San Francisco owns the 80 ft. wide right-of-way for the Hetch-Hetchy. About 25% of the ground above the Hetch-Hetchy is used for schools, parks, a bike path and leased parking areas. The rest of the 46 acre right-of-way is unimproved. The unimproved areas often collect weeds and trash and these areas could be put to better use.

The City installed and maintains a bike path on the Hetch-Hetchy which connects Orchard Gardens Park with Lakewood Park. This is a good example of an innovative and productive use of the right-of-way and intergovernmental cooperation. There may be other possibilities for both public and private use of the right-of-way, so that this land can be used in a more beneficial manner.

Utilities and Transportation. Pacific Gas and Electric Company and Southern Pacific Railroad also manage significant tracks of land which cut through Sunnyvale. Southern Pacific railroad lines run from east to west through the center of town. P. G. and E. has tall transmission towers which also occupy a large area and have an impact on how the City looks. Neither the P. G. and E. tower easements or the railroad lines have been improved to look more attractive. There is also only limited maintenance to these areas. The City has installed some landscaping along the railroad lines, but more is necessary. Better improvements along the railroad lines and P. G. and E. easements are needed to make these areas as attractive as other private and public properties in Sunnyvale.

Railroad lines could be improved to present a more attractive image of Sunnyvale.

		FY 89/90	FY 90/91	FY 91/92
Development Trends				
1.	Acres of Vacant Land	340		
2.	Housing Construction			
	SFD detach.	23		
	SFD attach	117		
	Duplex	0		
	Multi-Family	825		
3.	% of Projects on Redeveloped Property	37%		
The City's Image				
1.	Number of Gateway Improvements	0		
2.	Number of Historic Landmarks and Districts	10		
3.	Areas with Specific Plans	2		
4.	Areas with Design Guidelines or Landscape Standards	1		
The View from the Road				
1.	Acres of Public Landscaping on the Roadway	60		
2.	Number of Roads with Median Landscaping	14		
3.	Number of Street Trees	31,900		
Private Development				
1.	Number of Approved Public Artworks on Private Property	7		
Public Facilities				
1.	Number of Parks and Recreation Centers	18		
2.	Acres of Parks and Recreation Facilities	370		
3.	Number of Open Schools			
	Elementary	11		
	Junior High	3		
	High School	1		
4.	Acres of State and Federal Facilities within the Urban Service Area	842		

COMMUNITY DESIGN
GOALS, POLICIES AND ACTION STATEMENTS

INTRODUCTION

This section of the Sub-Element contains the goals, policies and actions for guiding the design of future development on both public and private properties. The goals and policies capsulize the intent of the Community Design Sub-Element and provide direction for future decisions affecting the physical form of the City. The Action Statements reflect a more specific way to implement the goals and policies.

The goals, policies and action statements within the Community Design Sub-Element are based on the following assumptions:

1. Identity. Residents, business owners and visitors benefit from a defined and attractive image for the City as a whole and for Sunnyvale's unique districts and neighborhoods. A more clearly articulated image will create a more memorable place. This sense of place and identity is important to the well being of the community.

2. Legibility. A legible environment allows people to make sense of their surroundings. Legible environments require diversity where the various components have a clear and understandable meaning. Sunnyvale needs more distinguishing features to acknowledge and celebrate the unique districts and services comprising the City.

3. Comfort and Safety. Safety and comfort are basic to the welfare of the community. Roadways, buildings and site plans can be designed to promote safety and comfort. A safe and comfortable environment should be available for all types of transportation, including pedestrian, and available to everyone in the community.

4. Integration. Projects which are integrated with surrounding properties or districts improve the quality of life by reducing visual and functional conflicts. Integration of new construction has practical benefits and improves the appearance of the physical environment.

5. Enjoyment. People are attracted to environments where there are beautiful and enjoyable features. People need places which are enjoyable and fun. Enjoyable environments are places designed to be responsive to people

and human needs, rather than merely efficient. Well designed and attractive buildings and roadways, and outdoor places with appealing landscaping and artworks are essential to the enjoyment of the physical environment.

6. Community. Public places which are owned and shared by everyone create a sense of belonging and identity for the community. Public places bring people together and promote mutual respect and civic pride.

CITY'S IMAGE

GOAL A: PROMOTE SUNNYVALE'S IMAGE BY MAINTAINING, ENHANCING AND CREATING PHYSICAL FEATURES WHICH DISTINGUISH SUNNYVALE FROM SURROUNDING COMMUNITIES AND BY PRESERVING HISTORIC BUILDINGS, SPECIAL DISTRICTS AND RESIDENTIAL NEIGHBORHOODS WHICH MAKE THE CITY UNIQUE.

