

**FINAL DRAFT
HIGHWAY 99W CORRIDOR SPECIFIC PLAN**

January 18, 1997



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part outlines the specific procedures for recording transactions, including the use of standardized forms and the requirement for double-checking entries to prevent errors.

3. The third part addresses the role of the accounting department in monitoring and reporting on the organization's financial performance. It highlights the need for regular reviews and the importance of providing timely and accurate information to management.

4. The fourth part discusses the importance of maintaining proper documentation for all financial records. It stresses that this is essential for ensuring the integrity of the data and for facilitating audits and investigations.

5. The fifth part concludes by reiterating the overall goal of the document, which is to ensure that all transactions are recorded accurately and that the organization's financial records are maintained in a secure and accessible manner.

6. The sixth part of the document provides a detailed overview of the organization's financial structure, including a breakdown of its various departments and their respective responsibilities. It also includes a summary of the organization's current financial position and a forecast for the future.

7. The seventh part discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

8. The eighth part outlines the specific procedures for recording transactions, including the use of standardized forms and the requirement for double-checking entries to prevent errors.

9. The ninth part addresses the role of the accounting department in monitoring and reporting on the organization's financial performance. It highlights the need for regular reviews and the importance of providing timely and accurate information to management.

10. The tenth part discusses the importance of maintaining proper documentation for all financial records. It stresses that this is essential for ensuring the integrity of the data and for facilitating audits and investigations.

11. The eleventh part concludes by reiterating the overall goal of the document, which is to ensure that all transactions are recorded accurately and that the organization's financial records are maintained in a secure and accessible manner.

12. The twelfth part provides a detailed overview of the organization's financial structure, including a breakdown of its various departments and their respective responsibilities. It also includes a summary of the organization's current financial position and a forecast for the future.

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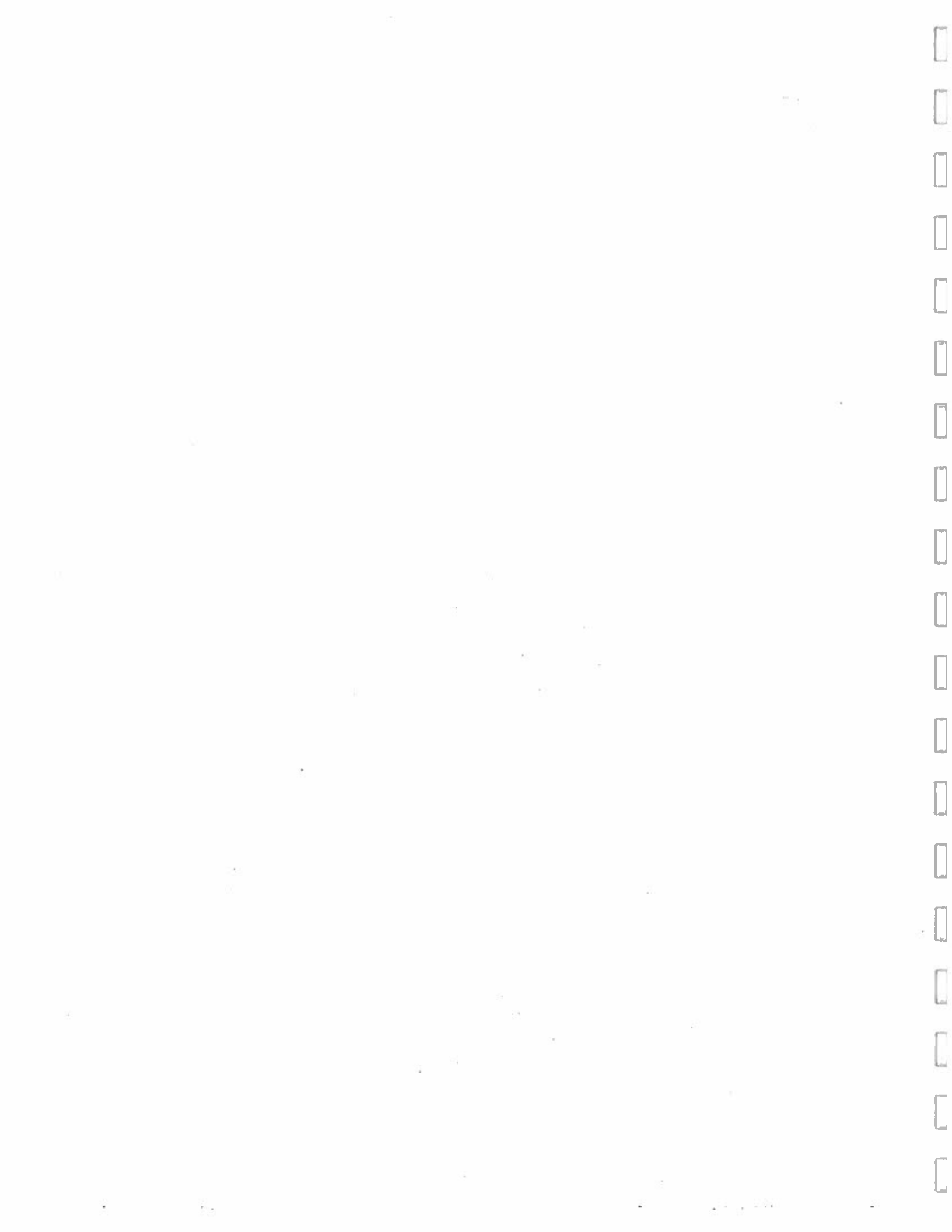


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Chapter 1 - INTRODUCTION

I. INTRODUCTION

A. PURPOSE

In 1993 the City of Corning completed a General Plan revision and update addressing the goals, policies, and programs of the community. One of the areas identified in the General Plan for potential growth and development is an area located on the west side of town along the Highway 99W Corridor. This area contains a large amount of land zoned for commercial uses, although presently it contains only limited commercial activity. Because a large portion of this corridor has the greatest potential for future non-residential development, a specific plan process for the area was initiated in 1995.

The Highway 99W Corridor Specific Plan is intended to provide a more detailed examination of the planning issues in the corridor than could be achieved in the City's General Plan. The purpose of the Specific Plan is to provide a comprehensive set of plans, policies, guidelines, and implementation measures for guiding and ensuring the orderly development of the Highway 99W Corridor.

The Highway 99W Corridor Specific Plan will be the land use planning mechanism for incorporating creative design into a mix of retail commercial, office, warehousing, and light manufacturing activities. This would be accomplished with specific identification of parcel by parcel optimum uses based on market research, retail service needs, environmental constraints, and community input. The specific plan process will result in the implementation of detailed action programs and implementation measures for economic development, land use, building form, site design, circulation, landscaping, and streetscape design.

This Specific Plan allows the City to tailor the plan to the particular needs of the Highway 99W Corridor. It implements the local General Plan by creating a bridge between General Plan policies and individual development proposals. Ideally, this Specific Plan will direct all facets of future development: from the distribution of land uses to the location and sizing of supporting infrastructure, from methods of financing public improvements to standards of development. Specific plans offer a unique opportunity to establish a comprehensive approach to planning and development issues by integrating community goals and policies and combining zoning regulations, capital improvement programs, detailed site development standards, and other regulatory tools into one document tailored to meet the needs of a particular area. The comprehensive nature of this Specific Plan combined with its unique orientation to localized conditions makes this document a very useful and effective planning tool.

B. HOW TO USE THIS BOOK

Use this Specific Plan as a guide for reviewing new development project proposals. Policies, standards, guidelines, and recommendations found in the Specific Plan can be compared with various components of a development proposal such as land use selection, site layout, circulation, architectural style, landscaping, and overall compatibility with the City's vision for the future.

If proposed projects comply with the guidelines and standards, then the proposed project's CEQA requirements are met by the Specific Plan Environmental Process. Conversely, if project applications differ substantially, then a new environmental review would be required.

C. RELATIONSHIP TO OTHER PLANS AND CODES

1. Authority for Plan

Section 65450 of the California Government Code allows local governments to prepare specific plans for the "systematic implementation" of the General Plan. In this context, the specific plan is a tool used to implement the provisions of general plan goals and policies.

Section 65451 of the Government Code establishes certain minimum requirements that must be addressed in a specific plan. Some of these requirements include: text and diagrams that specify the distribution and location of land uses; the proposed distribution, location, and intensity of public facilities; standards and criteria for development; and implementation measures including regulations, programs, and financing measures.

2. Zoning Ordinance

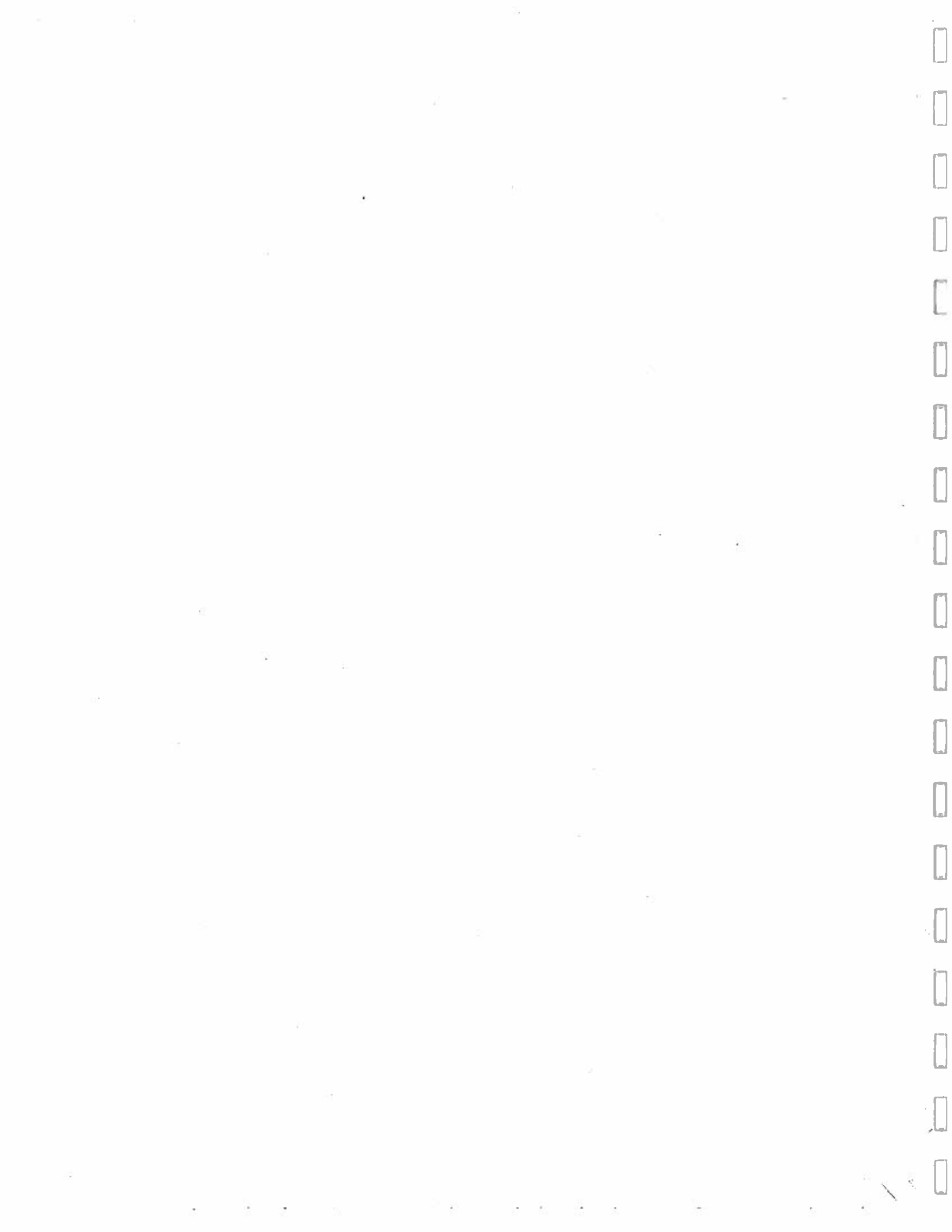
The Zoning Ordinance for the City of Corning, Title 17, is a set of regulations established for the various types of uses within the City. The specific plan is based on the requirements and regulations that have been established in the zoning ordinance.

3. Land Division Standards

The Land Division Standards have been enacted for the purpose of adopting standards, regulations, and procedures for the subdivision and other specified types of division of land within the city limits. The Specific Plan takes into consideration the Land Division Standards where applicable.

D. CONSISTENCY WITH GENERAL PLAN

The Specific Plan addresses pertinent general plan goals and explains the methods by which the Specific Plan implements those goals through policies and implementation measures. The Specific Plan covers the goals contained in the City's General Plan elements, thus, creating a bridge between General Plan policies and individual development proposals.



Chapter 2 - DESCRIPTION OF SPECIFIC PLAN AREA

II. DESCRIPTION OF SPECIFIC PLAN AREA

A. LOCATION AND BOUNDARIES

The Highway 99W Corridor Specific Plan Study Area consists of 350.64 acres as shown in Figure 1, page 2-7. It is bounded on the south by the city limits, on the west by Interstate Freeway Route 5, on the north by Gallagher Avenue, and on the east by Edith Avenue to the southern boundary of the subdivision at Dolla Court. From the southern property line of this subdivision the study area extends as a north-south line between Highway 99W and Toomes Avenue back to the southern city limit.

B. CURRENT LAND USES AND ZONING

Existing Land Uses. The Specific Plan study area is presently comprised of 16.30 acres of multifamily residential, 90.841 acres of commercial, 95.34 acres of agricultural-orchard, 20 acres of single family residential, 39.31 acres of rural residential, 50.41 acres of vacant land, and 38.47 acres in the sphere of influence (see Table 1 - Column 2).

Zoned Uses. Zoned uses include 255.9 acres of commercial, 8.7 acres of manufacturing, 22.387 acres of R1-2, 2.22 acres of R1A, and 12.98 acres of R3-4. There is a major difference between land use and zoning designations in the study area (see Table 1 - Column 3).

Vacant Land. The vacant land is zoned for 37.74 acres of commercial development, 7.24 acres of manufacturing, and 2.22 acres of R-1-A. There is no vacant land in the study area zoned R1, R1-2, or R3-4 uses (see Table 1 - Column 4).

Parcels Zoned Commercial. The current uses of parcels in the study area that are zoned commercial and are over one-half acre (the most suitable for development), 37.25 acres are vacant, 55.16 acres are in single family and single family agricultural use, 66.18 acres are in agriculture, and 2.81 acres are in multifamily housing, and 81.59 acres are in commercial use. These properties may be considered underutilized and suitable for specific planning to meet retail and employment generation needs.

Table 1 - Current Land Uses and Zoning

Land Use Designation (Column 1)	Current Land Use Acreage (Column 2)	Zoned Uses Acreage (Column 3)	Vacant Land Zoning Designation (Column 4)	Current Uses of Parcels > ½ Acre Zoned Commercial (Column 5)
Ag.-Orchard	95.34	0	0	66.18
Rural Residential	39.31	0	0	0
Residential R-1	19.96	0	0	15.85
R-1-A	0	2.22	2.22	39.31
R-1-2	0	32.387	0	0
Multifamily R3-4	16.31	12.98	0	2.81
Commercial	90.84	255.91	37.74	81.59
Manufacturing	0	8.7	7.24	0
Vacant	50.41	0	0	37.25
Sphere of Inf.	38.47	-	-	-

C. CONTEXT WITHIN THE GENERAL PLAN

The City of Corning has adequate residential land. However, there is a need for job generation land uses near the freeway. The General Plan has indicated that the Hwy. 99W Corridor is the most suitable location for future commercial development to occur. This Specific Plan addresses the issues and opportunities of the Hwy. 99W Corridor and their connection with the 1993 City of Corning General Plan.

D. ISSUES AND OPPORTUNITIES

The following issues and opportunities have been identified and addressed throughout the planning process. These issues reflect information gathered from the General Plan, citizen and City staff meetings, planning commission meetings, visioning workshops, and a visual preference survey.

1. Highway 99W Corridor and Highway 99W Right-of-Way

Former State Highway 99W is a thoroughfare and truck route that runs parallel to Interstate Freeway 5 (I-5) and has a 100 foot right-of-way for its entire length in the study area. The planned use of this right-of-way could be used to: enhance the aesthetic quality of the study area, create a safe and efficient transportation arterial, provide pedestrian walkways and bikeways, and provide accessibility to adjacent land uses. These benefits are achieved through the policies and implementation measures discussed in this document. Given its location adjacent to Interstate 5, the Highway 99W Corridor is a resource that is beneficial to the City and study area. This document establishes a Corridor that provides all of the following: a commercial core that is attractive and of high quality development, gateways,

streetscape, and entry points that provide a sense of arrival to the City, and a feeling of civic pride, encourages investment, and improves the area's economic vitality.

2. Gateways

Gateways are distinct entrances into a city or region. When formed by strong building edges, signs, landscaping, or other design elements, they help create a special sense of arrival. There are two potential gateways along the Highway 99W Corridor: Hwy. 99W/Solano Street and Edith Avenue intersection and the Hwy. 99W/South Avenue intersection. Both intersections provide entrances into the study area from I-5. The Hwy. 99W and Solano Street intersection also provides an opportunity of an enhanced entry into the downtown area. A well identified gateway will guide visitors to community services and business activities.

The Specific Plan identifies these two intersections as the primary entrances into the study area and are addressed in the Circulation Element, Community Design Element, and Streetscape Section of this document.

3. Street Intersections

There are two primary intersections in the study area are Hwy. 99W/Solano Street & Edith Avenue and Hwy. 99W & South. The General Plan has projected that at buildout, the level of service of these intersections will drop and congestion may occur. Street intersection circulation has been combined with other issues such as street improvements, bikeways, gateways, and streetscapes, and are addressed in the Circulation Element, Community Design Element, and Streetscape Section of this document.

4. Street Improvements

The Circulation Element, Community Design Element, and Streetscape Section discusses and illustrates ways of maximizing the Hwy. 99W right-of-way by providing street amenities such as exclusive right and left turning lanes, bikeways, sidewalks, and landscaped medians.

5. Freeway Oriented Commercial Development

The Corning Zoning Ordinance, Section 17.24, includes a zoning classification, CH Highway Service Commercial District. This zoning designation could be applied in several places within the study area. This Specific Plan suggests that this zoning designation be changed to the Corning Business Development Zone as well as which parcels should be rezoned to this zoning designation.

6. Surplus Of Commercial Zoned Land

The General Plan identifies a city wide surplus of commercially zoned land. However, it also notes that commercially zoned property is of primary importance and should be developed first.

Much of the commercial land in the City is located in the downtown area and not suited to capture freeway travelers. Some commercial land in other parts of the city could be rezoned to residential if there was a need. Right now there is plenty of land zoned for residential use throughout the city.

The Land Use Element in this document discusses the commercially zoned land in the study area and the types of allowable uses, including mixed land uses. The Community Design Element discusses the design guidelines that are to be applied to these commercial lands including: landscaping standards, architectural style, site design and layout, and parking lot location and access.

7. Large Parcels Of Underutilized Land

Presently, there is 103.43 acres of vacant and agricultural-orchard land zoned for commercial uses that are larger than one-half acre in size in the specific plan study area. This total of underutilized land can be expected to be developed well into the future. Development of this land can be dependent on any number of issues such as the current economy, location to other businesses, and site constraints. The Land Use Element discusses the opportunities and possible uses for the larger parcels.

8. Mixed Use Development

Mixed use development is a combination of land uses that have been determined to be compatible for development. This Specific Plan includes conceptual site plans for selected properties to be designated for mixed commercial and other non-residential development. Such conceptual plans demonstrates the optimum number of functions to be accommodated, the possible physical arrangement of buildings and the general layout of parking, landscaping, and circulation systems.

9. Sphere of Influence Land Uses

A portion of the study area, north of Blackburn Avenue to Gallagher Avenue, is located within the City of Corning's Sphere of Influence (SOI) but is outside of the city limits. The sphere of influence parcels are discussed in the Land Use Element of this document. In addition, the Land Use Element discusses the future annexation of parcels south of the Specific Plan study area boundary.

10. Resident's Consumer Needs

The Land Use Element identifies city resident's consumer needs and requirements for new outlets and services within the City and identifies the specific needs for the types of land uses within the study area. Restaurants, automobile row, senior care center, and office park have all been suggested. These determinations are parcel specific and involves direct contact with potential tenants or developers.

11. Environmental and Engineering Constraints

The Specific Plan also identifies environmental and engineering constraints to development of study area properties for residential, commercial or industrial occupancy. These constraints would include water, sewage, and drainage capacities, present and future traffic characteristics, freeway noise, flood hazard, creek habitat protection, and preservation of some selected agricultural uses in the study area. These issues are discussed in the appropriate elements of this document.

12. Flood Hazards

A large portion of the vacant and agricultural-orchard land uses in the Hwy. 99W Corridor is within the 100 year flood plain of both Jewett and Burch Creeks. Flood depths are estimated to be 1 to 3 feet (FIRM). These constraints could preclude the development of this area commercially. The Specific Plan addresses creek setbacks and standards for development in these areas. This issue is addressed in the Conservation, Open Space, and Environmental Quality Element, the Safety Element, and Community Design Element.

13. Landscaping

A combination of landscaping such as trees, grass, and ground cover enhances the form and appearance of an urban setting. In particular, street trees can create a more pleasing pedestrian-scale setting, frame the street edge, and provide shade to sidewalks and parking lots. Opportunities to create a major landscaped corridor entry statement leading into the study area is discussed in the Community Design Element and Streetscape Section of this document.

14. Traffic

The two primary intersections in the study area are areas of high truck traffic. With the location of truck stops and service facilities adjacent to I-5, it is very likely that much of the traffic is circular in nature (trucks exiting the Interstate for services and returning to the Interstate). Presently there are no designated truck routes within the City. The Circulation Element examines truck route opportunities and street improvements, including the widening of South Avenue to provide exclusive right and left turn lanes and the expansion of the Hwy. 99W right-of-way.

15. Parking

Large paved areas create visual and climatic impacts. The Community Design Element and Design Guidelines address the issue of parking lot design aimed at reducing these impacts, while at same time maintaining circulation that is essential to the success of commercial areas.

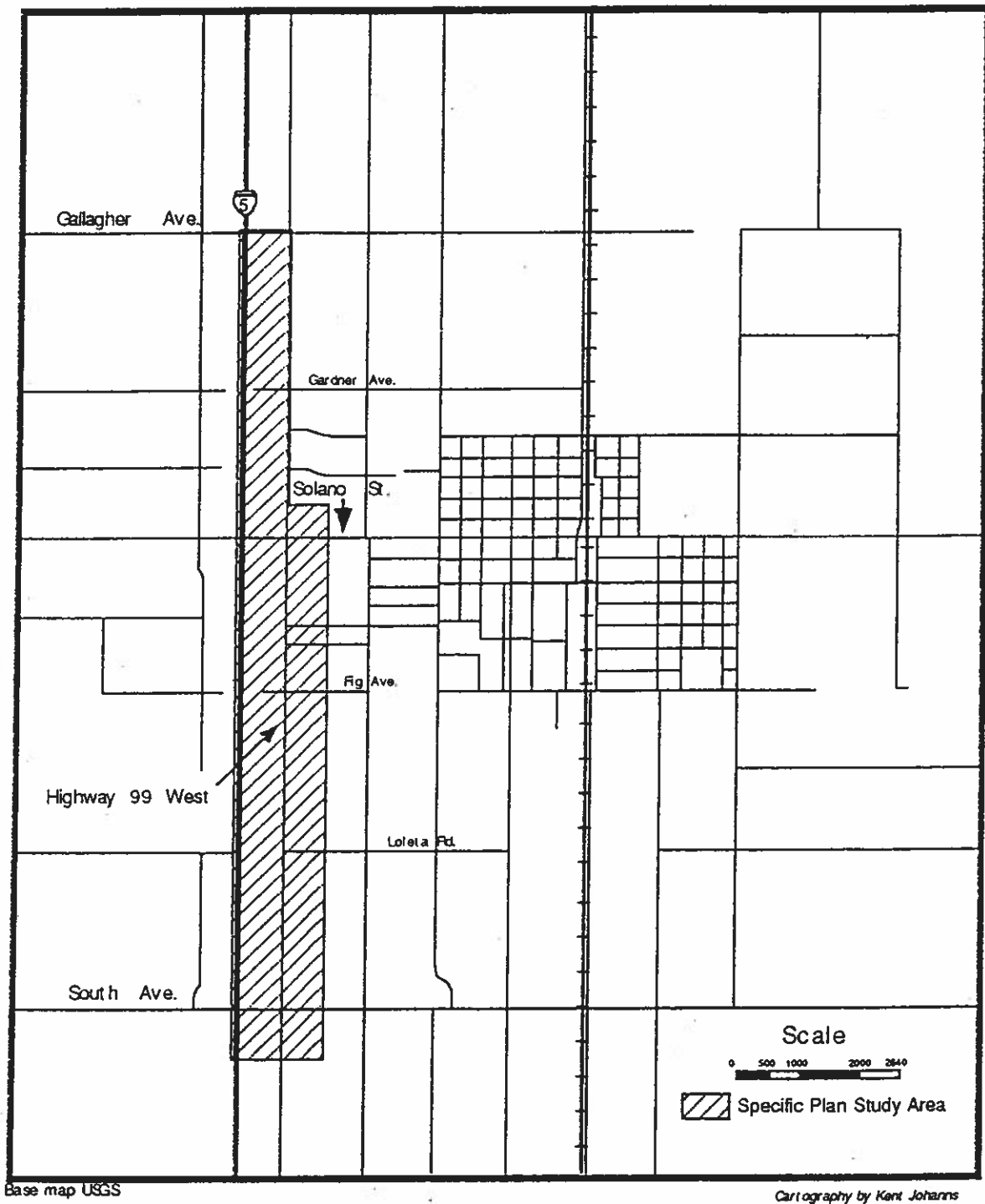
16. Design Guidelines

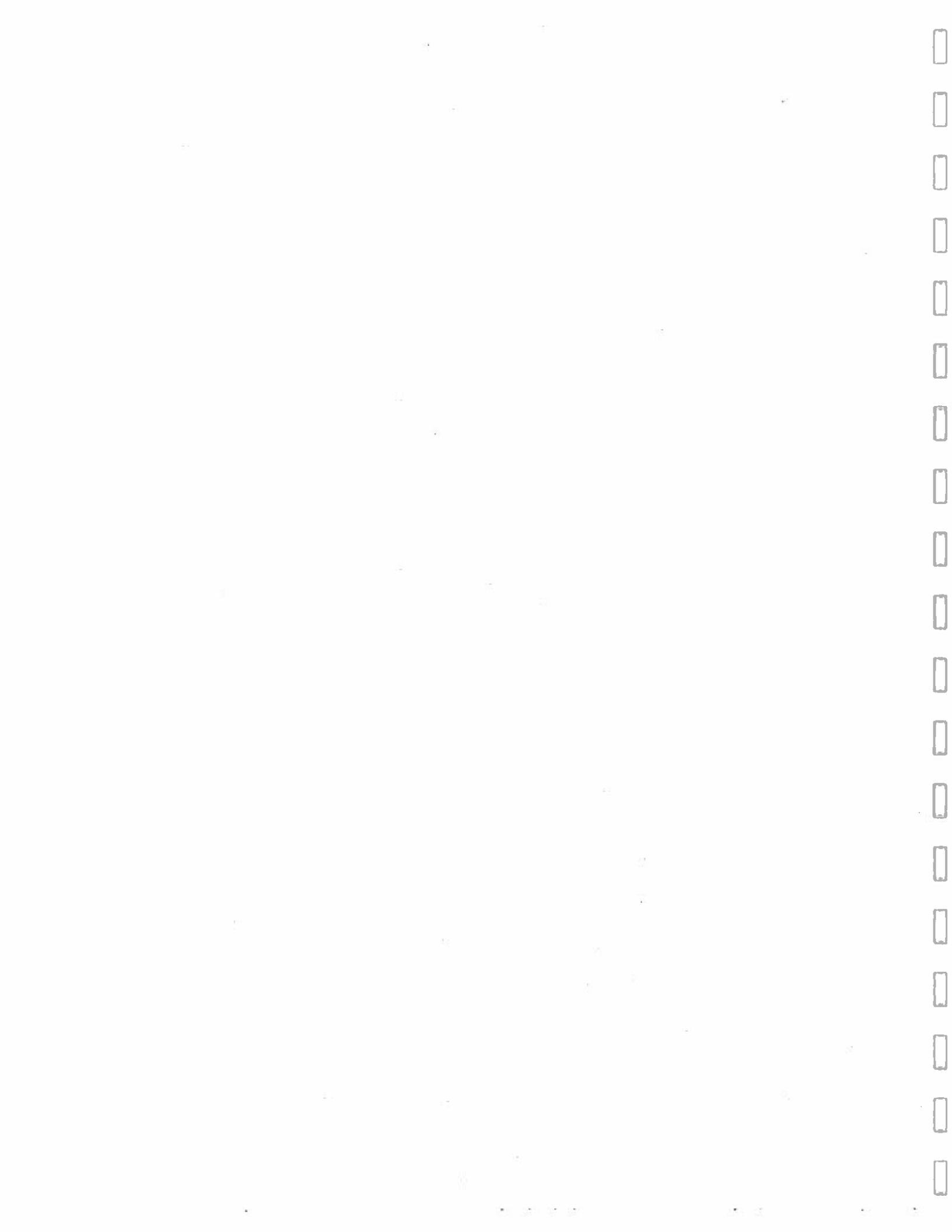
The purpose of Design Guidelines is to foster good design, provide a feeling of civic pride, encourage investment, and to improve the area's economic vitality. Topics addressed in the Community Design Element and Design Guidelines include: vehicle, bicycle, and pedestrian accessibility, noise mitigation, security, landscaping, architectural theme, signs, internal circulation, public safety, flood hazard mitigation, and overall aesthetic quality. Traditional strip commercial development and haphazard architecture will be avoided.

17. Abandoned Truck Facility

In the southern portion of the study area an abandoned truck facility has been designated as a clean-up site. The Safety Element explores options for clean up and the Land Use Element discusses reuse possibilities of the abandoned facility.

Figure 1 - Highway 99W Corridor Specific Plan Study Area





Chapter 3 - LAND USE ELEMENT

III. LAND USE ELEMENT

The Land Use Element establishes the study area's land use plan and provides goals, policies, and implementation measures for the development of the Highway 99W Corridor. The Land Use Element is intended to supplement the existing General Plan's land use plan, by addressing specific issues within the corridor.

A. LAND USE OVERVIEW

1. Present Land Uses and Zoning

Figure 2 illustrates the current land uses in the study area. Figure 4 indicates the future land uses according to their zoning designation in the City's General Plan.

a) Agricultural-Orchard Land Use

Agricultural land uses include portions of land zoned R-1-A and uses devoted to grazing and orchards. The use of these lands include orchards whether in use or in disrepair, land used for grazing, and large tracts of land with only one or two residential units (Rural Residential).

Land within the study area devoted to agricultural uses account for 95.34 acres. Approximately 66.18 acres of this current agriculture-orchard use, that is greater than ½ acre, is zoned for commercial use (Table 1 - Columns 2 and 5).

b) Residential Land Use

Existing residential land uses within the study area total 75.58 acres. Of this residential land use, 39.31 acres is rural residential, 19.96 acres is single family (R-1) residential, and 16.31 acres is multifamily (R-3-4) residential (Table 1 - Column 2).

Parcels that are zoned for residential uses include: single family residential agricultural (R-1-A) 2.22 acres, single family residential duplex (R-1-2) 32.39 acres, and multifamily residential (R-3-4) 12.98 acres (Table 1 - Column 3).

The vacant land within in the study area that is zoned for rural residential agricultural (R-1-A) is 2.22 (Table 1 - Column 4).

The current residential uses of parcels greater than ½ acre that are zoned for commercial use include: rural residential agricultural is 39.31 acres, single

family (R-1) residential is 15.85 acres, and multifamily residential is 2.81 acres (Table 1 - Column 5).

c) Housing Demographics

There is a large amount of land available within the city for residential development. If residential land did become constrained, most, if not all of the land surrounding the City is in agricultural production and could easily be developed for residential uses. Because of the availability of residential land, housing characteristics are limited in this study. However, the Design Guidelines does address residential land uses that about the study area.

d) Commercial Land Use

Land currently used for commercial uses within the study area equals 91.84 acres (Table 1 - Column 2). The total number of acres that has been zoned for commercial use is 255.91 acres (Table 1 - Column 3). Presently, 37.25 of the commercially zoned acres greater than one-half acre is vacant (Table 1 - Column 5) and 66.18 acres is in agricultural-orchard use.

e) Light Industrial and Manufacturing

Within the study area, 8.7 acres of land is zoned for manufacturing purposes, 7.24 of this total is currently vacant (Table 1 Columns 3 and 4).

f) Vacant

Currently there is 50.41 acres of vacant land within the study area. Vacant parcels that are greater than a ½ acre that are zoned for commercial use and is presently vacant is 37.25 acres (Table 1 - Columns 2 and 5).

Table 1 - Current Land Uses and Zoning

Land Use Designation (Column 1)	Current Land Use Acreage (Column 2)	Zoned Uses Acreage (Column 3)	Vacant Land Zoning Designation (Column 4)	Current Uses of Parcels > ½ Acre Zoned Commercial (Column 5)
Ag.-Orchard	95.34	0	0	66.18
Rural Residential	39.31	0	0	0
Residential R-1	19.96	0	0	15.85
R-1-A	0	2.22	2.22	39.31
R-1-2	0	32.39	0	0
Multifamily R3-4	16.31	12.98	0	2.81
Commercial	91.84	255.91	37.74	81.59
Manufacturing	0	8.7	7.24	0
Vacant	50.41	0	0	37.25
Sphere of Inf.	38.47	-	-	-

2. Surplus of Commercial Zoned Land

The General Plan identifies a city wide surplus of commercially zoned land. Much of this land that is currently in commercial use is located in the downtown area and is not suited to capture freeway travelers.

Within the study area most of the commercially zoned land is C-3, General Commercial District. Only a small portion of this land has been zoned CH, Highway Service Commercial.

The Zoning Ordinance, Chapter 17.22, indicates the permitted uses in the C-3 zone. Some of the uses include the following:

Those uses permitted in the C-1, Neighborhood Business District, such as: bookstores, drugstores, florists, hardware, professional offices, and gasoline stations.

Those uses permitted in the C-2, Central Business District, such as: athletic facilities, banks, cafes and restaurants, hotels, theaters, and printing shops.

Some of the C-3 uses include: commercial repair garages, auto sales and service, warehouses, and veterinary hospitals.

3. Specific Plan Zoning Designations / Corning Business Development Zone

The Specific Plan recommends classifying the Specific Plan study area, Corning Business Development Zone. Within this zone would be two zoning classifications:

1. CH: Highway Service Commercial District
2. SP-MU: Specific Plan Mixed Use

Both of these zoning classifications would be overlay zones for the present C-3 General Business District zoning classification. However, every proposed development in the proposed Corning Business Development Zone would be subject to discretionary review by the planning commission and conditions for development may be imposed in a conditional use permit.

a) CH Highway Service Commercial District Zoning Classification

The CH zoning classification is intended to be applied along main road and highway frontages, such as the Hwy. 99W Corridor. By expanding or changing the parcels that are currently zoned for CH uses, the city would be able to provide the necessary services for travelers on Interstate 5. The CH

zoning classification would be an overlay zone. Within this overlay zone proposed projects should cater to the services required by freeway travelers, such as, service stations, restaurants, motels, and convenience stores.

Land that could best utilize the CH classification is located near the two primary intersections in study area, however, much of this land has already been developed for commercial uses. The land that could be included in the CH overlay zone would be located immediately north or south of the study area's primary intersections in order to provide adequate access and circulation for travelers.

b) SP-MU Specific Plan Mixed Use Zoning Classification

The SP-MU classification would be applied to the larger parcels located between the primary intersections of the study area. By designating land the SP-MU classification, the city would be able to provide a combination of land uses on one parcel. The concept of mixed use (discussed in this chapter) combines a variety of compatible land uses on one parcel. The combination of uses could include uses from the commercial, industrial, or multi-family districts.

The SP-MU zoning classification would be an overlay zone for the present C-3 zoning classification, and would be located within the Specific Plan study area. Within this overlay zone, proposed projects could include commercial, office, and industrial uses as well as multi-family residential on lots east of Hwy. 99W. This overlay zoning classification would provide for range of opportunities for property owners and developers.

Figure 5, illustrates the Specific Plan zoning designations for the Corning Business Development Zone.

4. Large Parcels of Underutilized Land

Presently, there are 103.43 acres of vacant and agricultural-orchard land zoned for commercial uses that are larger than one-half acre in size, Figure 3. This total of underutilized land can be expected to be developed in the future. Development of this land can be dependent on any number of issues such as the current economy, location to other businesses, and site constraints.

According to the General Plan employment is expected to increase in the retail, services, and agriculture sectors. However, these jobs are typically low paying jobs, paying minimum wage or slightly higher. Encouraging a variety of

commercial, warehousing, light industrial, manufacturing, and other employment generating land uses is a partial solution to meeting the City's employment needs.

One way to encourage the development of these large parcels is to utilize mixed use development. The Specific Plan has prepared sample site plans in the Design Guidelines, Appendix D, illustrating a combination of compatible mixed uses.

Allowing for the combined development of large parcels promotes thoughtful and responsible development and compatible building design that is consistent with the City's character. This reduces haphazard and piecemeal development of large parcels within the study area.

5. Mixed Use Development

Mixed use development is a combination of land uses that have been determined to be compatible for development. Mixed use development means that a developer could propose a project for a parcel zoned for C-3 or Business Development Zone, that consists of a combination of allowable uses. The combination of uses could be from any of the following zoning classifications: the commercial districts (C-1 and C-2), M-1 Light Industrial District, M-2 General Industrial District, M-L Limited Manufacturing District, MF Industrial Frontage District, and some medium to high residential uses (mobile homes, multi-family residential, and senior development). The combination of such uses are found to be compatible if noise, smoke, dust, odors, and other offensive features are confined to the premises of such use.

The combination of commercial and residential uses would only be limited to the lots located on eastern side of Hwy. 99W. Commercial development would be located along Hwy. 99W and high density residential development would be located to the rear of the lot, acting as a buffer between commercial and single-family residential land uses. The medium to high density residential units would not exceed more than half of the property area, thus promoting the concept of commercial/residential mixed land use.

It has been suggested by city residents that parts of the Hwy. 99W Corridor could be developed as an automobile row. Some of the larger parcels could be developed with a variety of compatible commercial, manufacturing, or light industrial uses.

The conceptual site plans for selected properties that might be developed as mixed land uses are in Appendix D. These plans include examples of commercial and residential development on the eastern portion of Hwy. 99W and mixed commercial and non-residential development on other properties within the study area. Such conceptual plans demonstrate the optimum number of functions to be accommodated, the physical arrangement of buildings and the general layout of

parking, landscaping, and circulation systems. These site plans illustrate some of the design criteria established by this document.

6. Sphere of Influence Land Uses

A portion of the study area, north of Blackburn Avenue to Gallagher Avenue, is located within the City of Corning's Sphere of Influence (SOI) but is outside of the city limits. SOI land uses are broken down into Rural Residential, Suburban Residential, Urban Residential, General Commercial, and General Industrial. These land use determinations indicate the possible use of land within the current Sphere of Influence. These designations can change depending on the needs of the City and indicate the possible land uses the City might need to expand. To annex this land into the city limits, the City should apply to LAFCO. The Specific Plan study area sphere of influence boundary should be included in the annexation application. However, in following this document, the sphere of influence land should be utilized for commercial, or mixed commercial and non-residential, development.

The City should also consider annexing the land south of the city limits between the Specific Plan study area's southern boundary and the Liberal Avenue Interstate 5 exit, approximately 1.5 miles to the south of South Avenue. In order to mitigate some of the traffic impacts that may occur due to development in the study area, the Specific Plan encourages the promotion of utilizing the Liberal Avenue exit as an alternative access to Interstate 5. In so doing, the City would have more influence and control over the type of development that may eventually occur in this area. Further, if this area were to be annexed to the City, it should be designated as being within the boundaries of the Hwy. 99W Corridor Specific Plan.

B. LAND USE GOALS, POLICIES, AND IMPLEMENTATION MEASURES.

This section discusses the goals, policies, and implementation measures established for the Specific Plan study area. The goals, policies, and implementation measures are a combination of those established in the General Plan and those created as a result of this document.

1. Land Use Goals

- Promote the orderly development of Corning and its surroundings.
- Insure that new development pays for the necessary City facilities and services to support it through tax revenues, fees, or other means.
- Provide adequate vacant land for development of a range of commercial, office, and light industrial activities.
- Conserve and improve aesthetic, historic, neighborhood, open space and environmental land resources of the community.
- Avoid the approval of land uses which threaten public safety and property values.
- Develop the Hwy. 99W Corridor which provides a variety of retail, office, commercial, light industrial and manufacturing, and warehousing opportunities.
- Protect residential land uses that abut the study area including commercial and other land uses.

2. Land Use Policies

- Annexation of additional area into the City shall occur only when there is a demonstrated economic or environmental need to do so and when the annexation is in conformance to the general plan and the Hwy. 99W Corridor Specific Plan if located within the study area boundaries.
- Require rezoning of all lands considered for annexation.
- Promote higher densities and mixed land uses that are mutually compatible.
- Encourage the location and development of businesses which generate high property and sales taxes, local employment and are environmentally compatible.

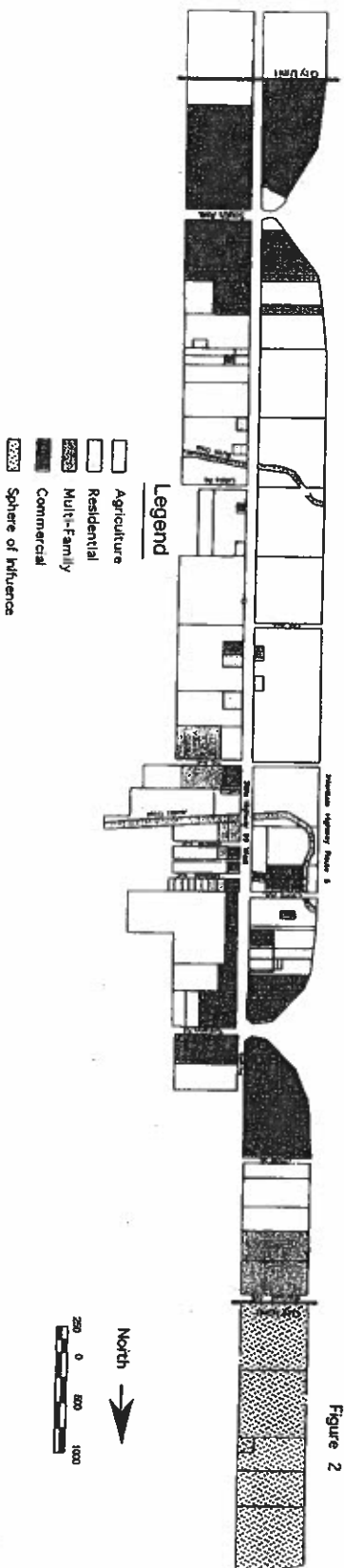
- Commercial development should be clustered on arterial streets and at major intersections in the downtown or near Interstate 5 interchanges.
- Industrial development should be located near the railroad, the airport, or freeway interchanges.
- Maximize the economic base of the Hwy. 99W Corridor through the use of zoning classifications such as Highway Service Commercial (CH) and mixed use development to insure expansion of a variety of land uses desirable to the area.
- Designate key sites of commercial land for mixed use and CH commercial development, and require master planning for these developments, to assure coordinated access, parking, building orientation/location, and pedestrian access.
- Ensure the gradual upgrade of underutilized parcels.

3. Land Use Implementation Measures

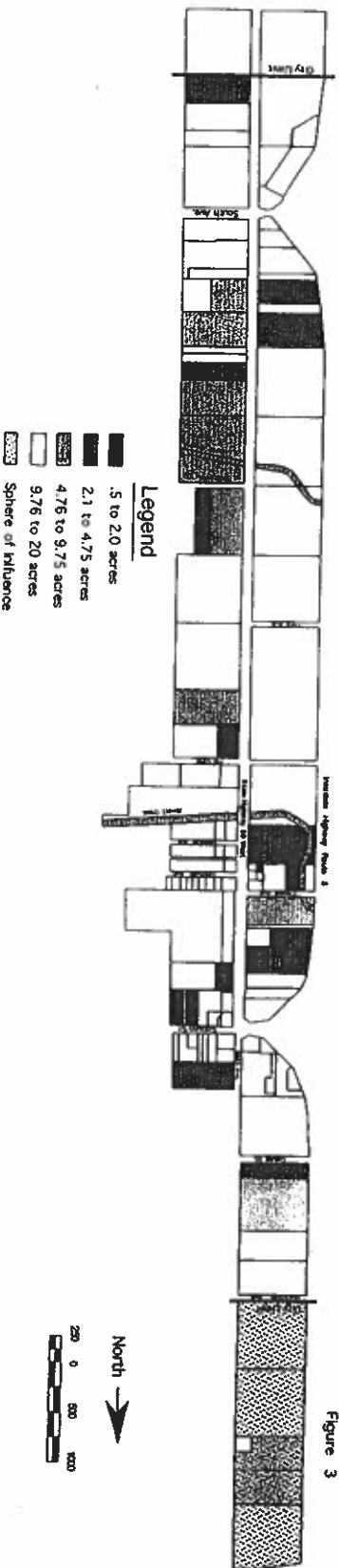
- Require expanded initial studies (CEQA) and fiscal impact studies to evaluate the advantages and disadvantages of all proposed annexations or major rezonings.
- Require rezoning for all land use changes in Tehama County jurisdiction but within the land surrounding the Sphere of Influence.
- Adopt a Flood Plain Overlay Zone to prevent development in flood prone areas and to protect riparian corridors.
- Traveler and visitor oriented land uses should be located near the I-5 corridor.
- Locate industrial and commercial land uses away from noise sensitive land uses.
- Prepare design guidelines that clarify the expectations of the City in terms of quality development.
- Establish regulations that assure compatibility of existing and new commercial uses.

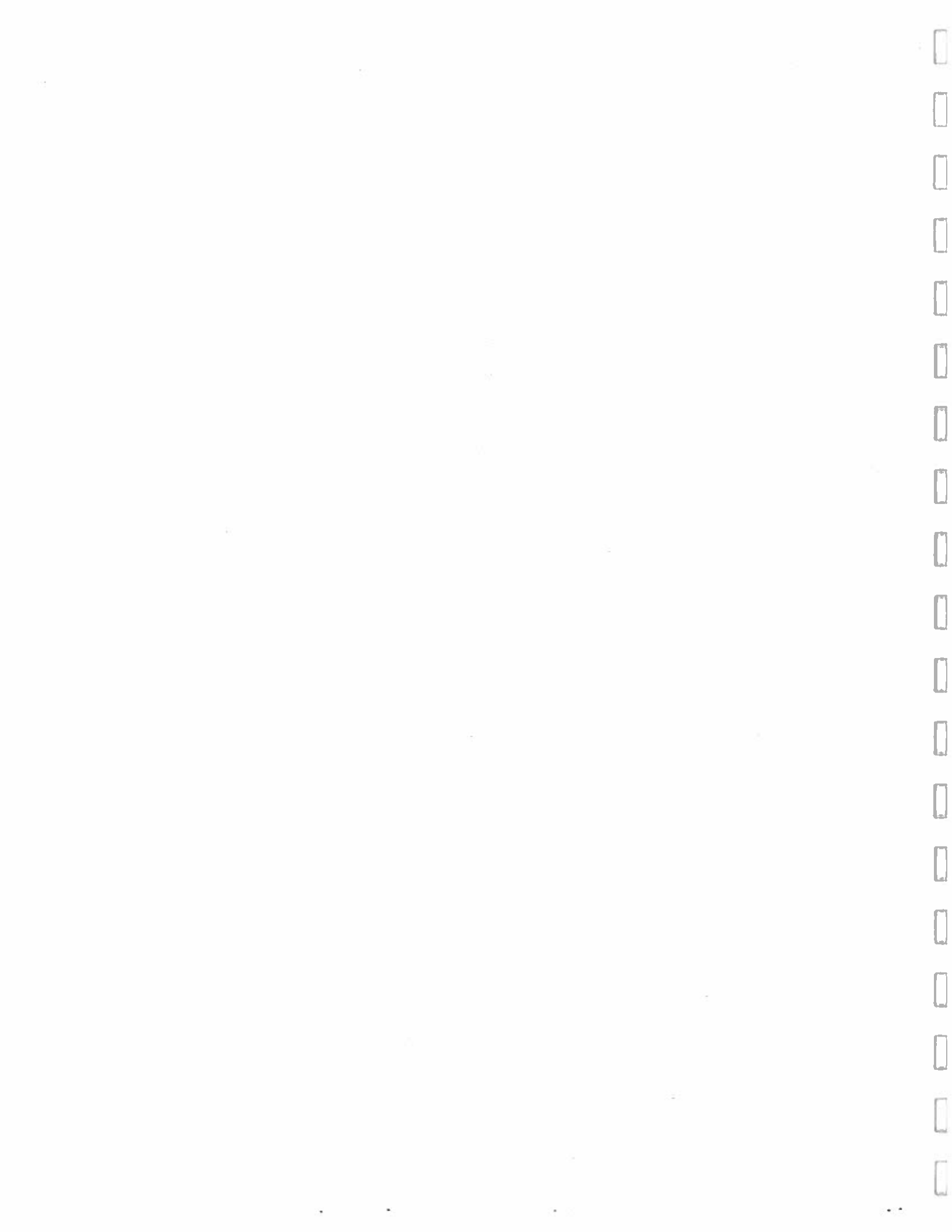
Highway 99 West Specific Plan Area - Corning, California

CURRENT LAND USE



LARGE PARCELS OF UNDERUTILIZED LAND





Highway 99 West Specific Plan Area - Corning, California

GENERAL PLAN FUTURE LAND USE

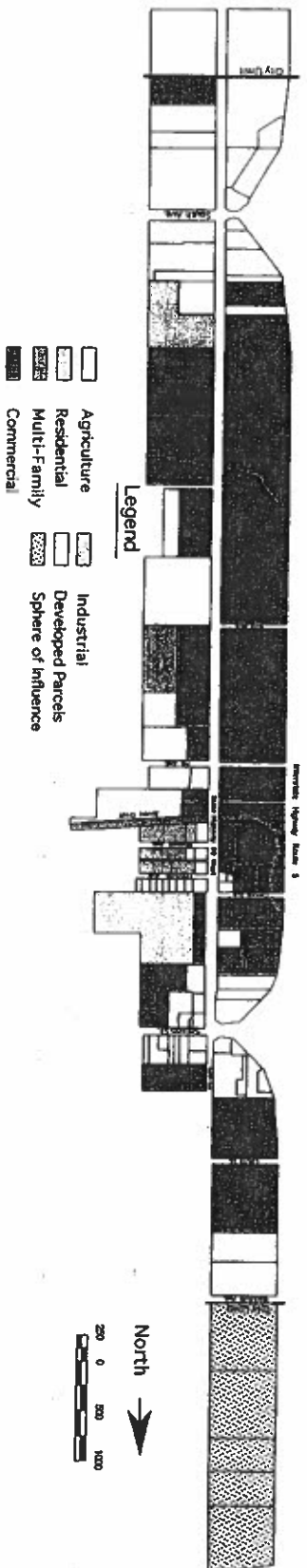


Figure 4

CORNING BUSINESS DEVELOPMENT ZONE OVERLAYS

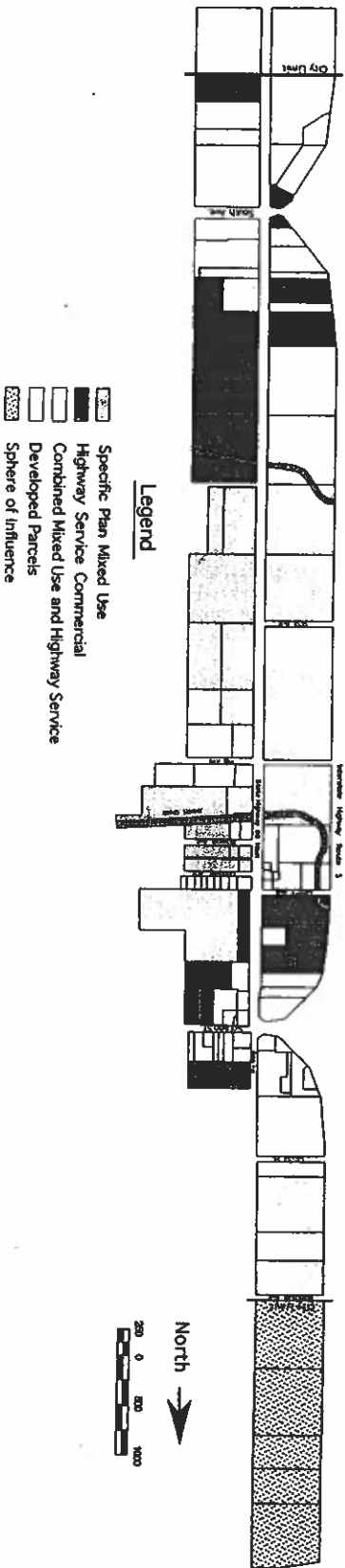
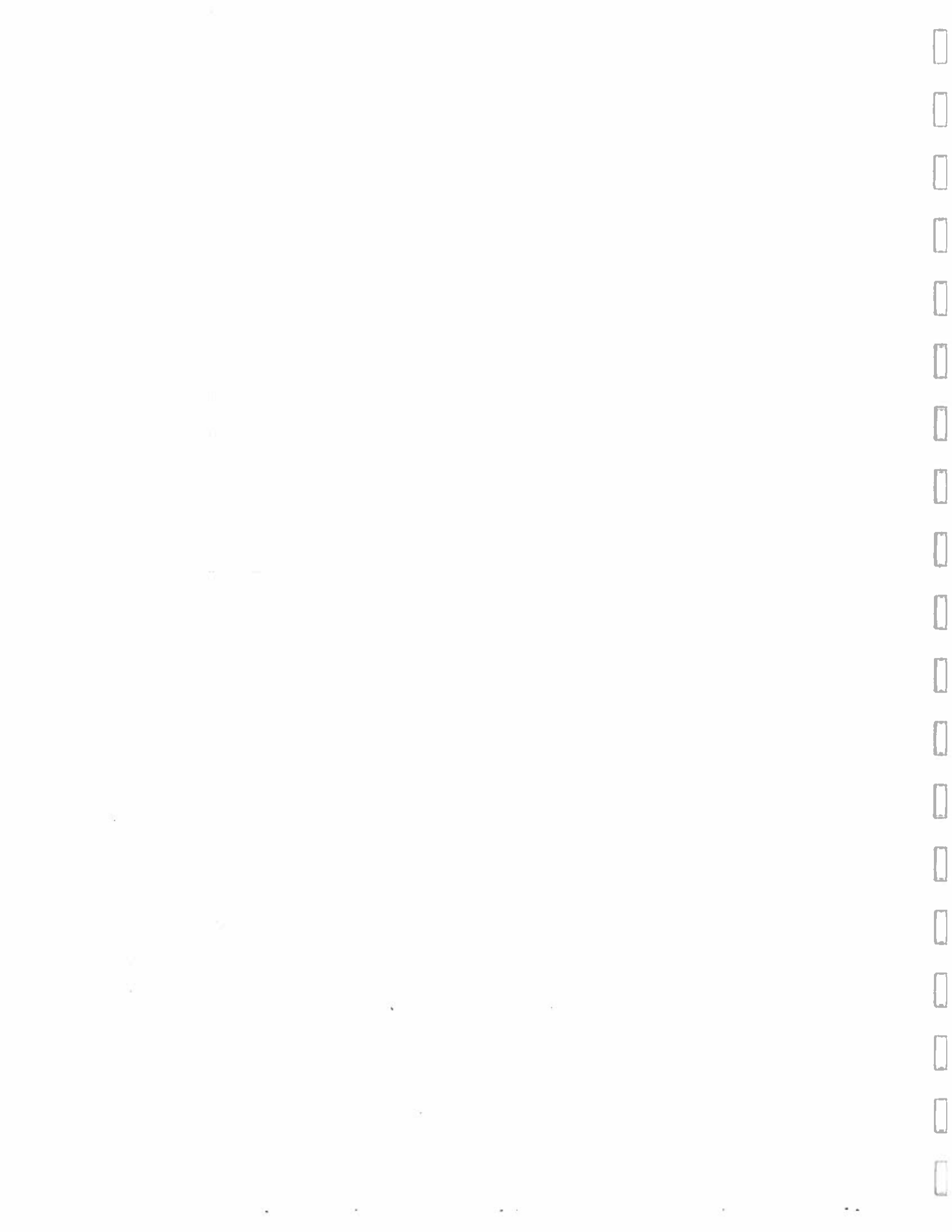


Figure 5



Chapter 4 - CIRCULATION ELEMENT

IV. CIRCULATION ELEMENT

The study area includes a circulation system of Interstate 5, Highway 99W, local roadways, and intersections. The definitions of these roadways are described below. Figure 6, lists the important streets and roadways in the Specific Plan study area, Figure 1 (Chapter 2), illustrates their location. Collector and arterial streets make up the bulk of the circulation system. Important roadways in the study area include: Hwy. 99W, Solano Street, South Avenue, Blackburn Avenue, Edith Avenue, Fig Lane, Gallagher Avenue (at the north boundary of the study area), and Loleta Avenue. Congestion occurs where roadways meet or traffic is impeded, such as an intersection. The two primary intersections in the study area are: Hwy. 99W/Solano Street and Edith Avenue in the northern portion of the study area, and Hwy. 99W and South Avenue in the southern portion of the study area.

