

LEVI-CUSHMAN SPECIFIC PLAN

Chevron Land and Development Company

**Approved by the
City of San Diego
City Council,
Resolution Number R269106
August 11, 1987**

LEVI-CUSHMAN SPECIFIC PLAN

Prepared for
Chevron Land and Development Company
1660 Hotel Circle North, #620
San Diego, California 92108

Prepared by
RICK ENGINEERING COMPANY
Planning Division
Water Resources Division
Civil Engineering Division

With
RECON
Urban Systems Associates, Inc.
Wimmer Yamada & Associates
BECKET

TABLE OF CONTENTS

1.0	INTRODUCTION	3	2.4	Land Use Aspects of the Design Guidelines	22
1.1	Intent of the Specific Plan	3	2.4.1	Height Limits	22
1.2	Plan Summary	3	2.4.2	Open Space Network	22
1.3	Policy Compatibility	4	2.4.3	Theme Entrances	22
1.4	Legal Context	7			
1.5	Planning Context	7	3.0	URBAN DESIGN AND DEVELOPMENT POLICY	24
1.5.1	Background and Setting	7			
1.5.2	Mission Valley Community Plan	11			
2.0	LAND USE PLAN	15	3.1	General Design Policies	24
2.1	Description of Land Use Program	15	3.1.1	Basic Design Themes	24
2.1.1	Mixed Use Requirement	16	3.1.2	General Design Guidelines	25
2.1.2	Development Phasing & Implementation	16	3.2	Architectural Considerations	26
2.2	Land Use Aspects of the Vehicular Circulation System	19	3.2.1	Materials and Treatments	26
2.2.1	River Crossings	19	3.2.2	Form and Scale	28
2.2.2	Light-Rail Transit (LRT)	20	3.2.3	Architectural Uses	29
2.2.3	Transportation Center	20	3.3	Open Space Network	29
2.2.4	Parking	20	3.3.1	River Buffer	29
2.3	Land Use Aspects of the Riparian Revegetation Program	21	3.3.2	Pedestrian Circulation	34
2.3.1	Flood Channel	21	3.3.3	Bicycle Circulation	37
2.3.2	Habitat Areas	21	3.3.4	Project Open Space	40
2.3.3	River Buffer	21	3.4	Site Planning and View Corridors	40
2.3.4	Transition Areas	21	3.5	Circulation	43
			3.5.1	Public Transportation	43
			3.5.2	Auto/Truck Circulation	44
			3.6	Streetscape Elements	49
			3.7	Landscape Design	52
			3.7.1	Streetscape	54

2.1	Project Development Plan	14	5.6	Project Recommended LRT Alignment	89
2.2	Key to Parcel Locations	18	5.7	Recommended Street Classifications	92
2.3	Typical Project Cross Sections	23			
3.1	Height Zones	27	6.1	School Locations	95
3.2	Open Space Network	30			
3.3	River Cross Section and Buffer	31			
3.4	Typical Designs Adjacent to the Buffer	33			
3.5	Pedestrian Circulation System	35			
3.6	Bikeways	38			
3.7	View Corridors	42			
3.8	LRT/Transportation Center	45			
3.9	Mass Transit	47			
3.10	Typical Street Sections	48			
3.11	Conceptual Landscape Plan	53			
3.12	Theme Entry Hierarchy	57			
3.13	Preliminary Grading Plan	67			
4.1	Floodway, Existing and Proposed	73			
4.2	Channel Design Cross Sections	75			
4.3	Revegetated Riparian Areas	77			
4.4	Special Treatment Areas	79			
5.1	Freeway and Street System with 1985 ADT	81			
5.2	Proposed Cul de Sac	82			
5.3	Caltrans Proposed Improvements	84			
5.4	Vehicular Access and Circulation	86			
5.5	Community Plan LRT Alignment	88			

3.7.2	Setbacks	55
3.7.3	Parking	55
3.7.4	Open Areas	56
3.7.5	Irrigation	63
3.8	Conservation	63
3.8.1	Energy Conservation	63
3.8.2	Water Conservation	65
3.9	Noise Considerations	65
3.10	Earth Moving/Grading	66
3.10.1	Flood Channel	68
3.10.2	Streets	68
3.10.3	Site Grading	68
3.10.4	Slope Planting Mixes	70
4.0	RIPARIAN REVEGETATION PROGRAM	72
4.1	Existing Conditions, Programs, and Limitations	72
4.2	Flood Management	72
4.3	Wetlands Reestablishment and Management	74
5.0	CIRCULATION PROGRAM	80
5.1	Freeway System	80
5.2	Street System	80
5.3	Project Access and Parking	83
5.4	Light-Rail Transit	87
5.5	Trip Generation Estimate	87