Policy A.1: **Identify the boundaries of the City with attractive and distinctive features.**

Action Statements

A.1.a. Encourage unique and uniform roadway landscaping and, where possible, median improvements to distinguish the City's boundaries.

A.1.b. Continue to enhance the visibility, accessibility and use of the San Francisco Bay on the City's northern boundary.

A.1.c. Consider studying ways to minimize the barrier impact of highways and expressways by developing design approaches which relate these roadways to the rest of the community.

A.1.d. Continue to develop a comprehensive gateway improvement program to select major gateways for improvements such as special landscaping, signage, visitor information centers, patterned pavement, monuments or artwork and unique private development standards.

A.1.e. Consider installing new City of Sunnyvale monument signs at major gateways into Sunnyvale and developing a comprehensive sign program to identify major attractions within the City.

A.1.f. Locate City of Sunnyvale signs in attractive surroundings and, whenever possible, in medians with distinctive landscaping.

A.1.g. Encourage distinctive and attractive buildings and site design at major gateways into Sunnyvale.

A.1.h. Maintain a compatible scale with the roadway when designing gateway improvements.

Policy A.2: Ensure that new development is compatible with the character of special districts and residential neighborhoods.

Action Statements

A.2.a. Maintain design guidelines and policies for new construction in historic districts which define acceptable building styles, shapes, rooflines, colors, materials, fenestration and setbacks and develop new guidelines as needed.

A.2.b. Continue to maintain and develop zoning standards which preserve the quality of residential neighborhoods.

A.2.c. Continue to encourage infill development or redevelopment which is compatible with the use, density, setbacks, height and, where possible, the predominant building style and size of the surrounding district or neighborhood.

A.2.d. Continue to identify and adopt methods of preserving historic resources and special districts.

Policy A.3 Support measures which enhance the identity of special districts and residential neighborhoods to create more variety in the physical environment.

Action Statements

A.3.a. Encourage diversity and develop programs to emphasize the unique features of special districts and neighborhoods.

A.3.b. Consider development of specific plans or design guidelines for the El Camino Real Commercial District and Mathilda Avenue corridor and study the feasibility of specific plans or guidelines for portions of Evelyn Avenue.

A.3.c. Continue to preserve buildings with unique historic or architectural value.

A.3.d Protect historic landmarks by discouraging adjacent development which hides or overwhelms their unique qualities.

A.3.e. Encourage new landmarks and features to distinguish districts and neighborhoods.

A.3.f. Strengthen the downtown as the visual as well as functional focus of Sunnyvale.

A.3.g. Consider design features that help locate the downtown district and emphasize the roadways and intersections leading downtown.

A.3.h. Encourage distinctive projects at major nodes which have a coherent spatial relationship and create dynamic spaces at these intersections.

A.3.i. Maintain existing programs and study new programs which promote the maintenance and quality of residential neighborhoods.

THE VIEW FROM THE ROAD

GOAL B: CREATE AN ATTRACTIVE STREET ENVIRONMENT WHICH WILL COMPLIMENT PRIVATE AND PUBLIC PROPERTIES AND BE COMFORTABLE FOR RESIDENTS AND VISITORS.

Policy B.1: Maintain and provide attractive landscaping in the public right-of-way to identify the different types of roadways and districts, make motorists more comfortable and improve the enjoyment of residential neighborhoods.

Action Statements

B.1.a. Continue to maintain and provide landscaped medians on major thoroughfares where it is physically and financially feasible.

B.1.b. Maintain and provide professionally designed medians with an interesting and attractive variety of ornamental, deciduous and evergreen trees and plants which are predominantly water-wise and drought resistant.

B.1.c. Continue to design landscape medians for easy and safe maintenance.

B.1.d. Encourage tree selection in the right-of-way which is in scale with the type of roadway and emphasizes important gateways.

B.1.e. Consider uniform and cohesive landscape themes for districts, major thoroughfares, City boundaries and neighborhoods.

B.1.f. Continue to choose roadway trees based on the planting site micro climate, whether the tree species is disease and insect resistant, location of utility wires, size of the planting site, root system potential for sidewalk damage, pruning requirements and the appropriateness of the visual characteristics of the trees.

B.1.g. Encourage trees which do not obscure business signage in commercial districts.

B.1.h. Continue to provide attractive canopy trees in residential districts.