Roadway Definitions

Freeway: A limited access and high speed road serving inter-regional movement with no interference from local street patterns or at-grade-crossings. Freeways are divided highways and serve primarily regional and long distance travel.

Arterial: A street carrying the vehicular traffic of intra-community travel as well as access to the rest of the county transportation system. Access to arterials should be by minor arterial, collector and local streets.

Minor Arterial: A street for movement of intra-community traffic and less traveled than arterial streets.

Collector: These roadways serve traffic between major and local roadways and neighborhoods. Collector's are used mainly for traffic movements within residential, commercial, and industrial areas.

Local Street: Roadways used primarily for direct access to residential, commercial, industrial, or other abutting property with on-street parking. They do not generally include roadways carrying through traffic.

Source: Highway Capacity Manual (1985)

A. CIRCULATION OVERVIEW**1. Roadways****Figure 6 - Arterial and Collector Roadways in Specific Plan Study Area**

Street Name	Roadway Classification
99 W	Arterial
Blackburn Avenue	Minor Arterial
Edith Avenue	Collector
Fig Lane	Collector
Gallagher Avenue	Collector
Loleta Avenue	Collector
Solano Street	Arterial
South Avenue	Arterial

a) Highway 99W Corridor and Right-Of-Way

Former State Highway 99W is a thoroughfare and truck route that runs parallel to Interstate Freeway 5 (I-5) with a 100 foot right-of-way for its entire length of the study area. It enters at the southern city limits and continues north to Solano Street. It merges with Solano Street east through downtown until the confluence of 3rd Street. Highway 99W then heads north in the direction of Red Bluff. The section of Highway 99W between the southern city limits and Solano Street is included in the study area of the Specific Plan.

b) Interstate 5

Interstate 5 is the main north/south transportation route and is west of the city and study area. There are two interchanges located within Corning which provide access to Interstate 5, these are South Avenue and Solano Street. Both of these interchanges are located in the study area.

The South Avenue interchange provides freeway access to I-5 in the north and south bound direction for the southwest portion of the City. This interchange also provides access to State Highway 99E located to the east via South Avenue. The South Avenue area is an important intersection for both travelers and trucks using Interstate 5. Located at this interchange are truck stops, restaurants, and hotels.

Solano Street interchange is the northern access point for I-5 in the City. This interchange provides access for both north and south bound traffic. This area provides residents and travelers with such services as fast food restaurants and shopping. The Solano Street interchange also provides direct access to the City's downtown.

According to Caltrans the traffic volumes for the South Avenue/I-5 interchange are based on Annual Average Daily Traffic (Annual ADT). The Annual ADT is the total traffic volume for the year divided by 365 days. Peak Month ADT is the average daily traffic for the month of heaviest traffic flow. Caltrans also calculates the Peak Hour traffic volumes. This value is useful in estimating the amount of congestion experienced, and shows how near to capacity the highway is operating. Peak Hour volumes are also used to calculate noise contour lines and noise levels.

The traffic volumes for the South Avenue/I-5 interchange are as follows:

Table 2 - Traffic Volumes South Avenue/I-5 Interchange*

	Peak Hour	Peak Month ADT	Annual ADT
Number of Vehicles North of Interchange	2,400	25,000	19,300

* No traffic volumes are estimated for Solano Street/I-5 Interchange.

b) Arterials

The three arterials located in the study area include Hwy. 99W, Solano Street, and South Avenue. Table 2 below, indicates the existing peak hour volume and level of service for these arterial roadways. The peak hour volume is usually 10 to 12 percent of the Average Daily Traffic (ADT) flow. The peak hour counts listed below were taken from the General Plan. These counts were originally taken between 4:30 p.m. and 6:00 p.m. Monday through Thursday.

Figure 7, in this section, defines the different Levels of Service for traffic volumes.

Table 3 - Roadways: Existing Peak Hour Volume and Level of Service

Roadway	Existing Peak Hour Volume	Level of Service
99W at northern city limit	211	A
99W at southern city limit	110	A
Solano Street at western city limit	216	A

Table 4 indicates the General Plan's projected peak hour volume and level of service for these roadways at buildout. These numbers were based on the current zoning classifications for the study area.

Table 4 - Roadways: Projected Peak Hour Volume and Level of Service

Roadway	Projected Peak Hour Volume	Level of Service
99W at northern city limit	241	B
99W at southern city limit	139	B
Solano Street at western city limit	215	C

d) Collectors

Important collectors in the study area include: Edith Avenue, Fig Lane, Loleta Avenue, and Gallagher Avenue (which is located in the City's sphere of influence).

2. Street Intersections**a) Hwy. 99W / Solano Street**

There are two primary intersections within the study area. These intersections are the "gateways" into the Hwy. 99W Corridor. The intersection in the northern portion of the study area is Hwy. 99W/Solano Street and Edith Avenue. It is at this point where Hwy. 99W merges with Solano Street and heads east through downtown. This intersection could be a gateway for both the City's downtown and the Specific Plan study area. This intersection has C-3 commercial development on all four corners and is controlled by a traffic light.

The Hwy. 99W/Solano Street and Edith Avenue intersection has an existing level of service rating of "C." According to observations, the traffic flow at this intersection actually runs at the higher level of service "B", than the computer model indicates. Cars were able to maneuver through the intersection with only minimal interference from other users. However, A trip generation analysis has been performed to determine the number of vehicle trips that would be generated in the study area at buildout (see Trip Generation Analysis in this element). It has been projected that, at buildout, the level of service for the Solano Street intersection will drop to an "E" rating. However, this rating does not take into consideration a number of variables that influence trip generation rates. Therefore, a detailed, site specific trip generation analysis has been conducted. This model takes into consideration proposed land uses and parcel density, zoning, and circulation patterns. See Table 5 and 6 below for existing and projected levels of service and Appendix A1-3 for the results of this analysis.

b) Hwy. 99W / South Avenue

The intersection in the southern portion of the study area is Hwy. 99W & South Avenue. Leading to this intersection are one lane roadways controlled by a four way stop sign. The present level of service rating for this intersection during the peak hour of traffic is a "D." The primary reason for this low rating is the number of truck traffic that occurs at this intersection. There are two reasons the traffic at this intersection is so high: 1) most of this traffic is circular in nature, meaning, trucks and travelers exit from I-5 to stop and refuel, then return to I-5, and 2) the truck and vehicle turning movements within the intersection. The Traffic Section, in this element, discusses the truck traffic in length. It also discusses possibilities for minimizing the future congestion at the Hwy. 99W and South Avenue intersection. For example, the Hwy. 99W right-of-way and South Avenue, with a 40 foot right-of-way, could be widened to provide exclusive right and left turn lanes.

It has been projected that at buildout, the level of service for the South Avenue intersection will drop to a "F" rating. One of the factors that will contribute to the projected decrease in the level of service is, as development occurs adjacent to this intersection the cyclical nature of the trucks and autos exiting and reentering Interstate 5 will increase.

Tables 5 and 6 indicate the existing and projected peak hour volume and level of service for the two primary intersections in the study area (see Appendix A).

Table 5- Intersections: Existing Peak Hour Volume and Level of Service

Intersection	Existing Peak Hour Volume (number of vehicles)	Level of Service*
Hwy. 99W/Solano Street and Edith Avenue	1209	C
Hwy. 99W and South Avenue	748	D

* Level of Service is defined in Figure 7.

Table 6 - Intersections: Projected Peak Hour Volume and Level of Service

Intersection	Projected Peak Hour Volume C-3 commercial (number of vehicles)	LOS*	Projected Peak Hour Volume with Mitigation Measures (number of vehicles)	LOS*
Hwy. 99W/Solano Street and Edith Avenue	4892	E	2242	C
Hwy. 99W and South Avenue	3765	D	1890	D

* LOS is Level of Service (see Figure 7 for definition).

Figure 7 - Level of Service (LOS)

<p>LOS A: Free flow of individual users that are not interrupted by other users in the traffic pattern. Any intersection delays that are less than 5 seconds.</p> <p>LOS B: Constant flow with a large freedom to maneuver, but with some interference from other users. Intersection delays are between 5 and 15 seconds.</p> <p>LOS C: Restricted flow which remains constant, but interference from other user is noticeable. Intersection delays range from 15 to 25 seconds.</p> <p>LOS D: High-density but stable flow. Freedom to maneuver is restricted and intersection delays range from 25 to 40 seconds.</p> <p>LOS E: Traffic Flow is at or near capacity and freedom to maneuver is extremely difficult. Intersection delays of 40 to 60 seconds can be expected.</p> <p>LOS F: Traffic flow approaches a level that exceeds the amount that can be served. Traffic is stop-and-go and queues form. Delays at intersections are greater than 60 seconds.</p>
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Source: Highway Capacity Manual (1985)

3. Traffic (Truck Transportation)

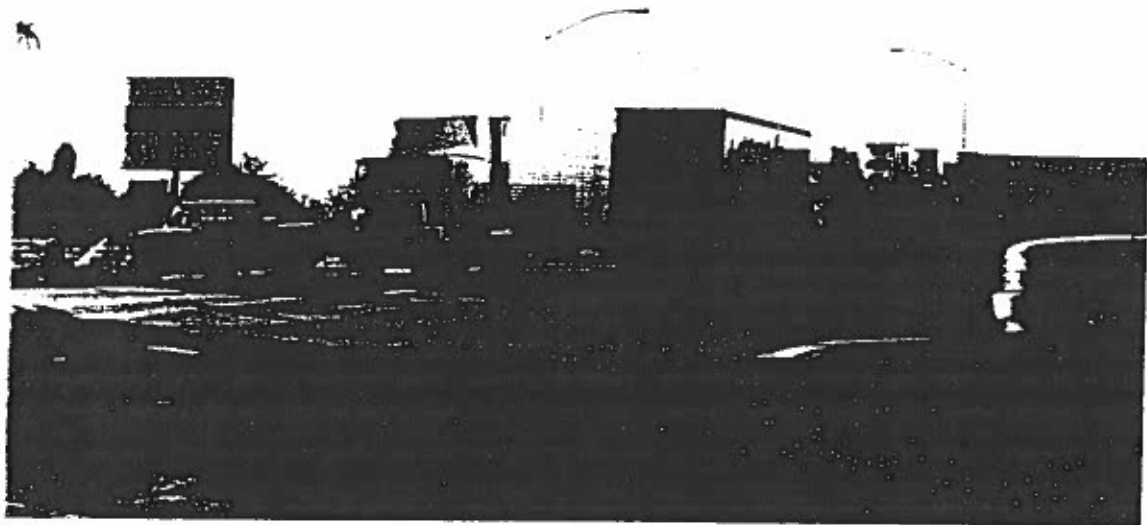
Trucks use Hwy. 99W, Solano Street, and South Avenue for moving goods and materials through the area. Along Hwy. 99 W and South Avenue is an area of high truck traffic. With the location of truck stops and service facilities adjacent to I-5, much of this traffic is circular in nature (trucks exiting the Interstate for services and returning to the Interstate). Visual observations show that there is back-up onto the freeway from the northbound off-ramp, and back-up across the overpass from the southbound exit during peak hours, see Figure 8 (picture). Signalization of the intersection may increase or slow traffic. The best alternatives are to work directly with Caltrans to provide better accessibility for trucks and travelers which would increase the safety of the off-ramp and intersection. Some of the alternatives to the current off-ramp from I-5 include:

- promoting the use of the Liberal Avenue / Road 99 exit,
- widening the off-ramp for additional turning lanes, and

- providing an off-ramp lane that extends down the freeway allowing for the queuing of trucks.

One of the easiest and most inexpensive ways to reduce the amount of traffic at the South Avenue intersection that is coming from the I-5 off-ramps is to promote the use of the Liberal Avenue / Road 99 exit. This freeway interchange is located 1.5 miles south of the South Avenue exit and has access for both northbound and southbound traffic. One way of promoting this interchange is to increase the number signs along the freeway for northbound travelers informing them that this exit provides direct access to Corning and South Avenue via Hwy. 99W. Also, post signs near the exits of commercial uses, such as Burns Brothers and Petro, informing southbound travelers to use the Liberal Avenue / Road 99 interchange for freeway access. This would reduce the number of vehicles that would normally travel through the South Avenue intersection to return to I-5.

Figure 8 - Picture of South Avenue/I-5 Interchange.



4. Trip Generation Analysis

A trip generation analysis examines the current and projected trip generation rates for residential, commercial, and agricultural land uses within the study area. The purpose of a trip generation analysis is to calculate the number of trips generated from a particular land use. A *trip* is a single or one-direction vehicle movement with either the origin or destination inside the study area. Knowing the present

and future trip generation rates for the study area will enable planners, developers, and residents to assess the impacts that development will have on the existing roadways and intersections.

The results of this analysis were used to determine the impact that future development would have on the two primary intersections in the study area. However, the calculations used assumed two variables: 1) that buildout of the study would occur in the next twenty years, and 2) that all commercial development generated the same number of vehicle trips (see Appendix A for trip generation rates for commercial development).

There are several ways to mitigate the impact that future development may have on a roadway or intersection and calculate realistic vehicle trip projections, these include:

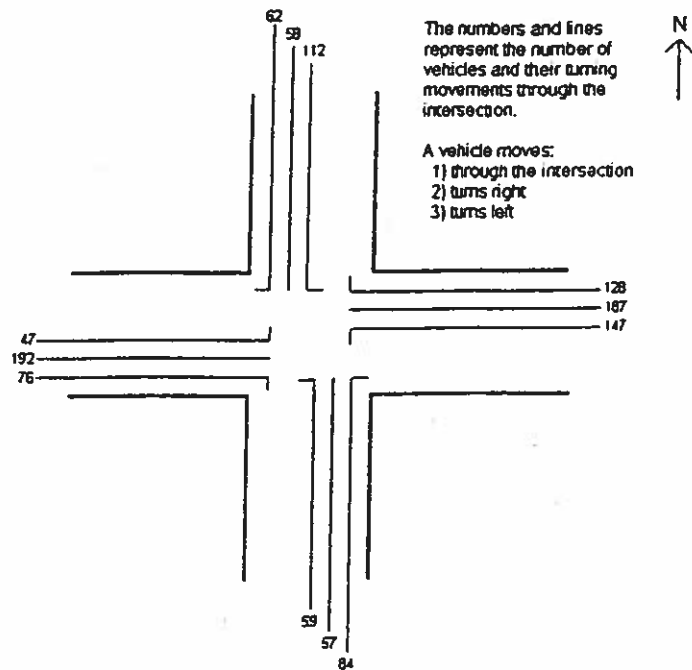
- widen the roadway right-of-way to include exclusive left and right turning lanes,
- signalize the intersection;
- improve adjacent collector and side streets to divert traffic, such as Fig Lane and Loleta Avenue;
- promote the use of other freeway interchanges, such as the Liberal Avenue exit;
- establish land use restrictions for density requirements on rear-lots;
- no medians should be allowed within 1000' of an intersection to allow for more turning lanes; and
- break down commercial uses and calculate trip generation rates for individual business types, such as: office buildings, retail commercial, light industrial, manufacturing, and truckstops.

Figures 9 and 10 are diagrams illustrating traffic volumes for the Solano Avenue and Hwy. 99W intersection and the South Avenue and Hwy. 99W intersection.

Appendix A-1 analyzes existing intersection trip generation calculations. Appendix A-2 analyzes projected intersection trip generation calculations if the study area were developed primarily commercial (the General Plan has designated this area primarily C-3 zoning). Appendix A-3 analyses projected trip generation calculations using the Corning Business Development Zone and corresponding overlay zones. Individual trip generation rates were determined for each parcel.

Figure 9 - Solano Avenue / Hwy. 99W Intersection:

Existing Traffic Volumes Solano Avenue Intersection.



Projected Traffic Volumes - Commercial Development.

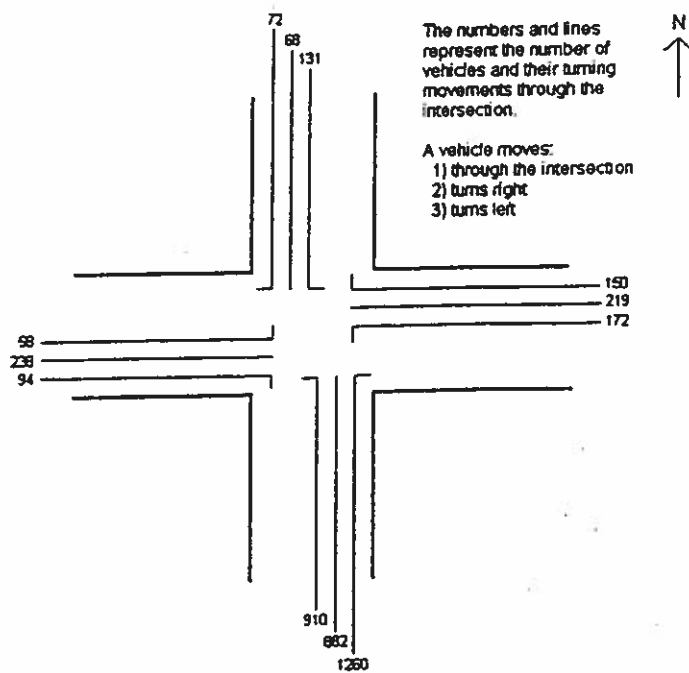


Figure 9 - Solano Avenue / Hwy. 99W Intersection (continued)

Projected Traffic Volumes with Mitigation Measures.

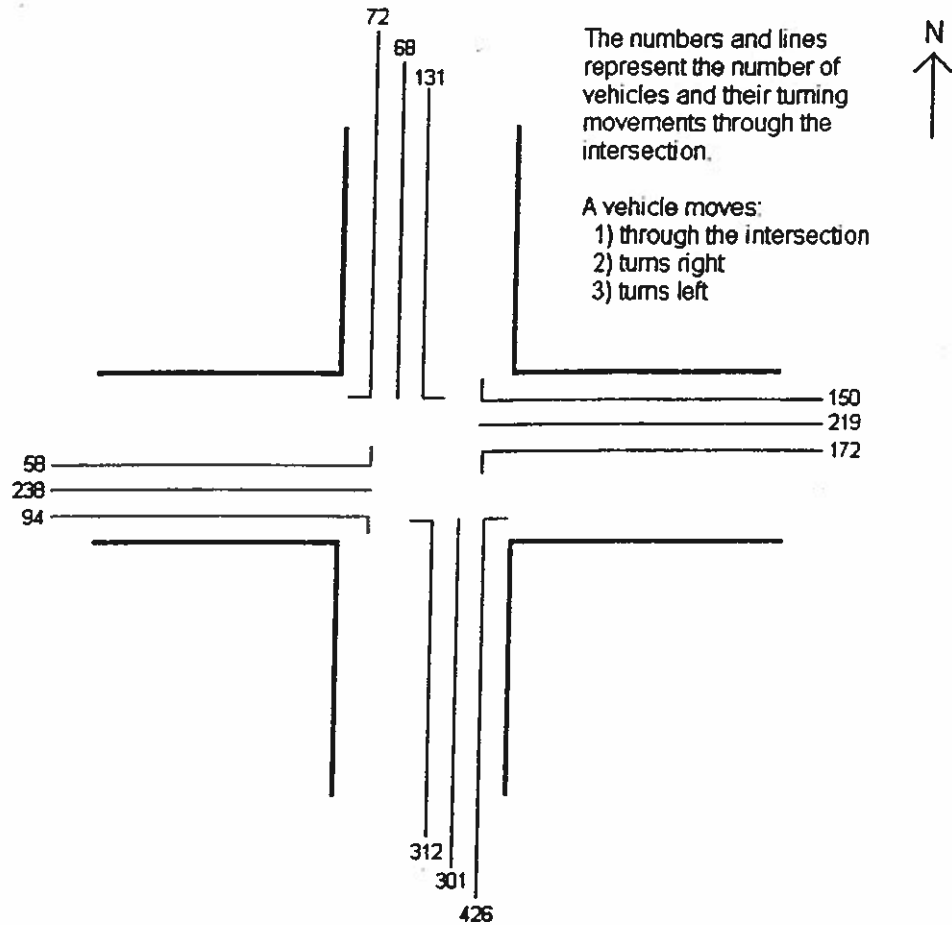
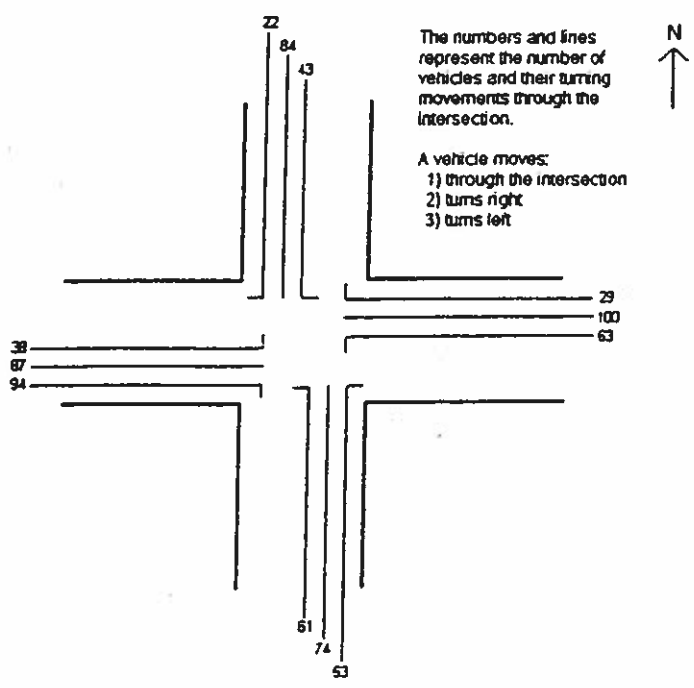


Figure 10 - South Avenue / Hwy. 99W Intersection:

Existing Traffic Volumes.



Projected Traffic Volumes - Commercial Development.

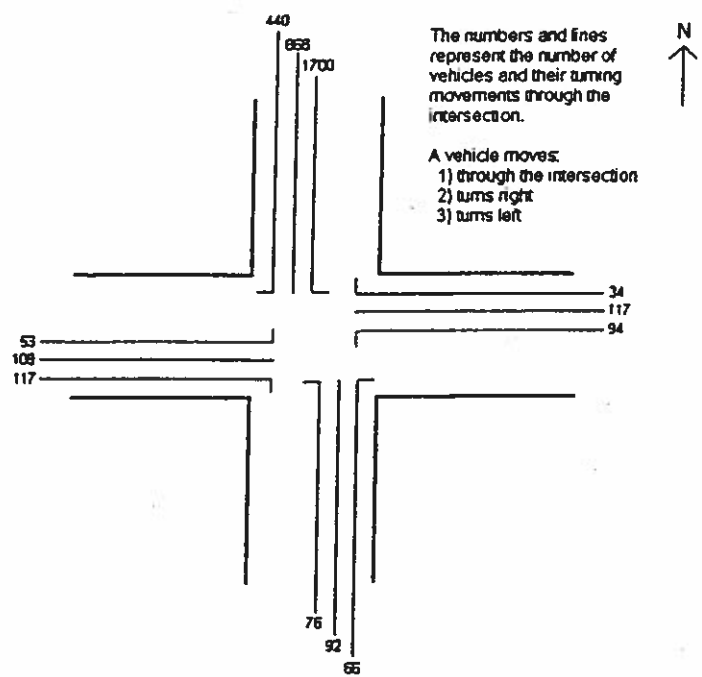
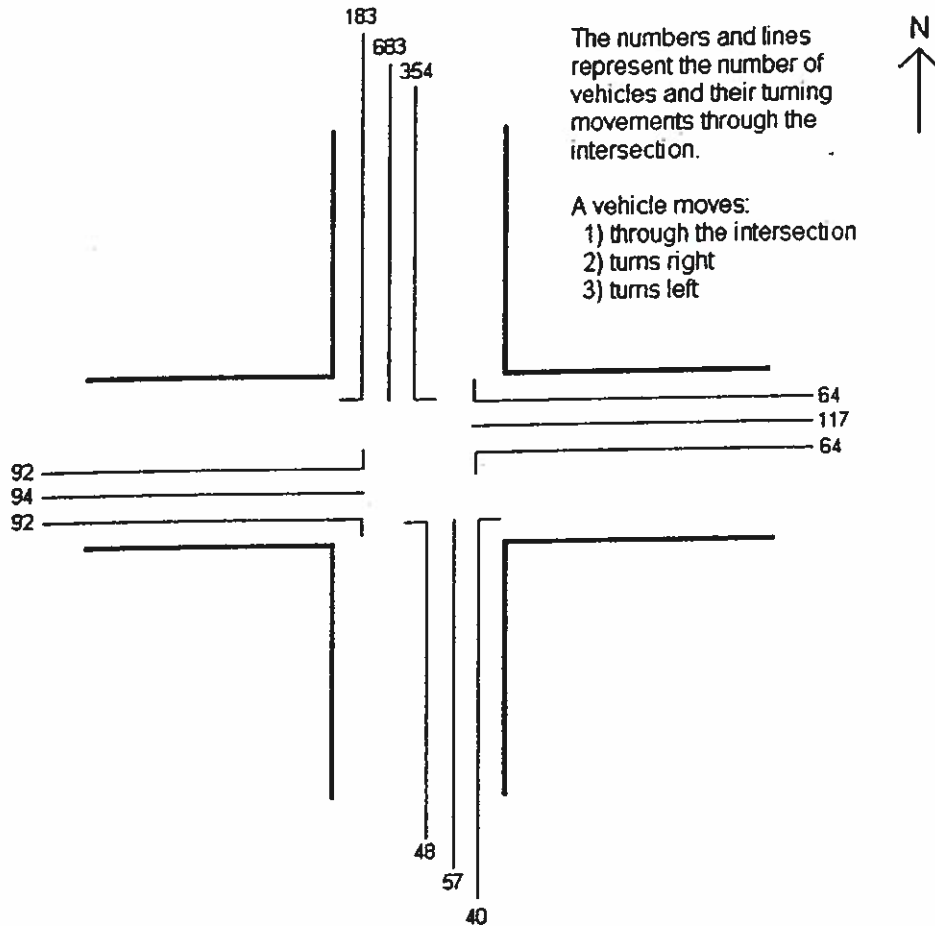


Figure 10 - South Avenue / Hwy. 99W Intersection (continued)

Projected Traffic Volumes with Mitigation Measures.



5. Street Improvements

a) Gateways

The two potential gateways in the study area are: 1) Hwy. 99W/Solano Street and Edith Avenue intersection, and 2) the Hwy. 99W and South Avenue intersection. Although the Community Design Element and the Design Guidelines are to be applied for future developments, incentives should be provided for existing developments to voluntarily comply with the guidelines. This would be particularly helpful at the Hwy. 99W/Solano Street and Edith Avenue intersection which has already been developed on all four corners. Ways that the City and developments could enhance these intersections include: hardscape paving treatments, monument signs, landscaping, ornate or decorated lighting fixtures, and bollards or planters. The Design Guidelines illustrates examples of each of these desirable elements.

b) Streetscapes

The Community Design Element, the Design Guidelines, and Landscape Standards have established streetscape design suggestions for Hwy. 99W. These cross-sections are illustrations of the different opportunities that the study area could implement for the roadways within the Corridor. Refer to the Design Guidelines, Appendix C, for illustrations.

c) Bikeways

The General Plan calls for the adoption of a bicycle plan that will provide a contiguous path system for the City. The topography of Corning is attractive for bicycle use. The Streetscapes Section of the Design Guidelines provides for bicycle lanes along the Hwy. 99W Corridor. The type of bike lanes that are most desirable are Class 1 bike paths, totally separated from traffic, and Class 2 bike lanes adjacent to traffic lanes. Class 1 bike lanes should be provided along the Hwy. 99W Corridor, the major arterial in the study area. By providing Class 1 bike lanes in this area, bicyclists are separated from the large trucks that use this roadway, thus increasing safety.

Class 2 bike lanes should be located on the collector streets in the study area. These bike lanes should extend throughout the study area and connect to other bike lanes outside the area.

By providing bikeways in the study area, the Specific Plan encourages the development of a City wide bicycle system.

d) Parking

Parking requirements are established in the City's Zoning Ordinance in Chapter 17.51 "Off-Street Parking Requirements." These parking requirements indicate the number of parking spaces required for particular uses conducted on a lot. However, the Specific Plan, through its Design Guidelines, has established additional criteria for parking lots.

B. CIRCULATION GOALS, POLICIES, AND IMPLEMENTATION MEASURES

This section discusses the goals, policies, and implementation measures established for the Specific Plan study area. The goals, policies, and implementation measures are a combination of those established in the General Plan and those created as a result of this document.

1. Circulation Goals

- Create a problem free transportation system in the Corning Planning Area.
- Accommodate traffic and parking demand resulting from full development of the Specific Plan study area.
- Maximize access to the area by traffic from I-5.
- Encourage transportation alternatives other than the single driver automobile.
- Create an integrated network of bicycle and walking trails throughout the planning area.
- Provide a network of safe, efficient and aesthetic streets that improve access throughout the study area for both vehicles and pedestrians.
- Facilitate efficient and safe movement of people and vehicles within the study area.
- Provide safe, adequate, and accessible parking in the study area.

2. Circulation Policies

- Maximize the efficient use of existing transportation facilities.
- Maintain a level "C" service standard for City intersections and roadways.
- Encourage alternative forms of transportation other than single occupant vehicles.

- Place high priority on the use of bicycles within the Corning Planning Area.
- Confine truck traffic to established routes through the City.
- All streets in the study area shall be designed with consideration of the design principles established in the design guidelines.
- Provide adequate access to all parts of the study area.
- Create a pedestrian environment while maintaining Hwy. 99W Corridor as a major vehicular thoroughfare.
- Provide easily identified, adequate and accessible parking with organized and consistent circulation systems for trucks and travelers.
- Soften the hardscape of parking areas, pedestrian spaces, and walkways through the use of landscaping and street furniture.

3.) Circulation Implementation Measures

- Require site specific traffic studies and mitigation for development proposals that have the potential to exceed roadway LOS of "C" on or off site and/or if the project includes: the potential to develop 200 trip ends and/or commercial development with 4,000 square feet of building area or more.
- Place bicycle racks in commercial areas and employment centers.
- Prepare a long term circulation improvement plan for the Highway 99W Corridor study area.
- All streets should be designed with the following criteria in mind: street trees and landscaping, well defined street edges, easily accessible, comfortable sidewalks and pedestrian areas, identify gateways, signage, and safety.
- A street tree program should be adopted for all study area streets.
- Provide appropriate streetscape designs for the Hwy. 99W Corridor.
- Provide incentives for current property owners whose existing parking areas with inadequate circulation and parking design be reconfigured to meet circulation design and safety standards established in the design guidelines.
- Utilize landscape and hardscape design features to soften parking and pedestrian areas for new development.

Chapter 5 - CONSERVATION, OPEN SPACE, & ENVIRONMENTAL QUALITY ELEMENT

V. CONSERVATION, OPEN SPACE & ENVIRONMENTAL QUALITY

The Conservation, Open Space, and Environmental Quality Element addresses issues related to the conservation, preservation and/or managed production of natural resources and open space. Open space refers to the preservation of natural resources, managed production of resources, outdoor recreation, and open space for public health and safety. Environmental quality takes into consideration both of these factors combined with other issues such as water quality, air quality, and soils protection.

A. OVERVIEW

1. Jewett and Burch Creeks

Jewett and Burch Creeks are the two naturally occurring waterways located in the City. Jewett Creek is an ephemeral creek located between Solano Street and Fig Lane in the study area. Burch Creek is a perennial creek located between Loleta Avenue and South Avenue. Both creeks have been disturbed by human action and as a result the existing riparian habitat has been significantly degraded. Figures 11 and 12 picture Jewett and Burch Creeks.

2. Single-Loaded Streets

One design consideration that might be appropriate for parcels located along Jewett and Burch Creeks is street development on one side of the creek bank, thus creating a linear open space between the creek and the road. The roadway would provide access to plantings along the creek bank and bicycle and pedestrian routes. Using single-loaded streets would prevent development from occurring immediately adjacent to the creek, thus providing an open space setback that would reduce flooding hazards and improve open space security with high visibility.

3. Creek Habitat Protection

The need to preserve existing riparian habitat is reinforced by the habitat's inherent association with the 100 year flood plain. The preservation of riparian habitat, water quality, bank stability, protection and prevention of flood damage, and the preservation of recreational areas and aesthetics are just some of the potential benefits of creek habitat protection.

4. Preservation of Agricultural Uses

Agriculture is the most predominate vegetation type found in the City of Corning. Although this is not a naturally occurring habitat, it does provide many economic and environmental values, including open space, for the community. Agricultural lands provide valuable resources for the surrounding wildlife. The orchards in the study area provide abundant nesting areas for a variety of bird species.

Agricultural land uses include portions of land zoned R-1-A and uses devoted to grazing and orchards. The use of these lands include orchards both in use and in disrepair. Land is used for grazing in large tracts with only one or two residential units. Land within the study area devoted to agricultural uses account for 95.34 acres. Approximately 66.18 acres of this current agriculture-orchard uses, that is greater than ½ acre, is zoned for commercial use. The study area contains soils with a capability rating from Class I to VIII, however, the prime farmland (Class I) has already been developed, the remaining soils do have some to severe soil conservation limitations (see Soils in this section below). Appendix B indicates soil types and capability classifications for the study area.

5. Open Space

Open space accommodates both active and passive recreation needs, provides visual relief, and defines the boundary of developed areas. The largest categories of open space in the study area are natural stream courses, landscaped corridors along arterial and collector streets, and vacant land. The linear open space areas along the roadways will be the dominant feature of the study area when it is fully developed. These landscaped corridors will add to the sense of openness and the visual amenity that will be characteristic of the Hwy. 99W Corridor.

6. Environmental Constraints to Development

The flood plains of Jewett and Burch Creeks may constrain development in parts of the study area. Both creeks fall within the AO Zone designation which means that these are areas of shallow flooding where depths are between 1 and 3 feet (refer to Flood Hazards in the Safety and Public Facilities Element in this document).

7. Water Quality

The City of Corning performs a variety of water quality monitoring activities, as mandated by the State. The City has a high quality source of groundwater. None of the city's water requires treatment of any kind.

Water quality is also a concern in areas where urban runoff is allowed to enter natural drainage courses from either rainfall, landscape irrigation, or agricultural

irrigation. This Plan establishes policies for the management of urban runoff through design of drainage systems, detention basins, and land use regulations.

8. Water Conservation

The City of Corning follows the Model Water-Efficient Landscape Ordinance provided by the State after the passage of the Water Conservation Act of 1990, (Assembly Bill 325). This ordinance is a water efficient landscape ordinance in which its provisions have also been established in the policies section of this chapter. In addition, the Design Guidelines also provides for water conservation in landscaping. Both the ordinance and this plan offer a very basic approach to water conservation.

9. Soils

The Soil Conservation Service's capability classification is a system in which soils are grouped according to a variety of physical attributes. The purpose is to show the general suitability of each soil for agricultural practices. The soils in Corning encompass 7 of the 8 classes ranging from soils that have few limitations that restricts their use to soils that have limitations that preclude their use for commercial plant production. The soils in the study area encompass 5 of the 8 classes. Definitions of these classes is presented in Appendix B-3.

According to the General Plan, there are 23 soil types found within the City's Planning Area; 8 of these soil types are located in the Specific Plan study area and represent 6 different soils series. These soils, along with their map unit and capability classification are presented in Appendix B-1, with a brief description of each series in Appendix B-2. A map of these soils is available in the Master Environmental Assessment prepared by Meade and Associates in 1988. Another, possibly more appropriate source, is the orthophotos provided in the Soil Survey: Tehama County (1967- US Soil Conservation Service).

10. Air Quality

The Specific Plan provides for alternative transportation modes, including pedestrian and bikeways which serve to reduce automobile trips. By also improving the street intersections to accommodate the high amount of truck traffic and reduce intersection congestion will help reduce the concentration of emissions from idling vehicles. Both of these circulation improvements help to reduce automobile traffic and exhaust emissions associated with daily routines within the study area.

11. Energy

Another important factor to consider in a development proposal is the conservation of energy resources. One way to conserve energy in future developments is to take into consideration the solar orientation, wind direction, and landscaping location of an area. Addressing these factors could measurably decrease the energy requirements of a building.

The primary consideration is the availability of sunlight and the extent of shading on the site. In Corning, buildings should face south, thus capturing a greater amount of winter solar radiation. Trees planted to the south of the building should be short, broad, deciduous species. North facing patios, pedestrian areas, or entrances should be limited, the shadow lengths of buildings and trees are extremely long, making this area colder in winter months, however, trees should be planted in this area to provide protection from the wind. Buildings oriented facing west should take into consideration the late summer sun by using deciduous vegetation or other forms of screening.

Figure 11 - Pictures of Jewett Creek.

Picture A - Facing East



Picture B - Facing West

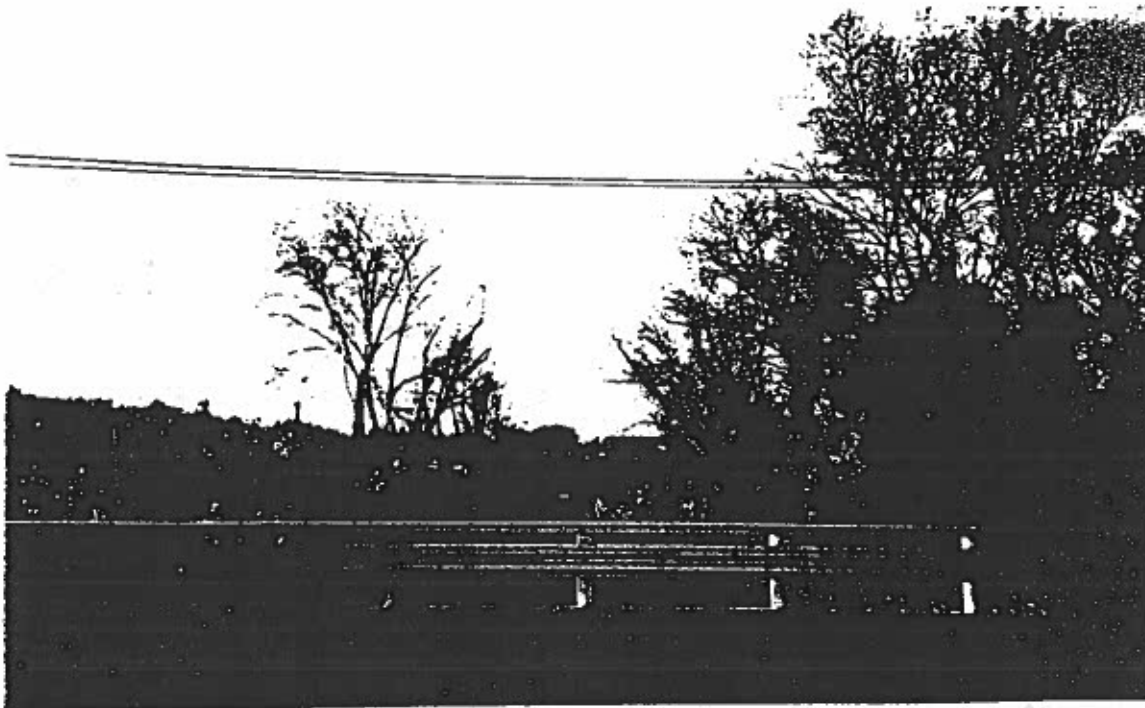


Figure 12 - Pictures of Burch Creek.

Picture A - Facing East.



Picture B - Facing West



B. CONSERVATION, OPEN SPACE, AND ENVIRONMENTAL QUALITY GOALS, POLICIES, AND IMPLEMENTATION MEASURES.

This section discusses the goals, policies, and implementation measures established for the Specific Plan study area. The goals, policies, and implementation measures are a combination of those established in the General Plan and those created as a result of this document.

1. Conservation, Open Space, and Environmental Quality Goals

- Maintain or improve groundwater quantity and quality in the planning area.
- Provide high quality water through the municipal treatment and distribution system.
- Properly manage mineral resources.
- Protect remaining wildlife populations and native vegetation associations.
- Conserve energy supplies.
- Maintain and protect the remaining riparian habitat areas.

2. Conservation, Open Space, and Environmental Quality Policies

- Promote water conservation techniques in new development projects.
- Require mitigation plans for all industries which generate toxic waste or produce excessive amounts of waste water.
- Encourage development projects demonstrated to have minimal impacts on wildlife habitat areas.
- Encourage development proposals that incorporate energy conservation into project design.
- Support proposals that would decrease vehicular emissions through reduction of vehicles miles traveled and through use of alternative modes of travel.
- Incorporate energy conservation techniques into project design.
- Minimize water usage for landscape irrigation through implementation of landscape guidelines.

3. Conservation, Open Space, and Environmental Quality, Implementation Measures

- Encourage development to new project proponents who incorporate major water conservation techniques into their designs.
- Prepare and distribute a recommended list of drought tolerant plants of new and replacement landscaping.
- Require an air pollution impact analysis for new business proposals in the study area that may create point source air pollution such as chemical plants, asphalt, and sand or gravel quarries.
- Any development application for construction within the 100 year flood plain shall be reviewed to insure that the project complies with flood protection measures required by the National Flood Insurance Program.
- Prepare, adopt, and implement a maintenance and enhancement plan for Jewett and Burch Creeks and any other riparian areas.
- Development projects shall have storm water runoff detention basins and drainage plans to prevent future problems with storm water once the project is complete.
- An open space overlay zone should be established on parcels with natural drainage ways, such as Jewett and Burch Creeks.

Chapter 6 - SAFETY AND PUBLIC FACILITIES ELEMENT

VI. SAFETY AND PUBLIC FACILITIES ELEMENT

The Safety and Public Facilities Element is intended to identify risks from hazards or safety problems in the study area, and to provide an assessment of existing protection services and the impact future development may have on these services.

A. SAFETY AND PUBLIC FACILITIES OVERVIEW

1. Abandoned Truck Facility

Located in the southern portion of the study area on the northeast corner of the intersection of Hwy. 99W and South Avenue is the Dudley Truckstop, an abandoned truck facility totaling approximately 13.2 acres. This site has been determined to be a clean-up site for hazardous waste. During the truckstop's operation as a refueling station, petroleum contamination was discharged to underlying soils and groundwater through leaking underground fuel tanks, associated piping, and other potential sources of discharge (e.g. surface spills during trucking fueling).

Metcalf & Eddy, Inc. (M&E) was retained to conduct a remedial investigation for the former Dudley Truckstop Facility. The Remedial Investigation Report proposes the following solutions to address the contamination problem:

- Installation of fencing to provide access control;
- Removal of sources of contamination, including 13 underground storage tanks, 3,300 lineal feet of distribution piping, and 1,100 lineal feet of storm drains and sumps. Approximately 5,000 cubic yards of contaminated soil will be removed and treated;
- Demolition and removal of 11 aboveground tanks and associated piping. Approximately 5,000 cubic yards of contaminated soil will be removed and treated;
- Conversion of truckwash ponds to a landfarm designed to contain and treat contaminated soil;
- Design, installation, and operation of a free product recovery system to remove the free product from the groundwater;

- Implementation of an "intrinsic remediation" approach for residual soil contamination and dissolved groundwater contamination;
- Preparation of Summary Remedial Action report.

The estimated cost to complete the above activities is \$530,400. The recommended remedial approach for this site consists of two phases. The first phase focuses on source removal. The second phase would consist of quarterly groundwater monitoring to establish the presence/absence of natural biodegradation (intrinsic remediation) at this site.

For complete details see the Remedial Investigation Report Former Dudley Truckstop Facility, prepared by Metcalf & Eddy, Inc., March 15, 1996.

2. Flood Hazards

The most significant flood hazard to the City and study area is natural seasonal flooding. The southern portion of the City, including portions of the study area, are prone to flood hazards and lie within the flat flood plains of Jewett and Burch Creeks (Federal Emergency Management Agency - FEMA). The flood plains of Jewett and Burch Creeks fall within the AO Zone and Z Zone designations. The AO Zone means that these are areas of shallow flooding where depths are between 1 and 3 feet. Z Zone are areas of 500-year flooding; areas of 100-year flood with average depths of less than one (1) foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood. Figure 13 illustrates the Flood Plain Overlay for the City.

These two drains comprise the largest drainage system in Corning removing and transporting surface water runoff from areas northwest of the City to the Sacramento River. Both of these creeks bisect the study area (refer to the Conservation Element in this document).

In 1995, portions of the study area were subject to flooding; at Burch Creek water flowing from the creek covered a portion of Hwy. 99W north of the bridge in a six inch sheet of water, Jewett Creek overflowed at Loleta Avenue between Hwy. 99W and Toomes Road, this flooding usually occurs when Burch Creek to the north overflows. The South Avenue and Hwy. 99W intersection and the Burns Brothers truck stop were also subject to 6" to 1' of flooding in 1995. No flooding occurred in the study area in the January, 1997 floods.

The 100 year flood plain should be a major consideration when planning for flood hazards. This flood plain is an area which is estimated to have a 1% chance of flood inundation per year. The 100 year flood plain has been established by the Federal

Emergency Management Agency (FEMA) as the "base flood" standard for acceptable risk.

The approximate boundaries for waterways affected by the 100 year flood plain are given to estimate the area of potential inundation (Table 7). The following table has estimated flood plains for the study area's waterways:

Table 7 - Flood Plain Widths of Study Area Waterways

Waterway	Flood Plain Width
Jewett Creek	100-150 feet
Burch Creek	100 feet

FEMA

The capacity of Jewett Creek to contain significant surface water runoff from Interstate 5 southeast to the southern city limits is the most significant flood hazard in Corning, and thus, some parts of the study area.

Much of the flood hazards in the study area can be mitigated by building design. This can be accomplished by raising the building foundation of proposed developments one foot higher than the surrounding area. Also, the Community Design Element encourages the preservation of open space by establishing setbacks and single-loaded streets along these waterways to buffer the flood plain zone, thus decreasing flood effects in the study area. The use of detention basins for proposed developments would reduce the amount of excess stormwater runoff during the rainy season and improve conditions by lowering peak flood flows. Proper maintenance of creek channels in conjunction with the County's jurisdiction outside city limits would also reduce possible flooding in the study area. The continued practice of setting up barricades on roadways during flooding will also serve to protect residents from potential safety hazards.

Careful planning, land use regulation, city grading ordinances, and maintenance of waterways will result in reducing any damage that may occur from flooding.

3. Soils

The description of soils is important in order to identify the degree to which soils can be considered to be hazardous in terms of erodibility or accommodation to a hazardous event such as earthquake or flooding. Soil erosion is generally of greatest concern on hillsides and along stream banks where runoff waters reach their highest velocity. Soils may also create other hazards such as undergoing liquefaction during a seismic event.

The Tehama County General Plan of 1974 identifies the Corning area as having highly expansive soils. Expansive soils have a high shrink-swell potential when

becoming wet and dry which can create hazards for structures positioned on top of a soil with this classification. Foundations and streets and roads may be vulnerable to expansive soils.

The 8 individual soil types found in the study area represent 6 different soil series. The soils series represented are Arbuckle, Cortina, Hillgate, Maywood, Riverwash and Tehama. A brief description of each series is presented in Appendix B-2.

Appendix B-4 contains figures representing the erosive, permeability, and expansive characteristics of soil types as they are relevant to, and present within, the study area. Proposed projects within the study area should determine the particular soil type and development conditions should include mitigation measures for potential impacts of erodibility, permeability, and expansive soils.

4. Public Facilities

a) Water

The City of Corning owns and operates its water supply and distribution system. The system relies solely on groundwater and there are currently nine wells in operation, three of which are located in the study area.