B.1.i. Investigate new varieties of trees for use in the City right-of-way.

B.1.j. Continue to plant and maintain street trees along the public right-of-way and identify areas which require replanting or replacement trees.

Policy B.2: Provide a safe and comfortable system of pedestrian and bicycle pathways.

Action Statements

B.2.a. Continue to maintain City sidewalks and study ways to prevent root damage.

B.2.b. Consider studying alternatives or modifications to monolithic sidewalks to provide traffic buffers for pedestrians.

B.2.c. Consider installing street trees next to the curb along major thoroughfares with significant pedestrian activity or in special areas which would benefit from a unified landscape theme.

B.2.d. Cooperate in regional efforts to establish a bay trail around San Francisco Bay.

B.2.e. Consider installing benches on sidewalks where there are shady resting spots or scenic vistas.

Policy B.3: Minimize elements which clutter the roadway and look unattractive.

Action Statements

B.3.a. Maintain the requirements for undergrounding overhead utility wires.

B.3.b. Maintain and develop programs to achieve more attractive private fencing facing the public right-of-way.

B.3.c. Continue to work with County and State agencies to choose appropriate colors, textures and landscaping for sound walls on freeways and expressways.

B.3.d. Encourage soundwall location and design which emphasizes important gateways into Sunnyvale.

B.3.e. Maintain a sign ordinance to assure that signage is attractive, compatible with the district and not distracting to motorists.

B.3.f. Continue to ensure that signage is used to identify businesses rather than advertise them.

PRIVATE DEVELOPMENT

GOAL C: ENSURE THAT BUILDINGS AND RELATED SITE IMPROVEMENTS FOR PRIVATE DEVELOPMENT ARE WELL DESIGNED AND COMPATIBLE WITH SURROUNDING PROPERTIES AND DISTRICTS.

Policy C.1: Place a priority on quality architecture and site design which will enhance the image of Sunnyvale and create a vital and attractive environment for businesses, residents and visitors, and be reasonably balanced with the need for economic development to assure Sunnyvale's economic prosperity.

Action Statements

C.1.a. Continue to improve the design review process by using design professionals on staff and developing design guidelines to direct developers and assist the City in architectural and site review.

C.1.b. Consider developing handout and summaries of design policies, guidelines and regulations to assist developers early in the project design process.

C.1.c. Continue to insure that projects have amenities which make them attractive and that these features are not sacrificed to maximize development potential.

Policy C.2: Review site plans to insure the design is compatible with the natural and surrounding built environment.

Action Statements

C.2.a. Encourage site design which preserves scenic vistas and maximizes solar orientation for heating and cooling.

C.2.b. Continue to monitor and develop standards for the preservation of mature trees and landscaping and encourage the preservation of landscaping to be considered early in the site design.

C.2.c. Continue to require that sites be designed so that the building locations, driveways, parking, exterior mechanical equipment, auxiliary structures and service access areas are attractive and compatible with adjoining properties and the public right-of-way.

C.2.d. Continue to require that on-site lighting be energy efficient, unobtrusive and located to minimize off-site glare while providing adequate night time safety.

C.2.e. Encourage site plans to be integrated with the adjoining road pattern, and at important junctures, provide view corridors into the project or other interesting features which will engage people.

C.2.f. Continue to review project design to insure minimum noise impacts to adjoining properties and reduce noise impacts from off-site sources, such as traffic.

C.2.g. Consider studying areas where the street and building setback relationship could be improved.

C.2.h. Encourage new construction to be compatible with the open space characteristics between buildings in districts or neighborhoods.

C.2.i. Continue to require landscaped buffers on commercial or residential properties which provide adequate protection for adjoining residential properties.

C.2.j. Consider prohibiting wing walls or other blank, high walls on buildings in order to create attractive transition zones between buildings.

C.2.k. Continue to require the screening of exterior mechanical equipment.

Policy C.3: Ensure that site design creates places which are well organized, attractive, efficient and safe.

Action Statements

C.3.a. Encourage sites to have obvious and easy to locate entries.

C.3.b. Encourage site plans to have a legible organization including focal points and features which provide direction and clarity about the use of the site.

C.3.c. Encourage multiple family residential projects to have differentiated outdoors spaces, including private entries which provide individual identity, semi-private transitional spaces and common areas with unrestricted and easy access.

C.3.d. Encourage integrated site plans, which have clear boundaries, similar detailing for all the elements and a complementary relationship with the building.

C.3.e. Encourage design elements which are pleasant to the senses.