Two wells are located at South Avenue and Hwy. 99W at the Petro gasoline station. A new well will be constructed in 1997 at Fig Lane with a ten inch main that leads south to South Avenue. There will be minimal constraints for future development in the study area for water supply and delivery. Figure 14 illustrates the location of the water distribution system in the study area.

b) Sewage

The City owns and operates an industrial and domestic wastewater treatment plant which began operation in 1988. The facility treats and disposes all residential and some industrial wastewater in which the treated water is then discharged into the Sacramento River. For the most part the City sewage system operates by gravity-fed mains. However, the study area south of Fig Lane is on a force main, that carries sewage from the southern portion of the study area, north to connect with the Fig Lane sewage line. Figure 15 illustrates the sewage disposal system in the study area.

c) **Drainage**

Jewett and Burch Creeks are the two natural drainage ways in the study area. These two drains comprise the largest drainage system in Corning removing and transporting surface water runoff from areas northwest of the City to the Sacramento River (refer to Flood Hazards in this element).

Street and development improvements within the study area will include constructed drainage ways and excess stormwater detention basins. Presently, the 24 inch storm drain located south of Jewett Creek is not adequate to serve future development. The Initial Study that is included in this document addresses the issue of drainage, increased surface runoff due to impermeable surfaces, and potential impacts downstream. The Initial Study also addresses mitigation measures for increased runoff, this includes the use of retention basins located on-site. Figure 16, illustrates the present storm drainage system in the study area.

d) **Police**

Law enforcement within the city limits is provided by the Corning Police Department which is headquartered at 774 Third Street. The City employs a total of fourteen sworn officers, one police chief, and three sergeants which is a ratio of approximately 2 police officers per 1,000 residents. The police chief indicates that this number is adequate in order to maintain the current level of service. The average response time for all calls, emergency and non emergency, is two to five minutes.

The police chief is also involved in site plan review whenever safety issues are involved. If the Hwy. 99W Corridor were to be completely developed there may be a slight impact to law enforcement. However, assuming that the development is primarily commercial, industrial, manufacturing, and similar uses the impact will be negligible. More impact usually occurs from residential development.

e) **Fire**

Fire services protection is provided by the City of Corning Fire Department. The department operates one fire station located at Fifth and Marin Streets in Corning. The department is staffed by two full-time dispatchers and one full-time fire chief along with 32 on-call volunteers. Presently, the Fire Department has a Class 3 Fire Dispatch Rating.

The response time for the incorporated city area is three minutes and maintains an ISO rating of '4'. The ISO is: Insurance Service Office rating which is

measurement of Fire Department competence to provide fire suppression services that is measured on a scale of 1 to 10.

The fire chief is also involved in site plan review and reviews proposed developments for fire safety and impacts to the fire department.

f) Noise

Chapter 7, Noise Element addresses the issues of noise including noise control, commercial noise levels, traffic noise levels, and methods for reducing noise levels.

g) Circulation

The Circulation Element and Design Guidelines of this document address the transportation issues of the study area including: traffic, parking, street improvements, and landscaping.

B. SAFETY AND PUBLIC FACILITIES GOALS, POLICIES, AND IMPLEMENTATION MEASURES.

This section discusses the goals, policies, and implementation measures established for the Specific Plan study area. The goals, policies, and implementation measures are a combination of those established in the General Plan and those created as a result of this document.

1. Safety and Public Facilities Goals

- Avoid the approval of land uses which threaten public safety and property values.
- Minimize the risk to lives and property loss from flood hazards and prevent impacts to waterways resulting from human activity which may serve to increase flood hazards.
- Ensure that adequate public facilities and services exist in order to serve the needs of existing and future development.

2. Safety and Public Facilities Policies

- Regulate the approval of new development to ensure that new projects do not increase the potential or severity for damage from flooding.

- Regulate new development to ensure that waterways and drainage channels will not be impacted in such a manner that drainage is impeded or increased significantly.
- Ensure that any increased runoff from projects is detained on-site and then diverted into storm drains of adequate capacity and not be diverted as surface water runoff onto adjoining properties.
- Ensure that new development does not increase the potential or severity of the flood hazard.
- Regulate land use in areas that are prone to flooding and only allow those areas to be developed with proper mitigation.
- Incorporate crime prevention measures into land use planning where prudent and appropriate.
- Regulate the delivery, use, and storage of hazardous materials within the City limits.
- Ensure that public facilities are adequately funded and constructed in a timely manner.
- Manage growth so that new public facilities and services will retain or improve quality of life.

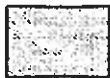
3. Safety and Public Facilities Implementation Measures

- Adopt a Flood Plain Overlay Zone to prevent development in flood prone areas and to protect riparian corridors.
- Require water detention basins be incorporated into the site design of proposed projects. Basins should temporarily detain the excess stormwater runoff originating on-site.
- Provide adequate storm drainage improvements to prevent flooding in areas which are prone to flood hazards.
- Maintain waterways and drainage channels eliminating material which may obstruct the flow of runoff.
- Strictly enforce ordinances preventing building fences, dumping trash or fill, altering vegetation, or construction activities within stream channels.

- Develop a criteria for utility extension that includes economic feasibility, environmental sensitivity and conformance to the Land Use Diagram.
- Establish and update requirements, fees, and standards for new infrastructure to be provided by private land development applicants.
- Include administrative, planning, and oversight costs in new development approval fee schedules.
- Require environmental impact analysis (expanded initial studies) for all development proposals that may affect City facilities and services.
- Require new developments to improve local storm drainage systems, on and off site, to accept appropriate design year flows as determined by the City Engineer.
- Require sufficient buffering measures between drainage ways and adjacent land uses.
- Include standards for the limitation of impervious surfaces in new project development review.
- Any development application for construction within the 100 year flood plain shall be reviewed to insure that the project complies with flood protection measures required by the National Flood Insurance program.
- The City shall require that the handling, transport, treatment, disposal, or storage of hazardous materials or waste in a manner that is consistent with Tehama County's Hazardous Waste Management Plan.

Flood Plain Overlay

From FEMA flood insurance study
FEMA flood Insurance Rate Map



Zone A

No base flood elevations and flood hazards factors determined



Zone AE

Base flood elevations determined



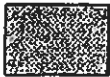
Zone AO

Areas of Shallow flooding where depths are between one
(1) and (3) feet : average depths determined



Zone A#

Base flood elevations and flood hazard factors determined



Zone X

Areas of 500 hundred year flood: areas of 100- year flood with
average depths of less than 1 foot or with drainage areas less
than 1 square mile; and areas protected by levees from 100
year flood

0 1000

Scale in Feet



North

INTERSTATE HIGHWAY ROUTE 5

Highway 99 West

SOLANO STREET

SOUTH AVE.

Highway 99 West Specific Plan Area - Corning, California

WATER MAIN LOCATIONS

(Water main locations within 1,000 feet of study area.)

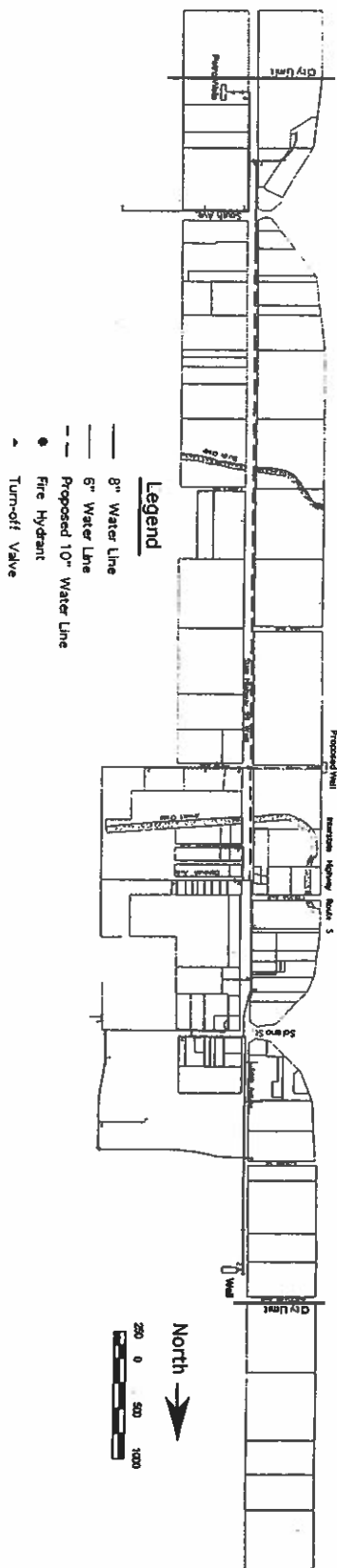


Figure 14

SEWER MAIN LOCATIONS

(Sewer main locations within 1,000 feet of study area.)

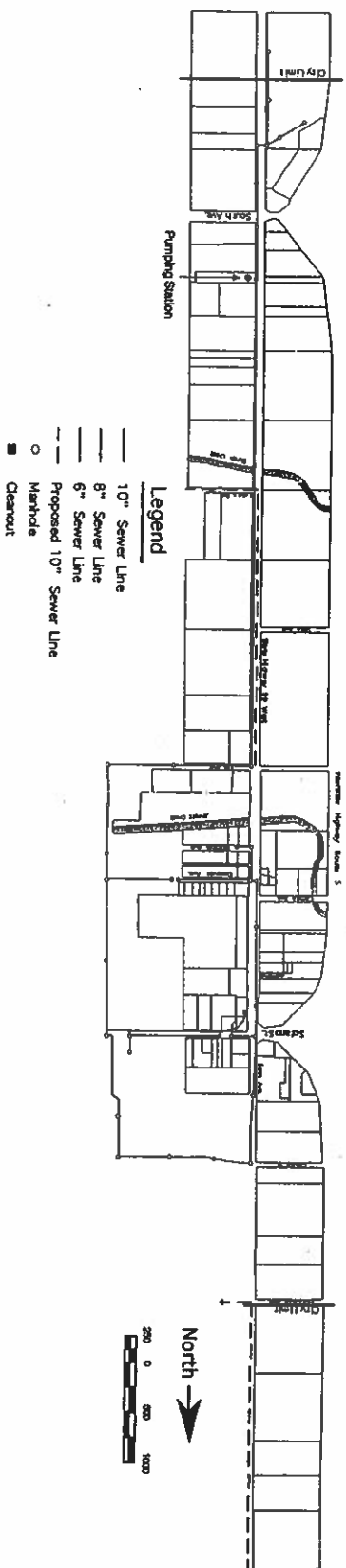


Figure 15



Highway 99 West Specific Plan Area - Corning, California

STORM DRAINAGE LOCATIONS

(Storm drainage locations within 1000 feet of study area.)

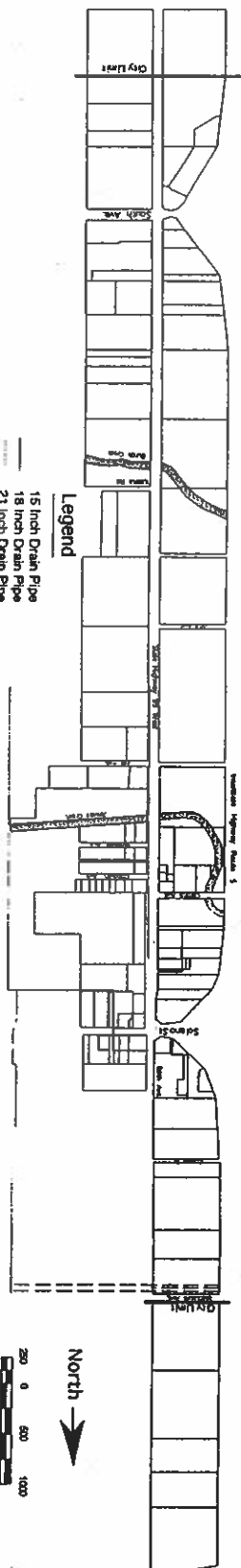


Figure 16

NOISE CONTOURS INTERSTATE HIGHWAY ROUTE 5

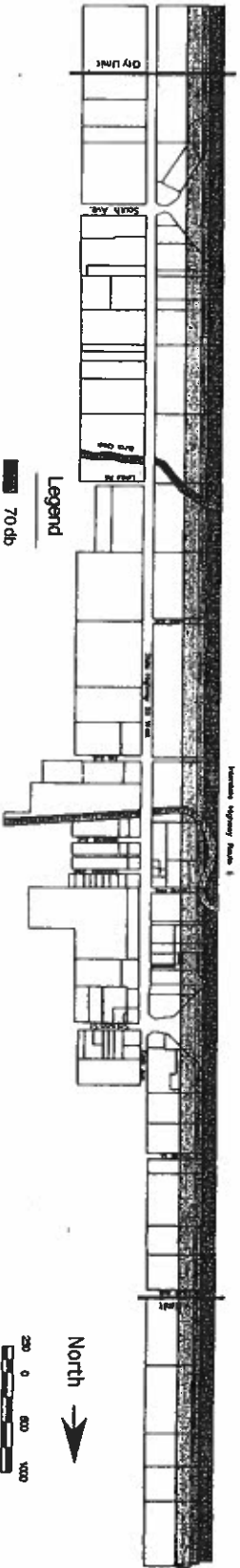


Figure 17

Chapter 7 - NOISE ELEMENT

VII. NOISE ELEMENT

The purpose of this Noise Element is to help protect the health and welfare of the study area and community by promoting development which is compatible with accepted noise standards.

A. NOISE OVERVIEW

The human ear is subject to a wide range of sound intensities and people hear changes in sound in proportion to those intensities. The *decibel (dB)* scale is a logarithmic scale used to compress this range. The threshold of human hearing corresponds roughly to 0 dB. The "A" weighting scale, that which most closely resembles human hearing, is used in this plan and is noted by the symbol **dBA**.

In this Specific Plan, the time varying character of environmental noise is described as **Ldn**. This is a statistical weighting of daytime and nighttime noises and is used as the basis of noise impact evaluation and for land use planning criteria.

Ambient noise levels constitute the composite from all sources far and near. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Parameters used when estimating traffic noise relate to the traffic, the roadway, and the receiver. Traffic parameters affecting noise are the number and type of vehicles passing a point during a particular time period and the average speed of the vehicles. Roadway variables include its surface, gradient, and geometry.

The EPA has identified indoor and outdoor noise limits to protect public health and welfare (e.g., hearing damage, sleep disturbance, and communication disruption). **Ldn** values of 55 dB outdoors and 45 dB indoors are identified as desirable to protect against speech interference and sleep disturbance for residential, educational, and health care areas. The noise level criterion to protect against hearing damage in commercial and industrial areas is identified as a 24-hour **Leq** value of 70 dB for outdoors and indoors. **Leq** refers to equivalent noise levels that are used to develop single value descriptions of average noise exposure over various periods of time. These average exposure ratings often include additional weighting factors for annoyance potential because of time of day or other considerations. The peak one hour **Leq** criterion for commercial and industrial areas is 72 dB (outdoors). These criteria would be used if the City of Corning were to participate in federally funded highway projects.

1. Noise Control

When distance is the only factor considered, sound levels from an isolated noise source will typically decrease by about 6 dB for every doubling of distance from the source. When the noise source is essentially a continuous line (e.g., vehicle traffic on a highway), noise levels decrease by about 3 dB for every doubling distance.

Noise levels are mapped using **Noise Exposure Contours**. These contours are lines drawn around a noise source which indicate constant energy levels of noise exposure. The contours are usually drawn in Ldn levels. Figure 17 illustrates the Noise Contours for the study area.

2. Residential Noise Levels

The only developed area in the study area that is affected by freeway traffic and within the 60 dBA contour is the apartment complex at the corner of Blackburn Avenue and Edith Avenue. A parcel, that may be developed in the future, located on the corner of Carona Avenue and Hwy. 99W with one residence, also falls within the 60 dBA freeway contour. However, this lot is zoned for commercial use in which Ldn values of 70 or below are normally acceptable.

3. Commercial Noise Levels

The General Plan Noise Element identified that the normally acceptable range for office and commercial land uses is an Ldn value below 70 dB (Ldn values of 67.5 to 77.5 are conditionally acceptable).

The Noise Contour Map, Figure 17, illustrates the 70 dB Ldn Contour, the 65 dB Ldn Contour, and the 60 dB Ldn Contour lines for the study area. Much of the study area immediately adjacent to I-5 (between I-5 and Hwy. 99W) falls within the 60 dB Ldn contour. However, as stated above, the normally acceptable range for commercial uses is 70 dB or below.

4. Freeway Noise Levels

Freeway noise increases as the number and average speed of automobiles on it increases. For example, if the automobile traffic volume doubles, the noise level from those autos increases by about 3 dBA. However, if the speed decreases to half, the noise level from autos decreases by about 6 dBA. The engine exhaust system and tire/roadway interaction contribute prominently to overall automobile noise.

Tires, exhaust, intake engine, and gears contribute to truck noise. An average truck generates A-levels about 15 dBA higher than the average car. The condition of the truck's muffler is particularly important. A significant difference between truck

and automobile noise is that the main noise from autos is from tires, whereas, the exhaust stack is the main noise source for trucks.

Receiver parameters are those which affect the relationship of the receiver's position to the vehicle roadway noise source. The distance between the observer and the highway is the most significant factor. The greater the distance, the lower the noise level. Doubling the distance from the highway reduces the average traffic noise at the receiver's position by about 4 to 6 dBA.

5. Traffic Noise Levels

Noise from local truck traffic is particularly noticeable on South Avenue, Hwy. 99W, and Solano Street. Although, this is generally within the City standards for nonresidential land uses, noise from diesel engines and reefer box motors left on for extended periods of time could cause complaints. Tables 8, 9, and 10 indicate the noise contours as calculated in the 1993 General Plan.

Table 8 - Present Noise Contours from Major Streets

Street	ADT (est.)	Speed/Adj.	Adj./ADT	60db/ft	65db/ft
South Ave.	2660	.30	798	48	23
99W/Solano	1800	.40	720	45	22

ADT - Average Daily Traffic

All ADT's are shown as adjusted with truck volumes

Table 9 - Future Noise Contours from Major Streets

Street	ADT (est.)	Speed/Adj.	Adj./ADT	60db/ft	65db/ft
South Ave.	2890	.30	867	69	35
99W/Solano	2220	.40	888	45	22

ADT - Average Daily Traffic

All ADT's are shown as adjusted with truck volumes

Table 10 - 1993 General Plan Present and Future Freeway Noise Contours: Corning Interchange.

ADT ¹	Trucks	Speed Adj.	Adj./Truck	60db/ft	65db
(Present) 21300	6930	1.4	14381	460	220
(Future) 25410	7623	1.4	45519	510	250

¹California Department of Transportation

Current freeway volumes indicate that ADT for Interstate 5 is at 25,000 vehicles in the peak month. The Noise Contour Map, Figure 17, illustrates the location of present noise contours: 60 dB at 300 feet, 65 dB at 170 feet, and 70 dB at 80 feet.

B. NOISE GOALS, POLICIES, AND IMPLEMENTATION MEASURES.

This section discusses the goals, policies, and implementation measures established for the Specific Plan study area. The goals, policies, and implementation measures are a combination of those established in the General Plan and those created as a result of this document.

1. Noise Goals

- Ensure that new development conforms to City noise level standards.
- Locate new noise sensitive land uses away from noise sources unless mitigation measures are included in development plans.
- Plan and design new streets or other public facilities to minimize noise in adjacent areas.

2. Noise Policies

- Establish buffer areas between sensitive land uses and noise sources.
- Implement Land Development Standards to set noise buffering standards within the noise corridors.

3. Noise Implementation Measures

- Implement staff and planning commission review of potential noise issues in new project location and design features.
- Implement staff and planning commission analysis of potential noise problems in proposed rezonings and general plan amendments.
- Incorporate the noise mitigations identified in initial studies for new projects as conditions for approval.

Chapter 8 - COMMUNITY DESIGN ELEMENT**VIII. COMMUNITY DESIGN****A. DESIGN OVERVIEW****1. What is Urban Design?**

The purpose of Visual Design Guidelines is to foster good design, provide a feeling of civic pride, encourage investment, and to improve the area's economic vitality.

Most U.S. cities have traditionally relied on zoning to guide the physical character of the community. Although zoning has adequately regulated the types and locations of land uses, it usually does not address the quality or appearance of development related to such land uses. Visual design guidelines encompass all the physical elements which make up the city and its natural setting. They include the visual quality of the entire city as well as development patterns of specific areas. Design Guidelines will help determine how Corning will look in the future, how it will function as a community, ensuring it is attractive and livable.

Urban design goals will be achieved through established planning and development mechanisms such as zoning and land division standards, specific and area plans, and shall enlist the participation of interested community and neighborhood groups.

By adopting Visual Design Guidelines, the City of Corning hopes to promote thoughtful and responsible design which is consistent with the City's character. Design Guidelines encourages innovative design within a framework of approved design policies and implementation measures. Appendix D contains the City of Corning's Design Guidelines established as a result of this document.

2. Visual Preference Survey

This Visual Preference Survey provided an opportunity for Corning residents to participate in the City of Corning's decision making process. By participating in the Visual Preference Survey, city planners documented public vision for the ultimate form of the City of Corning. See Appendix C for the results of the Visual Preference Survey.

These Design Guidelines do not necessarily seek to impose an overriding style, a limited color palette, or an artificial theme, but rather, these guidelines will seek to enhance and coordinate the area and compliment existing buildings.

The City's Design Guidelines will provide everyone with a clear understanding of the design process. In doing this, they will address commonly asked questions: Why should there be good design? How is good design achieved? Do particular design techniques contribute more to a pleasing visual environment?

B. TOPICS OF DESIGN GUIDELINES

1. Architecture

Architecture can be the most prominent element in defining physical space in the built environment. The City encourages development of architectural design that is high in quality. The major intent of architectural policies is not to stifle individual creativity, but rather to create a framework for a strong collective statement. Color and materials, architectural form, roofs, and other details are specified to provide continuity among developments.

a) Desirable Elements for Architecture and Building Design

The qualities and design elements for commercial zones that are positive and most desirable include:

- * Mediterranean or Spanish Mission style architecture.
- * Neutral, natural, or muted color tones.
- * Roofing materials using red clay or concrete tiles or brown toned asphalt composites.
- * The use of arcades and arches.
- * Signs that are small in scale with similar fonts, colors, and size.
- * Landscaping that is incorporated into the overall site design.
- * Landscaped and screened parking lots.

b) Undesirable Elements for Architecture and Building Design

Qualities and design elements for commercial zones that are negative and less desirable include:

- * Modern style, square "box-like" structures.
- * Signs of varying size, color, lighting, and font, that are large and flashy.
- * Minimal landscaping.
- * Large bland, unarticulated wall surfaces.
- * Visible outdoor storage, loading, and equipment areas.
- * Disjointed parking areas and confusing circulation patterns.

2. Parking Lots

Parking lot design is aimed at reducing the visual and climatic impacts of large paved areas. Properly designed parking lots enhance the urban environment by providing shade and greenery while providing shoppers and visitors with convenient parking. The provision of adequate and convenient parking and circulation is essential to the success of commercial areas. While actual parking requirements will depend upon building use, each commercial site will be required to provide parking for customers, employees, and service. Factors that need to be taken into consideration when designing parking lots include: location, access and entryways, layout and circulation, screening, paving materials, lighting, and walkways.

a) Desirable Elements for Parking Lots

The qualities and elements for parking lots that are positive and most desirable include:

- * Landscaping incorporated into the overall parking lot layout.
- * Screening from the street using a combination of walls and landscaping.
- * Trees providing shade throughout the parking lot.
- * Lighting fixtures that provide illumination as a pedestrian amenity and safety.

b) Undesirable Elements for Parking Lots

The qualities and design elements for parking lots that are negative and less desirable include:

- * Wide open, confusing lot layout.
- * Minimal, if any, landscaping.
- * Inadequate screening.
- * Minimal lighting fixtures.

3. Landscaping

Landscaping is a major factor in creating a positive image of an area. The landscaping of a new project should attempt to do more than just make a place look attractive. Landscaping themes can be used to enhance site development and promote the continuity between developments. Plants can perform a number of functions to enhance the land use, screen heat and glare, provide buffers, emphasize entrances and exits, and soften the lines of architecture and paving.

a) Desirable Elements for Landscaping

The qualities for landscaping that are positive and most desirable include:

- * Shrubs and trees used as a screen between parking lots and the street.
- * Buffer walls with shrubs, lawn, and tree landscaping.
- * Parking lot landscaping.
- * Entryways into parking lots.
- * Street median landscaping including trees, lawns, and shrubs.
- * Lighting fixtures and landscaping.
- * Pedestrian areas, such as benches, with trees providing shade.
- * Trees, shrubs, and flowering perennials.

b) Undesirable Elements for Landscaping

- * Minimal, or no, landscaping incorporated into the overall project design.

4. Signs

The purpose of this Section is to provide direction to property owners and project designers in understanding the City's goals for maintaining high quality development that is sensitive to the City's character. Sign Design Guidelines attempt to safeguard life, health, property and public welfare, and to preserve the character of the City by regulating the size, height, design, quality of materials, construction, location, lighting and maintenance of all signs not enclosed within a building, in the Specific Plan study area. Signs should be used to convey more information, than advertisement. A sign should be unobtrusive, convey its message clearly, be vandal-proof, weather resistant, and if lighted, not be unnecessarily bright. It is important to establish a relationship between signs, the buildings, and neighboring businesses.

a) Desirable Elements for Sign Design

The qualities and design elements for signs that are positive and most desirable include:

- * Low-lying signs or sign walls.
- * Sign landscaping.
- * Construction materials including brick, concrete, stucco, and cobblestones.
- * Lettering style that is easy to read, simple font, and conservative size and color.

b) Undesirable Elements for Sign Design

The qualities and design elements for signs that are negative and less desirable include:

- * Facade signs of varying shapes, sizes, and colors.
- * Tall oversized signs.
- * Brightly illuminated signs.
- * Signs constructed of metal or steel.
- * Minimal, if any, landscaping at sign base.

5. Walls & Fences

Walls and fences are one form of hardscape elements that should be taken into consideration. Fences can be utilized to indicate individual site and property boundaries, to provide security, to buffer noisy areas, to separate functional areas, and to screen unsightly service and parking areas.

a) Desirable Elements for Walls and Fences

The qualities and design elements that are positive and desirable for walls and fences include:

- * Concrete walls with landscaping.
- * Ornate wrought iron fences bordering walkways.
- * Wrought iron fences combined with concrete pilasters and landscaping.
- * Setbacks allowing for adequate landscaping.

b) Undesirable Elements for Walls and Fences

The qualities that are negative and less desirable include:

- * Chain linked fences.
- * No setbacks from road or sidewalk.
- * No landscaping.

6. Freeway Views

Freeway interchanges and corridors often create the first impression of a city for visitors. Buildings located along the Interstate 5 corridor should take into consideration the view of drivers from the freeway.

a) Desirable Elements for Freeway Views

The qualities and design elements for Freeway Views that are positive and desirable include:

- * Landscaped buffer between the freeway and the project site.
- * Breaks or "windows" for views at appropriate points.
- * No blank walls fronting freeway edge.

b) Undesirable Elements for Freeway Views

Qualities and design elements that were found to be negative and less desirable include:

- * Blank walls fronting the freeway edge.
- * No setbacks providing for landscaping or buffer between freeway and building.
- * Tall oversized signs of varying shapes, styles, and bright colors.

7. Pedestrian Amenities

Pedestrian amenities are a combination of elements that compliment architectural design and addresses the aesthetics of a project through the use of character elements. Good design promotes a strong sense of community through the careful attention to landscape, street furniture, building details, and sidewalk improvements. Projects should incorporate pedestrian amenities such as seating areas, trash receptacles, light fixtures, vending enclosures, bicycle racks, bollards, tree grates, planters and pots, and hardscape or paving treatments into the site design.

a) Desirable Elements for Pedestrian Amenities

The pedestrian elements for projects in the Specific Plan study area that are positive and most desirable include:

- * Pedestrian trash receptacles.
- * Benches constructed of a combination of materials.
- * Ornate antique lighting fixtures and historic lighting fixtures.
- * Parks and recreational opportunities for children and landscaped walkways.
- * Bicycle racks.
- * Fountains.
- * Semi-enclosed newspaper vendors.

b) Undesirable Elements for Pedestrian Amenities

The pedestrian elements that are thought to be negative and less desirable include:

- * Lighting fixtures and benches not part of an architectural theme.
- * Fixtures that have been added to projects as an afterthought.

8. Streetscapes - Hwy. 99W Corridor

Street cross-sections for Hwy. 99W right-of-way illustrate different opportunities that may be implemented for this major arterial.

a) Desirable Elements for Streetscapes

- * Raised center medians with landscaping.
- * Planting strip between sidewalk and roadway.
- * Class 1 bike lanes along roadway.

b) Undesirable Elements for Streetscapes

- * No landscaping or medians.

C. COMMUNITY DESIGN GOALS, POLICIES, AND IMPLEMENTATION MEASURES.

This section discusses the goals, policies, and implementation measures established for the Specific Plan study area.

1. Community Design Goals

- To create a high quality and distinct community image and a functional and aesthetically pleasing commercial corridor.
- Encourage the development of superior architectural and site planning design which, in time, will create an image for the City of Corning that attracts quality businesses and increases the market population.

2. Community Design Policies

- Provide an avenue for new development to complement and promote the future vision for the Hwy. 99W Corridor.

- Revitalize existing building facades and signs as well as sidewalks and parking areas.
- Protect residential zones abutting the Specific Plan study area from incompatible commercial intrusion through the use of design techniques.
- Provide for the elimination or screening of visually objectionable views such as outdoor storage, utility cabinets, trash containers, roof-mounted equipment, blank side walls, and loading areas through the implementation of the Design Guidelines.
- Promote complimentary landscape treatments throughout the study area to enhance hardscape elements, pedestrian amenities, and storefronts.
- Enhance and promote the creation of public space throughout the study area, through the use of street furniture, landscaping, building design, and pedestrian orientation.
- Design gateways or entry points which provide a sense of arrival to the study area, initiate a streetscape design theme, and provide signs to important destinations.

3. Community Design Implementation Measures

- Develop consistent streetscape, landscaping, and building design palettes for the study area that are sensitive to the creation of a high quality image. *(It is not the intent of this thematic requirement to discourage innovative or contemporary architectural expressions or to imitate the architecture of the past, but to promote the harmonious coexistence of architectural styles varying from restoration to contemporary architectural themes).*
- Require compliance with the Design Guidelines for the Highway 99W Corridor Specific Plan study area in plans for new development or expansion or redevelopment of existing development; incorporate design as a major consideration in design review and approval.
- Develop an incentive program that rewards private sector development for providing certain "extra" design and pedestrian amenities within their projects.
- Provide incentives and incorporate an encouragement program to expedite removal of signs that do not conform to the regulations of this Specific Plan. *(Participation of existing land use owners is voluntary).*

Chapter 9 - IMPLEMENTATION, ADMINISTRATION, AND FINANCING**IX. IMPLEMENTATION, ADMINISTRATION, AND FINANCING****A. INTRODUCTION**

This section presents approaches the City might consider when undertaking the implementation of the goals, policies, and implementation measures of the Hwy. 99W Corridor Specific Plan.

B. REGULATORY FRAMEWORK

This Specific Plan is a bridge between the broad land use and development policies of the General Plan and the regulating ordinances of the Zoning Code and policy documents such as the Land Division Standards. It must be integrated with these documents to have the legal authority required to promote beneficial change in the Specific Plan study area. Future public and private sector actions within the Specific Plan study area must then comply with the Specific Plan's goals, policies, implementation measures, and regulatory standards. The Design Guidelines contained in this Specific Plan also guide development and the development review process. Proposals may vary from these guidelines, however, they must be consistent with their basic intent.

1. General Plan Consistency

The Specific Plan, with its goals, policies, implementation measures, development standards, development incentives, and design guidelines is the foundation for pursuing a commercial revitalization strategy for the City of Corning. It is also a legal document intended to execute and implement the City's General Plan policies.

2. Zoning Code Consistency

Existing zoning districts within the Specific Plan boundary should be repealed and the Zoning Map amended to indicate a new designation of the "Corning Business Development Zone". All development standards, incentive programs, and design guidelines of this Specific Plan will apply. For development standards and regulations that are not amended by this Specific Plan (e.g. parking requirements) the regulations of the Zoning Code will apply.

Adoption of the Specific Plan will require amendment of the Zoning Code, to include the Corning Business Development Zone designation and the two

corresponding overlay zones: SP-MU Specific Plan Mixed Use and CH Highway Service Commercial. It will also require amendment of the Zoning Map.

3. Specific Plan Administration

a) General

All regular provisions of the City of Corning Zoning Code shall apply to all properties within the Specific Plan boundaries, including but not limited to design review, use permits, various appeals, amendments, public notice, and hearing provisions.

b) Site Plan Review

The Hwy. 99W Corridor Specific Plan will be implemented primarily through the use of the site plan review process as provided in the Zoning Code and Land Division Standards. Site plan approval shall be required for all rehabilitation, redevelopment, expansion of existing uses or structures and new development within the Specific Plan study area requiring a building permit. Additionally, the planning commission may require site plan review for a particular use as proposed by an applicant for a building permit when it is determined that such use may have certain impacts on surrounding development which requires detailed review. This requirement is instituted for the following reasons:

- To insure consistency with the intent of the Specific Plan.
- To insure implementation of the Design Guidelines by providing a process for review of development projects.
- To assure substantial long range compliance with the General Plan.
- To promote the highest contemporary standards of design.
- To adapt to specific or special development conditions that occur from time to time while continuing to implement the Specific Plan.

This process should be used in the broadest terms to determine the visual and functional fit of new development into the overall study area, as well as the more detailed aspects of the proposal, such as landscaping.

c) Development Agreements

A development agreement is a contract between the city and a landowner that provides assurances regarding project decisions. The agreement may specify such details as design features, infrastructure improvements, public dedication requirements, landscaping amenities, use restrictions, and project phasing. Such an agreement cannot be modified without the consent of both parties. The advantage to the city is that the details are worked out and agreed upon in

advance. The advantage to the developer is that the agreement reduces the risk of the city making changes later; the reduced risk increases developer comfort and reduces costs.

d) Planned Unit Developments

In some cases land development may occur as a planned unit development. This method, generally applied to larger parcels of land, allows greater flexibility in the design of commercial development than would otherwise be possible through application of conventional zoning regulations. It is intended that planned unit developments encourage the design of well-planned projects which offer a variety of innovative design styles. Such design may include features such as clustered buildings with common open space, common facilities, and other amenities.

Planned unit developments may be initiated by the developer or the City in conjunction with the Planning Commission, and are subject to applicable provisions of the Zoning Ordinance and Land Division Standards.

e) Applicability

Approval of a site plan shall be required prior to or concurrent with a use permit, tentative tract, or parcel map for all proposed projects within the Specific Plan study area. Where no tentative tract or parcel map is required, approval of a site plan shall occur prior to issuance of use and building permits. The Conditional Use Permit (CUP) process will be the method of approval. Authority for approval of a site plan shall rest with the Planning Commission.

f) Maintenance

(1) Private Areas

Common open space within developments shall be owned and maintained by property owner's associations. Access easements may be recorded at the time of subdivision to ensure public access rights, including right of access by the City in the event the property owner's association fails to properly maintain these areas.

(2) Public Areas

It is a goal of this plan that public areas be properly maintained as a means of enhancing the study area environment. Therefore, maintenance of landscaping within public rights-of-way will initially be the responsibility of the property owner's associations or a Landscaping and Lighting

District formed pursuant to Sections 22500 et seq. of the Streets and Highways Code.

C. PUBLIC IMPROVEMENTS AND FINANCING STRATEGIES

In constructing public improvements, the City will be making a visible economic commitment to realizing the vision for the Highway 99W Corridor. These improvements will add value to the area, thereby laying a foundation for future private sector investment, in the form of building renovations and new development. With development standards and guidelines in place, new private sector investment will combine with public improvements to fulfill the City's vision for the area.

There are several types of financing strategies available to fund development efforts in the study area. These strategies are described in general terms below.

1. Overview

Capital costs associated with the reconstruction of the street paving surface, curbs and gutters, and sidewalk repair and improvement, is included in the Capital Improvement Program, and is funded by a combination of Gas Tax Funds, General Funds, and County Transportation Funds. Street tree and lighting improvements may potentially be funded from the Lighting and Landscape Maintenance District Fund, and the General Fund.

Improved maintenance of public areas is a critical aspect of the long-term success of the Specific Plan. Maintenance could be enhanced by creating a Business Improvement District to fund a higher level of maintenance service in the area if it becomes necessary after full development.

2. Municipal Bond Financing

Federal and state laws allow cities to issue bonds with interest payments to investors that are exempt from federal and state income tax, thus allowing the cities to sell the bonds at a below-market interest rate. Cities in turn can make funds available to developers for certain projects at rates more favorable than the developers could get from conventional financing sources.

To gain this advantage, the project being funded must serve a "public Purpose". While this limits the opportunity to use municipal revenue bonds, these bonds still remain a very powerful vehicle for financing capital improvements.

Bond payments are typically secured by one of two sources: 1) tax increment and 2) assessment districts.

a) Tax Increment

The use of redevelopment powers entitles a community development agency to finance its activities through tax increment financing. After a redevelopment project has been formed, the taxable value of properties within the redevelopment boundary going to city, county, and state governments are frozen. The increases in tax revenues related to increases in assessed values are known as tax increments, and go to the agency to pay off debts incurred in the redevelopment process.

Tax increment revenues can be used to back municipal bonds, giving the City additional financial leverage. Conventional tax increment bond issues require that the tax increment exists prior to bond issuance. Public improvements therefore can only be made after some amount of private redevelopment has occurred. However, development disposition agreements are sometimes sufficient to back bond sales, with liens placed against the properties as security. This is particularly true if the developer is experienced and credible.

b) Assessment Districts

Assessment districts, such as parking or street improvements, can be formed to fund public improvements that will benefit a discrete area. The city can float bonds to pay for such improvements; the debt is paid by assessing those property owners who will be served by the improvements. An individual property owner's portion of the debt is based on the owner's proportional benefit. Any method that reasonably measures these benefits can be used to spread the debt among property owners.

Assessment districts are usually formed to pay for infrastructure projects, where there is a clear benefit to properties within the district and where there is a clear public purpose. These owners contribute based only on benefits they receive directly, not for all of the project's benefits.

Property owners typically resist paying for improvements from which they will derive only long-term benefits. One way to circumvent this problem is to issue the assessment bonds in series. This type of financing establishes a single amount that property owners will ultimately have to pay. Then bonds are issued incrementally as improvements are required, allowing property owners to pay only as improvements are made: the payments are low in early years and increase as the property's value increases. The payments often can be structured so that property owners who benefit immediately from the improvements pay a larger share of the debt in the early years and payments balance out among all the property owners over time.

The imposition of an assessment district on the property owners may not result in attracting a higher and better use. Each property owner's situation will be different and thus it is impossible to predict whether the assessment district will result in the City's desired outcome of attracting a higher and better use.

3. Development Fees

Under the California Constitution, cities have the right to exact fees from developers in exchange for their receiving the privilege to develop. Although development fees are relatively simple to administer and do not involve bond issues, they do have problems.

Development fees are a one-time charge. However, if the fees recovered are insufficient to cover costs, the city must consider alternative methods of raising the additional funds. Development fees are paid incrementally as development occurs. Also, development fees cannot be used to fund existing deficiencies in the area.

For improvements which cannot be easily constructed on a small-scale, incremental basis, it would be necessary to finance improvements through city-backed bonds. However, these bonds would have to be backed by the general fund since there is no guarantee as to when or how much of these fees would be recovered. Therefore, development fees are generally used in conjunction with other revenue sources because they typically do not yield much funding.

D. PARKING

Parking design guidelines set forth in this Specific Plan shall be adhered to as closely as possible but within a greater priority of good overall site design. Parking and site circulation shall be reviewed on a case by case basis.

E. PROMOTION AND BUSINESS RETENTION

The adoption of the Specific Plan can provide the basic impetus for revitalization of the area's physical setting. However, it should be kept in mind that focusing on physical improvements alone may not address all of the problems associated with development of the area. Consideration should also be given to support efforts that emphasize organization and the promotion of business and job creation.

F. BUSINESS ATTRACTION

Assisting and promoting existing business is part of the equation. Attracting new quality business and investment is essential. The land use incentives embodied in the Specific Plan make it easier to open new businesses, but a more assertive approach is also necessary to attract high priority businesses.

The City recognizes that certain businesses can enhance the City and become major attractions which can draw new consumers, and eventually more businesses. The City shall target specific businesses which can effectively operate in the Hwy. 99W Corridor, such as restaurants, auto service, industrial, and light manufacturing. A database should be established and maintained to provide potential businesses the information they need to evaluate a relocation or expansion decision.

G. IMPLEMENTATION, ADMINISTRATION, AND FINANCING GOALS, POLICIES, AND IMPLEMENTATION MEASURES.

1. Implementation, Administration, and Financing Goals

- To promote new development that will create an economic base for the City, to require high quality renovations and new development, and to provide for consistency between the Specific Plan and the City's other policy and regulatory tools.

2. Implementation, Administration, and Financing Policies

- To set the stage for private sector investment by implementing this Specific Plan addressing issues and opportunities from land use to design guidelines.
- To strengthen the marketability and attractiveness of the Hwy. 99W Corridor businesses.

3. Implementation, Administration, and Financing Implementation Measures

- Amend the existing General plan land use designations and Zoning districts to reflect the land use designation found in this document.
- Amend the existing Zoning Ordinance to reflect land use, circulation, and urban design provisions.
- Establish a Street Tree Program for all streets in the plan area.
- Require Site Plan Design Review for all redevelopment proposals.
- Prohibit structural modification or additions to non-conforming uses and structures.
- Establish assessment districts to finance necessary public improvements, including new streets, curbs, gutters, sidewalks, on street parking, and street trees.

- Impose a development fee to finance necessary public improvements as a result of a particular project, such as additional traffic signals and public parking.
- Provide leadership and actively recruit private developers to facilitate improvements.

APPENDICES

APPENDIX A-1

Existing Intersection Calculations

Corning. Highway 99/Solano Ave. 11/15/96 5:00/6:00PM

From lane	East	West	North	South	I with trucks
Left turn	147	47	112	59	
Through	187	192	58	57	
Right turn	128	76	62	84	
Total	462	315	232	200	1209

Trucks/ alone

From lane	East	West	North	South	Total
Left turn	2	2	3	1	
Through	6	4	3	0	
Right turn	1	3	1	2	
Total	9	9	7	3	28

Vehicles by Percentage	East	West	North	South	Total
Cars	98%	97%	97%	98%	98%
Trucks	2%	3%	3%	2%	2%

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

INTERSECTION: [REDACTED]

AREA TYPE.....OTHER

ANALYST.....Robert Wall

DATE.....11/15/96

TIME.....5-6pm

COMMENT.....

VOLUMES					:	GEOMETRY							
	EB	WB	NB	SB	:	EB		WB		NB		SB	
LT	147	47	112	59	:	L	12.0	L	12.0	L	12.0	L	12.0
TH	187	192	58	57	:	T	12.0	T	12.0	T	12.0	T	12.0
RT	128	76	62	84	:	TR	12.0	TR	12.0	TR	12.0	TR	12.0
RR	64	38	31	84	:		12.0		12.0		12.0		12.0
					:		12.0		12.0		12.0		12.0
					:		12.0		12.0		12.0		12.0

ADJUSTMENT FACTORS										
	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	2.00	N	0	0	0.90	0	N	20.8	3
WB	0.00	2.00	N	0	0	0.90	0	N	20.8	3
NB	0.00	2.00	N	0	0	0.90	0	N	20.8	3
SB	0.00	2.00	N	0	0	0.90	0	N	20.8	3

SIGNAL SETTINGS										CYCLE LENGTH = 80.0
	PH-1	PH-2	PH-3	PH-4		PH-1	PH-2	PH-3	PH-4	
EB LT	X				NB LT	X				
TH		X			TH		X			
RT		X			RT		X			
PD					PD					
WB LT	X				SB LT	X				
TH		X			TH		X			
RT		X			RT		X			
PD					PD					
GREEN	6.0	18.0	0.0	0.0	GREEN	6.0	18.0	0.0	0.0	
YELLOW	8.0	8.0	0.0	0.0	YELLOW	8.0	8.0	0.0	0.0	

LEVEL OF SERVICE							
	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.702	0.138	31.2	D	22.0	C
	TR	0.297	0.287	16.9	C		
WB	L	0.224	0.138	23.4	C	17.8	C
	TR	0.269	0.287	16.8	C		
NB	L	0.535	0.138	26.3	D	21.6	C
	TR	0.107	0.287	15.9	C		
SB	L	0.282	0.138	23.7	C	19.7	C
	TR	0.065	0.287	15.7	C		

INTERSECTION: Delay = 20.5 (sec/veh) V/C = 0.337 LOS = C

Corning. Highway 99/South Ave. 11/14/96 5:00/6:00PM					
From lane	East	West	North	South	with trucks
Left turn	63	38	43	61	
Through	100	87	84	74	
Right turn	29	94	22	53	
Total	192	219	149	188	748

Trucks/ alone					
From lane	East	West	North	South	Total
Left turn	17	35	6	36	
Through	19	27	15	4	
Right turn	7	64	15	7	
Total	43	126	36	47	252

Vehicles by Percentage	East	West	North	South	Total
Cars	78%	43%	76%	25%	66%
Trucks	22%	57%	24%	75%	34%

1985 HCM: UNSIGNALIZED INTERSECTIONS

Page-1

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 30

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 5780

NAME OF THE EAST/WEST STREET..... [REDACTED]

NAME OF THE NORTH/SOUTH STREET..... Highway 99

NAME OF THE ANALYST..... Robert Wall

DATE OF THE ANALYSIS (mm/dd/yy)..... 11/14/96

TIME PERIOD ANALYZED..... 5-6 PM

OTHER INFORMATION:

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: 4-LEG

MAJOR STREET DIRECTION:

CONTROL TYPE EASTBOUND: STOP SIGN

CONTROL TYPE WESTBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
	----	----	----	----
LEFT	63	38	43	61
THRU	100	87	84	74
RIGHT	29	94	22	53

NUMBER OF LANES AND LANE USAGE

	EB	WB	NB	SB
	----	----	----	----
LANES	1	2	1	1

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	0	0	
WESTBOUND	0.00	0	0	
NORTHBOUND	0.00	0	0	
SOUTHBOUND	0.00	0	0	

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	22	78	0
WESTBOUND	57	43	0
NORTHBOUND	24	76	0
SOUTHBOUND	75	25	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
WB	5.50	5.00	0.00	5.00
EB	5.50	5.00	0.00	5.00
MAJOR LEFTS				
SB	5.00	5.00	0.00	5.00
NB	5.00	5.00	0.00	5.00
MINOR THROUGH				
WB	6.00	6.00	0.00	6.00
EB	6.00	6.00	0.00	6.00
MINOR LEFTS				
WB	6.50	6.50	0.00	6.50
EB	6.50	6.50	0.00	6.50

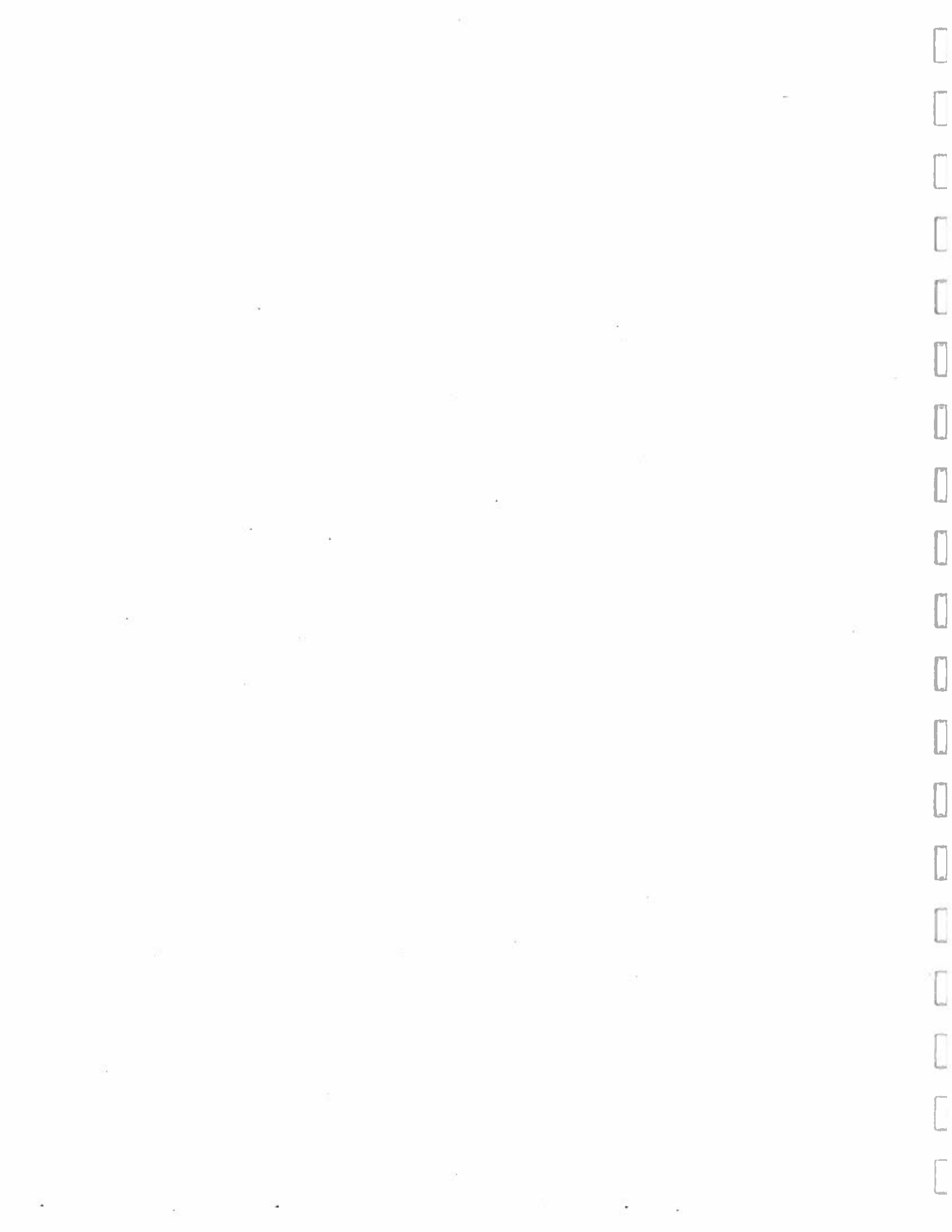
CAPACITY AND LEVEL-OF-SERVICE

Page-3

MOVEMENT	FLOW- RATE v (pcph)	POTEN- TIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M		SHARED CAPACITY c (pcph) SH		RESERVE CAPACITY c = c - v R SH		LOS
MINOR STREET									
→ WB LEFT	65	523	362	>	459	362	>	325	297 >B C
THROUGH	149	687	614	>		614	>		465 > A
RIGHT	161	1000	1000			1000			839 A
MINOR STREET									
→ EB LEFT	119	498	336	>		336	>		217 > C
THROUGH	189	701	627	>	511	627	>	148	438 >D A
RIGHT	55	1000	1000	>		1000	>		945 > A
MAJOR STREET									
NB LEFT	81	996	996			996			915
SB LEFT	99	999	999			999			900

APPENDIX A-2

Trip Generation Analysis Projected Intersection Calculations C-3 General Commercial Zoning Designation



Corning's population increase from Jan. 1995 to Jan. 1996, 1.7%

Caltrans (does not really do future projections, however,)

- 612 vehicle increase per year
- in year 2010, it is estimated that the average daily traffic volume for the peak month will be 33111 vehicles
- the current average daily traffic volume for the peak month is 25000 vehicles

Trip Generation Analysis:

For the purpose of this analysis, the peak hour is 10-12% of the total daily trips.

Agriculture:

2.22 acres x 2 trips per acre = 4.44 trips
peak hour would be $4.44 \times 10\% = .44$ trips

Industrial:

2.5 acres X 52.4 trips per acre = 131 trips
peak hour would be $131 \times 10\% = 13$ trips

Residential:

4.9 acres x 25.7 trips per acre = 125.93 trips
peak hour would be $125.93 \times 10\% = 12.5$ trips

Commercial: this is for parcels located between Solano Street and South Ave.

174 acres x 50% useable acres = 87 useable acres
 $87 \times 25\%$ used as floor area = 21.75 used as floor area
 21.75×43560 sq. ft. per acre = 947430
 $947430 / 1,000 = 947$
(60 trips/1,000 sq. ft. of useable floor area)
 947×60 trips = 56820 trips
 $56820 \times 50\%$ directional split = 28410 total trips to each intersection
 $28410 \times 10\%$ peak hour = **2841** trips per intersection at buildout

TOTAL TRIPS GENERATED TO EACH INTERSECTION:

Agriculture	.22
Industrial	6.5
Residential	6.5
<u>Commercial</u>	<u>2841</u>
TOTAL	2854.22

Corning. 99/Solano 10 Year Forecast					
From lane	East	West	North	South	I with trucks
Left turn	172	58	131	910	
Through	219	238	68	882	
Right turn	150	94	72	1260	
Total	541	390	271	3052	4254

Trucks/ alone					
From lane	East	West	North	South	Total
Left turn	2	2	3	1	
Through	7	5	3	0	
Right turn	1	3	1	2	
Total	10	10	7	3	30

Vehicles by percentage	
Trucks	7%
Cars	93%

1095 HCM: SIGNALIZED INTERSECTIONS

MARY REPORT

INTERSECTION..Solano/99

AREA TYPE.....OTHER

ANALYST.....Robert Wall

DATE.....10 year

TIME.....5-6PM

COMMENT.....

VOLUMES					GEOMETRY							
	EB	WB	NB	SB	:	EB	L	WB	L	NB	L	SB
LT	172	58	131	910	:	L	12.0	L	12.0	L	12.0	12.0
TH	219	238	68	882	:	T	12.0	T	12.0	T	12.0	12.0
RT	150	94	72	1260	:	TR	12.0	TR	12.0	TR	12.0	12.0
RR	75	47	36	630	:		12.0		12.0		12.0	12.0
					:		12.0		12.0		12.0	12.0
					:		12.0		12.0		12.0	12.0

ADJUSTMENT FACTORS										ARR.	TYPE
	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T		
EB	0.00	2.00	N	0	0	0.90	0	N	25.8	3	
WB	0.00	3.00	N	0	0	0.90	0	N	25.8	3	
NB	0.00	3.00	N	0	0	0.90	0	N	25.8	3	
SB	0.00	10.00	N	0	0	0.90	0	N	25.8	3	

SIGNAL SETTINGS								CYCLE LENGTH = 192.0			
		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X		X		NB	LT	X		X	
	TH		X		X		TH		X		X
	RT		X		X		RT		X		X
	PD						PD				
WB	LT	X		X		SB	LT	X		X	
	TH		X		X		TH		X		X
	RT		X		X		RT		X		X
	PD						PD				
GREEN		6.0	6.0	6.0	6.0	GREEN		6.0	6.0	6.0	6.0
YELLOW		18.0	18.0	18.0	18.0	YELLOW		18.0	18.0	18.0	18.0

LEVEL OF SERVICE							
	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.482	0.234	48.9	E	48.2	E
	TR	0.427	0.234	47.8	E		
WB	L	0.163	0.234	44.5	E	47.0	E
	TR	0.411	0.234	47.5	E		
NB	L	0.369	0.234	47.1	E	45.9	E
	TR	0.154	0.234	44.4	E		
SB	L	2.656	0.234	*	*	*	*
	TR	2.347	0.234	*	*		

INTERSECTION: Delay = * (sec/veh) V/C = 0.925 LOS = *

Corning. 99/South Ave. 10 Year Forecast					
From lane	East	West	North	South	Total with trucks
Left turn	94	53	1700	76	
Through	117	108	868	92	
Right turn	34	117	440	66	
Total	245	278	3008	234	3765

Trucks/ alone					
From lane	East	West	North	South	Total
Left turn	20	51	51	45	
Through	22	40	135	5	
Right turn	8	94	135	9	
Total	50	185	321	59	615

Vehicles by percentage	
Trucks	7%
Cars	93%

1985 HCM: UNSIGNALIZED INTERSECTIONS

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IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 30

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 7020

NAME OF THE EAST/WEST STREET..... South Ave.

NAME OF THE NORTH/SOUTH STREET..... 99

NAME OF THE ANALYST..... Robert Wall

DATE OF THE ANALYSIS (mm/dd/yy)..... 10 year

TIME PERIOD ANALYZED..... 5-6PM

OTHER INFORMATION: Peak hour

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: 4-LEG

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
	----	----	----	----
LEFT	94	47	1700	76
THRU	117	108	868	92
RIGHT	34	117	440	66

NUMBER OF LANES AND LANE USAGE

	EB	WB	NB	SB
	----	----	----	----
LANES	2	2	2	3

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	20	80	0
WESTBOUND	68	32	0
NORTHBOUND	11	89	0
SOUTHBOUND	25	75	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	5.50	5.50	0.00	5.50
SB	5.50	5.50	0.00	5.50
MAJOR LEFTS				
WB	5.50	5.50	0.00	5.50
EB	5.50	5.50	0.00	5.50
MINOR THROUGH				
NB	6.50	6.50	0.00	6.50
SB	6.50	6.50	0.00	6.50
MINOR LEFTS				
NB	7.00	7.00	0.00	7.00
SB	7.00	7.00	0.00	7.00

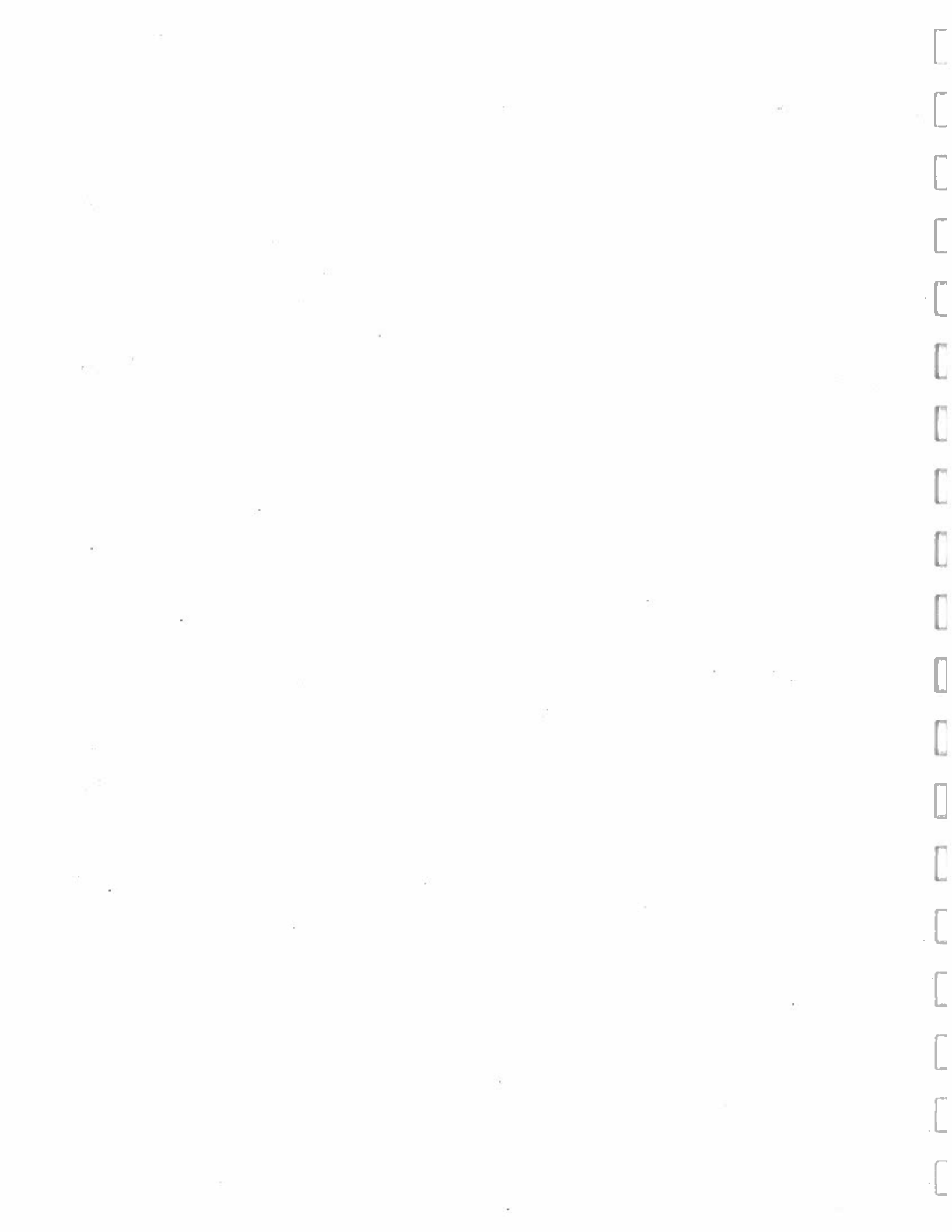
CAPACITY AND LEVEL-OF-SERVICE

Page-3

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M	SHARED CAPACITY c (pcph) SH	RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET						
NB LEFT	3307	340	187	187	%-3119	F
THROUGH	1688	493	400	> 400	> %-1288	> F
RIGHT	856	996	996	> 228 996	> %-4766 140	> F D
MINOR STREET						
SB LEFT	143	75	0	> 0 0	> 0 -143	> F
THROUGH	173	521	423	> 423	> 250	> C
RIGHT	124	982	982	982	858	A
MAJOR STREET						
EB LEFT	179	865	865	865	686	A
WB LEFT	78	941	941	941	863	A

APPENDIX A-3

**Mitigated Trip Generation Analysis
Projected Intersection Calculations
Corning Business Development Zone**



MITIGATED TRIP GENERATION ANALYSIS

The Specific Plan Area or Corning Business Development Zone was broken into two categories: 1) CH - Freeway Oriented Commercial Development, and 2) Specific Plan Mixed Use Development.

The CH zoning classification caters to businesses that are oriented to freeway travelers. These businesses include: truck stops, highway oasis, service stations, commercial businesses, high turn-over sit-down restaurants, drive-in restaurants, and convenience markets.

The calculations for the CH zoning are as follows:

	47.66	total CH acres
minus	15	acres for 2 truck stops at 7.5 acres each
	32.66	remaining acres
minus	8	acres for 2 highway oasis at 4 acres each
	24.66	remaining acres
minus	6	acres for 4 service stations at 1.5 acres each
	18.66	remaining acres for other services

TRUCK STOP CALCULATION - 2 truck stops

1278 average daily trips generated X 50% two-way volumes = 639 trips generated to the intersection

639 trips X 10% peak hour = 63.9 total trucks and autos

64 trips generated from this use during peak hour to the intersection via Hwy. 99 W

64 X 2 truck stops = 128

NEW

639/16 hours open = 40 trucks per hour

40 X 2 truck stops = 80 trucks per hour

HIGHWAY OASIS - 2 highway oasis

1894 average daily trips generated X 50 % two-way volumes = 947 trips generated to the intersection

947 trips X 10% peak hour = 94.7 total trips

95 trips generated from this use during peak hour to the intersection via Hwy. 99W

1 located north of South Avenue

90% will use Hwy. 99W / South Ave. = 85 trips

10% will use Hwy. 99W / Solano St. = 10 trips

1 locate south of South Avenue

50% will use Liberal Ave. on ramp = 47.5 trips NOT at intersection

50% will use South Ave. intersection = 47.5 trips

NEW

1894 average daily trips generated X 50 % two-way volumes = 947 trips generated to the intersection

947 trips / 16 hours open = 59 trips per hour

59 trips generated from this use during peak hour to the intersection via Hwy. 99W

1 located north of South Avenue

90% will use Hwy. 99W / South Ave. = 53 trips

10% will use Hwy. 99W / Solano St. = 6trips

1 locate south of South Avenue

50% will use Liberal Ave. on ramp = 29.5 trips NOT at intersection

50% will use South Ave. intersection = 29.5 trips

SERVICE STATION

750 trip ends per station two-way volumes X 50% = 375 trips generated to the intersection
375 trips X 10% peak hour = 37.5 total trips per station
37.5 X 4 service stations = 150 TOTAL trips
1 located south of South
 50 % will use South Ave. Int. = 18.75
 50 % will use Liberal Ave. Int. = 18.75
3 located between South Avenue and Solano Street
 37.5 X 3 = 112.5 trips X 50% use each intersection = 56.25 trips
 56% of the peak hour volume involve vehicles passing on their way to another destination
 56.25 - 56% = 24.75 to each intersection

OTHER SERVICES

18.66 acres remaining in the Specific Plan Area that is zoned the CH zoning designation.

18.66 X 50% useable acres = 9.33 acres
9.33 X 25% used for floor space = 2.33 acres

2.33 acres remaining for floor space

COMMERCIAL (60 trips per 1,000 sq. ft. of useable floor space)

50% used for commercial uses = 1.16 acres of floor space
1.16 X 43560 sq. ft. per acre = 50529 sq. ft. / 1,000 = 50.5
50.5 X 60 trips per 1,000sq. ft. = 3031 trips generated
3031 X 10% peak hr. traffic = 303

directional split is $303/2 = 151.5$ to each intersection

1.16 acres remaining for floor space

HIGH TURN-OVER RESTAURANT (164.4 trips per 1,000 sq. ft.)

50% used for high turn-over restaurant = .58 acres
.58 X 43560 sq. ft. per acre = 25264.8 sq. ft. / 1,000 = 25.26
25.26 X 164.4 trips per 1,000 sq. ft. = 4100 trips generated
4100 X 10% peak hr. traffic = 410

410 X 50% will use either intersection = 205
directional split is $205/2 = 102.5$ trips to each intersection

.58 acres remaining

CONVENIENCE STORES (577.5 trips per 1,000 sq. ft.) depending on size there could be more than 1 store.

.29 acres x 43560 sq. ft. per acre = 12632 sq. ft. / 1,000 = 12.63
 12.63 X 577.5 trips per 1,000 sq. ft. = 7276 trips generated
 7276 / 16 hours open = 454 trips

directional split is 454

80% will use the intersections returning to the freeway = 363 (454 X 80%)

363/2 = 181 to each intersection

20% will be local traffic and will use adjacent roadways = 90

DRIVE-IN RESTAURANT (553 trips per 1,000 sq. ft.) depending on size there could be more than 1 restaurant. The peak hour is 12-1 p.m.

.29 acres X 43560 sq. ft. per acre = 12632 sq. ft. / 1,000 = 12.63
 12.63 X 553 trips per 1,000 sq. ft. = 6967.8 trips generated
 6967.8 / 24 hours open = 290 trips per hour

directional split is 290

80% will use the intersections returning to the freeway = 232

232/2 = 116 to each intersection

20 % will be local traffic using adjacent roadways = 58

Liberal Ave. exit or adjacent roadway	South Ave. / Hwy. 99W Intersection	Use	Solano St. / Hwy. 99W Intersection
	80	Truck Stop	
29.5 (Liberal Ave.)	53	Highway Oasis	
	29	Highway Oasis	6
18.75 (Liberal Ave.)	18.75	Service Station (1)	
	24.75	Service Stations (3)	24.75
	151.5	Commercial	151.5
205 (adjacent)	102.5	High Turn-Over Restaurants	102.5
90 (adjacent)	181	Convenience Stores	181
58 (Adjacent)	116	Fast Food Restaurants	116
401.25	756.5	Totals	575.75

SPECIFIC PLAN MIXED USE DEVELOPMENT (134.11 acres)

Mixed use development caters to a variety of commercial, industrial, and residential uses. For the purpose of this analysis, the types of development analyzed included:

Group 1: Commercial (60 trips / 1,000 sq. ft.)
Hardware/Paint Store or similar use (51.3 trips / 1,000 sq. ft.)
Average of combined trips $60+51.3 = 111.3/2 = 55.65$ trips

Group 2: Industrial (5.43 trips / 1,000 sq. ft.)
General Light Industrial (5.46 trips / 1,000 sq. ft.)
Manufacturing (4 trips / 1,000 sq. ft.)
Industrial Park (7.26 / 1,000 sq. ft.)
Warehousing (5.1 / 1,000 sq. ft.)
Average of combined trips $27.25/5 = 5.45$ average trips

Group 3: Office (12.3 trips / 1,000 sq. ft.)
Office Park (20.65 trips / 1,000 sq. ft.)
Average of combined trips $32.95/2 = 16.4$ average trips

	134.11	acres zoned mixed use
minus	14.9	acres for multi-family residential 160 units
	119.21	remaining acres
minus	10	acres for 2 motels ea. With 75 rooms
	109.21	remaining acres

109.21 remaining acres

Remaining acreage breakdown:

10% used by Group 1 - Commercial and similar uses = 10.92

80% used by Group 2 - Industrial = 87.36 acres

10% used by Group 3 - Offices = 10.92

MULTI-FAMILY

160 units X 5.4 trips per dwelling unit = 864 trips

864 X 10% peak hr. = 86.4 trips during peak hr.

directional split:

70% out to Hwy 99W = $86.4 \times 70\% = 60.48 / 2 = 30.24$ trips to each intersection

30% use adjacent roadways = $86.4 \times 30\% = 25.92$

2 MOTELS with 75 rooms each = 150 rooms

150 rooms X 10.1 average daily trips per room = 1515 trips

1515 X 10% peak hour = 151 trips

151 / 2 directional split = 75.5 trips to each intersection

GROUP 1 - COMMERCIAL AND SIMILAR USES = 10.92 acres
55.65 trips per 1,000 sq. ft. of gross floor area

(Due to the number of parking spaces required for commercial and office uses it has been estimated that 50 % of the lot is useable area, and 25% of that is actually used as floor space)

10.92 acres X 50% useable area = 5.46 X 25% used as floor area = 1.365 acres X 43560 sq. ft. per acre = 59459 sq. ft. of floor area

59459 sq. ft. of useable floor space / 1,000 sq. ft. = 59.45 X 55.65 trips per 1,000 sq. ft. = 3309 trips
3309 X 10% peak hour = 330 trips generated
330 X 70 % directional split using Hwy. 99W = 231 / 2 to intersections = 115
330 X 30 % using adjacent roadways = 99 trips

GROUP 3 - OFFICES = 10.92 acres
16.4 trips per 1,000 sq. ft. of gross floor area

10.92 acres X 50% useable area = 5.46 X 25% used as floor area = 1.365 acres X 43560 sq. ft. per acre = 59459 sq. ft. of floor area

59459 sq. ft. of useable floor space / 1,000 sq. ft. = 59.45 X 16.4 trips per 1,000 sq. ft. = 974.98 trips
974.98 X 10% peak hour = 97.4 trips generated
97.4 X 70 % directional split using Hwy. 99W = 68.2 / 2 to intersections = 34.12
97.4 X 30 % using adjacent roadways = 29.22 trips

GROUP 2 - INDUSTRIAL USES = 87.36 acres
5.45 trips per 1,000 sq. ft. of useable floor area

(Due to the reduced number of parking spaces required for this type of use, it has been estimated that industrial uses use approximately 1/3 of the property, however, the requirement of runoff detention basins may reduce this to roughly 25%, for the purpose of this analysis, an average of the two percentages was used at 29%)

87.36 acres X 29% = 25.33 acres of useable floor space X 43560 sq. ft. per acre = 1,103,375 sq. ft. of floor
1,103,375 sq. ft. / 1,000 = 1103.37 X 5.45 average daily trips per 1,000 sq. ft. = 6013.39 trips
6013.39 X 10% peak hour = 601 trips generated during peak hour
601 trips X 70% use Hwy. 99W intersections = 420/2 directional split = 210 trips at intersection
601 trips X 30% use adjacent roadways = 180 adjacent roadways

Adjacent Roadways	South Ave. / Hwy. 99W Intersection	Uses	Solano St. / Hwy. 99W Intersection
25.92	30.24	Multi-Family	30.24
	75.5	Motels	75.5
99	115	Group 1 - Commercial	115
29.22	34.12	Group 2 - Industrial	34.12
180	210	Group 3 - Office	210
308.22	464.86	Totals	464.86

Zoning	Adjacent Roadways	South Ave. / Hwy. 99W Intersection	Solano St. / Hwy. 99W Intersection
CH Zoning	401.25	756.5	575.5
Mixed Use Zoning	308.22	464.86	464.86
Totals	709.47	1221.36	1040.36

100 % buildout	709.47	1221.36	1040.36
50% buildout 10 yrs.	354.7	610.68	520.18

STANDARD TRIP GENERATION RATES

HIGH TURN-OVER, SIT-DOWN RESTAURANT

164.4 vehicle trip ends per 1,000 sq. ft. gross floor area on an average weekday
16.4 trips occur in the peak hour ($164.4 \times 10\%$)
peak hour occurs between 6-7 p.m.

DRIVE-IN RESTAURANT

553 vehicle trip ends per 1,000 sq. ft. of gross floor area on an average weekday
78.8 trips occur in the peak hour (over 10%)
55.3 ($553 \times 10\%$)
peak hour occurs between 12-1 p.m. (lunch time)

QUALITY RESTAURANT

56.3 vehicle trip ends per 1,000 sq. ft. of gross floor area on an average weekday
peak hour occurs on Saturdays (8-9 p.m.) at generation rates of 87.3 trip ends per 1,000 sq. ft.
peak hour occurs between 12-2 p.m.

SERVICE STATION

750 vehicle trip ends per station
(56% of the peak hour volume involve vehicles passing by on their way to another destination)
The peak-hour generation rates indicated only a two-way rate. The amount entering or leaving is usually one-half the hourly two-hour volume.

HIGHWAY OASIS AND TRUCK STOPS

Highway oasis includes fuel sales for autos and occasionally for diesels, minimal mechanical services for autos, a restaurant, rest rooms, and on occasion, a gift and/or similar shop.

From 6 a.m. to 10 p.m. two-way volumes as high as 1894 for oasis (16 hour two-way, entering and leaving, volumes)
(divide trip generation number in half, most of this traffic is circular in nature, meaning it comes from I-5 and returns to I-5, the trip calculation for increase from I-5 has been calculated and it comes from another portion of the intersection than where it leaves at, it has already been figured into the equation)

Truck stop facilities are geared primarily to trucker's needs and include auto and truck fuels, a restaurant, rest rooms, trucker mechanical services, and trucker overnight accommodations.

From 6 a.m. to 10 p.m. two-way volumes as high as 1278 for truck stops (16 hour two-way volumes)
(45.5 percent were semitrucks)

CONVENIENCE MARKET

(using a 24 hour market in the CH zoning area)

577.5 average weekday vehicle trip ends per 1,000 gross sq. ft.

COMMERCIAL

60 trips/1,000 gross sq. ft.

INDUSTRIAL

5.43 average daily vehicle trip ends per 1,000 gross sq. ft. of floor area

59.9 average daily vehicle trip ends per acre

GENERAL LIGHT INDUSTRIAL (printing plants, material test labs, assemblers, etc.)

5.46 average daily vehicle trip ends per 1,000 gross sq. ft. of floor area

52.4 average daily vehicle trip ends per acre

HEAVY INDUSTRIAL/MANUFACTURING (manufacturing of large items)

1.5 average daily vehicle trip ends per 1,000 gross square feet of floor area

INDUSTRIAL PARK (industrial related facilities, mix of manufacturing, service and warehouse facilities)

7.26 average daily vehicle trip ends per 1,000 gross square feet of floor area

56.1 average daily vehicle trips per acre

MANUFACTURING (conversion of raw materials or parts to finished product)

4 average daily vehicle trip ends per 1,000 gross square feet of floor area

38.3 average daily vehicle trips per acre

WAREHOUSING (facilities largely devoted to the storage of materials)

5.1 average daily vehicle trip ends per 1,000 gross square feet of floor area

62 average daily vehicle trips per acre

APARTMENT

5.4 average daily vehicle trips per dwelling unit

MOTELS

10.1 weekday vehicle trips per occupied room

OFFICE

12.3 average daily vehicle trips per 1,000 gross sq. ft of floor area

276.6 vehicle trips/acre

OFFICE PARK

20.65 average daily vehicle trips per 1,000 gross sq. ft. of floor area

276.6 vehicle trips / acre

MEDICAL OFFICE

75 average daily vehicle trips per 1,000 gross sq. ft. of floor area

HARDWARE / PAINT STORE OR SIMILAR ESTABLISHMENT (roughly 28,000 sq. ft.)

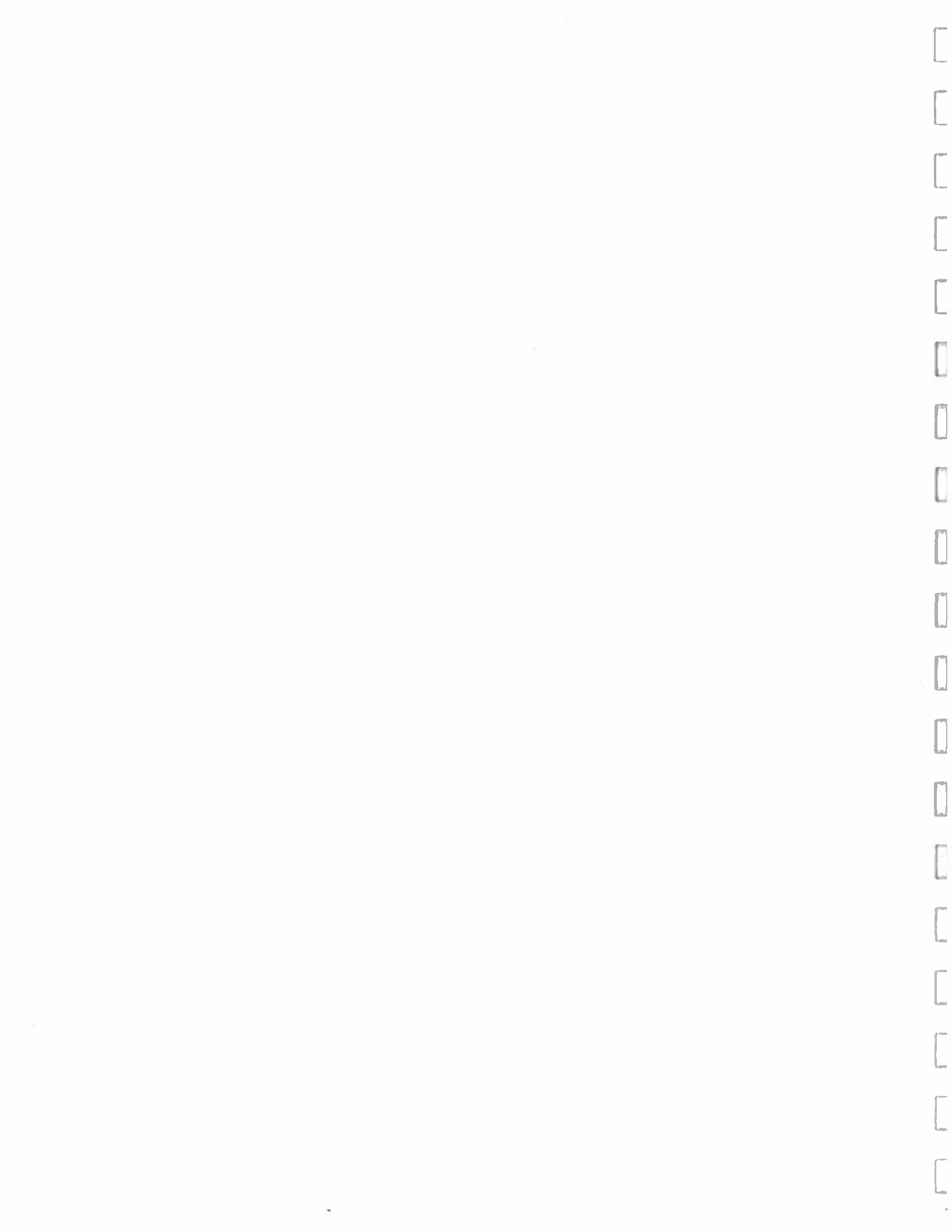
51.3 average daily vehicle trips per 1,000 gross sq. ft. of floor area
546 vehicle trips / acre

BANKS

169 average daily trips per 1,000 gross sq. ft. of floor area

INSURANCE

11.5 average daily trips per 1,000 gross sq. ft. of floor area



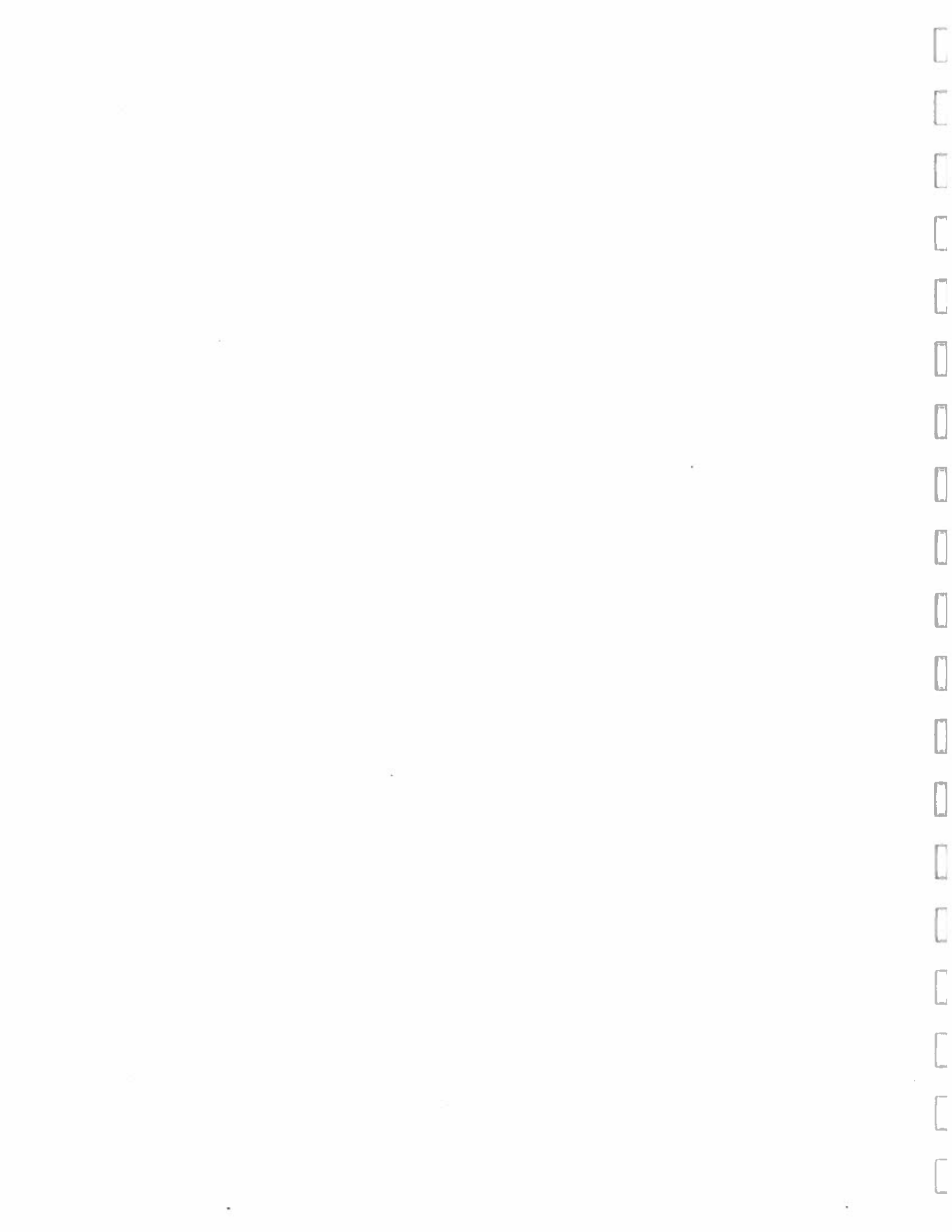
APPENDIX B

Soils Analysis

Appendix B-1

8 Soil Types Found in the Specific Plan Study Area

	<i>Description</i>	
Arb	Arbuckle gravelly fine sandy loam 0-3% slope	Arb-1
Arb-A	Arbuckle gravelly loam 0-3% slope	Arb-A-1
CzS	Cortina very gravelly fine sandy loam	CzS-1
Hil	Hillgate silt loam 0-3% slope	Hil-1
May	Maywood loam, high terrace 0-3% slope	May-1
Rv	River wash	Rv-1
Teh	Tehama gravelly loam 0-3% slope	Teh-1
Teh	Tehama silty loam 0-3% slope	Teh-2



Appendix B-2

Description of Soil Series

Arbuckle Series

Soils of the Arbuckle series are nearly level to gently sloping, well drained, and gravelly. They formed in gravelly alluvium derived from sedimentary and metamorphic rocks. The alluvium contains many, light-colored pebbles of quartz and chert.

These soils have a surface soil of brown, slightly acid gravelly loam or fine sandy loam. The subsoil is brown, neutral gravelly clay loam or loam. It generally grades to a substratum of very gravelly sandy loam, but in places the substratum is dense and slowly permeable.

Arbuckle soils are along most of the streams west of the Sacramento River at elevations between 200 and 1,000 feet. Grass and oak make up the vegetation.

Row crops, field crops, and orchard crops are grown successfully on the Arbuckle soils. Many areas along narrow flood plains are used for range.

Cortina Series

The Cortina series consists of nearly level, somewhat excessively drained to excessively drained soils. These soils formed in recent gravelly alluvium derived from sedimentary and metamorphic rocks. The rocks contain many pebbles of chert and quartzite. Cortina soils are brown to yellowish brown throughout. The surface layer is gravelly fine sandy loam, and the subsoil is extremely gravelly sand. These soils are brown or pale brown to yellowish brown in color. The soils range from medium acid in the surface layer to neutral in the subsoil and substratum.

Cortina soils are along most of the streams west of the Sacramento River at elevations of 200 to 500 feet. They are generally on flood plains near active streams, but some of them are in channels of abandoned streams and along ridges. The vegetation is mostly annual grasses and forbs, but includes some hardwoods and shrubs. Field crops, row crops, and orchard crops are grown on these soils under irrigation.

Hillgate Series

The Hillgate series consists of nearly level, well-drained soils. These soils formed in old alluvium washed from soils developed in material from shale, sandstone, and soft siltstone. The surface soil is light yellowish brown, massive, medium acid and medium textures. It is underlain abruptly by a yellowish brown subsoil that is massive, slightly acid to neutral, and fine textured. These soils are on low terraces, west of the Sacramento River at elevations of less than 1,000 feet. In most areas, pasture crops and row crops are grown. In some areas the vegetation is mostly grass and forbs but includes scattered oaks.

Maywood Series

The Maywood series consists of nearly level, well-drained soils formed in recent alluvium. The alluvium was derived mainly from softly consolidated sedimentary rocks. Maywood soils are pale brown, medium textured and neutral or slightly acid throughout. They are on flood plains west of the Sacramento River at elevations that range from 200 to 500 feet. Nearly all of the acreage is cultivated.

These soils range from pale brown to light yellowish brown in color. In many places they contain stratified material that ranges from loam to silt loam or fine sandy loam in textured or is gravelly in the lower part. Maywood soils range from slightly acid to neutral.

Riverwash

Consists of channels of intermittent streams and of active streams where the water is high. The areas are made up of deposits of sand and gravel, some of which are mined. Included with Riverwash in mapping are small areas of Cortina, Columbia, Maywood, Molinos, Orland, and Vina soils. Areas of Riverwash have no agricultural value.

Tehama Series

The Tehama series are nearly level, well drained soils formed in mixed alluvium, chiefly from sedimentary rock. The surface soil is pale brown, slightly acid loam or silt loam, and the subsoil is brown or yellowish brown, neutral clay loam. These soils are on low terraces, mostly west of the Sacramento River, at elevations of 200 to 1,000 feet. Most areas have been cultivated.



Appendix B-3

Soil Conservation Services' Capability Classification

Class I

Soils in Class I have few limitations that restrict their use.

Class II

Soils have some limitations that reduce the choice of plants or require moderate conservation practices.

Class III

Soils have severe limitations that reduce the choice of plants or require special conservation practices, or both.

Class IV

Soils have very severe limitations that restrict the choice of plants, require very careful management, or both.

Class VIII

Soils and landforms have limitations that preclude their use of commercial plant production and restrict their use to recreation, wildlife or water supply, or to esthetic purposes.

Appendix B-4

Soil Erodibility, Permeability, and Expansive Soils

Soil Erodibility

<i>Soil Name</i>	<i>Relative Erodibility</i>
Au - Arbuckle gravelly fine sandy loam	Low
AvA - Arbuckle gravelly loam	Low
Czs - Cortina very gravelly fine sandy loam	Low
Hl - Hillgate silt loam	High
Mf - Maywood loam	High
Tb - Tehama gravelly loam	Low
Tc - Tehama silt loam	High

Meade and Associates, 1988

Soil Permeability

<i>Soil Name</i>	<i>Permeability Rate¹</i>	<i>Permeability Description</i>
Au - Arbuckle gravelly fine sandy loam	0.2-2.0	slow
AvA - Arbuckle gravelly loam	0.2-2.0	slow
Czs - Cortina very gravelly fine sandy loam	2.0-6.0	medium
Hl - Hillgate silt loam	0.2-2.0	slow
Mf - Maywood loam	2.0-6.0	very slow
Tb - Tehama gravelly loam	0.6-2.0	slow
Tc - Tehama silt loam	0.2-2.0	slow

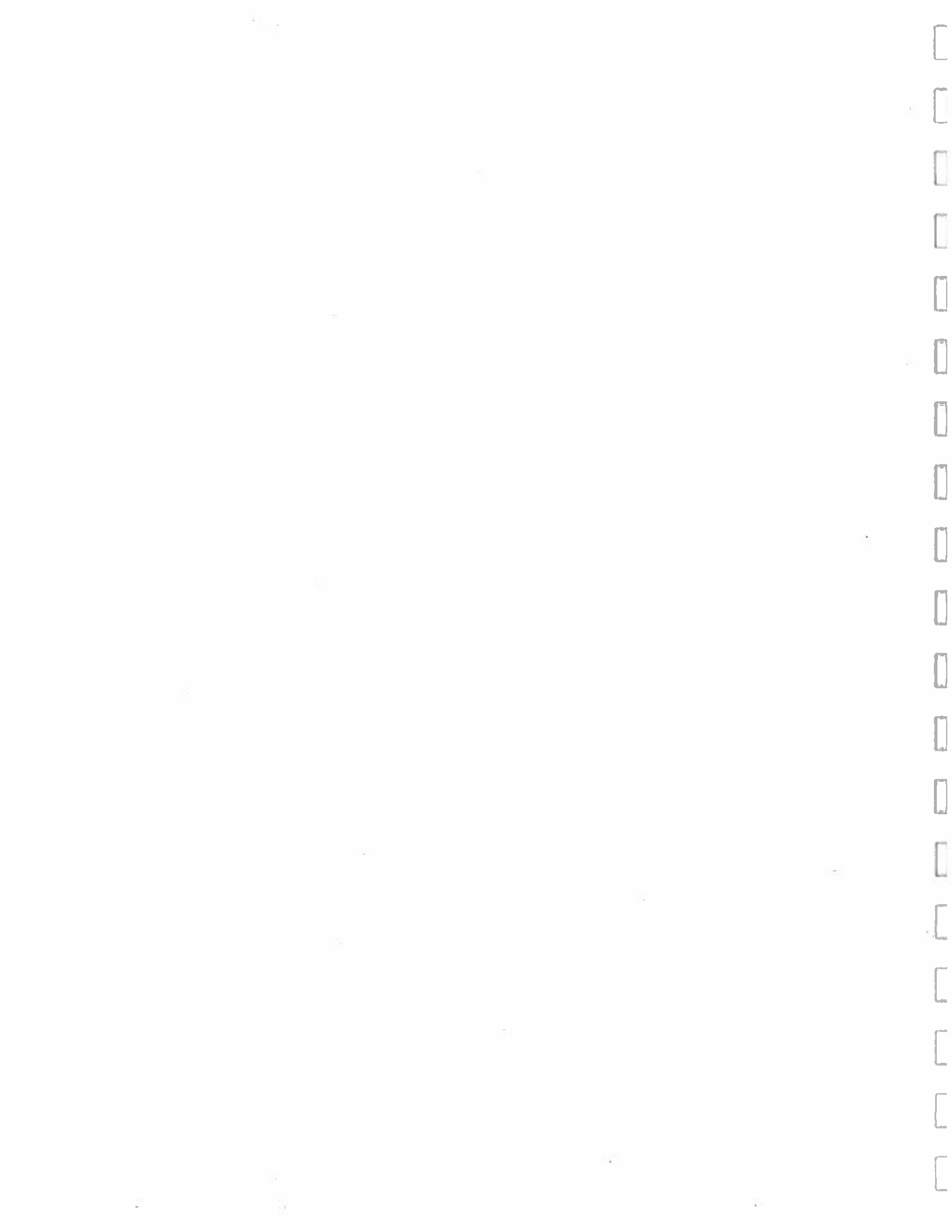
¹ Rate = inches/hour

Meade and Associates, 1988

Expansive Soils

<i>Soil Name</i>	<i>Shrink/Swell Potential</i>
Au - Arbuckle gravelly fine sandy loam	Moderate
AvA - Arbuckle gravelly loam	Moderate
Czs - Cortina very gravelly fine sandy loam	Low
Hl - Hillgate silt loam	High
Mf - Maywood loam	Low
Tb - Tehama gravelly loam	Moderate
Tc - Tehama silt loam	Moderate

Meade and Associates, 1988



APPENDIX C

Visual Preference Survey

APPENDIX C

VISUAL PREFERENCE SURVEY

SUMMARY

This section summarizes the results of the Visual Preference Survey. There were eight categories of pictures to be rated on the survey, these categories include: Architecture, Landscaping, Dumpster Containers, Parking Lots, Freeway Views, Signage, Pedestrian Activities, and Walls & Fences. The pictures in each category were rated on a scale of 0 to 5. A score of "0" indicates a negative image, and a score of "5" indicates a positive image. A score of "3" indicates an average rating for that picture. The numbers for each individual picture were tallied. The total possible points an individual picture could receive was 255 to 300 points, depending on the number of surveys that responded to each category (some survey participants responded to only a few categories, not all eight of them). The total points received by an individual picture was divided by the total points possible for that picture and a percentage was calculated. The percentages were categorized as follows:

68% or Higher	= Positive Image
50% - 67%	= Desirable Image
33% - 49%	= Less Desirable Image
32% or Lower	= Negative Image

For example: 60 of the surveys received responded to the architecture category. There were 300 possible points for each picture in this section. Picture A received 165 points out of 300, equaling 55% ($165/300 = 55\%$). According to Corning residents, picture A is a desirable image for the city. On the other hand, Picture E received 61 points out of 300, equaling 20% ($61/300 = 20\%$) Picture E is therefore a negative image for the city.

Table 1 lists the percentage totals received by each image. Table 2 indicates the total points received by each photo and the number of surveys that responded to each category.

APPENDIX C - VISUAL PREFERENCE SURVEY

Table 1 - Percent of Total Points

Category	3A	3B	4C	4D	1E	1F	2G	2H	3I
Architecture	45	40	25	33	20	27	69	77	45
Landscaping	77	53	34	23	77	34	33	37	45
Dumpsters	18	36	10	48	30	76	73	39	47
Remainders	40	23	34	33	33	33			
Breezy Views	62	26	50	45	51	55	56		
Storage	35	34	30	11	33	40			
Red Activities	76	37	35	67	74	56	71	79	45
Wall Mounts	3	25	46	33	45	41	34	33	37

- ★ 68% or Higher = Positive Image
50% - 67% = Desirable Image
33% - 49% = Less Desirable Image
32% or Lower = Negative Image

Table 2 - Total Points Received By Each Picture

Category	Total Surveys	Mountains	Percentage	A	B	C	D	E	F	G	H	I	J
Architecture	68	360	165	27	226	167	61	82	207	231			
Landscaping	67	285	272	15	145	232	219	120	132	249			
Dumpster	66	230	26	158	27	22	224	214	60	250			
Garage	65	345	130	73	115	191	122	150					
Freeway Views	51	255	159	67	128	109	105	172	143				
Signage	50	370	118	221	192	83	233	141					
Ped. Activities	51	255	178	146	209	171	183	154	202	124	114		
Wildlife Encounters	51	240	210	55	110	123	27	119	310	105	113		

¹ A total of 60 residents answered the survey, however, not all respondents answered each category.

² Each picture could receive a maximum of 5 points. The points per picture was calculated by adding the number of Total Surveys X 5 Possible Points = Total Points Per Picture.

ARCHITECTURAL IMAGES

SURVEY IMAGES

Architecture is probably the most prominent element in defining physical space in the built environment. The images in this category were rated according to: architectural form, color and materials, roofs, windows, facade design, awnings, signs, shade structures, and courtyards.

SURVEY RESULTS

Positive Images: Pictures C, G, H

The overriding theme in these positive images is the Mediterranean or Spanish Mission style architecture. The color palette of these buildings includes white-washed walls, natural or neutral earthtoned colors, such as tan or beige. These buildings are comprised of light-colored materials including masonry, stone, concrete, and stucco. Roofing materials are red clay or concrete tiles and are an intricate part of the Mediterranean theme. Common to these images is the use of arcades and arched passageways, promoting the pedestrian scale. Signs on these structures are located on the front of the arcade or facade, or hang above doorways along the pedestrian passageway. These signs are small in scale, and are of similar fonts and size. Trees and shrub planters have been incorporated into the overall site design of these buildings, landscaping is a contributing factor in making these pictures positive images.

Desirable Images: Pictures A, D

The architectural style in these images is not wholly Mediterranean, however, there are a few similarities. The color palette and construction materials are similar with, light colored stucco or concrete materials, with the addition of brick used in the architectural design. The red clay or concrete tiles are still a desirable image for roofing materials, however, brown tone asphalt composites are also desirable. These images are of freestanding commercial buildings and are not connected to other stores or offices. They are box-like structures that have incorporated some of the positive images characteristics, such as, arcades and archways, columns or piers, small signs, and landscaping.

Less Desirable and Negative Images: Less Desirable Picture B;
Negative Pictures E, F

The architectural style in these images are more modern in design. The buildings are box-like with sharp edges and square-like archways. The signage fronting these structures vary in size, color, lighting, and font, offering no uniformity or cohesiveness in design.

Landscaping in these images is minimal and has not been incorporated into the overall site design, but rather appears to be an afterthought.

LANDSCAPING IMAGES

SURVEY IMAGES

Landscaping themes can be used to enhance site development and promote the continuity between developments. Landscaping is intended to support the architectural guidelines by creating screens and buffers where needed and views where opportunities exist. Each of these images were rated according to plants, lighting fixtures, use of walls and paving materials, screening and buffers, and use with street medians.

SURVEY RESULTS

Positive and Desirable Images: Positive Pictures A, D, E, H;
Desirable Pictures B, C, F, G

All of the landscaping pictures were thought to be either positive or desirable images. From their responses, Corning residents would like to see landscaping incorporated into the overall site design of a development.

The images in the survey incorporated landscaping into the site's design in a variety of ways, including:

- shrubs and trees used as a screen between parking lots and the street,
- buffer walls with shrubs, lawn, and tree landscaping,
- parking lot landscaping,
- entryways into parking lots,
- street median landscaping including trees, lawns, and shrubs,
- lighting fixtures and landscaping,
- pedestrian areas, such as benches, with trees providing shade,
- trees, shrubs, and flowering perennials and shrubs.

TRASH RECEPTACLE IMAGES

SURVEY IMAGES

Trash receptacle design should reflect a community theme or architectural continuity. Each of these images were rated according to appearance, construction materials, design, location, screening and size.

SURVEY RESULTS

Positive and Desirable Images: Positive Pictures E, F, H;
Desirable Picture B

The positive images of trash facilities, such as those of a shopping center or retail store, are surrounded by trash enclosures, which are screened and easily accessible. The enclosure walls are concrete or masonry in natural or neutral color tones of white, tan, or beige. The gates that provide access to the enclosure are metal doors with the same or similar natural or earth-toned colors. These survey images show the trash receptacles hidden from view and the enclosure screened with landscaping.

Freestanding trash containers or receptacles, used by pedestrians, are a desirable image for the city. In these images the trash containers are located in parking lots and along pedestrian passageways or walkways and are constructed of concrete or stucco materials. The color and construction materials of these containers are natural color tones such as brown, beige, and tan.

Negative Images: Pictures A, C, D, G

Citizens thought that trash receptacles without enclosures tend to be an eyesore. These trash receptacles are usually located in alleyways or behind buildings and have not been incorporated into the overall site design. In these images, garbage has been left to the side of these receptacles creating an even greater negative image.

PARKING LOT IMAGES

SURVEY IMAGES

Parking lot design is aimed at reducing the visual and climatic impacts of large paved areas. These images were rated according to parking lot layout, access from the street, pedestrian walkways, lighting, screening, walls or other buffering devices, and landscaping.

SURVEY RESULTS

Positive Images: Pictures D, E, F

The parking lot images depict a variety of parking lot layouts. Parking lots using landscaping as a screen to the street, trees providing shade, and parking lot planters are the most positive images according to Corning residents. In each of these images, the parking lot is screened from the street with trees, shrubs, or landscaped arches. Trees incorporated into the parking lot layout provide shade, reducing the visual and climatic impact of large paved areas. Lighting fixtures in these parking lots are of two styles: a historic wrought iron fixture and a "shoe-box" fixture with a zero cut off field.

Desirable Images: Pictures B, C

Parking lots without vegetative screening are also acceptable, however, landscaping that is incorporated into the overall parking lot layout is desirable.

Diagonal curb parking, usually occurring along a downtown street, is also acceptable. However, the parking spaces in this particular image are incorporated into a downtown design theme which includes: trees with wrought iron guards, ornate antique lighting fixtures, and brick paved sidewalks.

Less Desirable Images: Picture A

The less desirable image of a parking lot is a wide open lot with very little landscaping or shade, minimal lighting fixtures, and a confusing parking layout.

FREEWAY VIEW IMAGES

SURVEY IMAGES

Freeway interchanges and corridors often create the first impression of a city for a visitor. These images were rated according to landscaping along the freeway corridor, business landscaping along freeway, and providing "windows" for views at appropriate points along the freeway.

SURVEY RESULTS

Desirable Images: Pictures A, C, E, F, G

The city edge along Interstate 5 will most often be viewed by those passing by. In these images the property edge acts as a buffer between development and the freeway. Buildings are separated from the freeway boundary by landscaping. Landscaping that buffers buildings from the freeway is desirable, this vegetation is a combination of lawns, shrubs, flowering plants, and trees. At appropriate points, breaks are located in the landscaping which provide views of business located along the highway corridor. Also, these desirable images do not contain large or oversized signs along the freeway edge.

Less Desirable and Negative Images: Less Desirable Picture D;
Negative Picture B

Buildings fronting the freeway with blank walls, no setbacks, and no landscaping are less desirable images. One of most negative images to Corning residents are the freeway views that include tall oversized signs of varying shapes, styles, and bright colors. These randomly placed signs stand high above the trees and crowd the freeway view. These types of signs are typical of gas stations and fast food restaurants.

SIGN IMAGES

SURVEY IMAGES

Signs should be used to convey information, not advertisement. Residents rated the pictures according to size, lighting and colors, location and placement, construction materials, lettering, type of signs, i.e. building or wall signs or hanging signs, and landscaping with signs.

SURVEY RESULTS

Positive and Desirable Images: Positive Pictures B, C, E;
Desirable Picture A

The positive images for signs are low-lying signs, or sign walls. These sign walls are approximately no higher than four feet and vary in length. Landscaping is also part of the sign wall design. Landscaping immediately surrounding the sign wall includes, shrubs, flowering perennials, and lawns. The sign walls in these images are constructed of a combination of materials including: brick, concrete, stucco, and cobblestones. The lettering style on each of these signs is easy to read, a simple font and of conservative size. If the sign advertises a business plaza, the lettering size is large, approximately 10 inches in height. If the sign lists several stores, the lettering is small enough to list each store, yet large enough to see from a vehicle. If a sign wall is located at an entryway and serves as a median between entering and exiting cars, then lettering is placed on both sides of the sign. At night, each of these signs is illuminated by a lighting fixture in the ground and hidden by landscaping.

Less Desirable and Negative Images: Less Desirable Picture F;
Negative Picture D

When there is more than one business linked together, such as a downtown district or shopping center, facade signs or wall signs located on the front of a building is a less desirable image. These signs vary in shape, size, construction materials, colors, and font and detract from the architectural style of the building.

Negative sign images, according to Corning residents, are tall oversized signs of varying shapes, styles, and brightly colored. They are randomly placed and stand high above the trees as advertisements. Landscaping at the base of these signs is minimal and they are constructed of metal and steel. Signs of this design are common at gas stations and fast food restaurants.

PEDESTRIAN AMENITY IMAGES

SURVEY IMAGES

Pedestrian amenities are a combination of elements that compliment architectural design. Some of these elements include: benches, bicycle racks, fountains, lighting, newspaper or vending machines, pedestrian walkways, and fountains. These images were rated according to materials and design and the overall desirability for Corning.