C.3.f. Continue to require adequate, attractive, water-wise, drought tolerant and efficiently irrigated landscaping and routinely review landscape standards.

C.3.g. Consider investigating innovative approaches to parking lot landscaping which provide shade and vertical relief to large asphalt areas.

C.3.h. Continue to require full perimeter landscaping around parking lots whenever possible.

C.3.i. Encourage outdoor areas for relaxation or eating which are protected from noise and traffic.

C.3.j. Encourage sites to be designed with a sense of mystery so that the design is interesting and engaging.

C.3.k. Continue to require visible and attractive artworks for new private development at gateways and on large commercial and industrial properties.

C.3.l. Encourage reciprocal ingress-egress easements between commercial properties whenever feasible to minimize curb cuts, increase landscaping and improve vehicular safety.

C.3.m. Continue to require site plans with good public visibility of entries, adequate night time lighting, safe on-site circulation systems and quick, unobstructed access routes for fire and police services.

C.3.n. Continue to require sites plans to be easily navigated by people with handicaps and for some projects consider innovative features in excess of minimum state standards for handicap access.

Policy C.4: Encourage quality architectural design which improves the City's identity, inspires creativity and heightens individual as well cultural identity.

Action Statements

C.4.a. Encourage easily identified and attractive building entrances which are oriented to the street.

C.4.b. Consider eliminating floor area ratio restrictions on entrances which enhance the architecture of the building and cannot be converted to work space.

C.4.c. Require roof elements to wrap around the building so that the element looks integrated and not just pasted on.

C.4.d. Encourage clear glass windows at the pedestrian level for commercial buildings to provide visibility of the activities inside stores and restaurants and visibility of pedestrian activity outside.

C.4.e. Continue to require mechanical equipment to be fully screened and integrated with the architecture of the building.

C.4.f. Encourage building windows to have a shape and spacing consistent with the building style.

C.4.g. Encourage below grade parking to be unobtrusive and integrated with the building architecture by continuing the same materials and colors as the building, screening auto entrances from public view and using landscaping and berming to reestablish a natural relationship with the ground.

C.4.h. Consider developing zoning ordinance standards for minimum depths of below grade parking and avoid at grade parking under buildings.

C.4.i. Encourage buildings with two or more stories to have architectural elements which create a pedestrian scale on the ground level, such as variations in the textures and materials, differentiated piers and columns, recessed entries and windows, awnings or offset planes.

C.4.j. Avoid tall buildings which create a tunnel effect and where necessary step the building back above the second level or stagger setbacks on the street.

C.4.k. Encourage buildings to have interesting articulation on all sides through changes in the building plane and height and the addition of elements such as deeply recessed or bay windows, porticos or dormers which create shadow and texture.

C.4.l. Avoid blank walls on the ends of buildings facing the roadway and provide detail and articulation on these elevations.

C.4.m. Encourage the spacing and size of doors and windows to have a rhythm compatible with the architectural style.

C.4.n. Encourage buildings where each of the building elements, such as windows, roofs and walls, are in proportion with each other.

C.4.o. Encourage high quality, durable materials for buildings which create texture.

C.4.p. Avoid piecemeal embellishment, frequent changes in materials or materials that are incompatible with the building style.

C.4.q. Encourage exterior building materials to wrap around corners and any change in materials only to be made in locations where there is a change in the building plane or where a change in materials is effectively used to identify the base of the building.

C.4.r. Review building colors in the context of the scale of the building and avoid strong colors which may be overwhelming at larger scale.

C.4.s. Encourage buildings where all of the design elements, such as colors, materials, style and ornamentation are unified and create cohesive, attractive and distinctive architecture.

Policy C.5: Ensure that buildings are appropriate to their context and designed to be compatible with surrounding properties and special districts.

Action Statements

C.5.a. Encourage new construction to be consistent with the horizontal or vertical building orientation or building shape of special districts or streetscapes.

C.5.b. Encourage roof styles which are similar to surrounding buildings or unique districts.

C.5.c. Avoid buildings which do not have a similar scale or height as surrounding properties, except at gateways or for landmark structures.

C.5.d. Consider studying floor area ratio limitations for residential and commercial districts.

C.5.e. Avoid building colors which are not compatible with adjoining properties or special districts.

C.5.f. Encourage new construction to be designed so that it minimizes the impact on the privacy of adjoining residential properties.

C.5.g. Avoid tall buildings which substantially shade adjoining residential properties.

C.5.h. Continue to require additional setbacks for new construction when necessary to preserve the light, air, views and privacy of adjoining residential properties.