SURVEY RESULTS

Positive Images: Pictures A, C, E, G, H

The following images are features that Corning residents thought positive and appropriate for the city:

- pedestrian benches constructed of a combination of concrete and cobblestones
- pedestrian benches constructed of wood and wrought iron
- ornate antique lighting fixtures and historic lighting fixtures
- parks and recreation opportunities for children
- bicycle racks (ribbon rack)
- fountains

Desirable Images: Pictures B, D, F

The following images are features that Corning residents thought desirable and appropriate for the city:

- large landscaped walkways, six or more feet wide
- newspaper vendors that are enclosed on three sides, the enclosure an extension of the architectural theme

Less Desirable Images: Pictures I, J

- lighting fixtures that are not part of the architectural theme, but appear randomly placed, and without landscaping
- bank ATM facilities using a glass partition that is not part of the architectural design of the building and creates a safety hazard

WALLS & FENCES IMAGES

SURVEY IMAGES

Walls and fences are one form of hardscape elements that should be taken into consideration. Walls and fences were rated according to construction materials, style and design, height, buffering and landscaping.

SURVEY RESULTS

Positive and Desirable Images: Positive Pictures A, G, H;
Desirable Pictures D, I

Landscaping is the element that determines if a wall or fence is a positive image. The walls and fences Corning residents found to be positive are ornate wrought iron fences bordering walkways, wrought iron fences combined with concrete pilasters, and concrete walls with landscaping. These images are a combination of landscaping designs, including trees, trellises, shrubs, and lawns.

Less Desirable Images: Pictures C, F

Concrete walls that are not incorporated into a landscape theme or does not blend with the landscaping are not desirable elements. These walls appear to have been erected as an afterthought. They do not follow the architectural theme of surrounding buildings and they have minimal landscaping.

Negative Images: Pictures E, B

Chain linked fences are negative images to Corning residents. In these images the fences appear to be rusted and flimsy, no setback requirements from the roadway, and little room for landscaping or pedestrian walkways.

PUBLIC'S COMMENTS

The Visual Preference Survey also provided the opportunity for public comments, they include the following:

REGULATIONS AND STANDARDS

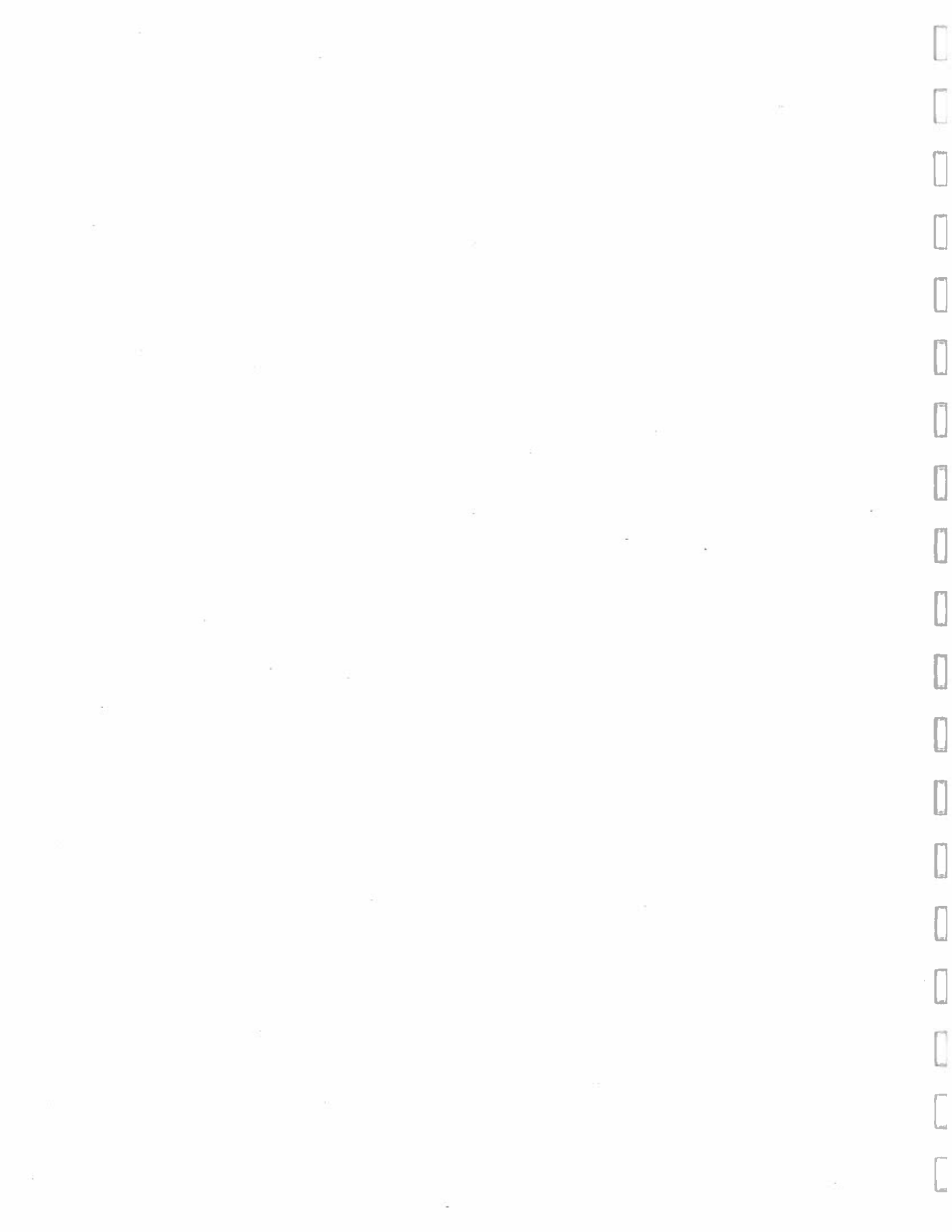
- regulations to help clean up the town
- standards along 99W corridor
- design review process with authority to approve and disapprove a project
- upgrading is worth it

DESIGN SUGGESTIONS

- repair streets
- control very high signs
- no murals
- extend sidewalks
- building facades
- cohesive look, a theme, preferably Spanish theme or old mission style
- maintain landscaping
- landscaping with a Santa Barbara theme
- landscaping using palm or leaf trees, but not both
- more scenic attractions
- cafe's and patio restaurants
- safety concerns about the type of people who might be in the parks
- youth activities, recreation, and shopping
- employment opportunities

PUBLIC PARTICIPATION

- glad to be able to participate
- liked the visual preference survey idea
- if only!



DRAFT DESIGN GUIDELINES

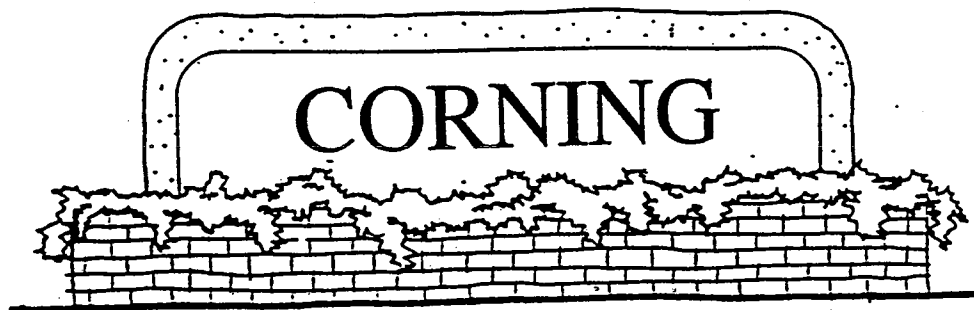
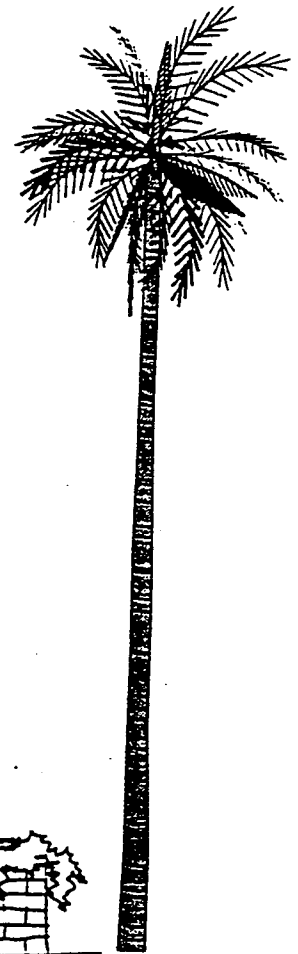
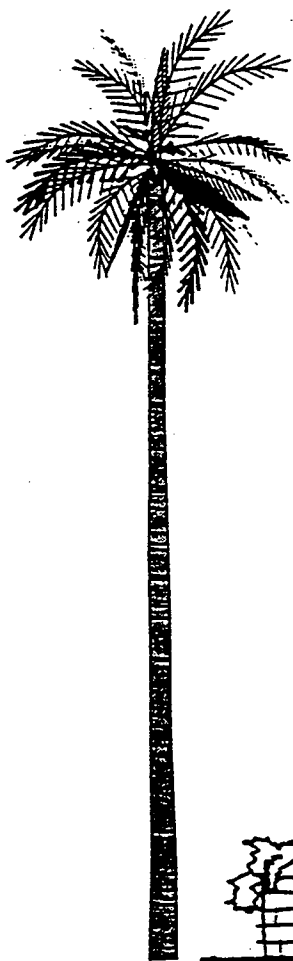


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I. ARCHITECTURAL DESIGN GUIDELINES

A. ARCHITECTURAL STYLE.

1. Architectural Style Policies

- A Mediterranean or Spanish Mission design theme is desirable for new projects within the Specific Plan study area. There is a range of architectural designs that are characteristic of these architectural themes allowing for a variety of designs, while maintaining building compatibility for new projects.

2. Architectural Style Implementation Measures

- "Canned" or trademark building designs are strongly discouraged.
- Architectural "sections" or other drawings should be submitted with development plans.

B. BUILDING DESIGN.

1. Building Design Policies

- Building design should be coordinated with regards to color, materials, form and detailing in order to achieve design harmony and integrity. Parapet walls and building facades should be treated as part of the building design, not as unrelated visual elements.
- Building design should compliment and harmonize with neighboring buildings. Design compatibility can be achieved through similarity of form, height, roof shapes, scale, materials, color, or pattern of openings.
- A clear architectural concept is an essential component of good design. Having a concept for the project can often provide simple solutions to common design problems (such as the selection of exterior building materials). An architectural concept can help determine the location and type of landscaping, color choices, and roof pitches.
- Designs should demonstrate a consistent use of colors, materials, and detailing throughout all elevations of the building. Elevations which do not

ARCHITECTURAL DESIGN GUIDELINES

directly face a street should not be ignored or receive only minimal architectural treatment.

- Pedestrian amenities such as benches, bicycle racks, fountains, lighting, vending machines, and pedestrian walkways should also be incorporated into the overall site design. (*Refer to Pedestrian Amenities Section of this document*).

2. Building Design Implementation Measures.

- Building and structure height limits are set forth in the City of Corning Zoning Ordinance.
- Avoid the use of blank walls along the streetfront.
- Architectural gimmicks should be avoided. The designer should avoid the use of visual contrast from neighboring structures as an advertising tool to attract attention.
- Pedestrian amenities should be incorporated into the site design. These elements should compliment the site and should not be added as an afterthought.

C. BUILDING COLOR.

1. Building Color Policies

- Building color should be compatible with its surroundings. Its color shall not become the "signing" for the project by competing for attention.

2. Building Color Implementation Measures

- The colors on the buildings should use neutral or natural earth tones. Muted tones should be used for the structure's base.
- The color palette chosen for a building should be compatible with the colors of adjacent buildings. An exception is where the colors of adjacent buildings strongly diverge from these design guidelines.
- Accent colors should complement the base color or a variation of its hue, either weaker or stronger. The transition between base and accent colors should relate to changes in building materials or the change of building

surface planes. Colors should not meet or change without some physical change or definition to the surface plane.

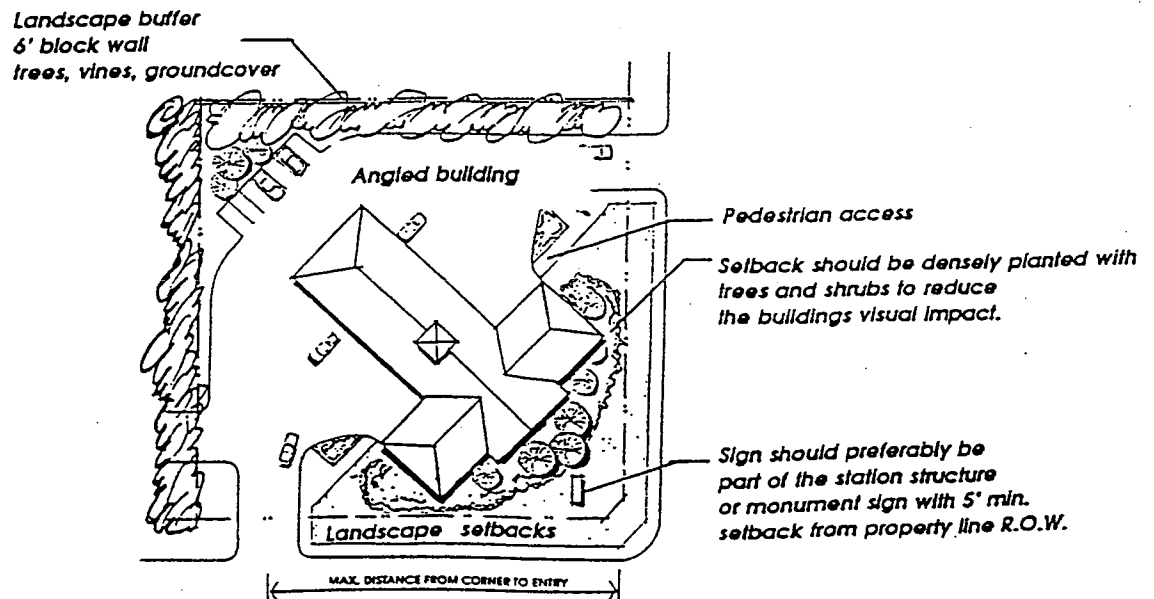
- Wherever possible, minimize the number of colors appearing on the building exterior. Generally a limit of three colors per building is desirable.
- Primary colors (red, blue, orange) should only be used to accent building elements, such as a door or window frames and architectural details.
- Architectural detailing should be painted to complement the facade and tie in with adjacent buildings.

D. BUILDING LOCATION.

1. Building Location Policies

- Buildings should generally be oriented parallel to streets and should be placed as close to the street as required and established setbacks permit. Buildings may be angled to create interesting juxtapositions if there is a legitimate goal to be achieved. However, the definition of the street edge is an important and legitimate role for buildings and needs to be considered. Exceptions may occur for wider setbacks from the street if a compatible use is proposed (for example, outdoor dining or pedestrian rest area) or to maintain continuity with landscaped areas on adjacent properties.

Buildings may be angled.



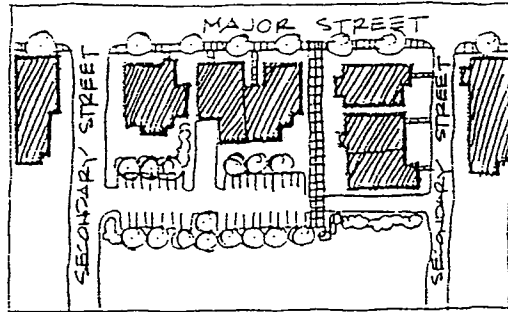
ARCHITECTURAL DESIGN GUIDELINES

- The orientation of buildings should respond to the pedestrian or vehicular nature of the street. Buildings with high pedestrian use should face on, and be directly accessible from the sidewalk. *(Refer to the Pedestrian Amenities Section in this document).*
- Commercial sites such as shopping centers should be designed to locate a minimum of the total building frontage at the front setback line. This siting, together with substantial landscaping treatment, reinforces and strengthens the overall streetscape, and helps to screen off-street parking areas.
- Multiple buildings in a single project should create a positive functional relationship with one another.
- The visual impact of parking lots should be minimized by locating these facilities to a portion of the site least visible from the street and by providing adequate screening and parking lot landscaping. *(Refer to Parking Lot Section in this document).*
- Projects should connect the on-site pedestrian circulation system to the off-site public sidewalk.
- Parking areas should be connected to building entrances by means of enhanced paving techniques. *(Refer to the Parking Lot Section in this document).*
- Loading facilities should not be located at the front of buildings where they will be difficult to screen from view. These facilities are more appropriate at the rear of the site where special screening may not be required.

2. Building Location Implementation Measures

- A minimum of 30 percent of the total building frontage should be located at the front setback line.

Building frontage at front setback.



Building frontage at setback.



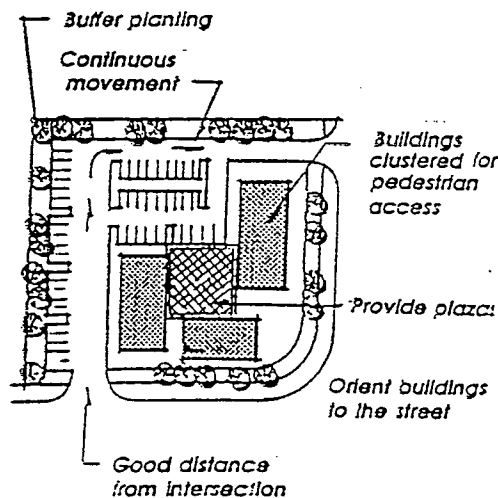
- Building setbacks from the fronting street can vary, depending upon the type of commercial use. In all cases, there should be no "zero-lot" lines which would prevent adequate landscaping along the street edge.

No zero-lot lines.



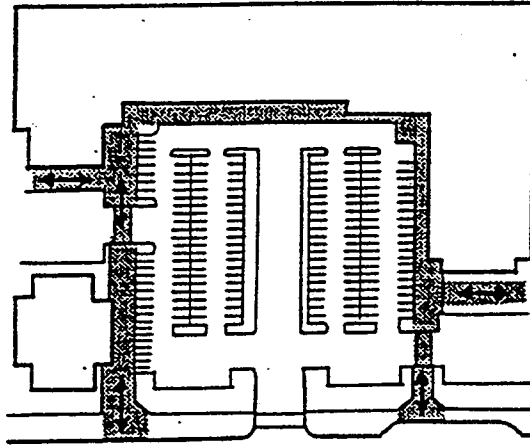
- Multiple buildings should be clustered to achieve a "village" scale. This creates opportunities for plazas and pedestrian areas while preventing long "barracks-like" rows of buildings. This link can be accomplished through the use of an arcade system, trellis, colonnade, or through enhanced paving.

Cluster buildings.



- All parking lots must be landscaped and buffered from public view.
- Pedestrian connections to the public sidewalk should be located at intervals of one connection for each 200 lineal feet (or fraction thereof depending on lot size).
- All properties shall provide attractive, direct and safe pedestrian access to parking, between commercial establishments on the parcel, and between parcels themselves.

Provide pedestrian access.

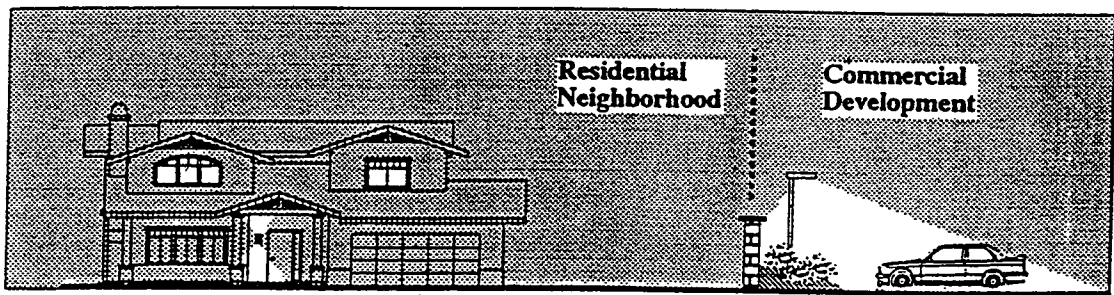


E. BUILDINGS LOCATION ADJACENT TO RESIDENTIAL LOTS.

1. Buildings Location Adjacent To Residential Lots Policies

- Commercial projects can create unwanted noise, dust, odors, and traffic which intrudes into nearby residential neighborhoods. Residentially zoned properties immediately adjacent to commercially zoned sites need to be adequately protected from such intrusions.

Protect adjacent residential parcels.



2. Buildings Adjacent To Residential Lots Implementation Measures

- Projects should include a setback adjacent to the residential property which is at least 10 feet wide, not including the required setbacks established in the zoning ordinance.
- Projects should provide a greater setback when the commercial lot is separated from a residentially-zoned lot by an alley. A rear yard setback of twenty feet should be provided, measured from the center line of the alley.
- Projects will provide a six-foot high, solid masonry wall on the property line. This wall must be landscaped. Trees should be spaced no farther apart than sixteen feet all along the property line, within a minimum of a three foot wide landscaping strip adjacent to the wall, shrubs or vines will also be

coordinated into the landscaping. *(Refer to the Landscaping Section in this document).*

- Provide a progressively larger setback from the property line for buildings over 15, 25, and 35 feet. This requirement will help to let natural light and ventilation reach ground floor residential spaces on the adjacent lot.
- Shield external lighting fixtures from adjoining residential buildings.
- Screen roof equipment, refuse, storage, and equipment areas from adjoining lots. See Screening below.

E. BUILDING MATERIALS.

1. Building Materials Policies

- Artificial or decorative facade treatments, where one or more unrelated materials appear "stuck-on" a building, should be avoided. Artificial products that attempt to imitate real materials (for example, wood, stone, brick) are discouraged.
- Wall materials should be creatively used to reinforce the Specific Plan's theme.

2. Building Materials Implementation Measures

- Encourage materials including, but not limited to:
 - * masonry
 - * brick
 - * stucco
 - * corrugated metal (for commercial and light industrial mixed uses)

Building materials for rear-lot commercial and light industrial mixed uses.

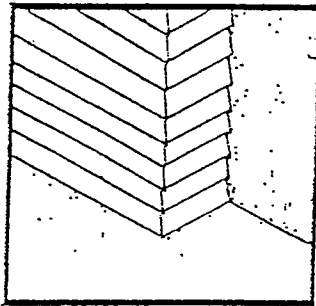


Building materials for rear-lot commercial and light industrial mixed uses.

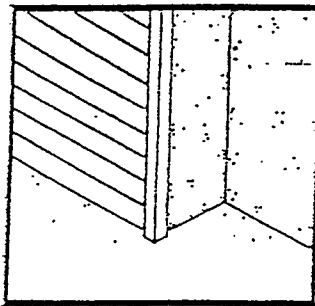


- Changes in the building's exterior construction material or color should change with building plane.

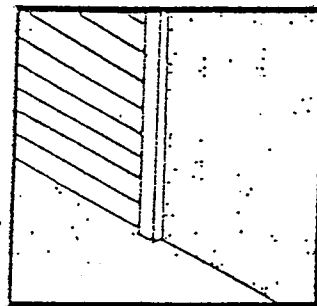
Changes in exterior finish materials.



*Change in plane with
change in material
Recommended*



*Material or color change
at outside corner
Not recommended*



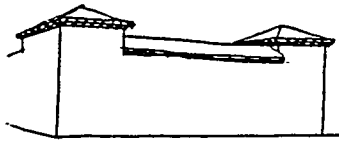
*Change of materials on same
plane Not Recommended*

G. FORM AND MASS.

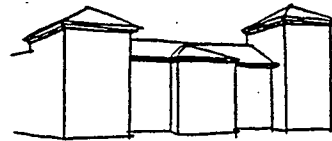
1. Form And Mass Policies

- A building's design should provide a sense of human scale and proportion. "Box-like" structures are generally unattractive and distort the overall scale of an area. Structures should be designed to avoid a "box-like" appearance.

Articulate mass.



BOX-LIKE FORM



ARTICULATED FORM



BOX-LIKE FACADE



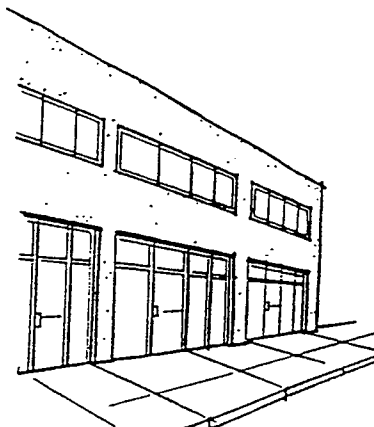
ARTICULATED FACADE

- Large scale building elements will appear imposing if they are situated in a visual environment of a smaller scale. The scale of buildings should be related to adjacent pedestrian areas and buildings.

1. Form And Mass Implementation Measures

- Vary the planes of the exterior walls in depth and/or direction. Wall planes should not run in one continuous direction for more than 50 feet without an offset.

Varied Planes, not box-like.

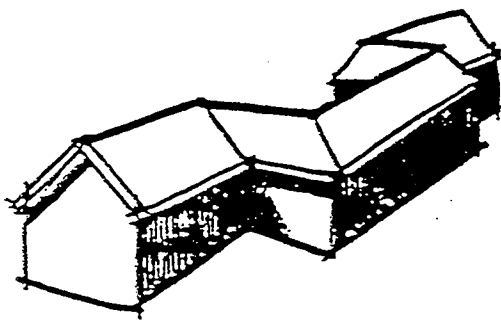


*Without architectural variations
buildings appear flat, monotonous
and "box-like"*

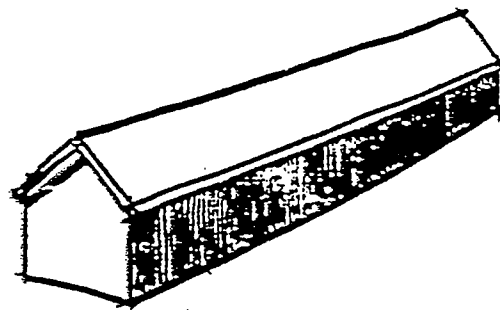


- Vary the height of the building so that it appears to be divided into distinct massing elements.

Vary the height of the building.



Appropriate



Inappropriate

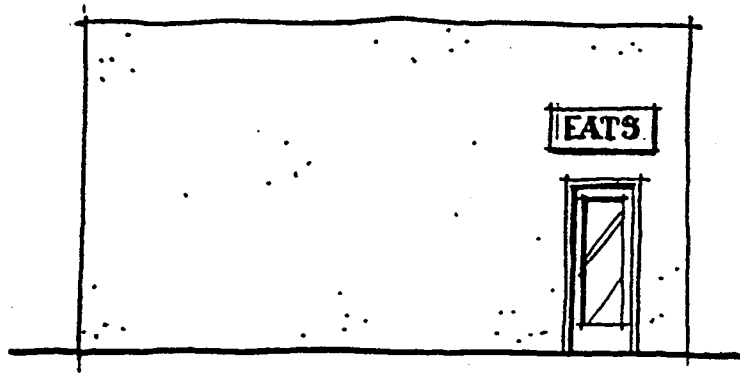
Not Recommended.



ARCHITECTURAL DESIGN GUIDELINES

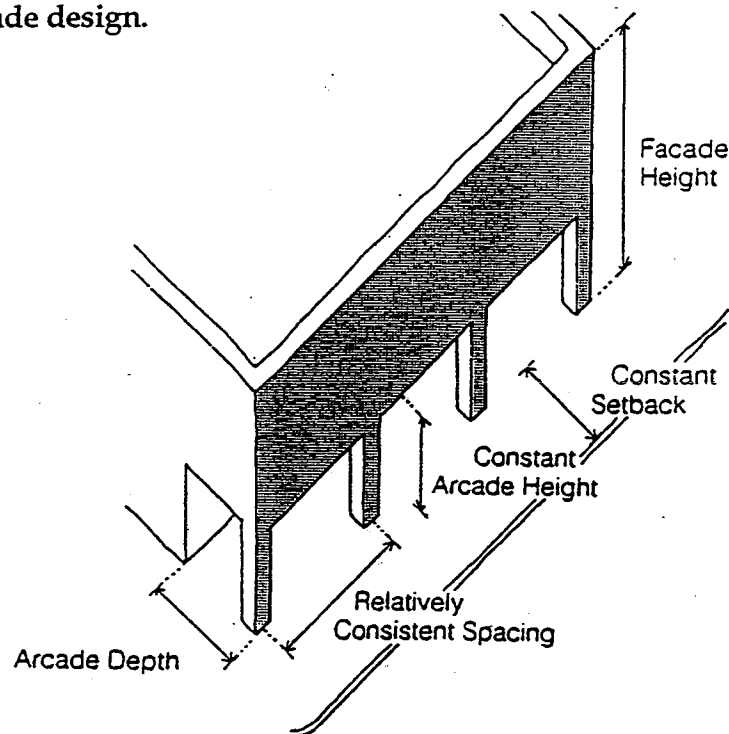
- Articulate the different parts of the building's facade by use of color, arrangement of facade elements, or a change in materials.
- Use landscaping and architectural detailing at the ground level to lessen the impact of an otherwise bulky building.
- Avoid blank walls. Utilize windows, trellises, wall articulation, arcades, change in materials, or other such features.

Not Recommended.



- Arcades should be used to accent building openings and provide climate protection.

Arcade design.



H. ROOF MATERIALS AND ROOFLINES.

1. Roof Materials And Rooflines Policies

- Roof design contributes strongly to the image of a structure as having quality and permanence. Depending on how the Mediterranean or Spanish Mission theme is incorporated into the architectural design of the building the use of full pitched roofs shall be as follows:

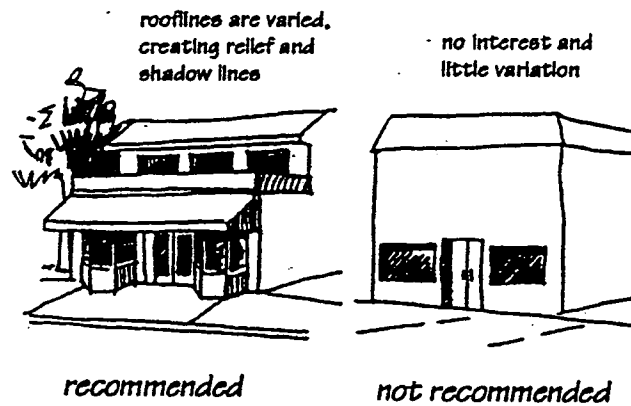
2. Roof Materials And Rooflines Implementation Measures

- Roof materials should be creatively used to reinforce the theme. Encouraged materials include but are not limited to:
 - * red clay or concrete tile
 - * composite shingle
 - * metal raised seam (for commercial and light industrial mixed uses)
- The following roof materials are not generally acceptable:
 - * corrugated metal (unless part of a commercial and light industrial mixed use district).
 - * high contrast or brightly colored glazed tile.
 - * highly reflective surfaces
 - * illuminated roofing
- The roofline at the top of the structure should not run in a continuous plane for more than 100 feet without offsetting or jogging the roof plane.

Offset or jog roof plane.



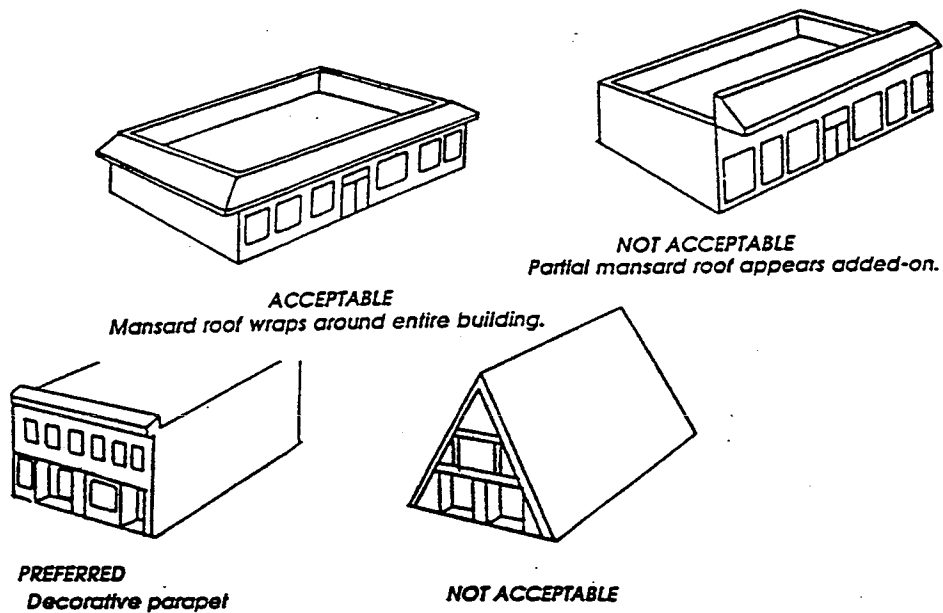
Create relief and variation.



Rooflines

- For freestanding commercial buildings nearly vertical roofs (A-frames) and piecemeal Mansard roofs (used on a portion of the building perimeter only) are strongly discouraged. Mansard roofs, should wrap around the entire building perimeter whenever possible.

Rooflines.

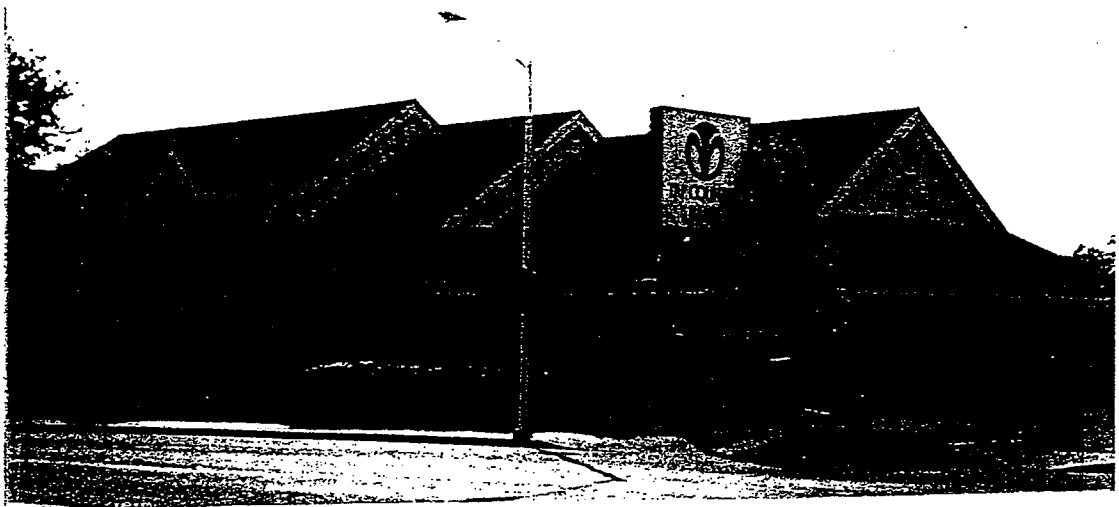


Sample mansard roof.



- New freestanding structures should incorporate full pitched roofs whenever possible. Roofs should either be full pitched or should appear so from the street.

Full pitched roof.



- Whenever flat roofs are used, there should be a screening parapet topped with a coping, cornice, or other molded projection which crowns or finishes the parapet to which it is attached.
- Parapet walls should be treated as an integral part of the structure's design. They should receive architectural detailing consistent with the rest of the

facade and should not appear as unrelated elements intended only to screen the roof behind.

- Parapets should be well detailed, three dimensional and of substantial size to complement a building.

Sample of parapet wall.



I. SCREENING OF ROOF EQUIPMENT.

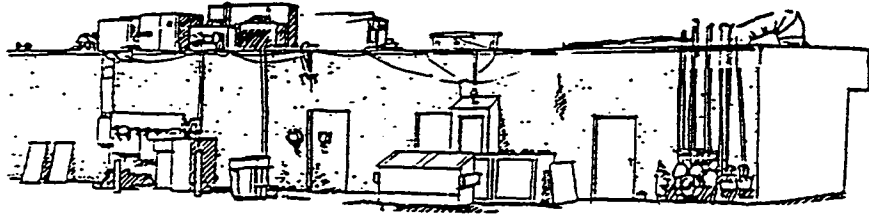
1. Screening Of Roof Equipment Policies

- Screening of roof equipment shall be an integral part of roof design and not appear as a "tacked-on" afterthought. (*Refer to Roof Materials and Rooflines in this Section*).

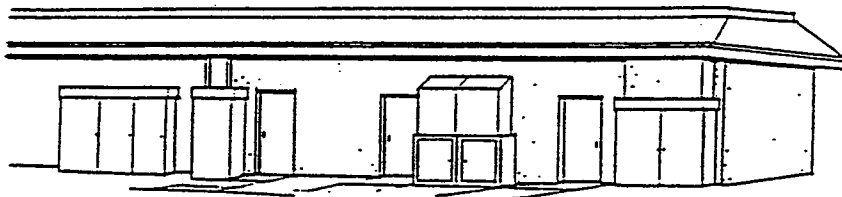
2. Screening Of Roof Equipment Implementation Measures

- All roof equipment shall be completely screened from a horizontal line of sight. Mechanical equipment should be located below the highest vertical element of the building.

Screening roof equipment.



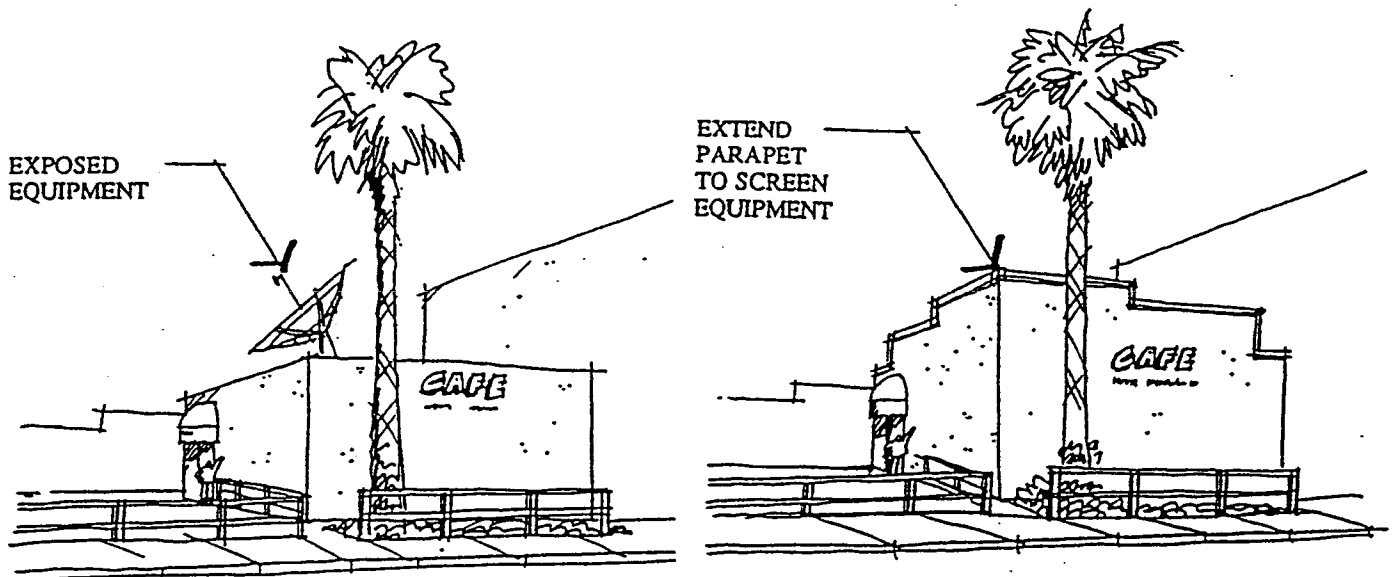
Unscreened rooftop equipment and utilities are strongly discouraged.



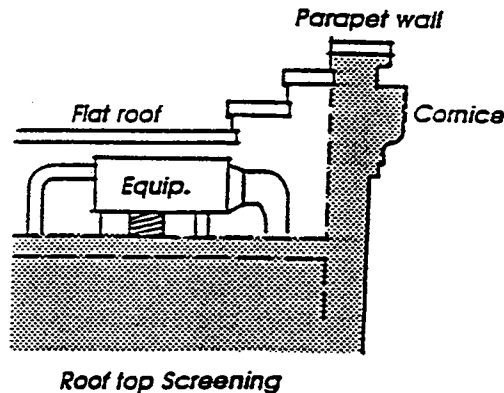
Screened rooftop equipment and screened utility meters are encouraged.

- For flat roofs, a screen enclosure behind a parapet wall may be used if it is made to appear as an integral part of the structure's design. Ground or interior-mounted mechanical equipment (with appropriate screening) is encouraged as an alternative to roof-mounting.

Screening roof equipment.



Screening roof equipment.



- Roof penetrations (such as plumbing and exhaust vents, air conditioner units, and transformer boxes) should be grouped together to minimize their visual impact. The roof design should help to screen or camouflage rooftop protrusions.

J. SCREENING OF REFUSE, STORAGE, AND EQUIPMENT AREAS.

1. Screening Of Refuse, Storage, And Equipment Areas Policies

- Screening is a technique used to protect and separate uses and site functions from one another for the purpose of decreasing adverse noise, wind, or visual impacts, and to provide privacy. The need for screening should be considered early in the design process so that screening elements (including walls, fences, berms, landscaping) can be effectively integrated into the overall project design and not added later as an afterthought.
- The architectural design of a project should include elements that screen from public view all external mechanical equipment, including refuse enclosures, electrical transformer pads and vaults, air conditioning, satellite receiving dishes, and communication equipment. Screening should be integrated into the overall design of the building by utilizing the same or similar materials, textures, and colors.
- All screening facilities should be of adequate size for their intended purpose without dominating the site, blocking sight distances, or creating unnecessary barriers.

2. Screening Of Refuse, Storage, And Equipment Areas Implementation Measures

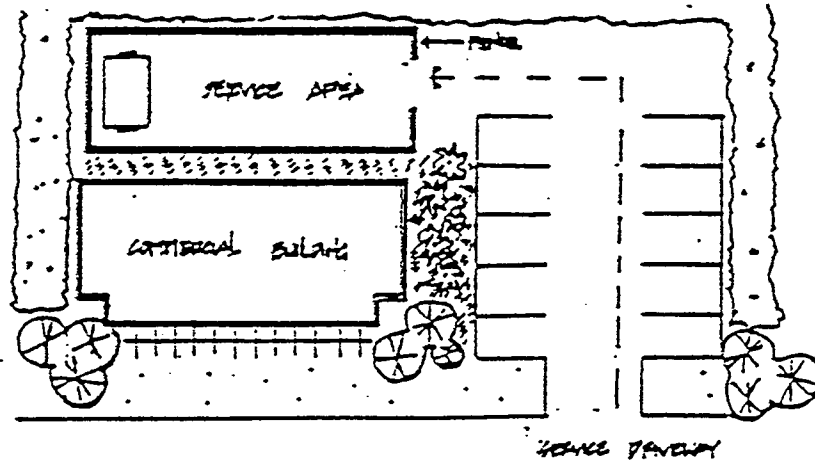
- For trash storage areas visible from the upper stories of adjacent structures, trash covers/screens should be opaque or semi-opaque. The covering structure should be compatible with the site's architectural style.
- Where screening is required at the ground level, a combination of elements should be considered including solid masonry walls, berms, and landscaping.

Screening of refuse container.



- Refuse containers, service areas, loading docks, and similar facilities should be located in areas out of view from the general public and so that their use does not interfere with on-site parking or circulation areas, and adjacent uses, especially residential uses.

Screening of service areas.

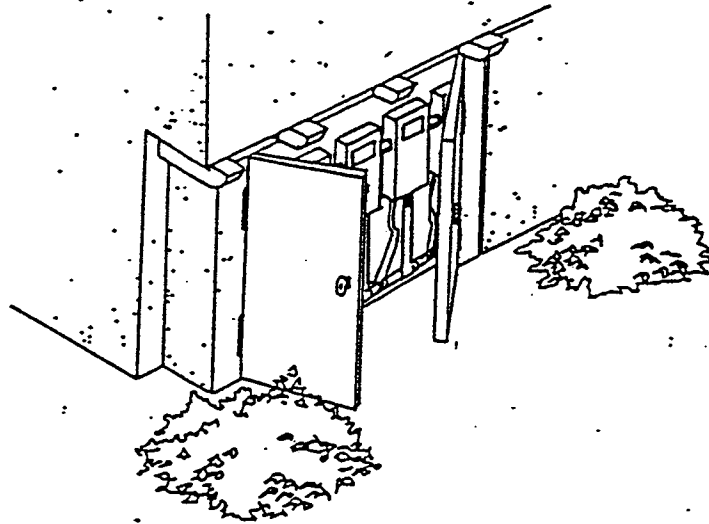


- Trash storage areas should be screened with a fence 12 inches higher than the trash receptacles they contain. Fences should be constructed of concrete block and plastered, or constructed of brick masonry to provide a strong, long lasting fence that complements the building design. Trash enclosure doors should be metal panels and colored in neutral or natural earth tones.
- Utility equipment (such as electric and gas meters, electrical panels, and junction boxes) should be located in a utility room within the structure or enclosed utility cabinets at the rear of the structure.

Screening of utility equipment.



Screening of utility equipment.



- Transformers should never be the dominant element of the front landscape area. When transformers are unavoidable in the front setback area, they should be completely screened by walls and/or thick landscaping, and should not obstruct views of tenant spaces, signs, and/or driveways.
- All mechanical equipment (such as compressors, air conditioners, pumps, heating, and ventilating equipment, generators, solar collectors, satellite dishes, communications equipment) and any other type of mechanical equipment for the building should be concealed from view of public streets and neighboring properties.
- Mechanical equipment should not be located on the roof of a structure unless the equipment can be hidden by building elements that were designed for that purpose as an integral part of the building design.

K. SIGNS. (*Refer to the Signs Section in this document*).

1. Sign Policies

- Every structure should be designed with a precise concept for adequate signing. Provisions for sign placement, sign scale in relation to building

ARCHITECTURAL DESIGN GUIDELINES

scale, and the readability of the sign should be considered in developing the overall project's signing concept.

- All signs should be highly compatible with the structure and site design relative to color, material, and placement.

2. Sign Implementation Measures

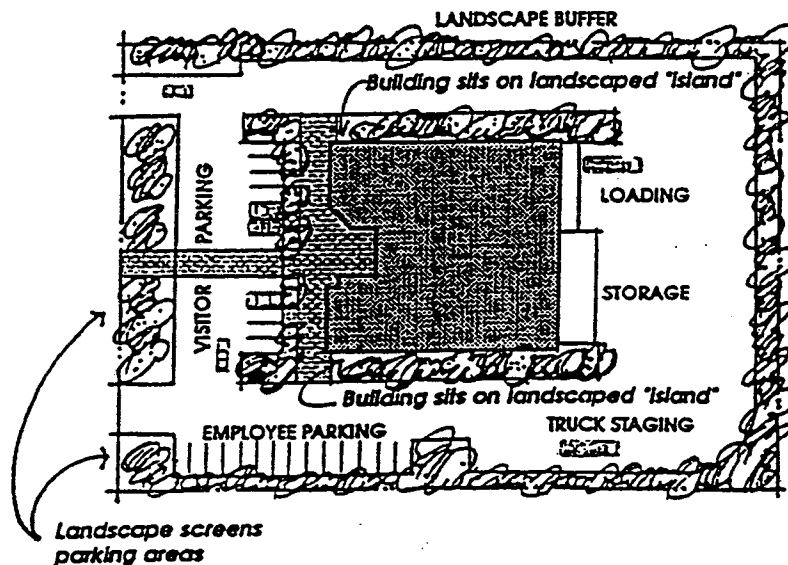
- Create sign design guidelines section pursuant to this document.

L. LANDSCAPING. *(Refer to the Landscaping Section in this document).*

1. Landscaping Policies

- Landscaped areas should be planned as an integral part of the overall project and not simply located in "left over" areas of the site or created as an "afterthought."
- Excess stormwater runoff detention basins should be incorporated into the landscaping design of a project and shall comply with the City of Corning's Land Division Standards.
- Landscaping should be used to help define outdoor spaces, soften a structure's appearance, and to screen parking, loading, storage, and equipment areas.

Landscaping.



- The use of on-site pedestrian amenities (such as benches, shelters, drinking fountains, lighting, and trash receptacles) is encouraged. (*Refer to the Pedestrian Amenities Section in this document*).

2. Landscaping Implementation Measures

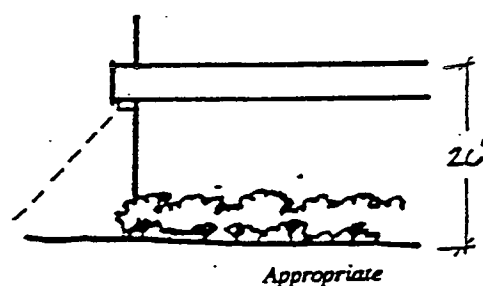
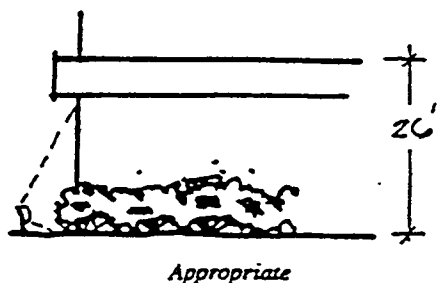
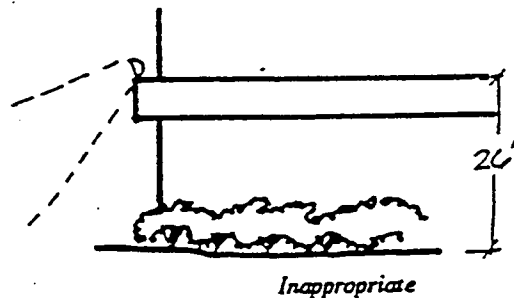
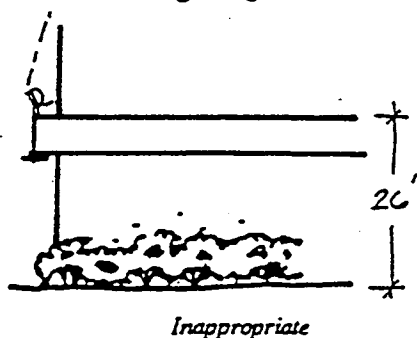
- Project landscaping shall be designed pursuant to this document and the City Land Division Standards.

M. LIGHTING. (*For other Lighting references, refer to the Parking Lot Section and Pedestrian Amenities Section in this document*).

1. Lighting Policies

- Exterior lighting should be designed to be compatible with the architectural design of the project.
- The use of exterior lighting to accent a building's architecture and facade is encouraged.

Exterior lighting.

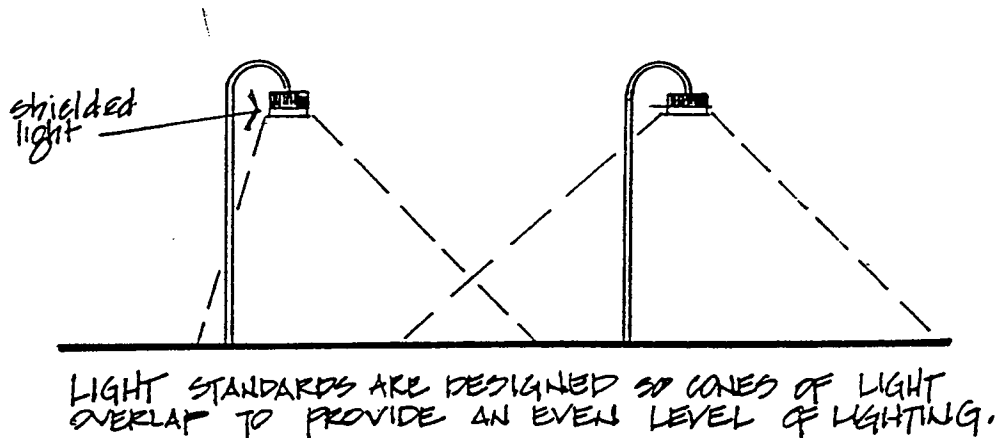


- All lighting fixtures should be properly shielded to eliminate light and glare from impacting adjacent properties, and passing vehicles or pedestrians.