PUBLIC FACILITIES

GOAL D: PROVIDE PUBLIC FACILITIES WHICH ARE ACCESSIBLE, ATTRACTIVE AND ADD TO THE ENJOYMENT OF THE PHYSICAL ENVIRONMENT.

Policy D.1: Ensure that Sunnyvale's public facilities are easily identified, accessible, attractive and representative of the community's values and aspirations.

Action Statements

D.1.a. Consider implementing a comprehensive sign program for public facilities and City of Sunnyvale entry signs which may include maps to show the location of City facilities.

D.1.b. Establish a consistent design vocabulary for all public signage including fixture type, lettering, colors, symbols and logos.

D.1.c. Consider providing for the use of well designed banners for City events, holidays and other special occasions.

D.1.d. Consider implementing ways to increase the visibility of the Civic Center on Mathilda Avenue and El Camino Real and consider better identification for the Community Center along Remington Avenue.

Policy D.2: Maintain beautiful and comfortable outdoor public places which provide a shared sense of ownership and belonging for Sunnyvale residents, business owners and visitors.

Action Statements

D.2.a. Continue to provide public parks where people can enjoy nature, exercise, socialize and relax.

D.2.b. Continue to provide courtyards and public plazas around City buildings and encourage at least one large plaza downtown.

D.2.c. Encourage public courtyards and plazas to have: comfortable, shady places to sit; protection from automobile noise and fumes; defined boundaries; and, where appropriate, water elements and artworks.

D.2.d. Choose water elements, such as fountains or water sculptures, which will look attractive when water is not available because of drought conditions.

D.2.e. Continue to acquire public artworks which contribute to the public identity of outdoor places and provide pleasure and enrichment for Sunnyvale residents.

D.2.g. Encourage selection of public artworks which have a broad appeal and capture the aspirations or social and cultural heritage of the community.

D.2.h. Insure that some public artworks are meant for children and for touching and playing.

D.2.i. Insure that the scale and subject of public art is appropriate to its location.

D.2.j. Encourage some commercial activities in public plazas downtown.

D.2.k. Continue to encourage pedestrian and commercial activity on the sidewalks of the historic 100 block of Murphy Avenue.

D.2.l. Encourage new redevelopment downtown to be oriented to increase the visibility and use of the small courtyard on Washington Avenue by the parking structure.

D.2.m. Support the parking assessment district downtown.

D.2.n. Encourage below grade parking downtown and avoid parking structures which hide important buildings and districts or block the view into the downtown from major roadways.

Policy D.3: Work with outside government agencies to achieve attractive public and quasi-public facilities consistent with the quality of development in Sunnyvale.

Action Statements

D.3.a. Encourage adequate, attractive and legible signage for public and quasi-public facilities not owned by Sunnyvale.

D.3.b. Cooperate with the Santa Clara Water District to develop programs to improve the appearance flood control channels and drainage swales.

D.3.c. Cooperate with the City and County of San Francisco on improvements to the Hetch Hetchy right-of-way to make better use of this large open space area.

D.3.d. Encourage PG&E and Southern Pacific Railroad to improve the appearance of transmission line easements and the railroad lines.

Design Glossary

Articulation: Variations in the depth of the building plane which break up monotonous walls and create interesting patterns of light and shadow.

Character: Special physical characteristics of a structure or area that set it apart from its surrounding and contribute to its individuality.

Compatible: Elements or buildings that are in harmony with their surroundings and retain an individual identity while being perceived as part of a homogenous whole.

Districts: Areas of a City which have a unique character which is identifiable as different from surrounding areas because of distinctive architecture, streets, culture, landmarks or the type of activities and land uses.

Diversity: Elements that are different from one another and have various forms or qualities.

Gateway: A place where many people enter or leave the City which has the potential to distinguish the City's boundaries.

Goal: A statement of public purpose that establishes a general direction of effort on a comprehensive city-wide level and indicates the ends to be achieved by various actions.

Identity: A quality of sameness that makes a city, place or building unique and gives it a distinguishing character.

Image: The mental picture of a city or place taken from memory and based on subjective experience.

Landmarks: Visually prominent and outstanding structures or natural features that function as points of orientation and identification for individuals and areas of the City.

Legible: The organization of the physical parts of a building, site or area into a coherent pattern that is easily understood.

Nodes: Junctions where roadways or other pathways intersect and there is a crossing or convergence of paths.

Policy: A general course of action leading to the realization of goals and objectives, and indicating priorities to serve as a guide for decision making.

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

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