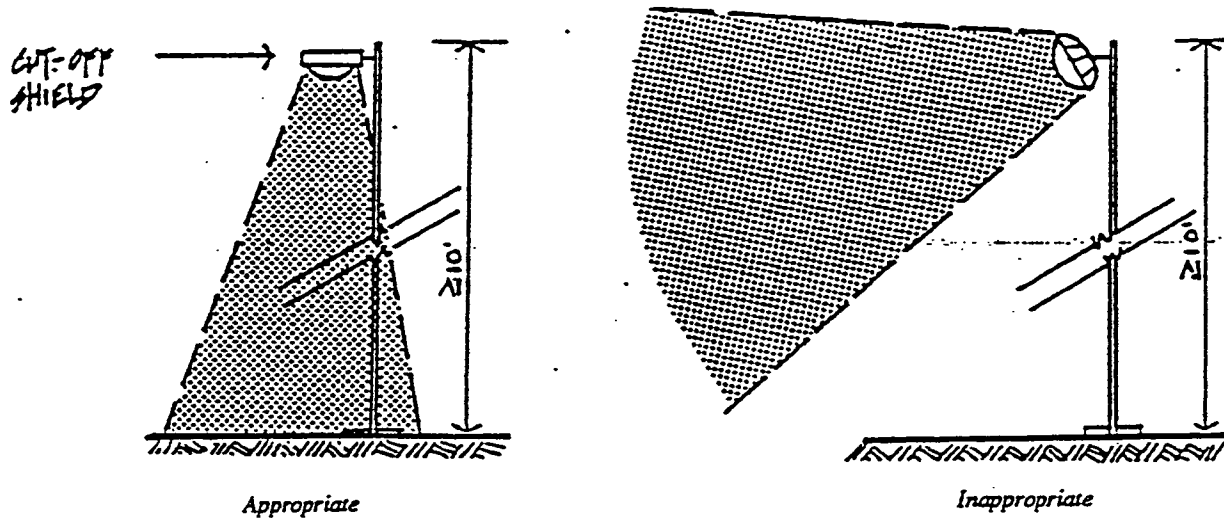
2. Lighting Implementation Measures

- Both lighting fixtures and levels of light should be subtle and not designed with the motive of having an intensely lit facade act as a sign.
- Lighting should be used to provide illumination for the security and safety of on-site areas such as parking, loading, pathways, and working areas.
- An appropriate hierarchy of lighting fixtures/structures and intensity should be considered when designing the lighting for the various elements of a project (i.e., building and site entrances, walkways, parking areas, or other areas of the site).
- As a security device, lighting should be adequate but not overly bright. Tall lights over twenty feet high should be avoided.
- To achieve the desired lighting level for parking and pedestrian areas, the use of more short, low intensity fixtures is encouraged over the use of a few tall fixtures that illuminate large areas. Cut-off shields should be used to direct light toward the appropriate areas.

Lighting.



Lighting



N. BUILDING ENTRYWAYS.

1. Building Entryways Policies

- Building entries should be protected from the elements and should create a focus or sense of entry for the building.
- Wall recesses, roof overhangs, canopies, arches, arcades, signs, and similar architectural features should be integral elements of the building's design calling attention to the importance of the entry.

2. Building Entryways Implementation Measures

- Entryway design should follow the architectural design policies in this section.
- Incorporate landscaping techniques to enhance entryway design.

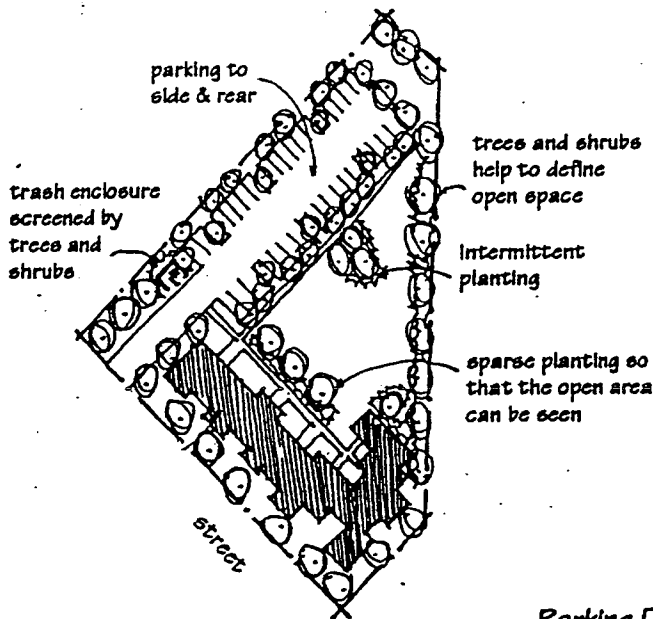
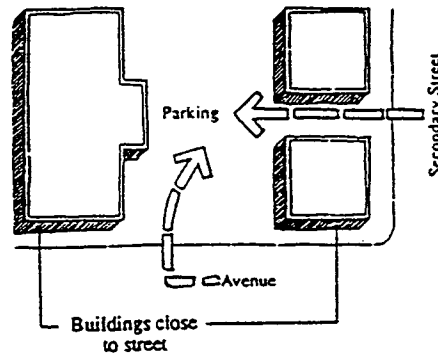
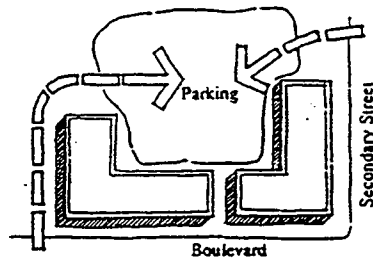
II. PARKING LOT DESIGN GUIDELINES

A. PARKING LOT LOCATION.

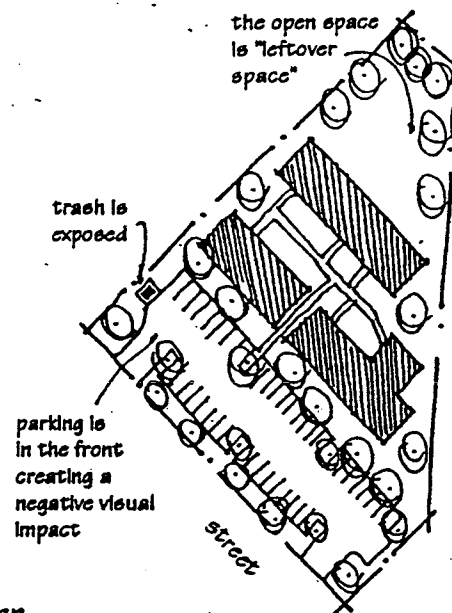
1. Location Policies

- Parking areas should, if possible, be located on the sides and behind buildings with easy access from the street.
- Parking lots should be accessed from commercially developed streets and off side streets or alleys if they have sufficient width and improvement.

Access from arterial and secondary streets.



recommended



not recommended

Parking Design

B. PARKING LOT ACCESS AND ENTRYWAYS.

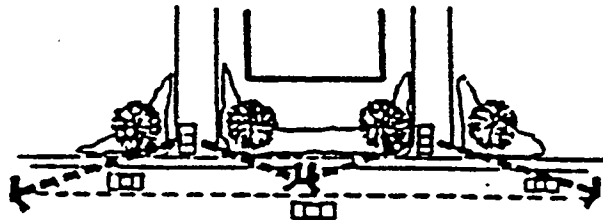
1. Access And Entryways Policies

- Primary project entryways should be designed as special statements reflective of the character of the project. The goal should be to establish a distinctive and inviting image for the project.

2. Access And Entryway Implementation Measures

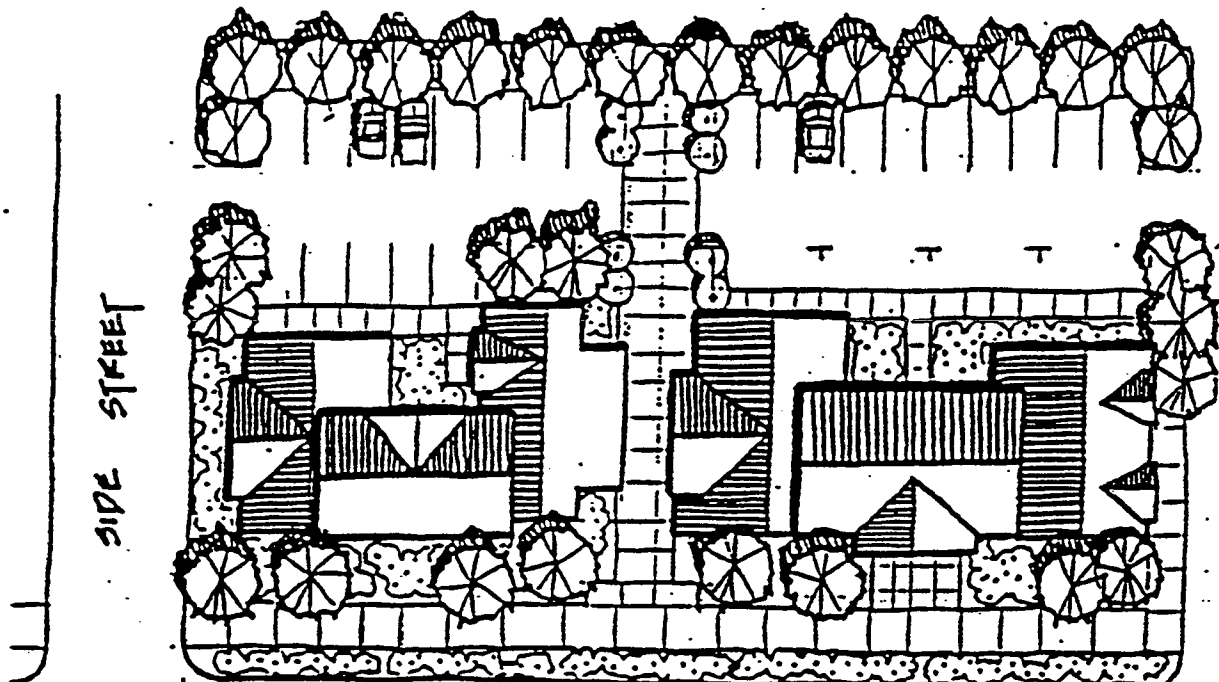
- Entrances should be designed and located so that drivers have ample time to see and use them as they approach the site. Adequate sight distance should be provided at exits for drivers re-entering traffic.

Provide adequate sight distance for drivers.



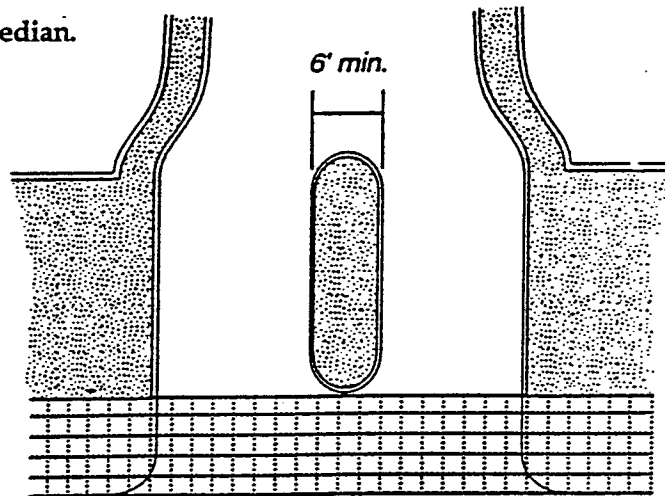
- Locate access drives off of side streets or alleys if they have sufficient width and improvement.

Location of access drives.



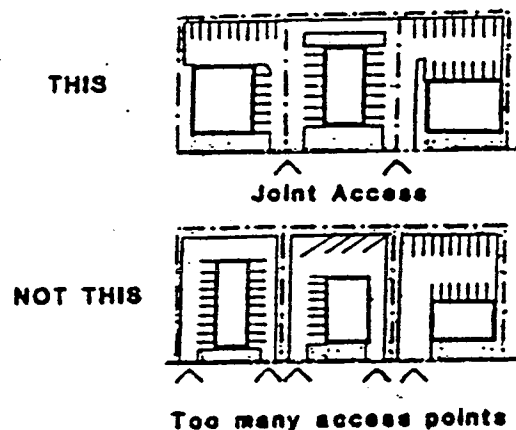
- Parking access points, whether located on front or side streets, should be located as far as possible from street intersections so that adequate vehicle stacking room is provided. The number of vehicular access points should be strictly limited to the minimum amount necessary to provide adequate circulation.
- Entry drives for projects with 200 or more parking spaces should include a minimum six-foot wide landscaped median to separate incoming and outgoing traffic.

Six foot wide median.



- Shared access and parking between adjacent businesses and/or developments is encouraged.

Joint access.



- Textured paving, flowering accents, low walls, shrubs, and the use of specimen trees, 48-inch box or larger, should be used to generate visual interest at entry points to commercial centers, business parks, and commercial/light industrial mixed-uses.

C. PARKING LOT LAYOUT AND CIRCULATION.

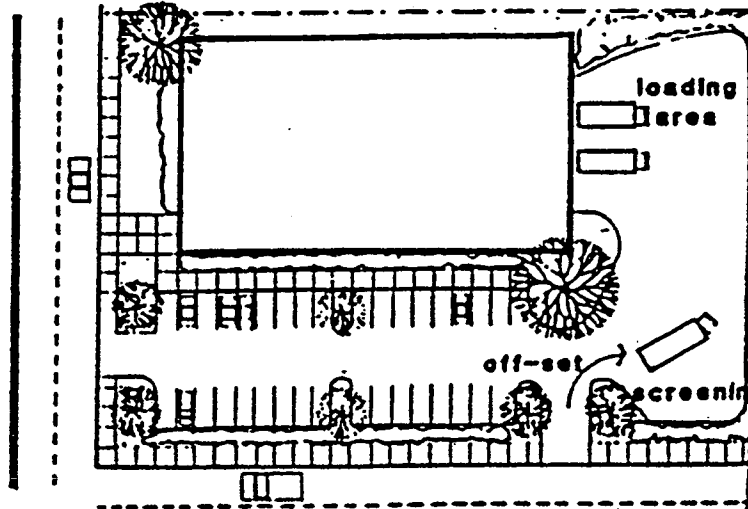
1. Layout And Circulation Policies

- Parking lot layout and circulation patterns should be designed to minimize layout confusion, be easily accessible from both the street and building, and use landscaping to reduce the climatic impacts of large paved areas.

2. Layout And Circulation Implementation Measures

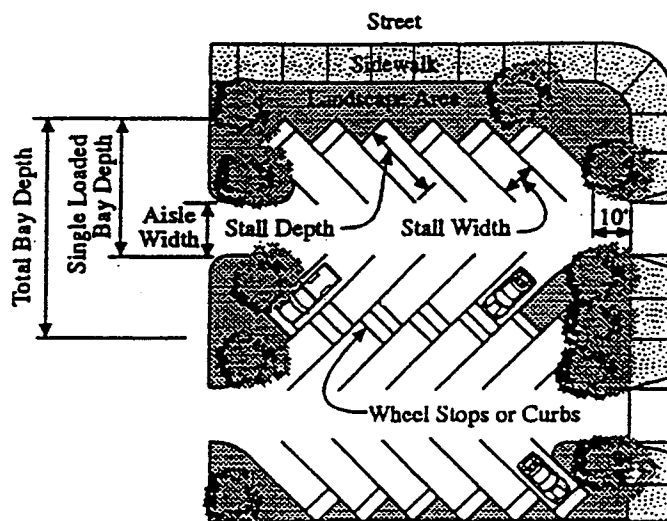
- Use a hierarchy of circulation: major access drives with no parking, major circulation drives with limited parking, and aisles for direct access to parking.
- The number of vehicular access points should be strictly limited to the minimum amount necessary to provide adequate circulation.
- Loading activity should not interfere with other site circulation patterns.

Loading activity.



- Parking layout design should provide ample stall and aisle widths and adequate turning radii.

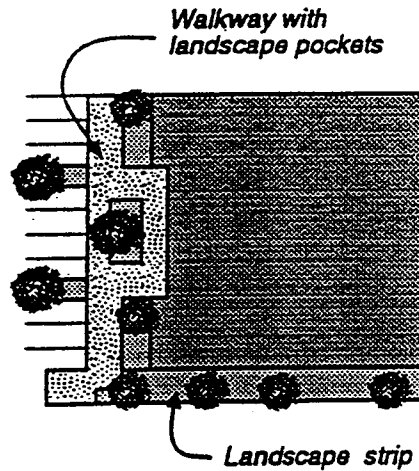
Parking layout design.



- Building entries should be clearly visible from the parking area and should be kept clear of parking.
- Include landscaping that accents the importance of the driveways from the street and frames the major circulation aisles.
- Use wheel stops wherever needed in order to prevent automobiles from parking on dirt areas or landscaping. Wheel stops should be placed approximately four feet back from the edge of landscaping to allow for bumper overhang.
- Parking areas should be separated from structures by a raised walkway at least four feet wide and landscaped strip at least two feet wide. The placement of parking aisles or spaces directly abutting a structure is discouraged.

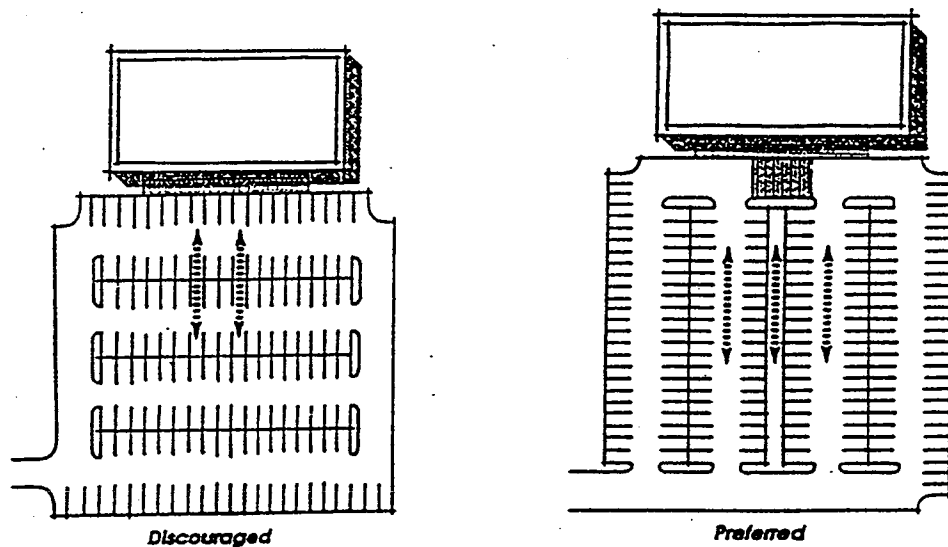
PARKING LOT DESIGN GUIDELINES

Use raised walkway to separate parking areas.



- Parking lots should be designed so that pedestrians walk parallel to moving vehicles. This minimizes the need for pedestrians to cross parking aisles and landscape areas.

Pedestrians walk parallel to vehicles.



- Where parking lots accommodate over 100 vehicles, they should be broken up into segments or modules of less than 50 spaces each by means of intervening landscaping, access driveways, or structures to avoid large unbroken expanses of paved area.

D. PARKING LOT SCREENING. *(For Screening references, refer to the Landscape Section in this document).*

1. Screening Policies

- Parking and circulation areas should be screened from public streets.
- Loading and shipping facilities should be screened from public view.

2. Screening Implementation Measures

- Parking areas shall be screened from public streets by combinations of low walls, berms, and plant materials. The height of the screen shall not cause sight distance obstructions at entrances or along pedestrian ways.

Parking lot screening.



Parking lot screening.



E. PARKING LOT LANDSCAPING.

1. Landscaping Policies

- Landscaping should be used to define areas such as entrances to buildings and parking lots, define the edges of various land uses, provide transition between neighboring properties (buffering), and provide screening for outdoor storage, loading and equipment areas.
- Include landscaping that accents the importance of the driveways from the street, frames the major circulation aisles, and highlights pedestrian pathways.

2. Landscaping Implementation Measures

- Establish parking lot landscaping pursuant to the Landscaping Guidelines and Landscaping Standards established in this document.

F. PARKING LOT LIGHTING. *(Refer to the Pedestrian Amenities in this document).*

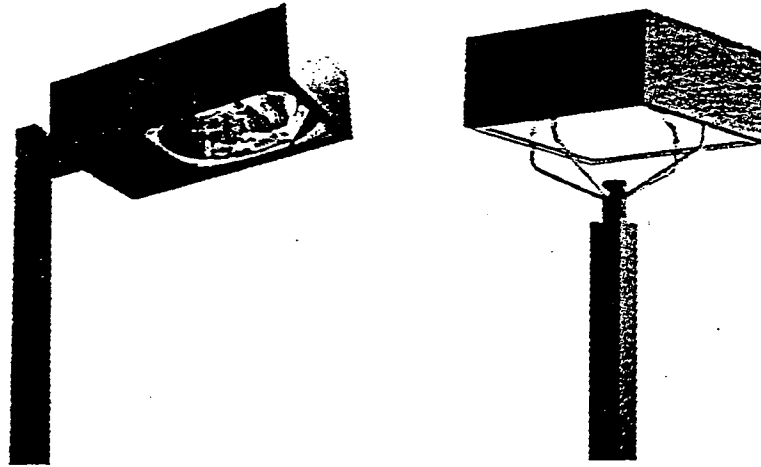
1. Lighting Policies

- Lighting areas shall have lighting capable of providing adequate illumination for security and safety. Lighting standards shall be energy efficient and in scale with the height and use of on-site structures.
- A well orchestrated lighting program will reinforce the sense of community and architectural theme.

2. Lighting Implementation Measures

- Lighting that uses a “zero cut-off” shield, such as the “shoe box” style fixtures, are appropriate for most parking areas.

Parking lot lighting.



- The maximum height of parking area lights should be twenty feet, unless the parking lot has been designed specifically for accommodating 18 wheel trucks.
- Light standards and fixtures shall be painted one uniform brown, dark brown, or near black color. These neutral tones tend not to conflict with building color themes.

G. PARKING LOT - PEDESTRIAN CONNECTIONS AND WALKWAYS.

1. Pedestrian Connections And Walkways Policies

- Pedestrian walkways from the parking areas to buildings shall be integrated within the overall site design.
- Pedestrian and bicycle access should be designed to physically and visually link the site to the public sidewalk and bikeway system as an extension of the project's circulation system and to separate pedestrian and vehicular traffic. Also, provision should be made for direct pedestrian links between the project and adjoining projects and residential areas whenever appropriate.

2. Pedestrian Connections And Walkway Implementation Measures

- Pedestrian connections to the public sidewalk should be located at intervals of one connection for each 200 lineal feet (or fraction thereof depending on lot size).

- Walkway layout should anticipate pedestrians' desired movements and should provide direct routes whenever feasible.
- Walkways should be well-marked with low-level directional signs, lighting, distinctive paving, and landscaping. Arcades or similar features should be used to cover walkways and provide clear identification of facilities.

III. LANDSCAPING STANDARDS.

A. PURPOSE

The purpose of this chapter is to achieve the following:

- Enhance the aesthetic appearance of all development throughout the City by providing standards related to the quality, and functional aspects of landscaping;
- Increase compatibility between abutting land uses and public rights-of-way by providing landscape screening and buffers;
- Provide for the conservation of water resources through the efficient use of irrigation, appropriate plant materials, and regular maintenance of landscaped areas; and
- Protect public health, safety, and welfare by preserving and enhancing the positive visual experience of the built environment, providing appropriate transition between different land uses, and enhancing pedestrian and vehicular traffic and safety.

B. APPLICABILITY

1. All projects shall provide and maintain landscaping in compliance with the provisions of this Chapter. Standards for the provision of landscaping in conjunction with a development project are located in the City's Land Division Standards and the Design Guidelines in this document.
2. Landscaping shall not be installed until the applicant receives approval of the final landscape plan. Any changes to the approved landscape plans that affect the character or quantity of the plan material or irrigation system design are required to be resubmitted for approval prior to installation.

C. LANDSCAPE PLAN REQUIREMENTS

1. Conceptual Landscape Plan

A Conceptual Landscape Plan shall be submitted as part of any application for a land use entitlement or subdivision, for new development or major redevelopment.

2. Final Landscape Package

Following approval of the land use entitlement, a Final Landscape package will be submitted as part of the application for a Building Permit.

3. Content

Conceptual Landscape Plans and Final Landscape Packages shall contain all information specified in the Instructions for Preparing Landscape Plan

4. Review and Approval

After initial application review the City shall review each Conceptual Landscape Plan and Final Landscape Package to verify its compliance with the provisions of this Chapter. The Planning Commission may approve the submittal in compliance with this Section, or may disapprove or require changes to a submittal that is not in compliance.

D. LANDSCAPE INSTALLATION REQUIREMENTS

1. General Requirements

a) Setbacks

All setback areas required by these Regulations shall be landscaped, except where a required setback is occupied by a sidewalk or driveway or where a required setback is screened from public view and it is determined by the Planning Commission that landscaping is not necessary to fulfill the purposes of this Section.

b) Unused Areas

All areas of a building site not intended for a specific use or purpose shall be landscaped unless it is determined by the Planning Commission that landscaping is not necessary to fulfill the purposes of this Section.

c) Parking Areas

Required parking lot landscaping, including perimeter screening, shall not be included to meet the landscaped open space requirements.

2. Specific Zone Landscaping Requirements

Proposed development and new land uses shall be designed, constructed and maintained with landscaped open space areas of the minimum size, shown below, based on the zoning designation applicable to the site. Additional landscaping may be required to provide visual relief or contrast, or to screen incompatible or obtrusive features.

<i>Zoning</i>	<i>Minimum % Required to be Landscaped</i>
C-3 (Commercial)	10%
SP-MU (Specific Plan Mixed Use)	15%
CH (Freeway Oriented Comm)	5%

3. Plant Material Limitations

Plant materials shall be selected and installed to comply with the following requirements:

- Plant materials shall be provided in the following minimum percentages, and calculations documenting the required mix of plant materials shall be shown on the landscaped plan.

Required Mix of Plant Materials

<i>Plant Material</i>	<i>Required % of Mix</i>
Trees	
24-inch box	20%
15-gallon	80%
Shrubs	
5-gallon	60%
1-gallon (herbaceous only)	40%
Groundcover	
Coverage within 2 years	100%

- Plant materials shall emphasize drought-tolerant and/or native species;
 - * At least 90 percent of the plants selected in non-turf areas shall be suited to the Sacramento Valley climate and require minimal water once established.

- * Up to 10 percent of the plant material may be of a less drought-tolerant variety as long as they are grouped together and can be irrigated separately.
- All landscape plantings shall be of sufficient size and intensity so that a finished appearance and plant maturity can be attained in a reasonable time.
- Trees and shrubs shall be planted so that at maturity they do not interfere with service lines and sight distance areas.
- Trees and shrubs shall be planted and maintained in a manner that protects the basic rights of adjacent property owners, particularly the right to solar access.
- Trees planted near public sidewalks or curbs shall be of a species and installed in a manner which prevents physical damage to sidewalks, curbs, gutters and other public improvements.
- Ground may consist of live plant material and/or gravel, colored rock, and similar materials shall be used in all non-turf areas as a mulch to control weeds and conserve/retain water until a living ground cover has achieved full coverage.
- No turf shall be allowed in median strips, or in areas less than six feet wide.

E. IRRIGATION

All required landscaped areas shall be supported by a permanent, automatic irrigation system coordinated to meet the needs of various planting areas and in compliance with the following:

1. Equipment

a) Anti-drain valves

Integral, under the head, or in-line anti-drain valves shall be installed as needed to prevent low head drainage.

b) Automatic control valves

Different hydrozones (watering requirements are different for different plant species) shall be irrigated by separate valves.

c) Controllers

Automatic control systems shall be required for all irrigation systems and must be able to accommodate all aspects of the design. Automatic controllers shall be digital, have multiple programs, multiple cycles, and have sensor input capabilities.

d) Rain sensor devices

Rain sensing override devices shall be required where appropriate, such as turf areas.

e) Soil moisture sensors

Soil moisture sensing devices shall be considered where appropriate, such as turf areas.

f) Sprinkler heads

Sprinkler heads shall be selected for proper area coverage, application rate, operating pressure, and adjustment capability. Sprinklers shall have matched precipitation/ application rates within each control valve circuit.

g) Water meters

Separate landscape water meters or sub-meters shall be installed for all projects where service includes both landscape and non-landscape. Landscape sub-meters, if used, shall be purchased, installed and maintained by the owner.

h) Drip irrigation

Drip irrigation systems may be approved if commercial or agricultural grade materials are used. All components shall be installed below the soil except for emitters.

2. Runoff and Overspray

All irrigation systems shall be designed to avoid runoff, low head drainage, overspray or other similar conditions where water flows or drifts onto adjacent property, non-irrigated areas, walks, roadways or structures.

F. INSTALLATION

All landscape materials and support equipment shown in an approved Final Landscape Package shall be installed on the site as follows:

1. Building Construction Projects

Required landscape shall be installed and verified by the Planning Commission prior to issuance of Certificate of Occupancy.

2. Installation

All landscape materials and irrigation equipment shall be installed in compliance with the approved plans and specifications.

3. Delayed Installation

In the event that seasonal conditions prevent the effective installation of required landscape prior to occupancy, a conditional certificate of occupancy and/or a performance bond in the amount equal to the value of the landscape materials may be permitted, subject to the approval of the Planning Commission.

4. Changes To Design

Any changes to an approval of the Final Landscape Package must be approved by the City Staff.

G. INSTALLATION AND MAINTENANCE OF LANDSCAPE

Landscaping shall be installed and maintained consistent with the approved Final Landscape Package and in a manner as to fully attain the objectives including, but not limited to, tree canopy and shading, landscape screening and buffering. Maintenance of approved landscape installations shall consist of regular watering, pruning, fertilizing, clearing of debris and weeds, the removal and replacement of dead plants, and the repair and replacement of irrigation systems and integrated architectural features.

H. LANDSCAPING STANDARDS POLICIES AND IMPLEMENTATION MEASURES.

1. Landscaping Standards Policies

- The Landscaping Standards shall be followed for all proposed projects in the Specific Plan Area. The Landscaping Standards will be utilized in conjunction with the Design Guidelines in order to meet all the suggestions and requirements established in this document.

2. Landscaping Standards Implementation Measures

- All landscaping shall meet the Landscape Plan Requirements and Installation Requirements set forth in the Landscaping Standards established in this document.
- All landscaping shall meet the requirements of the Landscaping Standards including: general design standards, plant material limitations, irrigation, installation, installation and maintenance, tree preservation measures, and the Landscape Design Guidelines.
- Landscaping shall be planned as an integral part of the overall project design and not simply located in excess space after parking areas and structures have been planned.
- Landscape planting shall be provided for all adjacent public rights-of-way, including parkway planter strips, not improved with street improvements.
- Street trees, as specified by the City of Corning, shall be installed.
- Landscaping shall be provided throughout parking areas.
- Landscaping adjacent to driveways and parking shall be protected from vehicle damage through the provision of minimum six-inch high concrete curbs or other types of barriers as approved by the city.
- All landscaped areas shall be properly irrigated in compliance with the Irrigation Section below.

IV. LANDSCAPING DESIGN GUIDELINES

A. GENERAL LANDSCAPING.

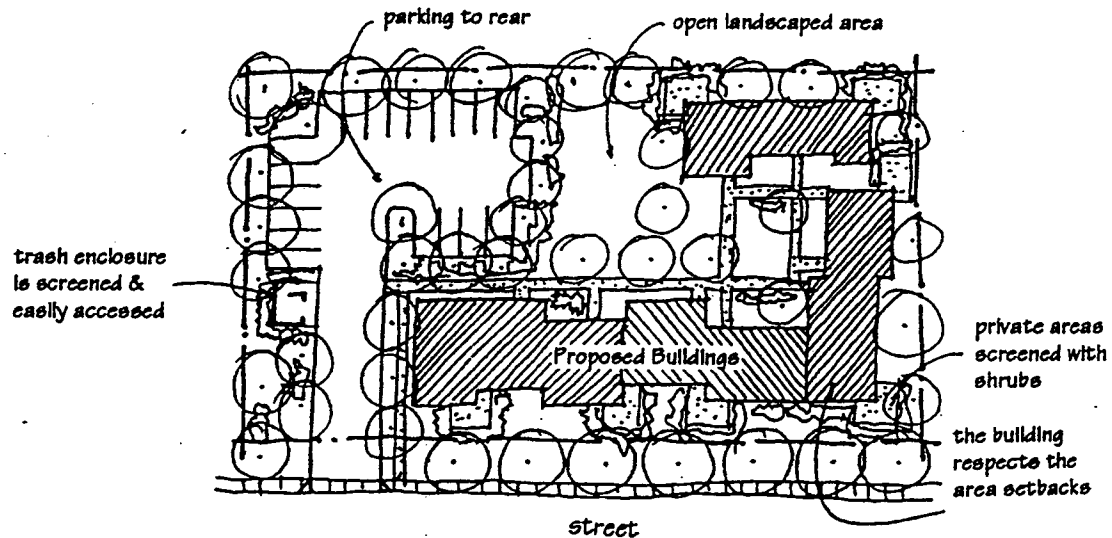
1. General Landscaping Policies

- All landscaping shall be in compliance with the Landscaping Standards established in this document (*refer to the Landscaping Standards in this document*).
- All site development shall include landscaping. Landscape designs should accent the overall design theme through the use of arbors, trellises, planter boxes, and so on that are appropriate to the particular architectural theme of the project. Landscaping shall not be located in excess space after parking areas and structures have been planned.
- Detention basins should be incorporated into the overall landscaping design of a proposed project.
- Proposed landscaping should relate to the scale of the structures on the site and should be compatible with the character and scale of adjacent landscaping that complies with the provisions of these guidelines and Landscaping Standards.
- Landscaping should enhance the aesthetic appearance of development and increase compatibility between abutting land uses and public rights-of-way by providing landscape screening and buffers.
- Landscaping should provide for the conservation of water resources through the efficient use of irrigation, appropriate plant materials, and regular maintenance of landscaped areas.
- Landscaping should protect public health safety, and welfare by preserving and enhancing the positive visual experience of the built environment, providing appropriate transition between different land uses, preserving neighborhood character, and enhancing pedestrian vehicular traffic and safety.

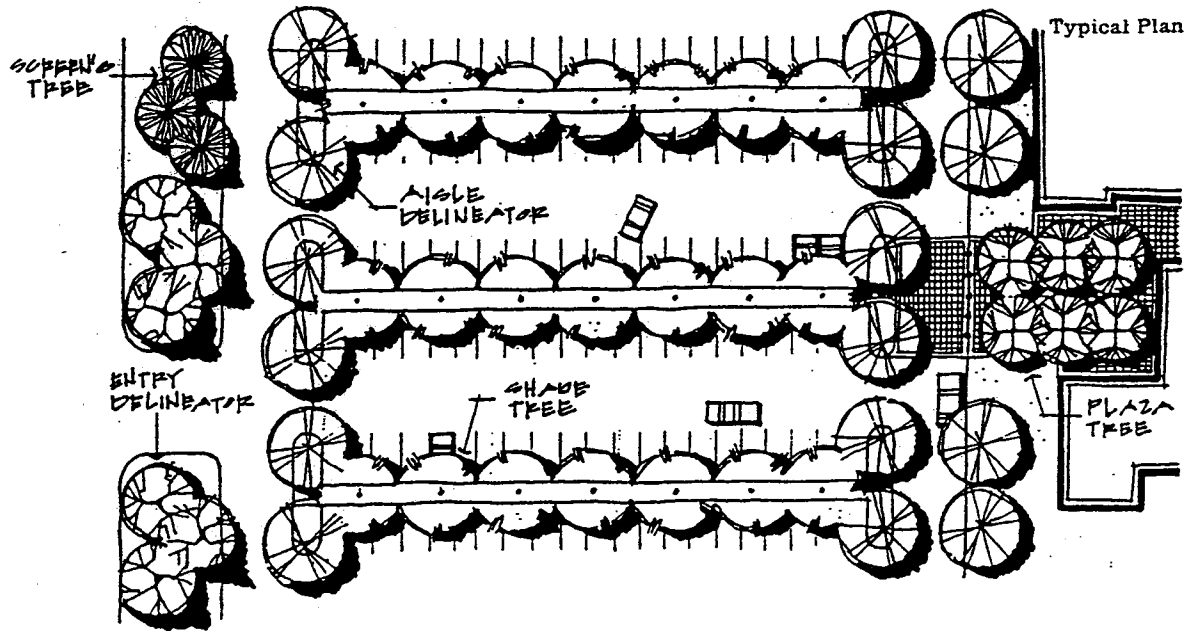
2. General Landscaping Implementation Measures

- A Conceptual Landscape Plan or Landscape Design shall be submitted as part of any application for a land use entitlement or subdivision, for new development or major redevelopment.

Landscape Design.

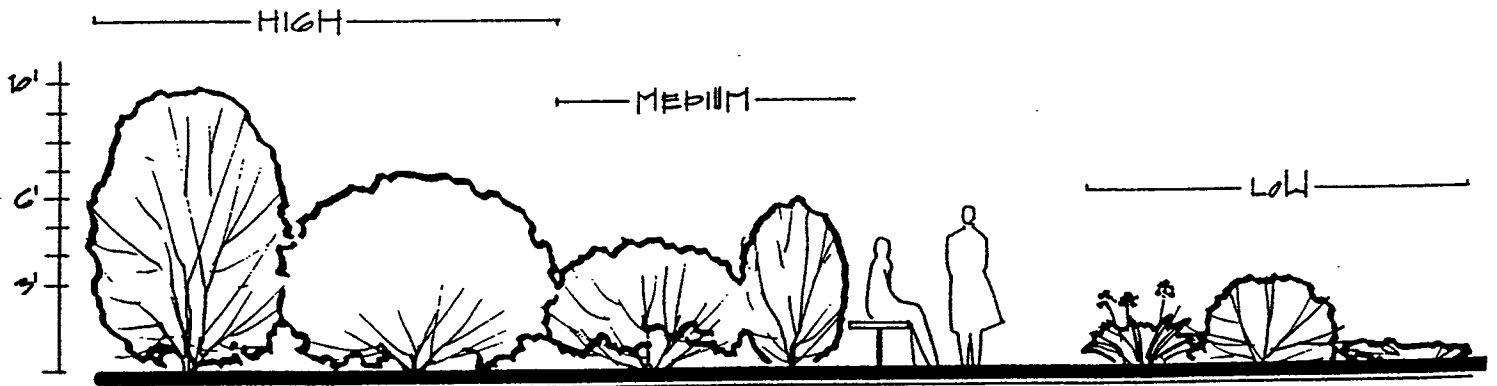


Conceptual plan for parking lot design.



- Landscape designs should generally use a three tier concept:
 - * Low ground covers; medium height shrubs; and trees.

General shrub forms and sizes.



How various plant forms and sizes are incorporated into building design.



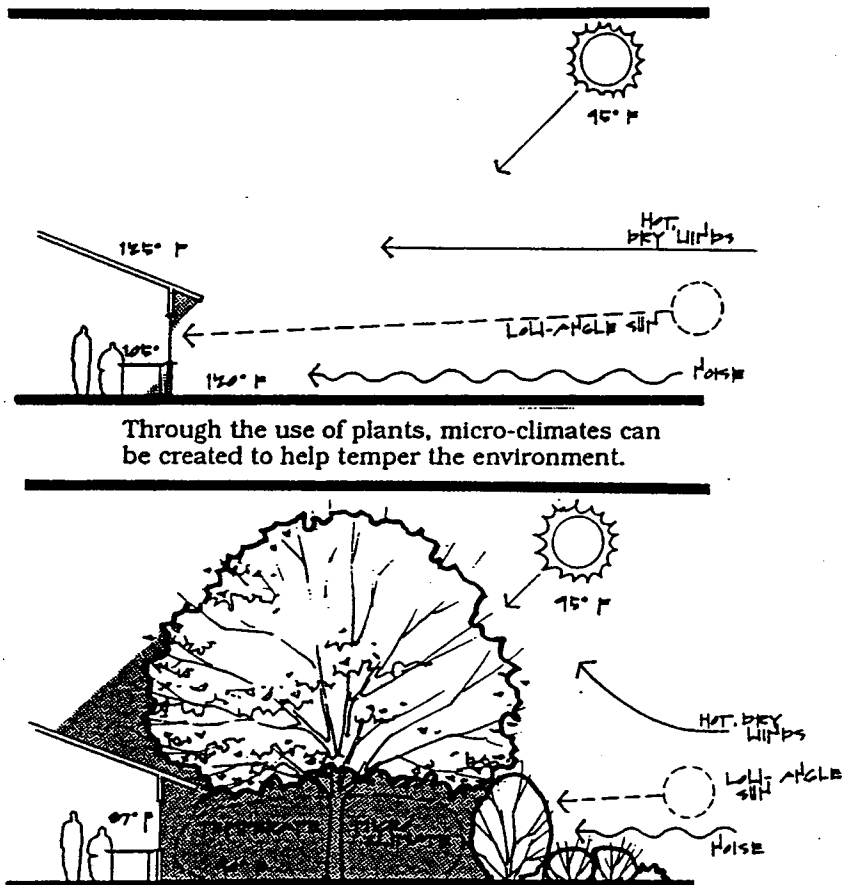
- The following are common landscape design concepts that can be used throughout the project site to increase the visual and functional quality of the development:
 - * Plant materials should be compatible in size, shape, and color with native or neighborhood vegetation.
 - * Landscape materials should be selected whose ultimate size and shape are appropriate for their location and functions.
 - * Accent or specimen trees, should be used in informal groupings or rows at major focal points, such as project entries and pedestrian plazas.
 - * Use of flowering vines on walls and arbors.
 - * Use of pots, vases, wall or raised planters for accents in locations which otherwise would be difficult to provide in ground landscaping.
 - * Use of trees to create canopy and shade, especially in areas of high pedestrian traffic.

- * Use of distinctive plants and colors as focal points.
- * Use of berms, plantings, and low walls to screen parking areas while allowing views to larger structures beyond.
- * Use of dense landscaping to screen unattractive views and features, including storage areas, trash enclosures, utility structures, transformers and generators, and other project features that do not contribute to the enhancement of the surroundings (*refer to the Screening of Refuse, Storage, and Equipment Areas in the Architectural Guidelines in this document*).
- New trees should be planted so that they are separated from turf or paved surfaces by three to five feet. This will prevent over-watering of the tree, surface rooting, crown-rot, and "girdling" of the tree trunk by maintenance equipment. Some trees require more room, and must be accommodated for accordingly - consult growth habit of each individual tree type.
- If trees are to be planted in a turf area, the following criteria should be followed:
 - * Only deep-rooted tree species should be used;
 - * Any turf area around the tree should be graded so that water drains away from the tree; and
 - * Turf irrigation should be directed away from the tree. The tree should be irrigated by a combined bubbler/deep water pipe fixture.
- The spacing of trees and shrubs should be appropriate to the species used. The plant materials should be spaced so that they do not interfere with the adequate lighting of the premises or restrict access to emergency apparatus. Proper spacing should also ensure unobstructed access for vehicles and pedestrians and provide clear vision of intersections.
- Appropriate shrubbery and creeping vines should be provided along all walls and fences adjoining public rights-of-way.

LANDSCAPING DESIGN GUIDELINES

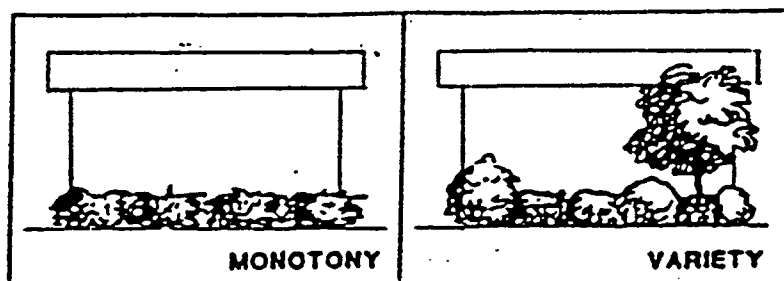
- Deciduous trees should be provided along south and west building exposures to provide climate control during summer and winter months.

Using plant materials for climate control.



- Landscaping around the entire base of buildings is recommended to soften the edges of the structure. Planting materials should incorporate a variety of plants, forms, and sizes to avoid monotony.

Monotony and variety.



B. LANDSCAPING ALONG STREETS.**1. Landscaping Along Streets Policies**

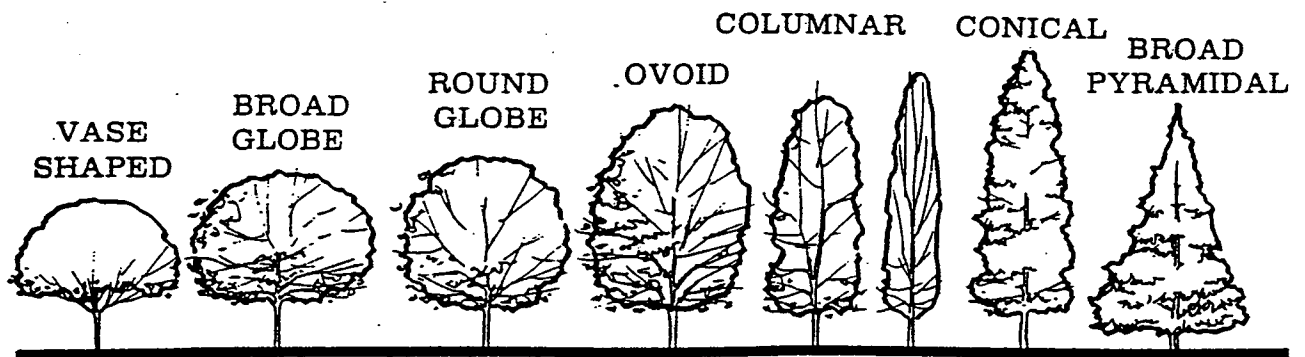
- Whenever landscaping is required along street frontages, the project's on-site landscaping should be designed in coordination with the roadway landscaping to provide an integrated design concept. To accomplish this, a planting scheme which emphasizes maximum harmony but allows some diversity is recommended.

2. Landscaping Along Streets Implementation Measures

- Improvements in the public right-of-way should include sidewalks and/or bicycle-pedestrian ways, trees, shrubs, and ground cover.
- Plant material should conform to the following spacing criteria:
 - * The center of the first tree or large shrub should be located a minimum of 25 feet away from curb at all intersections and driveways to maintain good visibility of on-coming traffic.
 - * Landscaping shall not exceed a height of 36 inches near intersections and project entries so as not to obstruct sight distance areas.
 - * A minimum of 15 feet between center of trees and large shrubs to light standards and fire hydrants.
 - * A minimum of 10 feet between center of trees and large shrubs and edge of driveway.
- Create diversity by use of deciduous and evergreen trees in a balanced, alternation combination. Evergreens should provide visual screening and serve as a backdrop for accent trees.
- Landscaping should provide organization of dominant, specimen, and accent trees. Use of dominant trees should be large enough to be in scale with the street, with round headed form is recommended.
- Specimen trees, should generally have a vertical form and be planted in groups or clusters.

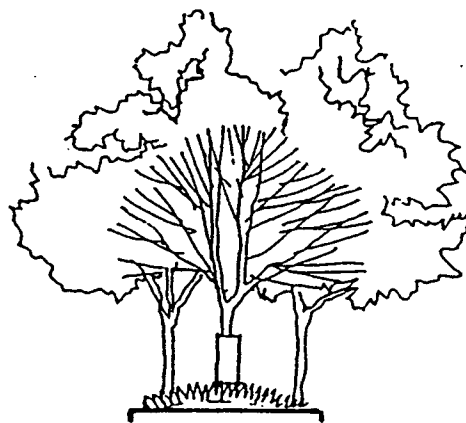
LANDSCAPING DESIGN GUIDELINES

Tree form variations.



- Dominant trees must be able to be pruned to a minimum of 14 feet to the first branch for vehicular access and sign visibility.
- Tree placement is to be coordinated with street lighting and utilities.
- Traffic medians should be planted with a combination of trees and shrubs where the planter width is 14 feet.

Trees in traffic median.



center median



center median

- Select shrubs that will not outgrow designated space or require unnecessary maintenance.
- For public safety, use large shrubs adjacent to walkways only where there is a clear functional need (i.e. screening, etc.).

- Decorative cobble, crushed rock, permanent wood chips or gravel should not be used extensively as a ground cover material. Cobbles (2"-6") may be used to stabilize drainage swales and channels.
- The use of earth berms for screening should be kept to a minimum.
- The use of extensive lawns for landscaping should be kept to a minimum.

C. PROJECT ENTRY LANDSCAPING.

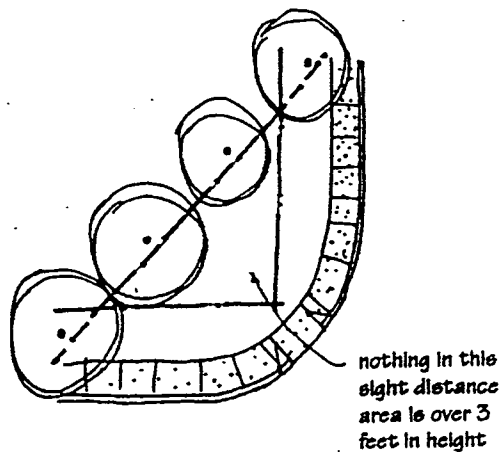
1. Project Entry Landscaping Policies

- In order to define and accent major entrances into the City, intersections should display landscaping, such as, trees, shrubs, and flowers in ornamental planting beds.
- Project entries should be designed as special statements reflective of the character and scale of the project to establish identity for tenants, visitors, and patrons. Flowering accent planting and specimen trees should be used to reinforce the entry statement.

2. Project Entry Landscaping Implementation Measures

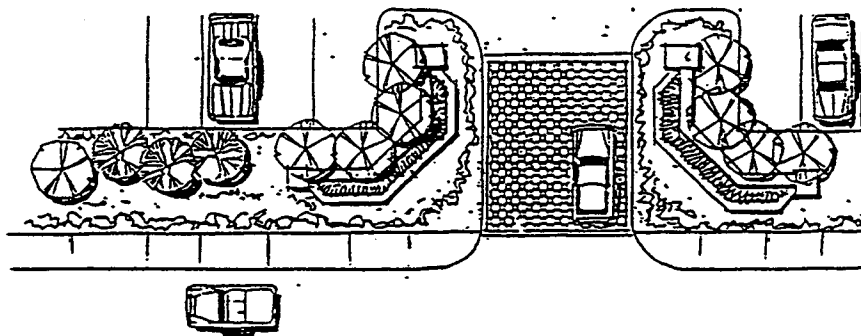
- Plant material should conform to the following spacing criteria at entry and driveways (also listed in the Landscaping Along Streets section above).
 - * The center of the first tree or large shrub should be located a minimum of 25 feet away from curb at all intersections and driveways to maintain good visibility of on-coming traffic.
 - * A minimum of 15 feet between center of trees and large shrubs to light standards and fire hydrants; and
 - * A minimum of 10 feet between center of trees and large shrubs and edge of driveway.
 - * Landscaping shall not exceed a height of 36 inches near intersections and entryways so as not to obstruct sight distance areas.

Sight distance area.



- Project identification signs are encouraged at entry drives. These signs should be incorporated into the overall landscape design and architectural theme of the project (*refer to the Sign Guidelines in this document*).
- Project entries should give a feeling of transition between the public sidewalk and the entry driveway.
 - * Entrances and exits into parking lots should be landscaped with trees, shrubs, and flowers.
 - * Textured paving treatments, including interlocking pavers and stamped concrete, should be used at project entries and pedestrian walkways.

Enhanced project entries.



- Project entries should be designed with public safety in mind, for example, use of paving or hardscape treatments should not become slippery when wet.
- Paving and hardscape treatments should not be so rough or irregular as to make walking difficult, discourage the use of baby strollers or wheelchairs, or conflict with adjacent uses.

D. PARKING LOT LANDSCAPING. *(Refer to Parking Lot Design Guidelines in this document for additional parking lot design criteria).*

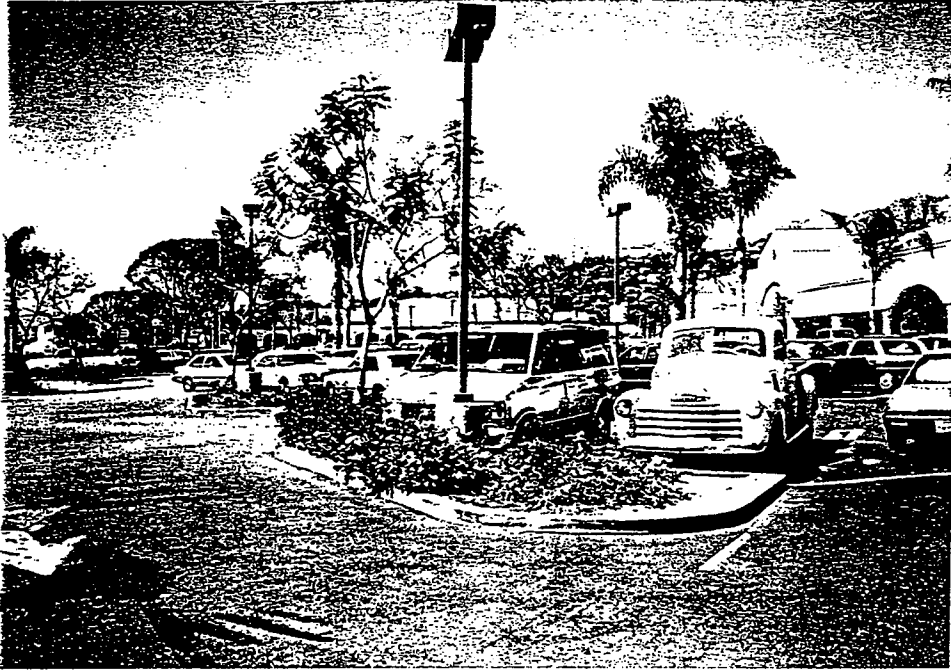
1. Parking Lot Landscaping Policies

- Parking lots should not be the dominant visual elements of the site, the visual and climatic impacts of large paved areas can be minimized by the use of landscaping.

2. Parking Lot Landscaping Implementation Measures

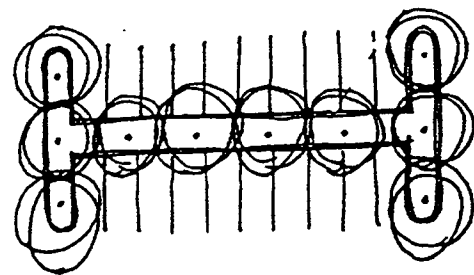
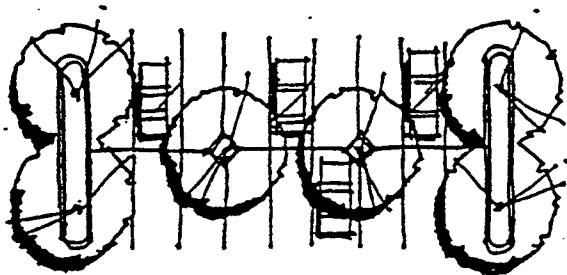
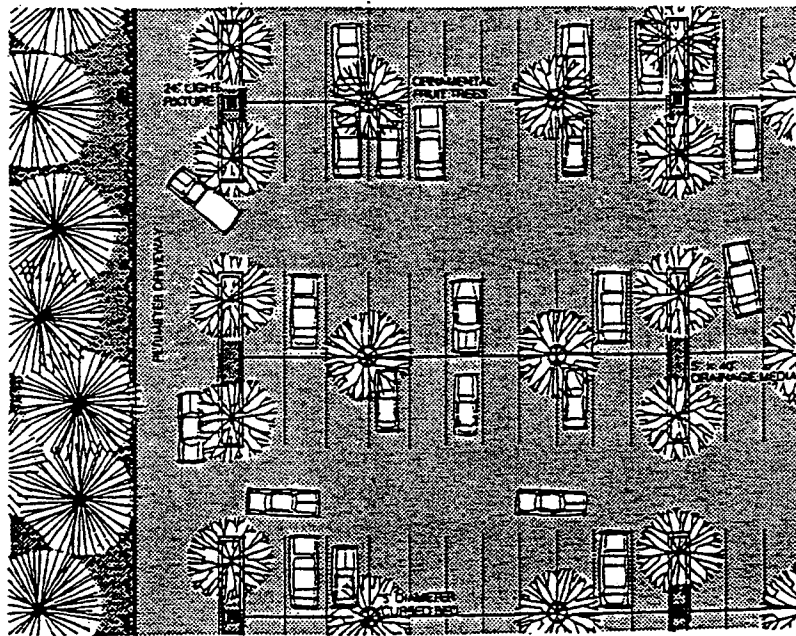
- Use trees and shrubs to provide screening between parking lots and streets *(refer to Parking Lot Screening in the Parking Lot Design Guidelines in this document).*
- Plant material in parking lots should be hardy, fast growing, and durable.
- All portions of a parking lot that are not used for parking or maneuvering should be landscaped.
- Provide landscaped islands within parking areas as a means to break up the visual dominance of parked vehicles.

Landscaped islands.



- Parking lot trees shall be evenly distributed throughout the parking area to create a broad canopy of shade. At maturity, the parking lot trees are to shade at least 50% of the parking area.
- * Tree plantings on the interior of the parking area should be provided at an average ratio of roughly one tree per four spaces.
- * Parking lot planter width for shade trees generally requires a minimum of 6 to 8 feet from inside curb to inside curb.
- * In order to be considered within the parking lots, trees must be located in planters that are bounded on at least 3 sides by parking area paving. Only trees located in landscaped "fingers" or "islands" will count towards parking lot landscaping.

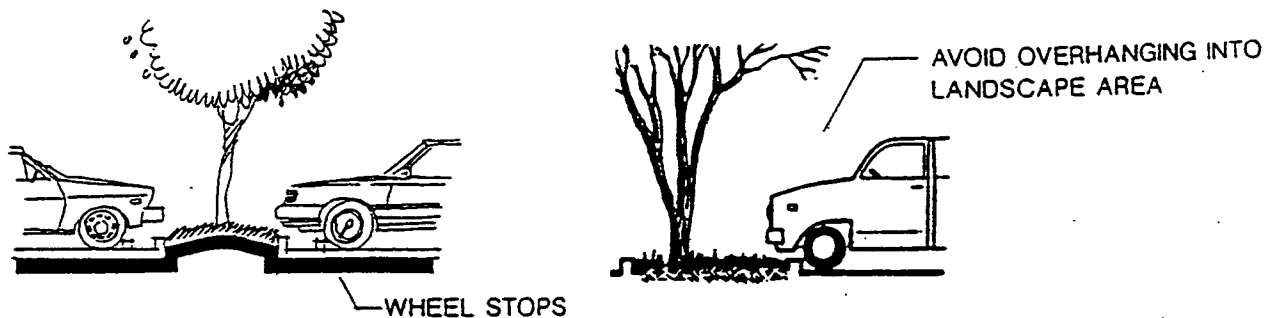
Parking lot planter configurations.



LANDSCAPING DESIGN GUIDELINES

- Vegetation in landscaped islands must be adequately protected from vehicle damage by such methods as wheel stops.

Wheel stops.



- At maturity, parking lot trees should be able to be trimmed at least 10 feet above ground and shrubs should be maintained at a maximum height of three feet to provide visibility into the site.
- A landscaped strip at least two feet wide, should be provided between the parking areas and the building.
- Where appropriate, a joint landscaped perimeter parking screen should be constructed with adjoining properties.

E. SIGN LANDSCAPING. *(Refer to the Sign Guidelines in this document for additional design criteria).*

1. Sign Landscaping Policies

- All sign walls, or signs originating at the ground level, should have landscaping.

2. Sign Landscaping Implementation Measures

- Sign landscaping should enhance the overall landscaping theme of the site. Landscaping should incorporate plant materials, such as low lying shrubs and flowers.

F. WALLS AND FENCES LANDSCAPING. *(Refer to the Walls and Fences Design Guidelines in this document for additional design criteria).*

1. Walls and Fences Landscaping Policies

- All walls and fences shall have landscaping that reflects the project landscaping and street landscaping design.

2. Walls and Fences Landscaping Implementation Measures

- The horizontal mass of continuous walls should be softened by landscape planting and vines. Where long lengths of fence or wall surfaces are required, periodic articulation or change of material should be used to prevent monotony. Landscape pockets should be provided along the wall.
- Landscaping should be used as screening measures to reduce views of chain link fencing that is used on the side and rear portions of the parcel.
- For properties abutting a residential area, the solid masonry wall will provide a landscaped setback on both sides of the wall or fence:
 - * Inside the lot the landscaped setback is a minimum of 5 feet, with landscaping to reach a height of at least 8 feet; and
 - * Outside the lot wall the landscaped setback is a minimum of 5 feet. This setback could be included as part of the parkway excluding areas used for sidewalk, curb, or gutter. The portion of the landscaped setback that utilizes part of the parkway depends on the width of the parkway which can vary from 7-12 feet.

G. FREEWAY CORRIDOR LANDSCAPING. *(Refer to the Freeway Views Design Guidelines in this document for additional design criteria).*

1. Freeway Corridor Landscaping Policies

- A landscape corridor and buffer zone along Interstate 5, creates a sense of entry for the City, buffers businesses from noise, and provides views into the Specific Plan Area at appropriate points.

2. Freeway Corridor Landscaping Implementation Measures

- A 10 foot minimum landscaped setback is required along the freeway edge, or rear portion of a parcel that abuts the freeway.

- Along the freeway landscaping corridor, trees and vegetation should be spaced, along the freeway/property setback, leaving “windows” for views at appropriate points.

H. PEDESTIAN AREA LANDSCAPING. *(Refer to the Pedestrian Amenities Design Guidelines in this document for additional design criteria).*

1. Pedestrian Area Landscaping Policies

- Pedestrian areas, including plazas, are small in scale and size and are related to the slow pace of walking. Interesting shadow patterns on pavement, seasonal color and sculptural form are desirable elements in plant material selection. Protection from sun and wind are important considerations for sitting, gathering, and walking areas.

2. Pedestrian Area Landscaping Implementation Measures

- Planting for pedestrian areas could be located next to walkways, within plazas, and adjacent to other pedestrian spaces. Plantings should include smaller species of shrubs, trees, and plants to maintain an intimate human scale.
- Pedestrian area landscaping should be created and designed with the overall architectural theme and building design in mind.
- Pedestrian spaces should be enhanced by planting accents including vines, flower beds, raised planters, window boxes, and hanging pots with flowers and vines.
- Trees should generally be planted closely together. They can be grouped in various patterns including grids and formal lines.
- Low branching trees are to be avoided.
- The use of paving or hardscape treatments for pedestrian walkways, with more intricate design and textural changes are encouraged.
- Potential access problems for handicapped people must be considered. Textures and materials which create difficulties or safety hazards should be avoided.
- Use of fountains as focal points in design are desirable elements.

V. SIGN DESIGN GUIDELINES

A. GENERAL SIGNS.

1. General Sign Policies

- Signs should be designed and located to be compatible with their surroundings in terms of size, shape, color, construction materials, legibility, and illumination.
- Signs should enhance a structure's architecture and not dominate the elevation on which it is placed. Signs should be consistent with the proportions and scale of the elements within the structure's facade.
- Monument signs or sign walls are the preferred alternative for business identifications. Where several tenants occupy the same site, individual wall mounted signs or hanging signs are appropriate in combination with a monument sign identifying the business park complex and address.

2. General Sign Implementation Measures

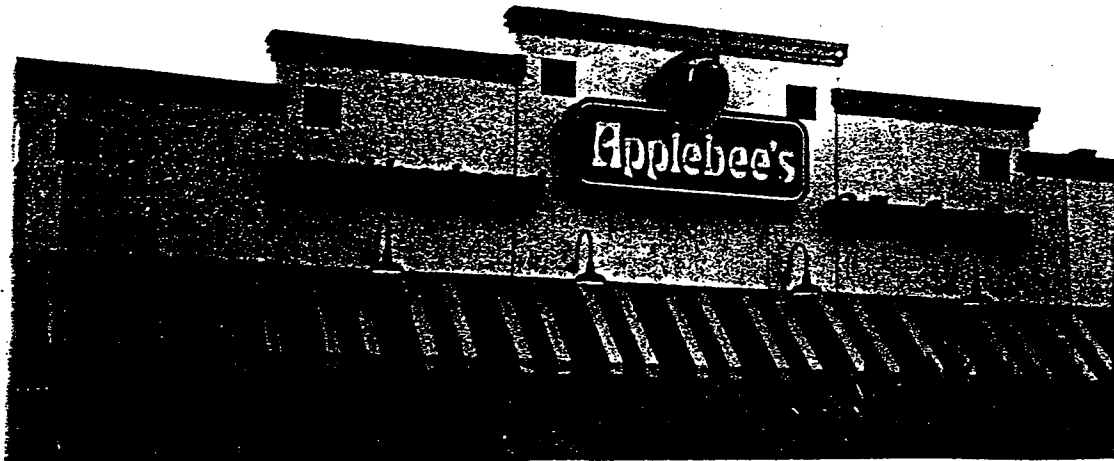
- Sign creation should take into consideration location and placement, construction materials, legibility, and illumination.

B. SIGN LOCATION AND PLACEMENT.

1. Location and Placement Policies

- Study the facade of the structure to determine if there are any architectural features or details that suggest a location, size or shape for the sign(s). Such features include: bands or frames of brickwork, cornice lines, indentations or projections in the face material, gaps between columns, or other permanent features.

Sign location and placement.



2. Location and Placement Implementation Measures

- Do not locate signs so that they cover architectural features, such as decorative columns or cornice bands, that may be important to the structure's overall design.
- On a building wall, locate a project identification sign no higher than twenty-five feet. This sign shall not be designed to identify an individual tenant or business in a building, unless the entire building is occupied by one business. Signs should not extend above the roof at the top of the wall.

Not Recommended.



- Hanging signs: An alternative to parapet or wall signs, signs may be hung underneath and parallel to pedestrian walkways, facing out towards parking areas. When used, these signs should be hung between columns and oriented towards parking areas. The use of these signs may be limited: the Mediterranean and Spanish Mission style design theme arcades' are characterized by curved archways. However, if architectural design allows, this is the preferred alternative to parapet or wall signs in multi-tenant retail commercial structures.
- Monument signs and sign walls on solid bases are preferred over pole mounted signs. These signs should be placed far enough back from intersections and access drives so that drivers' sight is not blocked from traffic or pedestrians.

Sign wall location and placement.



- Monument signs or sign walls should be placed at key entryways.

Monument sign location and placement.



C. SIGN COLOR.

1. Color Policies

- Sign color should be taken into consideration when designing signs for a project.

2. Color Implementation Measures

- Too many colors used simultaneously can confuse and negate the message of a sign. Limit the total number of colors to two or three on any one sign. Small accents of several colors can make a sign unique and attractive, but the competition of large areas of many different colors decreases readability.
- Contrast is an important influence on the legibility of signs. Light letters on a dark background or dark letters on a light background are most legible.
- Bright day-glo (fluorescent) colors should be avoided as they are distracting and do not usually blend well with colors on structures or other background colors.
- Sign colors should complement the colors used on the structures and the project as a whole. Monument signs and sign walls should have the same or similar color treatment as the building structure it represents.

D. SIGN CONSTRUCTION MATERIALS.

1. Construction Policies

- Sign materials should be compatible with the design theme and use of materials on the building where the sign is to be placed. For example, the use of a chrome and glass contemporary sign on a Mediterranean or Spanish Mission style building would be inappropriate.

2. Construction Implementation Measures

- All signs shall be designed free of bracing, angle-iron, guy wires, cables or similar devices.
- The selected materials should contribute to the legibility of the sign. For example, glossy finishes are often difficult to read because of light and glare.
- The use of individually mounted channel letters is encouraged.

Individually mounted channel letters.



- Internally lighted plastic faced cabinet signs should incorporate light colored letters on a dark opaque background or dark letters on a light background.

Internally lighted plastic faced cabinet signs.



- Neon tubes are a popular sign material and can contribute to the night time ambiance of an area. However, not more than one wall mounted neon sign should be used on the same facade of a building because of their brightness and attention attracting properties.
- Monument signs and sign walls shall be constructed of the same or similar materials and colors as the building structure. These signs should be enhanced using brick, cobblestones, etc. and landscaping that have been incorporated into the overall architectural theme.

E. SIGN LEGIBILITY.

1. Sign Legibility Policies

- Signs should be simple in design and easy to read.

Sign legibility.

HARD TO
READ

Discourage typefaces
which are hard to read

B

Avoid overly ornate or
highly stylized lettering

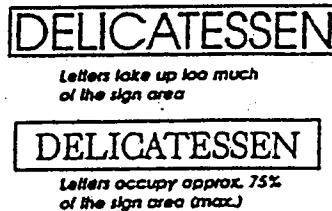
F
M

Utilize simple serif
or sans serif typefaces

2. Sign Legibility Implementation Measures

- Signs should use a brief message. The fewer the words, the more effective the sign. A brief succinct message is easier to read and looks more attractive.
- Crowding of letters, words or lines will make a sign more difficult to read. The number of lettering styles and amount of copy kept to a minimum. Letters should not occupy more than 75 percent of sign panel area.

Sign legibility.



- Limit the number of lettering styles used on a sign to increase legibility. As a general rule, limit the number of letter types to no more than two for small signs and up to three for larger signs.
- Avoid faddish typefaces. These typefaces are usually difficult to read.

F. SIGN ILLUMINATION.

1. Sign Illumination Policies

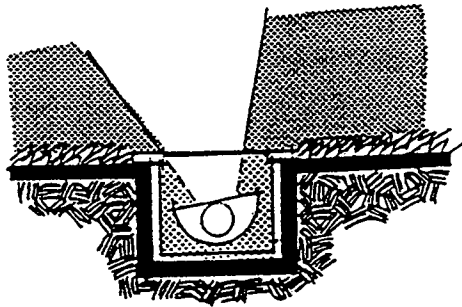
- Illumination should enhance sign design, color, and lettering, and not act as an advertising tool.

2. Sign Illumination Implementation Measures

- Reflective, fluorescent, and primary colors should be avoided.
- Direct and indirect lighting methods are allowed provided that they are not unnecessarily bright.

- Sign walls should be illuminated by an indirect source of light. This is usually best because the sign's construction will be more compatible and integrated with the building's architecture.

Sign with indirect light source.

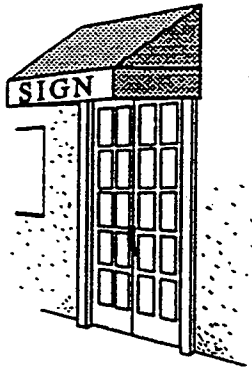


- Whenever indirect lighting fixtures are used (fluorescent or incandescent), the light source shall be shaded, shielded, subdued or directed so that the intensity of the light does not impact surrounding properties. Signs should be lighted only to the minimum level required for nighttime readability.
- For hanging signs underneath pedestrian arcades or covered walkways, lighting fixtures must be concealed in the architecture away from pedestrian view.
- Monument or sign walls shall either be illuminated by an indirect and concealed lighting source or back lit letters may be used.
- Exposed raceways behind individual letter signs tend to emphasize the mechanics of the sign rather than the message. This type of sign is strongly discouraged. Signs should be designed to conceal electrical raceways.

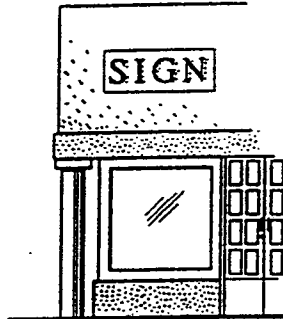
Sign illumination - exposed raceways.



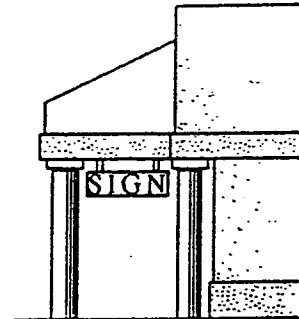
Sample sign types.



Canopy



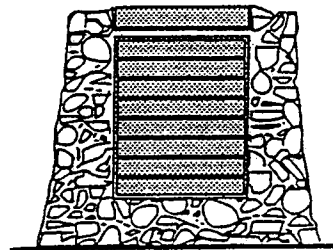
Wall



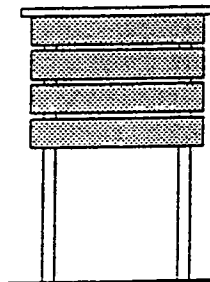
Under Marquee



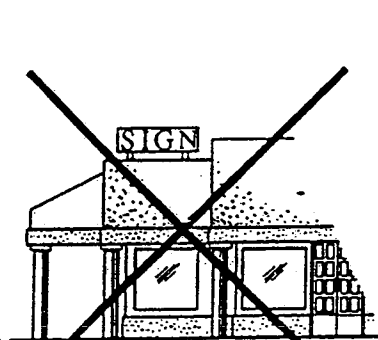
Monument



Multi-Tenant



Pole/Pylon

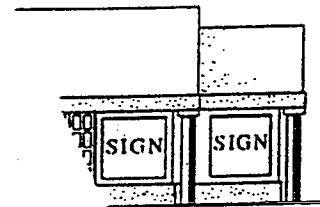


Roof

NOT ALLOWED



Projecting



Window

VI. WALLS AND FENCES DESIGN GUIDELINES

A. WALLS AND FENCES.

1. Walls And Fences Policies

- Walls and Fences used for commercial properties shall be designed to complement the buildings architecture.
- Walls and Fences should not be permitted along the frontage of commercial properties so as to obscure views or to act as a visual barrier.
- Security aspects of wall and fence design should be discussed with the city's crime prevention officer.

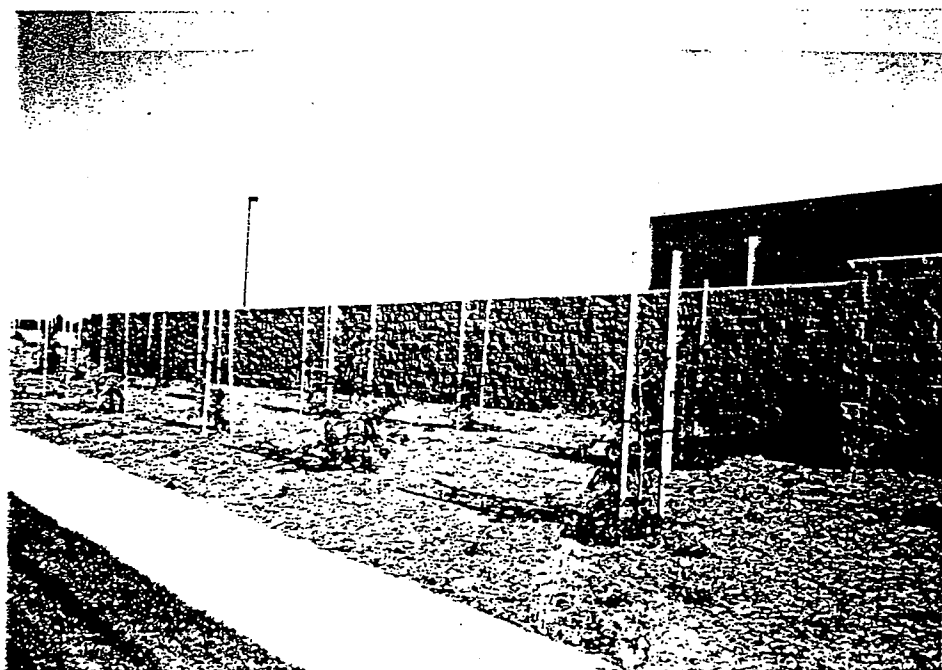
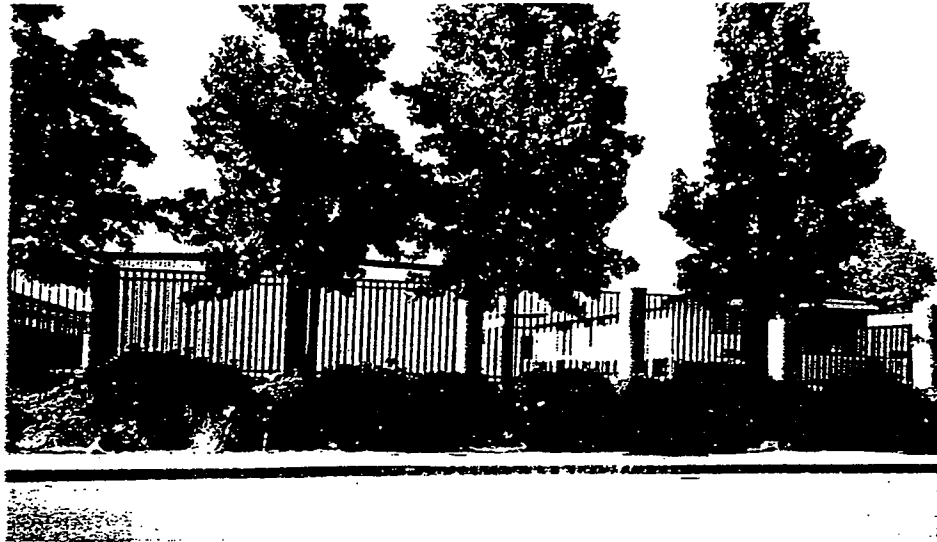
2. Walls And Fences Implementation Measures

- No chain link fencing will be allowed along the frontage of a property. Wood slats, landscaped hedges, and other screening measures should be used to reduce views of such fences when used in other locations on a parcel. Wrought iron/pilaster fences and walls may be used if for the purpose of security.

Chain-linked fences - Not Allowed.



Sample walls and fences.



- Construction materials and colors shall be consistent with the project architecture, with dark toned hues and earthtone colors preferred.
- For walls built to screen ancillary structures, such as trash enclosures, construction materials should compliment architecture (*see Screening in Architectural Design Section of this document*).
- The horizontal mass of continuous walls should be softened by landscape planting and vines. Where long lengths of fence or wall surfaces are required, periodic articulation or change of material should be used to prevent monotony. Landscape pockets should be provided along the wall.

Soften horizontal mass.

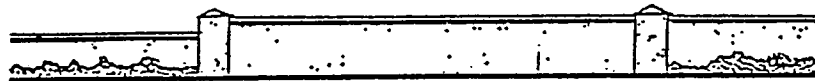


- No wall or fence shall exceed six feet in height, unless used as a screening device for ancillary structures, such as refuse containers.
- When barriers are necessary for security, open view fencing shall have brick or cobblestone pilasters, with metal rails and pickets sufficiently spaced to restrict trespassing. A combination of solid pillars, or short solid wall segments and wrought iron grill work is acceptable.

Combine fence materials.



Elevation of Slaggered Wall



Elevation of Solid Wall with Pilasters



Elevation of Wall /Wrought Iron Combination



Elevation of Wrought Iron with Pilasters



Elevation of wrought iron with pilasters.

- If walls are not required for specific screening or security purpose they should not be used. The intent is to keep walls as low as possible while still performing their screening and security functions.
- If a commercial property is adjacent to a residential lot, a solid masonry wall, six feet in height and sufficiently landscaped, will be constructed.

VII. FREEWAY VIEWS DESIGN GUIDELINES

A. FREEWAY VIEWS.

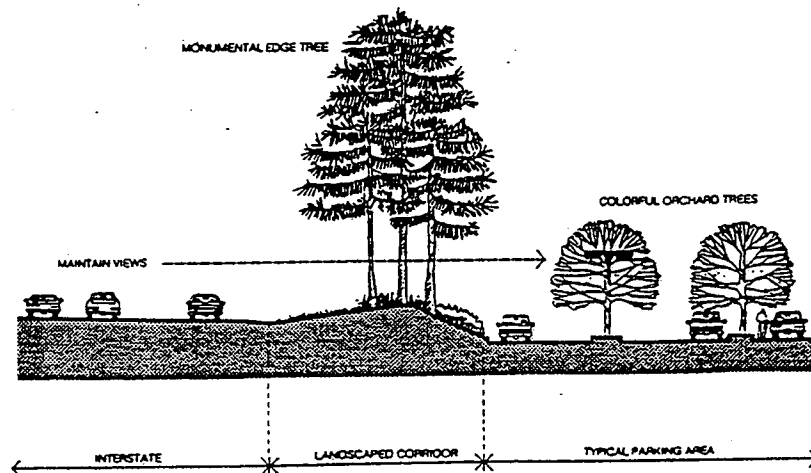
1. Freeway Views Policies

- To create a landscaped corridor and buffer zone along Interstate 5 creating a sense of entry for the City, buffers businesses from noise, and provides views into the Specific Plan area at appropriate points .

2. Freeway Views Implementation Measures

- A landscape corridor should be established along I-5 to create a cohesive landscaping design throughout the Specific Plan Area.

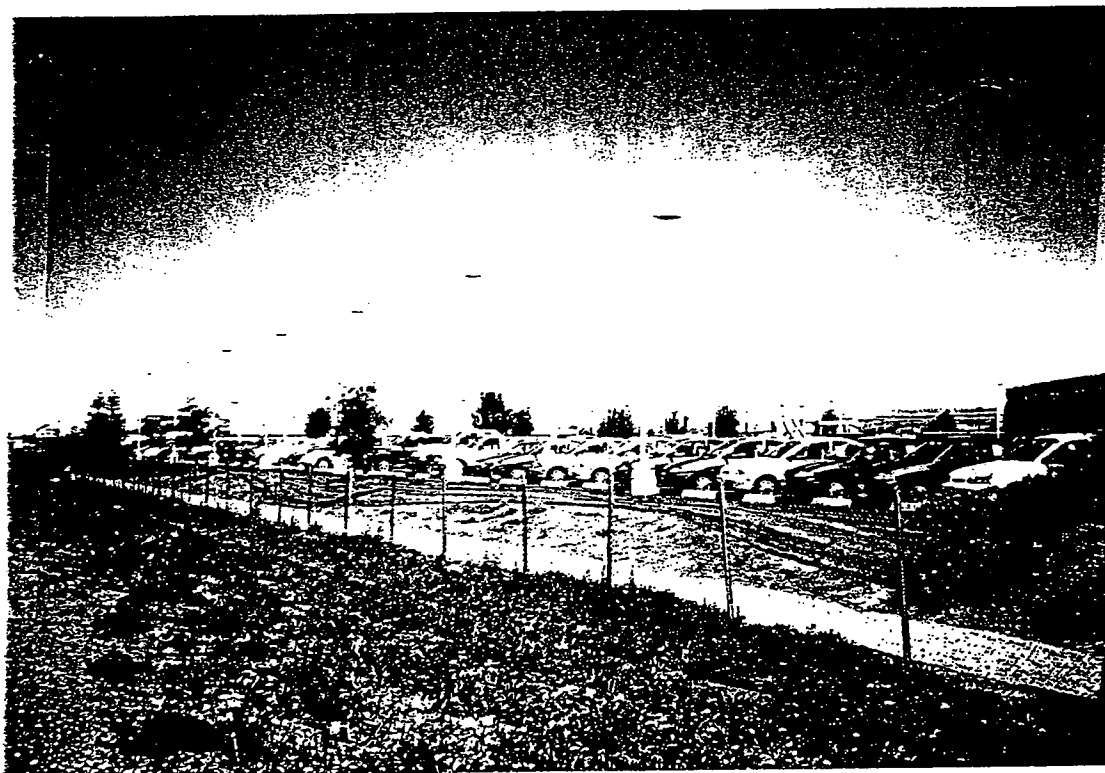
Freeway landscape corridor.



- Trees and vegetation should be spaced along the freeway leaving "windows" for views at appropriate points.
- Minimize the visual impact of utility lines and poles, plain backs of buildings, and business signs.
- No blank walls should front the freeway edge (*refer to the Architectural Design Guidelines, Form and Mass Section in this document*).

- Buildings setbacks from the freeway edge and property line should be established to allow for a planting strip and buffer zone.

Freeway setbacks.



VIII. PEDESTRIAN AMENITIES DESIGN GUIDELINES

A. PEDESTRIAN AMENITIES.

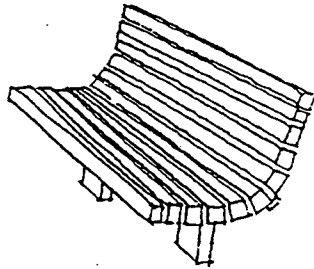
1. Pedestrian Amenities Policies

- Projects shall build upon the character of existing projects by using pedestrian amenities.
- All pedestrian amenities including street furniture, signs, and hardscape paving elements shall be of a coordinated design. These amenities, their color and construction materials, shall accent and be the unifying element for all pedestrian amenities in the plan area.

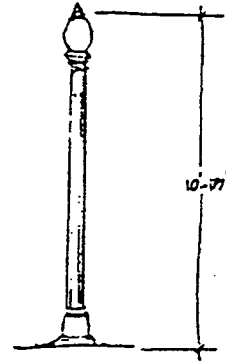
2. Pedestrian Amenities - Implementation Measures

- Projects shall incorporate pedestrian amenities into project design. The items shown are conceptual in nature. Final specifications should be made at the time final designs are completed. Desirable pedestrian amenities include:
 - * seating areas
 - * light fixtures
 - * trash receptacles
 - * bollards
 - * planters and pots
 - * newspaper vending enclosures
 - * bicycle racks
 - * tree grates
 - * hardscape or paving treatments into the site design

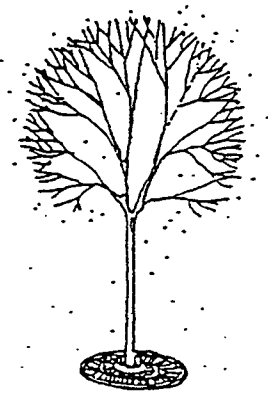
Pedestrian amenities.



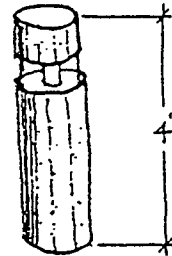
Bench



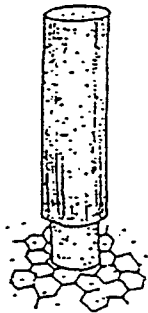
Pedestrian-Level Light



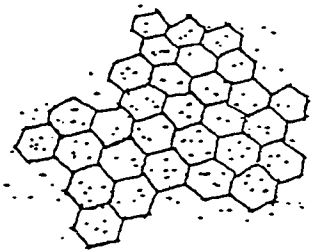
Tree Grates



Low-Level Light



Bollard

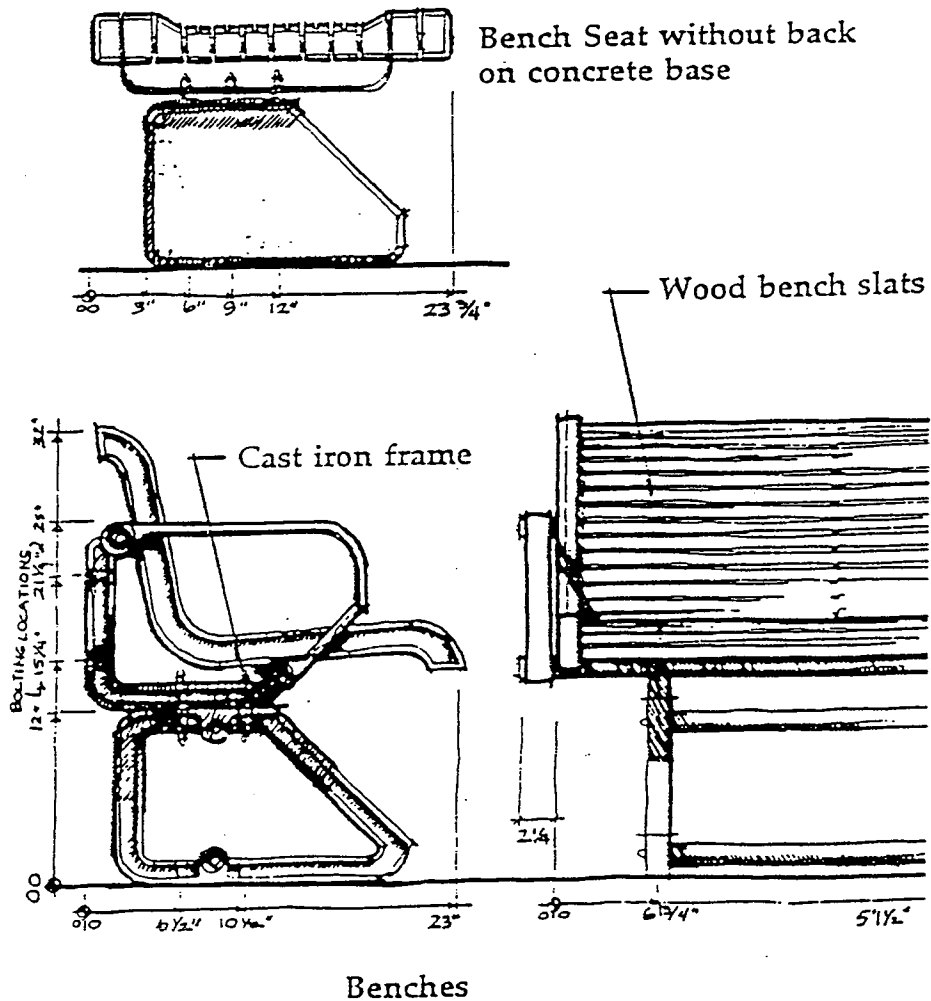


Pavers

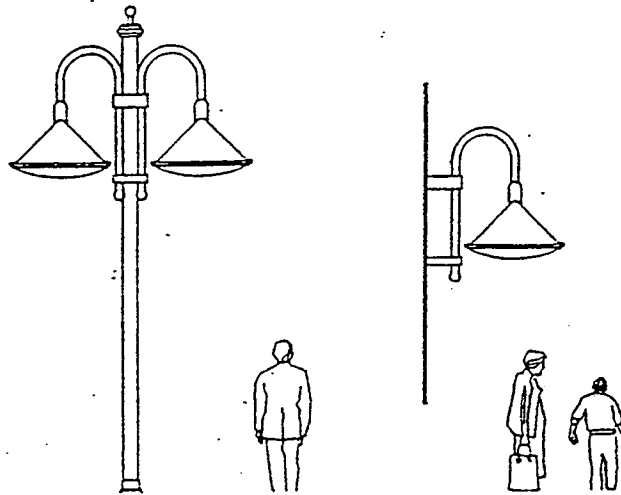


Trash Receptacle

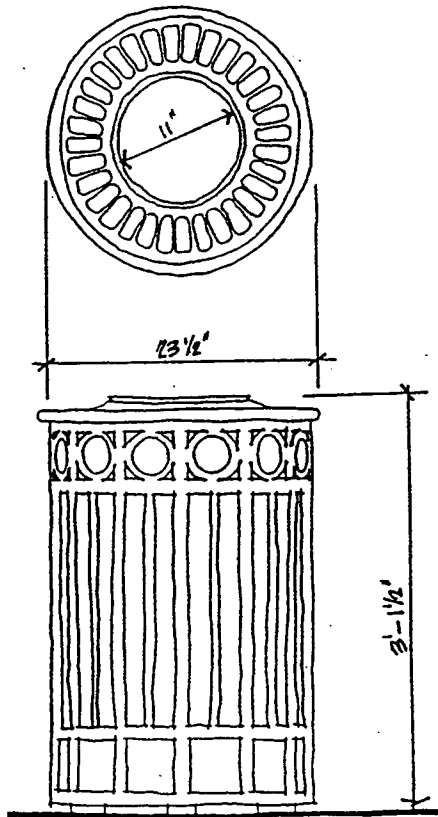
- Street Furniture: Street furniture shall be provided as necessary, including benches, trash receptacles, and newspaper racks and so on, shall be selected or designed to fit with the nearby buildings' architecture.
- Benches: Benches occurring along sidewalks, walkways, and within parks should be fixed in place and constructed of durable and low maintenance materials. Benches that are part of a project should incorporate similar colors and construction materials.



- Lighting Fixtures: Exterior lighting should be designed as part of the architectural and site design of a project. Fixture style and locations should be compatible with the building's architecture and landscaping. Projects should display a consistency in lighting-fixture style.

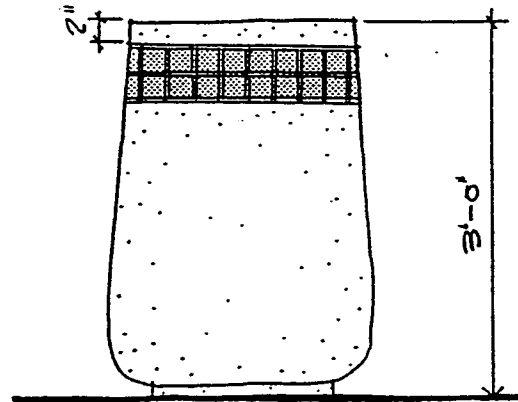


- **Trash Receptacles:** All trash receptacles should be attractively designed and easily maintained. Color and construction materials should be of the same theme as the buildings it accents. Receptacles should be placed in key locations where they are visible and easily accessible for pedestrian use.



HISTORIC

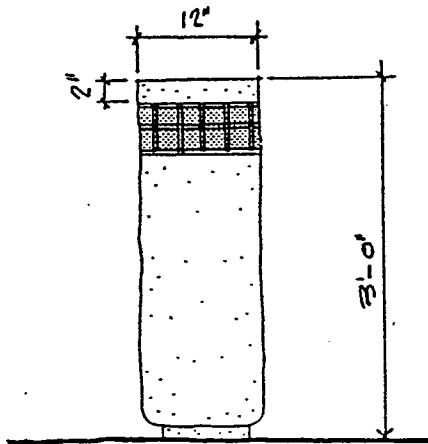
Manufacturer: Canterbury International
 Model No.: 308A
 Size: 23.5 "diameter x 37.5" high
 Material: Steel and cast iron with welded construction
 Finish: Painted in color specified
 Color: Forest green
 Lid: Cast aluminum



TYPICAL

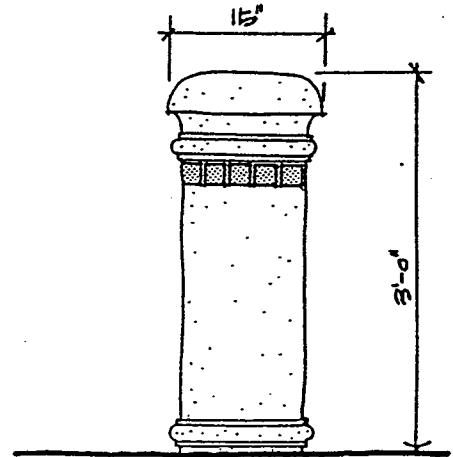
Manufacturer: Ornamental Art Stone
 Model No.: Customized 50R
 Size: 22.5 "diameter x 36" high
 Material: Concrete or Glascrete
 Finish: Light Sandblast
 Color: Slate, gray
 Lid: Anodized black aluminum
 Tile: Double row, 2" square, forest green, glazed tile
 Manufacturer: Emser Tile, San Francisco, CA

- Bollards: A bollard is a vertical, freestanding, short post used as a barrier to vehicles. Bollards viewed from public rights-of-way shall be designed to be consistent with the vehicular directional signs. Construction materials and colors should accent the buildings' design theme.



TYPICAL

Manufacturer: Dura Art Stone
 Model No.: Custom
 Size: 15" x 3'-0"
 Material: Concrete or Glascrete
 Color: Slate Gray
 Tile: Double row, 2" square, forest green, glazed tile
 Manufacturer: Emser Tile, San Francisco, CA



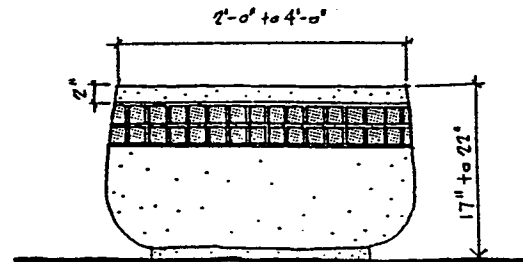
HISTORIC

Manufacturer: Ornamental Art Stone
 Design: D; custom bollard
 Size: 12" diameter x 36" high
 Material: Concrete or Glascrete
 Finish: Light Sandblast
 Color: Slate Gray
 Tile: Double row, 2" square, forest green, glazed tile
 Manufacturer: Emser Tile, San Francisco, CA

- Planters and Pots: Shall enhance the landscaping and architectural design theme of a project. Construction materials and colors should accent the buildings' design theme.

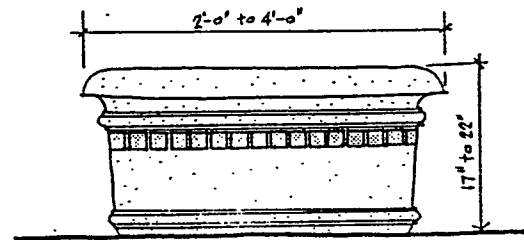
TYPICAL

Manufacturer: Ornamental Art Stone
 Model No.: 50R
 Size: 2'-4' diameter x 17" or 22" high
 Material: Concrete or Glascrete
 Finish: Light Sandblast
 Color: Slate Gray
 Tile: Double row, 2" square, forest green, glazed tile
 Manufacturer: Emser Tile, San Francisco, CA



HISTORIC

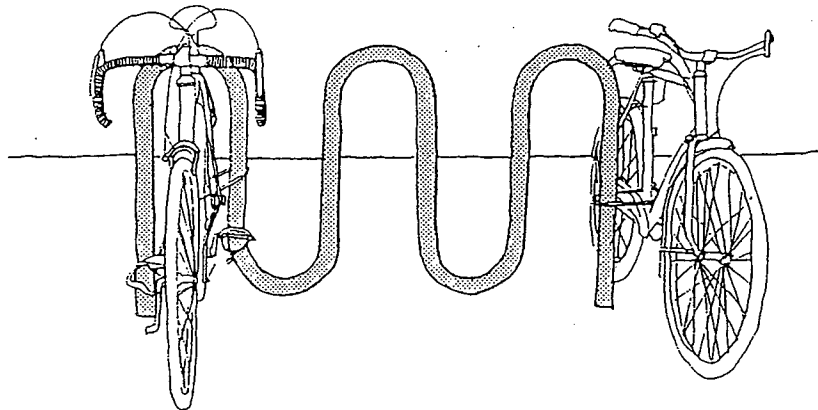
Manufacturer: Dura Art Stone
 Model No.: x Custom
 Size: 2'-4' diameter x 17" or 22" high
 Material: Concrete or Glascrete
 Color: Slate Gray
 Tile: Double row, 2" square, forest green, glazed tile
 Manufacturer: Emser Tile, San Francisco, CA



- Newspaper Vending Machines: (or other periodical vending machines) shall be limited to four individual machines per parcel and shall be screened and enclosed by a solid wall built of materials complimentary to architecture on three sides to screen views.



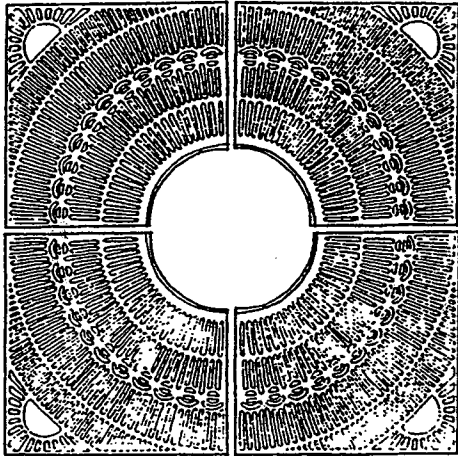
- Bicycle racks: Ribbon bicycle racks are the desired style for this pedestrian amenity. Whenever possible, these racks should be dark brown or black, rather than unpainted metal, in order to compliment building color and architectural design.



TYPICAL

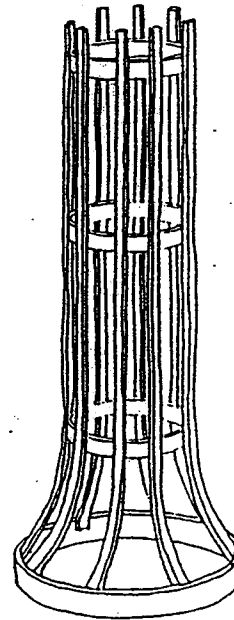
Manufacturer:
Brandir International, Inc.
Design: Ribbon Rack
Material: Galvanized steel

- Tree Grates and Guards: These amenities are used to protect trees that are located along pedestrian walkways. Grates and guards shall be used along walkways with a high amount of pedestrian traffic or as an accent to project design. Styles and color should compliment the architectural design and color theme of a project.



TREE GRATE

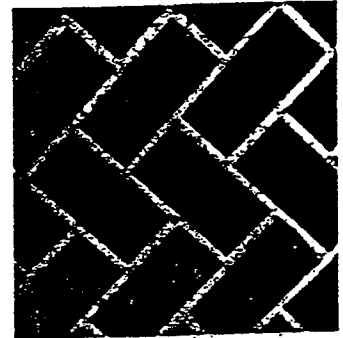
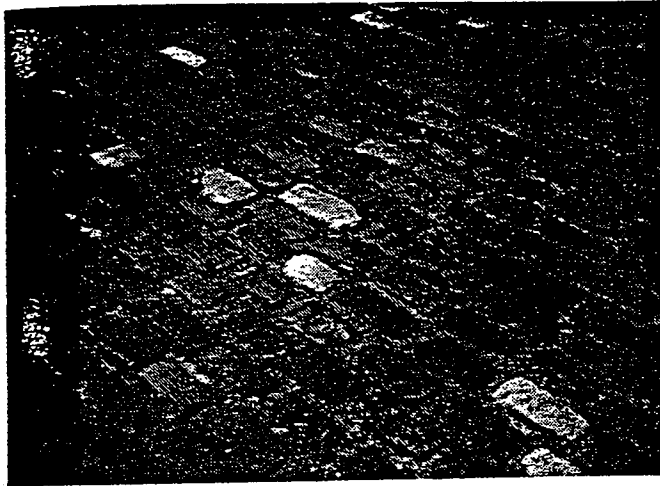
Manufacturer:
Canterbury International, Inc.
Model No.: CDRTG
Size: 3'-0" or 4'-0" (preferred)
Material: Cast aluminum
Finish: Baked enamel
Color: Forest green (In Historic
Downtown) Black (in other areas)



TREE GUARD FOR HISTORIC DOWNTOWN

Manufacturer:
Canterbury International, Inc.
Model No.: 2000
Size: Standard
Material: Steel
Finish: Baked enamel
Color: Forest green

- Hardscape Treatments: Hardscape elements should be used to coordinate the architecture, landscaping, and all pedestrian amenities included in a project, as well as provide a link between the street edge and adjacent properties. Hardscape elements are enriched paving treatments that are used for pedestrian walkways within a development. Hardscape treatments or textured paving should not be so rough or irregular as to make walking difficult or discourage the use of baby strollers or wheelchairs.



Enriched paving treatments will be used to mark key traffic points.



Hardscape elements can unify and reinforce the theme of the community.

IX. STREETSCAPE DESIGNS

Five streetscape designs were created for the Hwy. 99W Corridor. These streetscapes were designed based on the 100' right-of-way for the roadway. Although the five options vary in layout, each of the streetscapes incorporates the following design elements:

- * landscaping
- * raised center medians
- * planting strips
- * bike lanes
- * sidewalks

Option A: Option A is the most desirable for the Hwy. 99W Corridor. It is characterized by a 14' center median (12' turn lane), 2 - 12' lanes traveling in each direction, 8' planting strip separating the road from bicyclists and pedestrians, 6' class 1 bike lane, and a 5' sidewalk.

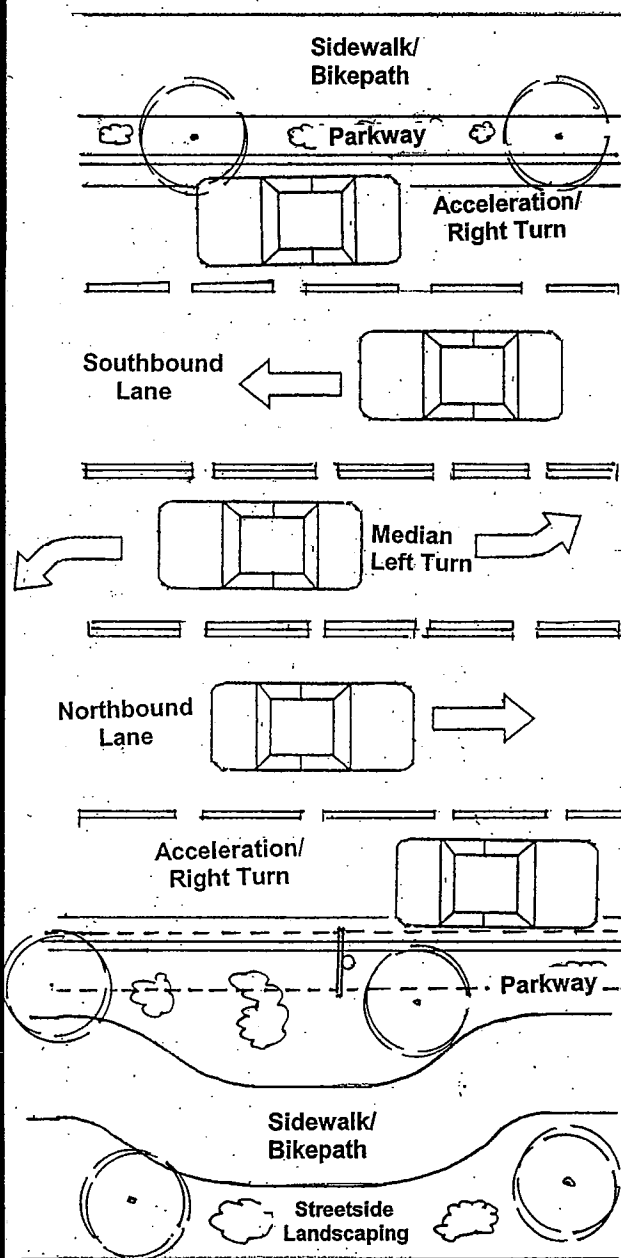
Option B: Option B is characterized by a 14' center median (12' turn lane), 2 - 12' lanes traveling in each direction, 7' class 2 bike lane, 7' planting strip separating the bike lane/roadway from the sidewalk, and a 5' sidewalk. Option B is less desirable than Option A because of the location of the bike lane. Due to the truck traffic that travels on Hwy. 99W, it is important to protect the safety of bicyclists from these large vehicles.

Option C: Option C is desirable because of the 7' Class 1 bike lane. However, the 6' center median does not allow for a turning lane. This may hinder traffic circulation for vehicles wanting to turn left.

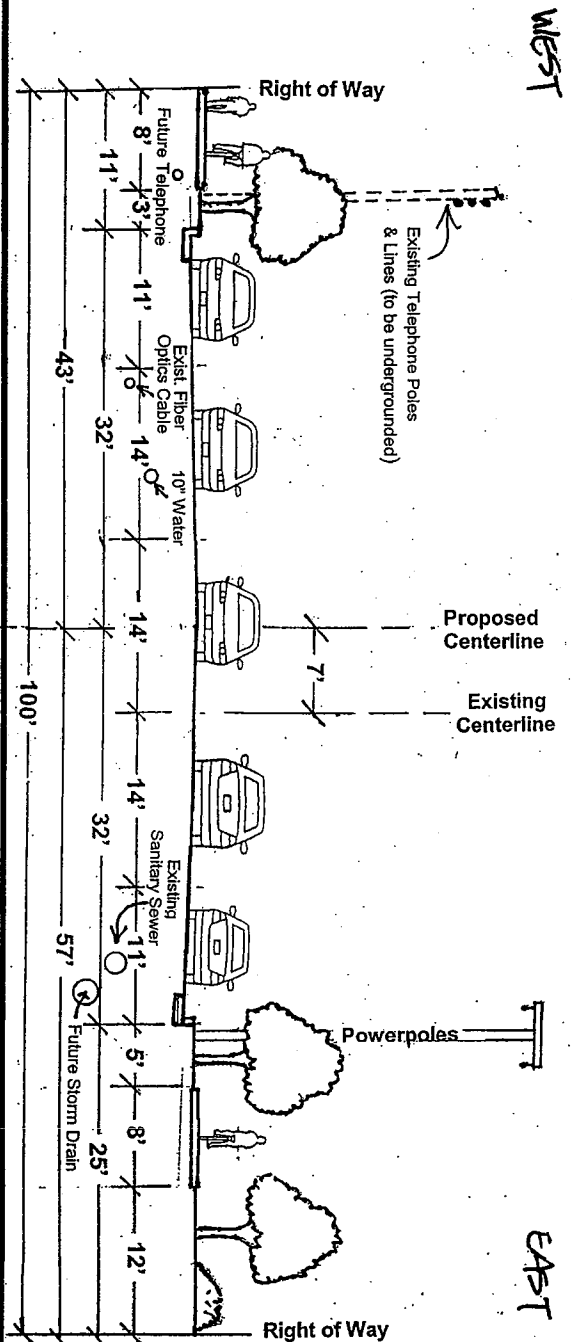
Option D: Option D also has a small center median which does not allow for a turning lane. This option is also less desirable because of the class 2 bike lane located without separation from the roadway.

Option E: Option E is the least desirable of the streetscapes proposed. Both the sidewalk and the bike lane are located immediately adjacent to Hwy. 99W. Because of the large vehicles and trucks that use this roadway, pedestrians and bicyclists would be less likely to use the sidewalk and bike lane, due to safety reasons.

PLAN VIEW



CROSS SECTION



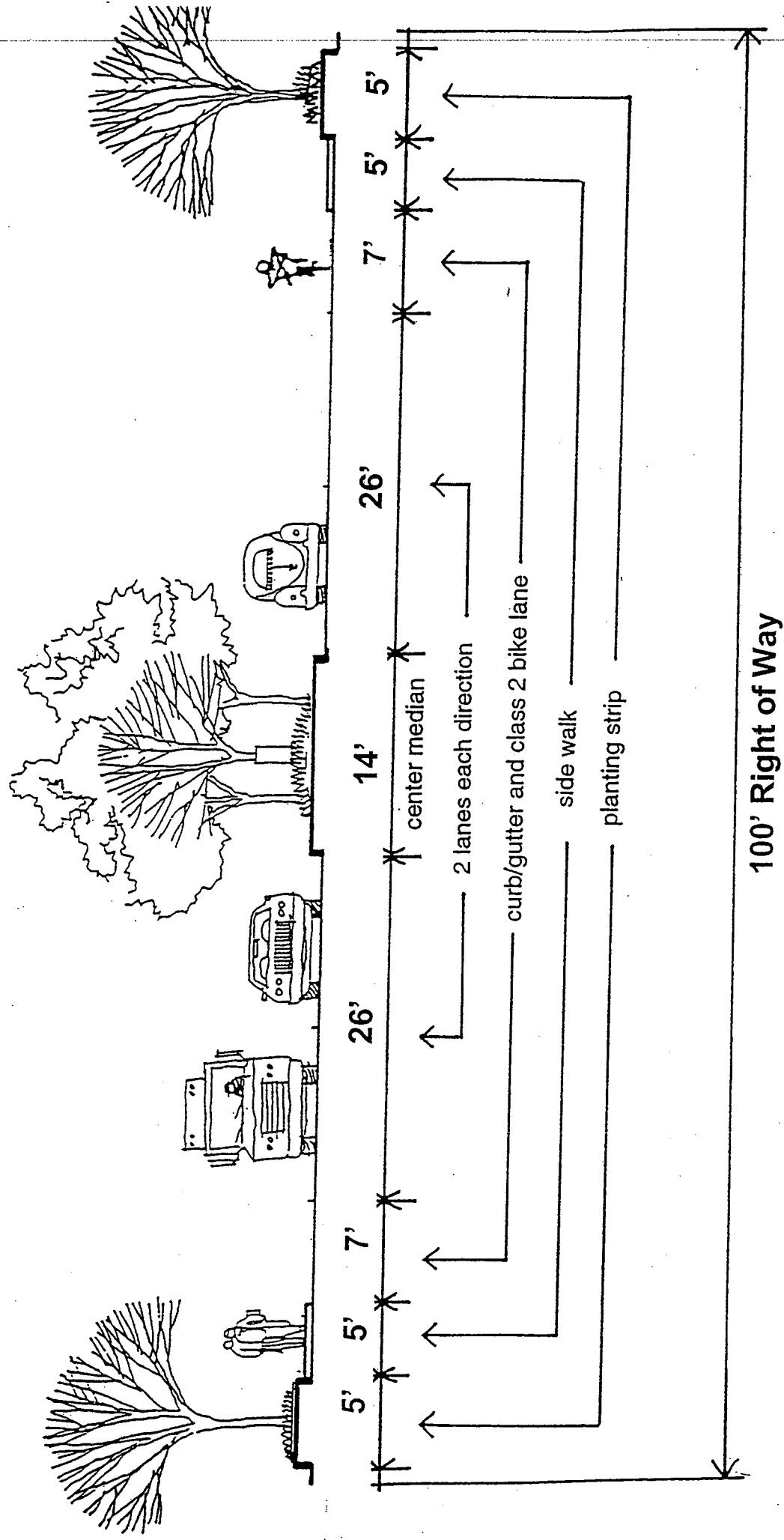
REVISED HWY. 99-W PLAN



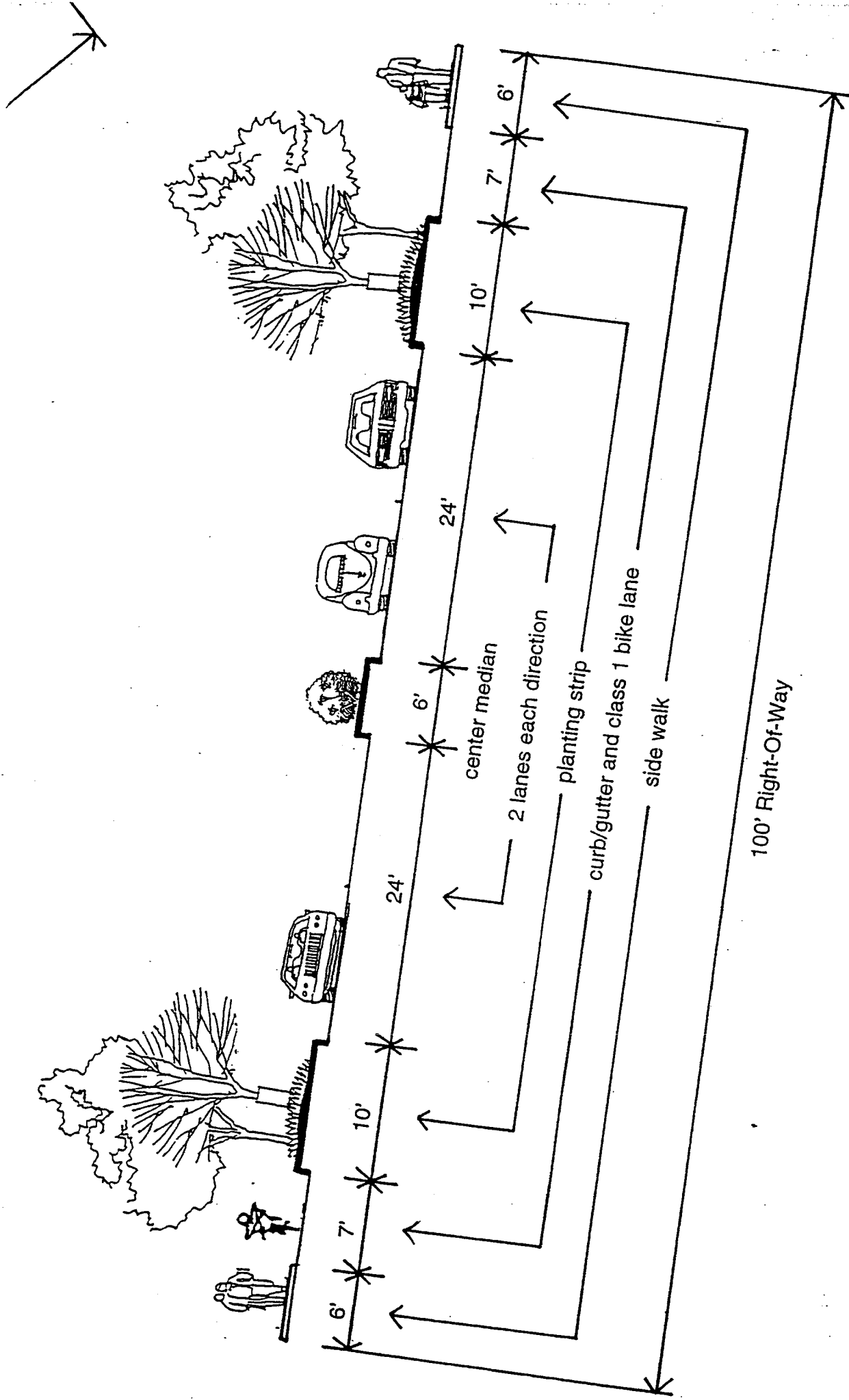
Four Lane Arterial Street Section
(for Highway 99W & South Ave)

ADOPTED -

* Replaced 6/12/2007 by CC

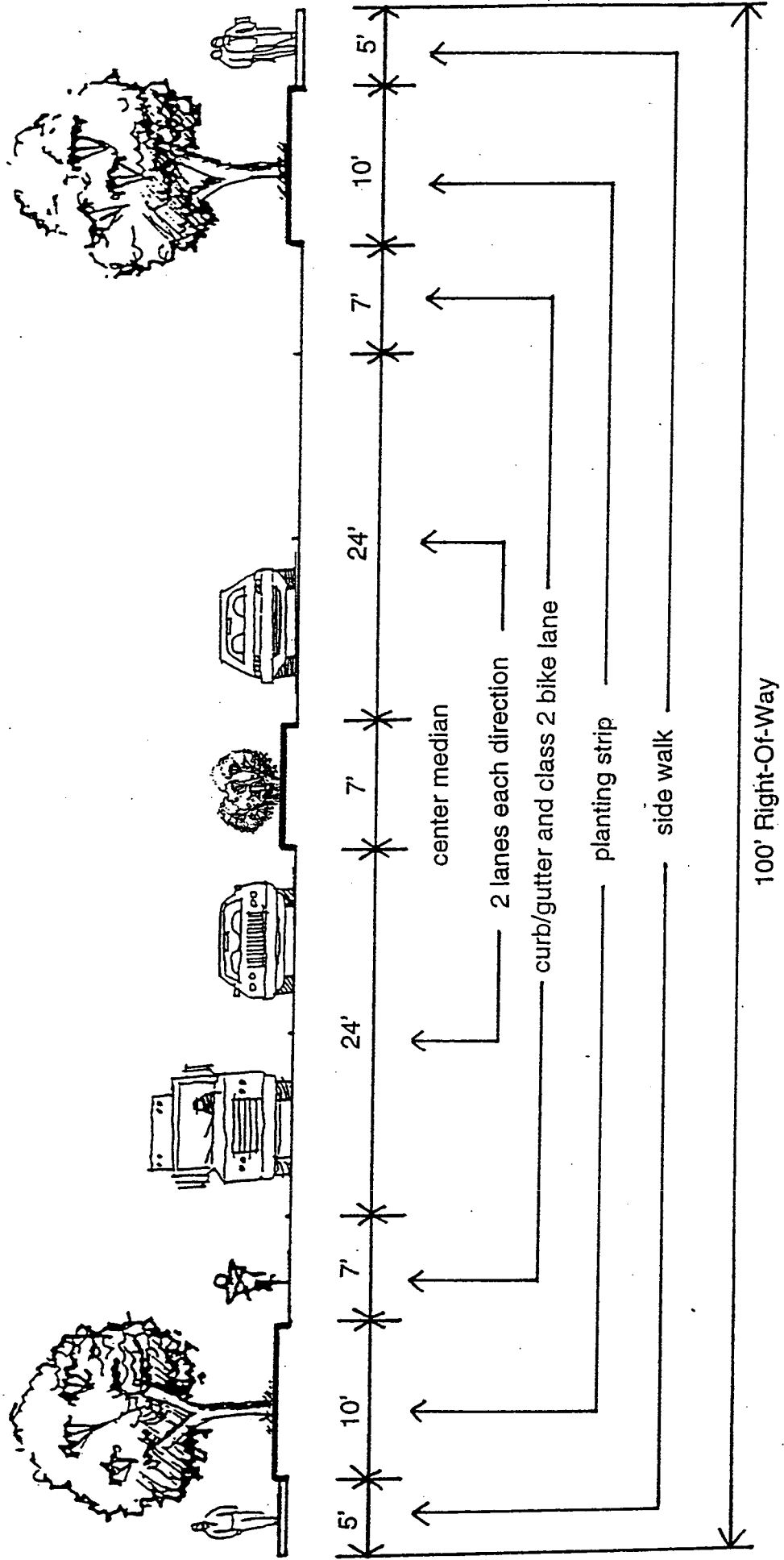


Four-Lane Arterial Street Section



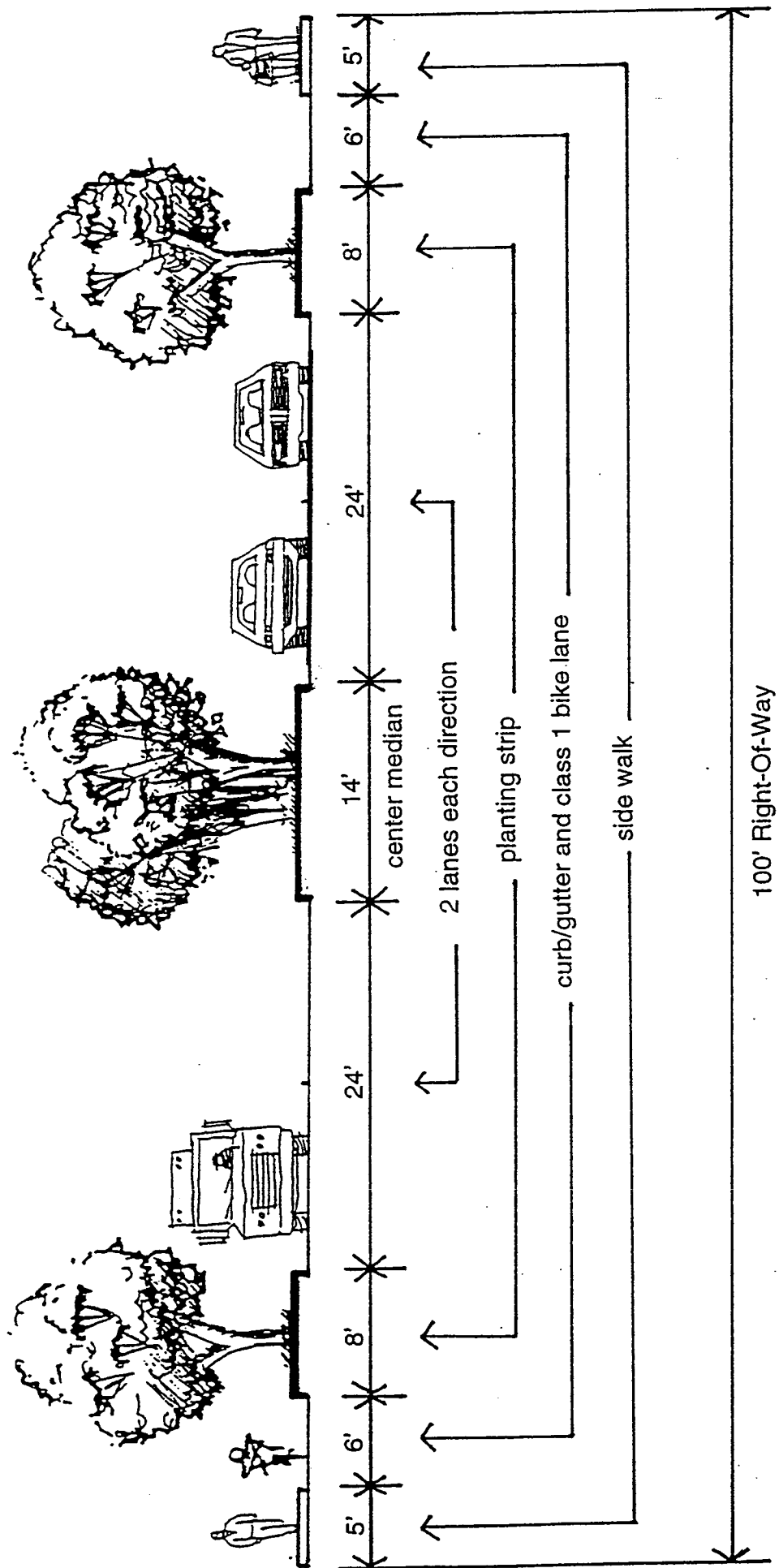
OPTION D

Four-Lane Arterial Street Section



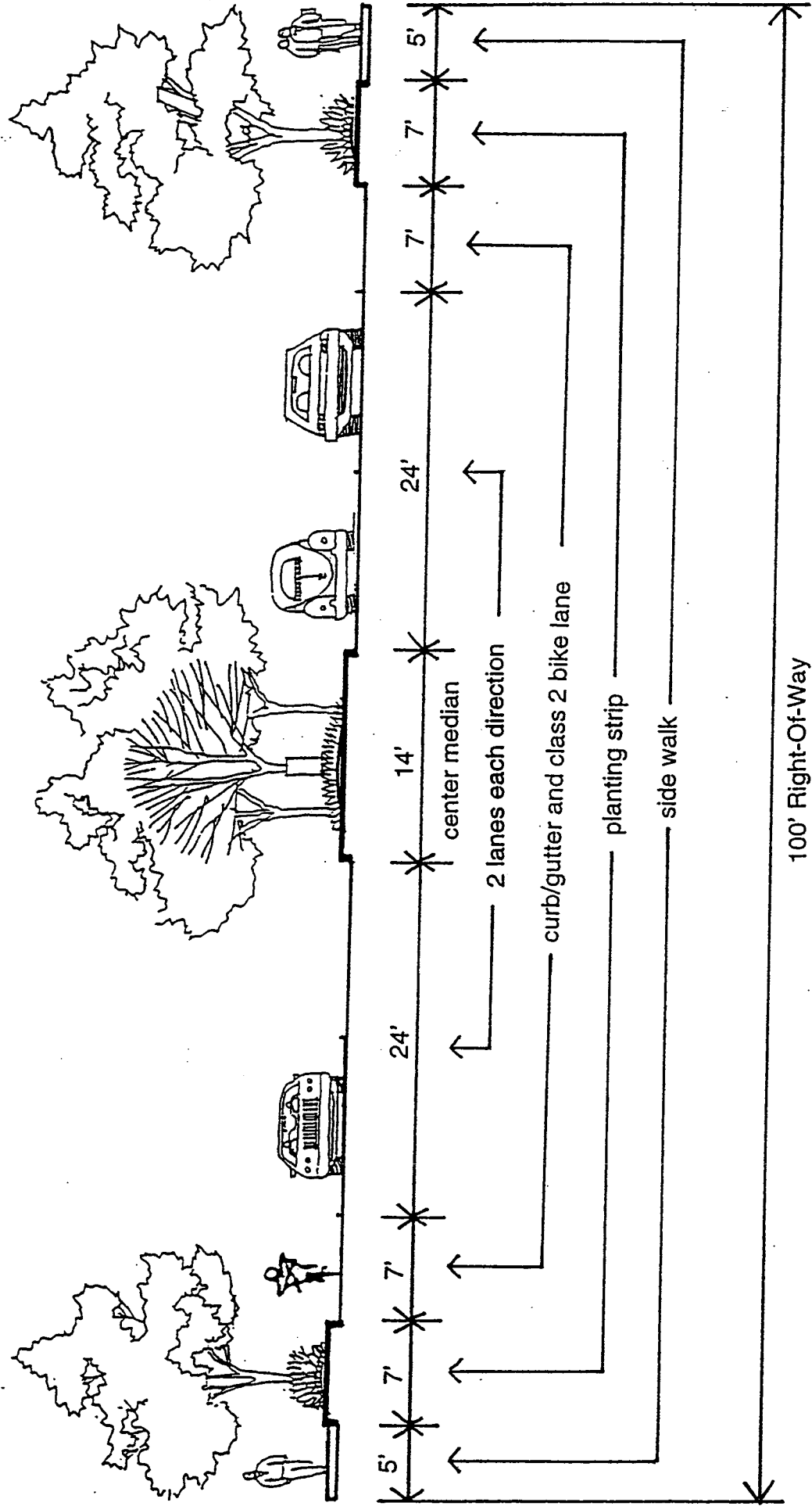
OPTION A

Four-Lane Arterial Street Section



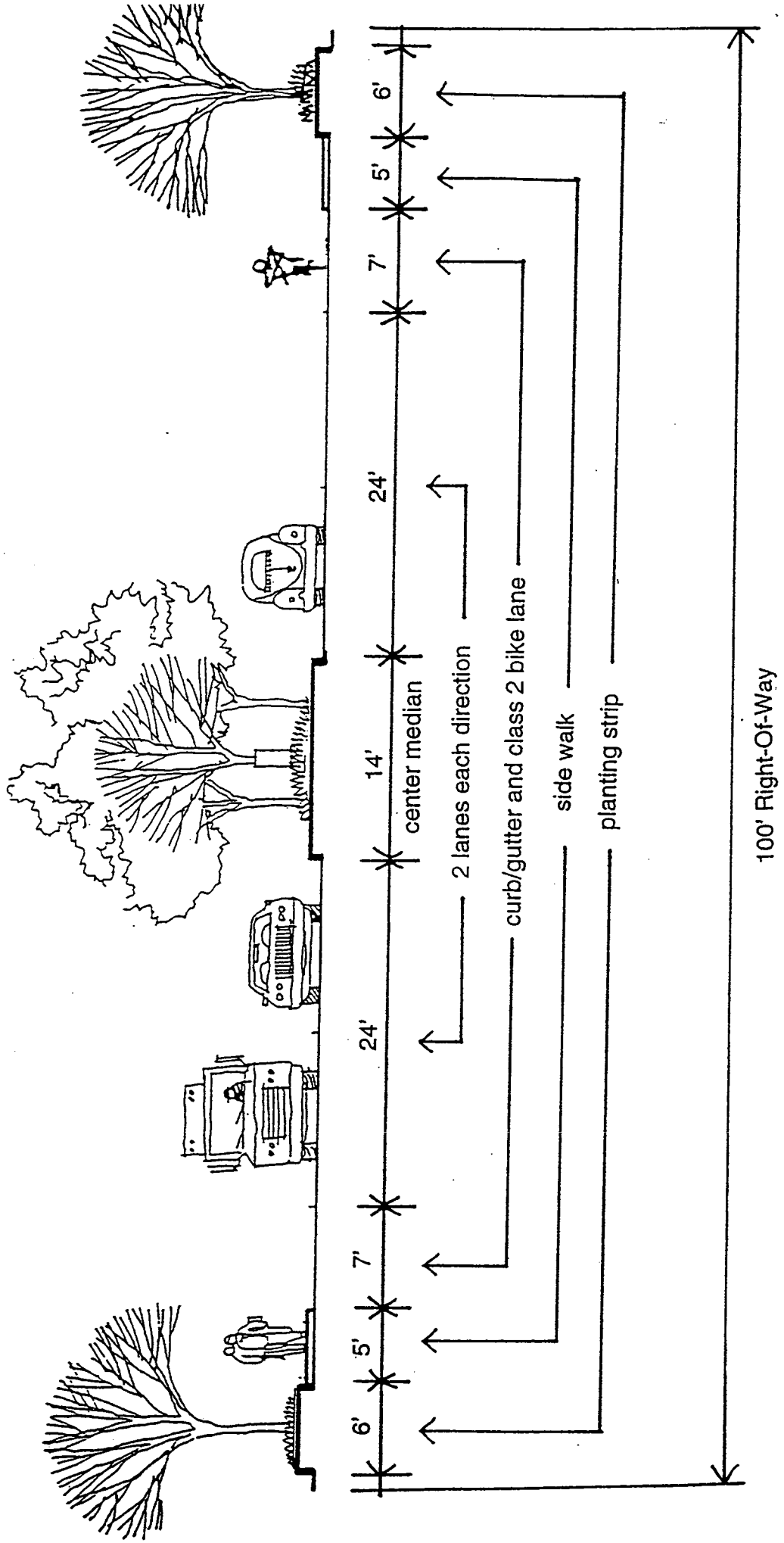
OPTION B

Four-Lane Arterial Street Section



OPT. N E

Four-Lane Arterial Street Section



X. SAMPLE SITE PLANS

Sample site plans have been prepared using the Design Guidelines established in this document as the criteria for site design. These site plans include a combination of mixed land uses such as, commercial, light industrial, office, and residential uses that might be developed in the study area. Each site plan includes some of the more desirable elements indicated by Corning residents in the Visual Preference Survey such as, hardscape paving treatment, landscaping, screening of refuse and storage areas, and parking lot location and design.

Keep in mind that these are only sample site plans, they are for illustrative purposes only. Proposed developments would need to conform to all city standards, including but not limited to, City of Corning Land Division Standards, Zoning Ordinance, Hwy. 99W Corridor Specific Plan, and other applicable policies and regulations.

A. SITE PLAN 1 - Light Manufacturing / Industrial Site Plan Characteristics

10 Acre Parcel

- subdivided into 4 parcels

Main Entry Access

- Hwy. 99W with 2 - 12' lanes in each direction
- 6' center median and hardscape paving treatment

Secondary Access

- from side street
- provides access to parking, rear lots and loading facilities
- same hardscape paving treatment as main entry at a smaller scale

Service Alley

- provides access for loading facilities for rear parcels
- provides access for refuse collection

Parking Areas

- can be accessed from both entries for all four parcels
- parcels and parking areas are interconnected by walkways
- parking areas include center landscaped medians, aisle delineators, and landscaped islands
- rear lots, the pedestrians walk parallel to vehicles
- parking areas for the front parcels are located behind the buildings

Landscaping

- a mix of trees, shrubs, and vines
- the front parcels' landscaping treatments are similar, theoretically they were the first to develop, the similar landscaping ties them together.
- the rear lots' landscaping is also similar to the perimeter landscaping, and the parking lots are tied together by alternating tree types

Perimeter Landscaping

- rear of lot has a 12' setback for masonry wall and 5' of landscaping on both sides of the wall, landscaping includes trees and vines.
- side lot boundaries make a transition from the rear lot landscaping to the different tree and shrub types at the front of the lot

Refuse, Storage, and Loading Areas

- screened by walls and/or landscaping
- screened from view using trees and shrubs

Sample Uses / Parking requirements:

Parcel 1 - furniture and appliance stores, repair shop, and similar uses

- $180 \times 180 = 32400$ sq. ft.
- commercial 17.51.130B requires 1 parking space / 600' gross sq. ft. = 54
- industrial uses and warehouses 17.51.140A requires 1 parking space / 1500 = 21.6 spaces
- Total spaces = 53

Parcel 2 - auto services, equipment sales, service garages, or building material yards, etc., e.g. Pep Boys, Home Base

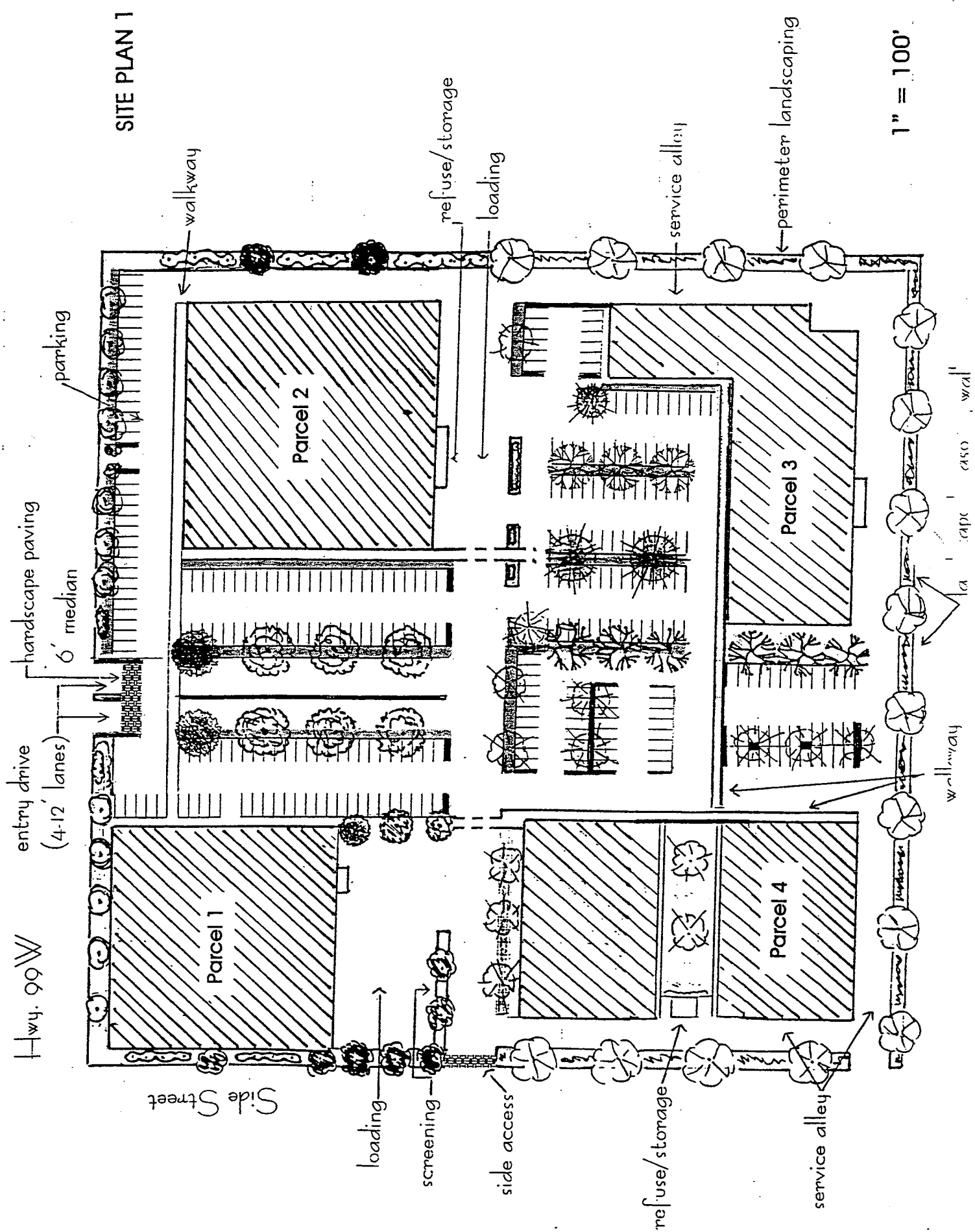
- $200 \times 200 = 40,000$ sq. ft. building
- commercial 17.51.130A requires 1 parking space / 500' = 80 spaces
- Total spaces = 83

Parcel 3 - industrial / office building (a combination of industrial uses with offices such as a printer)

- 31200 sq. ft. building
- combined industrial and office parking requirements using 17.51.160 - parking requirements for uses not specified...shall be determined by the planning commission.
- Total spaces = 87

Parcel 4 - miscellaneous warehouse or manufacturing services or machinery or equipment sales, etc.

- 2 buildings at $110 \times 160 = 17600$ sq. ft. each
- 1 parking space / 500 sq. ft. = 35.2 parking spaces for each building
- Total spaces = 71



B. SITE PLAN 2 - Commercial / Industrial Site Plan Characteristics

10 Acre Parcel

- 2 front lot parcels with commercial uses
- 1 large rear lot with industrial or similar uses
- Interstate 5 borders the rear of the lot

Perimeter Landscaping

- 10' Landscape Corridor along I-5 boundary, trees are spaced at appropriate points to provide views of signs that may be located on the buildings.
- landscaping is a combination of trees and shrubs

Water Detention Basin

- A runoff water detention basin has been designed into the landscaping of the front of the parcel. The amount of runoff generated from the site will determine the size of the detention basin. The detention basin is a combination of outlining trees and lawn ground cover.

Sample Uses / Parking Requirements:

Parcel 1 - Commercial

- commercial uses (shopping center less than thirty thousand sq. ft.) = 1 space/200 gross sq. ft.
- 20400 sq. ft. building = 102 spaces
- Total spaces = 106

Parcel 2 - Commercial

- commercial uses (shopping center less than thirty thousand sq. ft.) = 1 space/200 gross sq. ft.
- 18600 sq. ft. building = 93 spaces
- Total spaces = 94

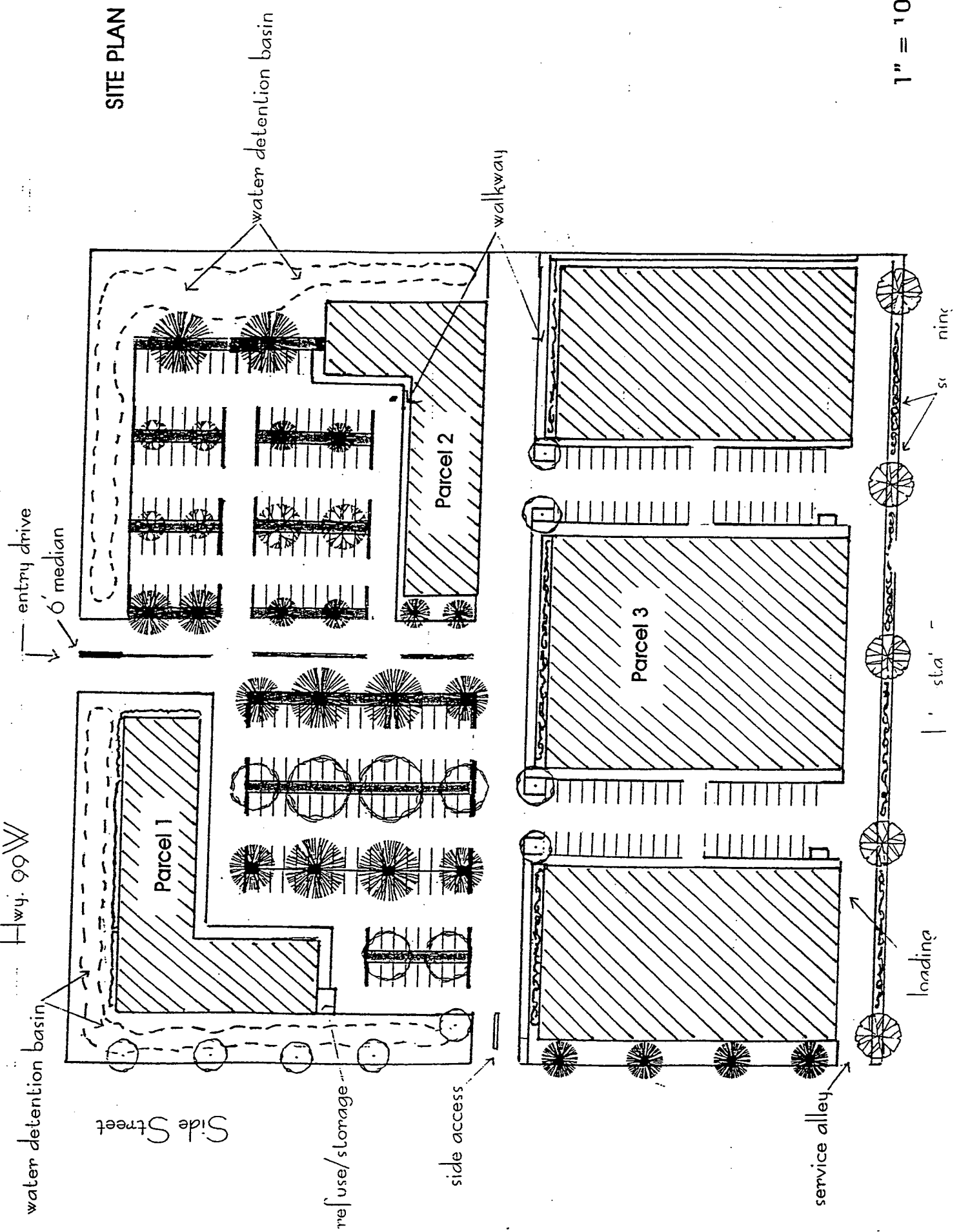
* Note: the commercial uses could also be used for office buildings or similar use which may reduce the parking requirement.

Parcel 3 - Industrial Uses and Warehouses

- total of all 3 buildings = 112800 sq. ft. (2 smaller buildings are 33600 sq. ft. each, 1 large building is 45600 sq. ft.)
- 1 parking space/1500 gross sq. ft. = 75 spaces
- Total spaces = 78

Hwy. 99 W

SITE PLAN 2



C. SITE PLAN 3 - Office / Commercial / Multi-Family Site Plan Characteristics

10 Acre Parcel

- subdivided into 3 parcels
- front parcels used for commercial and office buildings
- rear parcel used for multi-family residential

Main Entry Access

- 2 access points from Hwy. 99W
- 1 access with 2 -12' lanes in each direction
- 1 access with 1 -12' lanes in each direction

Secondary Access

- side access for multi-family residential parcel with 64 units

Parking Areas

- can be accessed from both entries for front parcels

Water Detention Basin

- a runoff water detention basin is located along the front, side and rear of lot and is incorporated into the landscaping of the entire parcel

Perimeter Landscaping

- a masonry wall separates the commercial and office parcels from the multi-family use with 5' of landscaping on both sides of the wall

Sample Uses / Parking Requirements

Parcel 1 - Commercial Use such as a nursery.

- $190 \times 120 = 22800$ sq. ft. (8400 sq. ft. of outdoor sales area)
- 1 parking space/500 gross sq. ft. plus 1 parking space/2000 gross sq. ft. of outdoor sales area = 50 spaces
- Total spaces = 53

Parcel 2 - Office

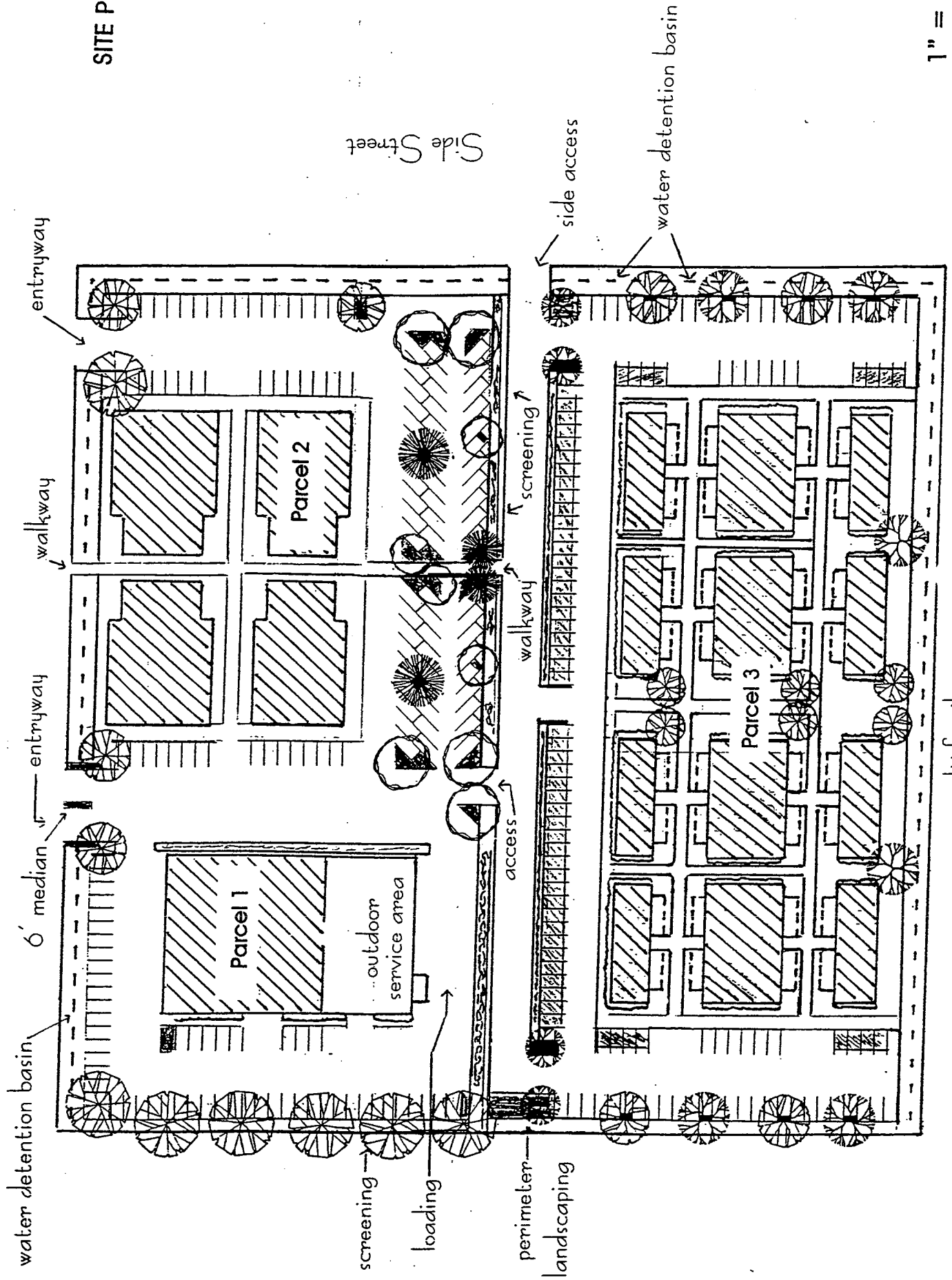
- 30600 sq. ft. (total of 4 buildings)
- 1 parking space/300 gross sq. ft. of floor area = 102 spaces
- Total spaces = 104

Parcel 3 - Multi-Family Residential

- 64 units (2 bedroom)
- 2 parking spaces/2 or more bedrooms = 128 spaces
- Total spaces = 130

Hwy. 99 W

SITE PLAN 3



1" = 100'

multi-family
residential

GLOSSARY

The following glossary of terms is provided to assist developers, decision-makers and staff in understanding the meaning of various terms used in this document including design terminology. Not all of these terms appear in the design guidelines, although their usage is likely to occur during project review.

Accent Planting - Areas used for borders, entry ways, flower beds, pedestrian areas, plazas, walkways, and other similar locations. Accent planting is used to enhance the overall landscaping design.

Accent Trees - Enhance the overall landscaping design and ties together the dominant tree theme, shrub planting, and the architectural design of the project. Accent trees are usually used to create the pedestrian scale and are smaller in size.

Alcove - A small recessed space, opening directly into a larger room.

Apex - In architecture or construction, the highest point, peak or tip of any structure.

Arbor - A light, open structure of trees or shrubs closely-planted, either twined together and self-supporting or supported on a light latticework frame.

Arcade - 1) A line of counterthrusting arches raised on columns or piers. 2) A covered walk with a line of such arches along one or both long sides. 3) A covered walk with shops and offices along one side, and a line of such arches on the other. 4) A covered walk, lit from the top, lined with shops or offices on one or more levels.

Articulation - The arrangement of parts on a building's exterior that serve to give the building its individual personality.

Backlit - Illuminated internally or from the inside.

Baluster, banister - One of a number of short vertical members, often circular in section, used to support a stair handrail or a coping.

Balustrade - An entire railing system (as along the edge of a balcony) including a top rail and its balusters, and sometimes a bottom rail.

Band - Any horizontal flat member or molding or group of moldings projecting slightly from a wall plane and usually marking a division in the wall.

Barge Course - One of the two rafters that support that part of a gable roof which projects beyond the gable wall.

Berm - A continuous bank of earth raised above the ground surface.

Bollard - A vertical, freestanding, short post used as a barrier to vehicles.

Bracket - A support element under overhangs; often more decorative than functional.

Cabinet Sign or Can Sign - A sign which contains all the text and/or logo symbols within a single enclosed cabinet and may or may not be internally illuminated.

Canopy - A covered area which extends from the wall of a building, protecting an entrance or loading dock.

Cantilever - A beam or architectural element projecting beyond a wall line without support from below.

Cap, Capital - Usually, the topmost member of any vertical architectural element, often projecting, with a drip as protection from the weather. The upper member of a column, pilaster, cornice, molding, or the like.

Casing - The exposed trim molding, framing, or lining around a door or window; may be either flat or molded.

Channel Letters - Three dimensional individually cut letters or figures, illuminated or unilluminated, affixed to a structure.

Chroma - The strength of a color which may vary on a scale from weak to strong. Weak-chroma colors are grayish while strong-chroma colors are more pure.

Colonnade - A row of columns supporting a roof structure.

Column - In structures, a relatively long, slender structural compression member such as a post, pillar, or strut; usually vertical, supporting a load which acts in (or near) the direction of its longitudinal axis.

Coping - A protective cap, top, or cover of wall, parapet, pilaster, or chimney; often of stone, terra-cotta, concrete, metal or wood. May be flat, but commonly sloping, double-beveled, or curved to shed water as to protect masonry below from penetration of water from above.

Corbel - In masonry, a projection or one of a series of projections, each stepped progressively farther forward with height; anchored in a wall, story, column or chimney; used to support an overhanging member above.

Cornice - Any molded projection which crowns or finishes the part to which it is affixed; usually decorative.

Delineator Trees - Used to guide traffic, highlight entrances, terminate vistas and indicate ends of parking bays.

Design - 1) To compose a plan for a building. 2) The architectural concept of a building as represented by plans, elevations, renderings, and other drawings.

Detention Basin - A facility constructed or modified to restrict the flow of stormwater to a prescribed maximum rate, and to concurrently detain the excess waters that accumulate behind the outlet.

Dimension of a color - The visual quality of color. All colors have three dimensions: chroma, hue, value.

Directional Sign - An on-site sign which is designed and erected solely for the purpose of directing vehicular and/or pedestrian traffic within a project.

Dominant Trees - Trees planted to primarily create shade and provide canopy for streets, parking lots, and climate control.

Dormer - A structure projecting from a sloping roof usually housing a window or ventilating louver.

Double-Faced Sign - A sign constructed to display its message on the outer surfaces of two identical and/or opposite parallel planes.

Eaves - The lower edge of a sloping roof; that part of a roof of a building which projects beyond the wall.

Excess Stormwater Runoff - The volume and rate of flow of stormwater discharged from any drainage area which is or will be in excess of that volume and rate which pertained before urbanization.

Facade - The exterior face of a building which is the architectural front, sometimes distinguished from the other faces by elaboration of architectural or ornamental details.

False Front - A front wall which extends beyond the sidewalls of a building to create a more imposing facade.

GLOSSARY

False Mansard - A mansard like roof applied to the facade of a building not actually covering any floor area.

Frontage - 1) Property frontage; the front or frontage is that side of a parcel or development site abutting on a public street. 2) Building frontage; that portion of a building which fronts on a public street, public parking lot, private parking lot available to the general public, or pedestrian walk where customer access to a structure is available.

Gable - The vertical triangular portion of the end of a building having a double-sloping roof, from the level of the cornice or eaves to the ridge of the roof.

Gambrel Roof - A roof which has two pitches on each side.

Garish - That which is gaudy, showy, flashing, dazzling or too bright to be aesthetically pleasing.

Girth - In architecture, it refers to the circumference of a building.

Hardscape - Hardscape elements are enriched paving treatments that are used for pedestrian walkways, entryways, and similar uses within a development to mark key points.

Hip Roof - A roof which slopes upward from all four sides of a building, requiring a hip rafter at each corner.

Hue - The name of a color and one of its three dimensions.

Indirectly Illuminated Sign - A sign whose light source is external to the sign and which casts its light onto the sign from some distance.

Internally Illuminated Sign - A sign whose light source is located in the interior of the sign so that the rays go through the face of the sign, or light source which is attached to the face of the sign and is perceived as a design element of the sign.

Keystone, Key Block - In masonry, the central, often embellished, unit block of an arch. An element resembling a keystone in function or in shape.

Lattice - A network, often diagonal, of strips, rods, bars, laths, or straps of metal or wood, used as screening or for airy, ornamental constructions.

Mansard Roof - A roof having a double slope on all four sides, the lower slope being much steeper.

Marquee - A permanent roof-like shelter over an entrance to a building.

Mass - Refers to the bulk and size of a building; the main or larger part of a structure.

Monument Sign or Sign Wall - An independent, freestanding structure supported on the ground having a solid base as opposed to being supported by poles.

Natural or Earth-tone colors - Brown, tan, and creme colors.

Neutrals in color - White, black, and the grays.

On-site Detention Basin - A feature or structure for temporarily storing excess stormwaters, having devices for controlling the rate of release of the stored waters, and located within the urbanized site where the runoff originates.

Orientation - The placement of a structure on a site with regard to local conditions of sunlight, wind, and drainage.

Parapet Wall - The part of a wall which rises above the edge of a roofline.

Pilaster - A rectangular column attached to the facade of a building.

Pitch - The slope of a roof expressed in terms of a ratio of height to span.

Rendering - A perspective or elevation drawing of a project or portion thereof with artistic delineation of materials, shades, and shadows.

Ridge - The highest line of a roof when sloping planes intersect.

Roof Sign - A sign constructed upon or over a roof, or places so as to extend above the edge of the roof.

Scale - The relative proportion of elements on a building or between buildings.

Shade of a color - The color resulting from the addition of a black to a pure hue.

Silhouette - Profile or outline of an object.

Sign - Any structure, device, figure, display, message placard, or other contrivance, or any part thereof, situated outdoors or indoors, which is designed, constructed, intended, or used to advertise, or to provide data or information in the nature of advertising, to direct or attract attention to an object, person, institution, business, service, event, or location by any means, including words, letters, figures, designs, symbols, fixtures,

GLOSSARY

colors, illumination, or projected images. Does not include murals, paintings, and other works of art that are not intended to advertise or identify any business or product.

Sign Area - The entire area within a perimeter defined by a continuous line composed of right angles using no more than eight lines which enclose the extreme limits of lettering, logo, trademark, or other graphic representation.

Sign Wall or Monument Sign - An independent, freestanding structure supported on the ground having a solid base as opposed to being supported by poles.

Specimen Trees - Enhance the overall landscaping design and ties together the dominant tree theme, shrub planting, and the architectural design of the project. Specimen trees are usually columnar in form and larger than accent trees.

Streetscape - The area, including buildings, sidewalk, and street, in view of any portion of a street.

Texture - The tactile and visual quality of a surface or substance other than its color.

Tint in color - The color resulting from the addition of white to a pure hue.

Tone in color - The color resulting from the addition of gray to a pure hue.

Tower - A building or structure typically higher than its diameter.

Translucent - Surface that allows light to shine through, but is diffused to the extent that distinct images cannot be perceived.

Turret - A little tower often at the corner of a building.

Trellis - An open grating or latticework, of either metal or wood. An arbor or framework for the support of vines.

Value in color - The lightness or darkness of a color or a colorless area.

Vertical Proportions - The relative relationship between vertical elements on a building facade.

Wall Sign - A sign which is attached to or painted on the exterior wall of a structure with the display surface of the sign approximately parallel to the building wall.

Window Sign - Any sign posted, painted, placed, or affixed in or on any window exposed to public view. Any interior sign which faces any window exposed to public view and is located within three feet of the window.