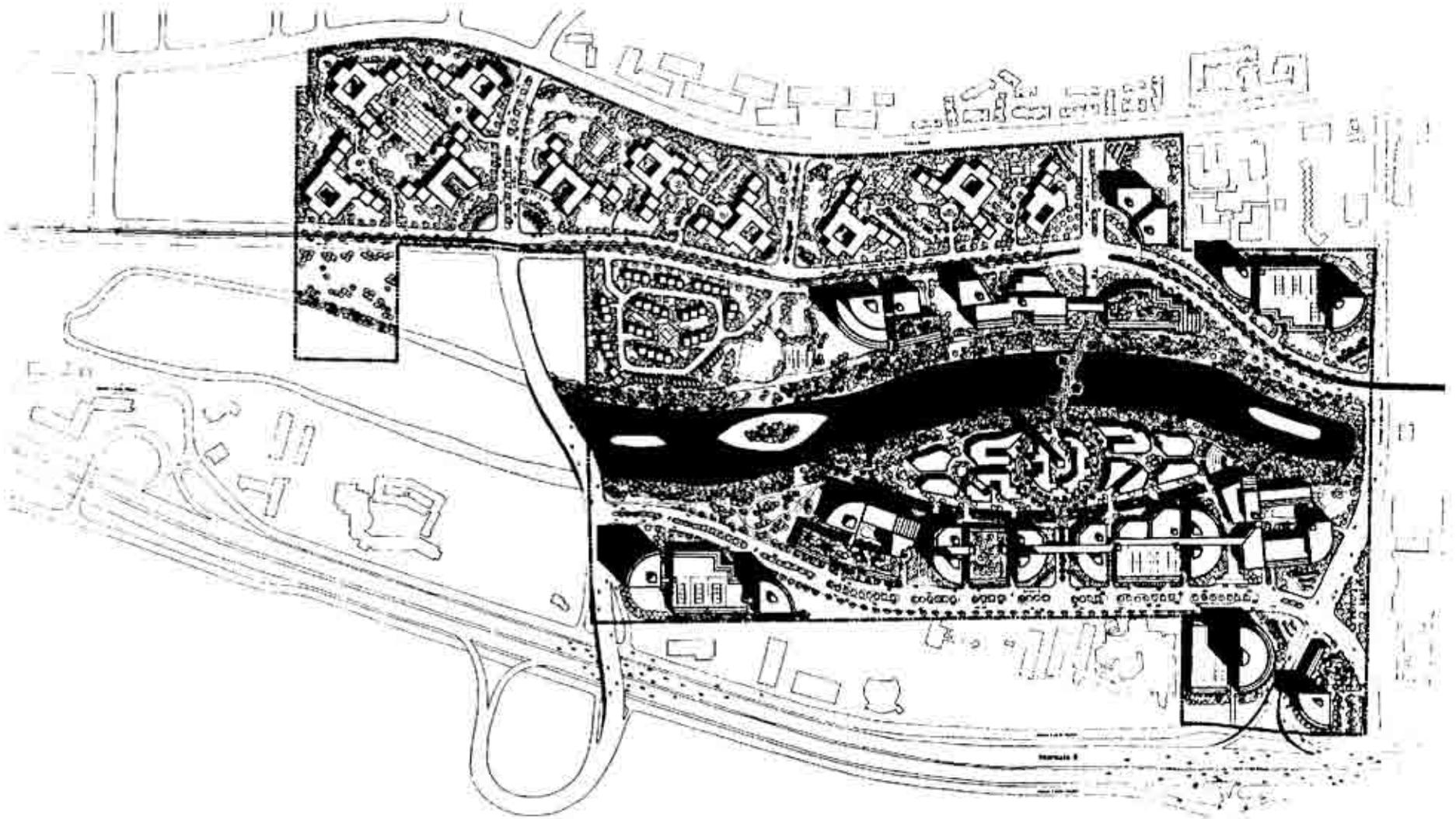
6.0	PUBLIC SERVICES AND FACILITIES	94
6.1	Schools	94
6.2	Park Facilities	94
6.3	Public Services and Utilities	97
7.0	COMPATIBILITY WITH APPLICABLE PLANS	99
7.1	Introduction	99
7.2	Progress Guide and General Plan	99
7.3	Mission Valley Community Plan	100

TABLES

2.1	Anticipated Development Allocation	17
3.1	Streetscape Plant Matrix	58
3.2	On-Site Plant Matrix	60
5.1	Project Trip Generation	91
5.2	Phasing of Transportation Improvements	93

FIGURES

1.1	Vicinity Map	2
1.2	Local Setting	6
1.3	Aerial View	8
1.4	Ownership Boundaries and Assessor's Parcel Numbers	9
1.5	ADT Allocation Based on Interim Development Ordinance	13



**LEVI - CUSHMAN
SPECIFIC PLAN**

CONCEPT PLAN

1.0 INTRODUCTION

1.1 INTENT OF THE SPECIFIC PLAN

This Specific Plan proposes mixed-use development on approximately 200 acres of land in the western portion of Mission Valley on a site currently occupied by the Stardust Country Club. The land is owned by members of the Levi and Cushman families of San Diego and leased to the golf club.

Because of its size, location, and single ownership, the property presents a unique planning and development opportunity in Mission Valley and will create opportunities for public access to the San Diego River through what is now privately-used open space.

Basic uses, programs, and conditions for development of the 200-acre Levi-Cushman property are identified in this Specific Plan. The Plan establishes a framework to accommodate 20 years' worth of development by defining the context in which future land use proposals can be evaluated. This is accomplished by providing an overall physical development plan and a series of development and design criteria.

In an attached text entitled "Implementation Guidelines," policies and criteria from the Specific Plan are collected and reformatted for use in evaluating Planned Commercial Development (PCD) and Planned Residential Development (PRD) applications. Ultimately, Planned Commercial Developments and Planned Residential Developments will detail the specific uses which occur on specific sites.

1.2 PLAN SUMMARY

To be phased over a 20-year period, development within the Levi-Cushman Specific Plan (LCSP) area focuses residential, retail, office, and hotel use on a newly channeled San Diego River.

Central to the project will be a 12-acre island created along the southern edge of the San Diego River. The island will be commercially anchored and accommodate small-scale specialty retailing, office, and residential uses. Much of the housing and neighborhood commercial uses planned for the project are located on the north side of the River. Most office and hotel development is sited south of the River.

Overall, the major themes that form the basis of this Specific Plan are:

Mixed Use. A mix of residential, retail commercial, office, hotel, and recreational uses will be included within the project.

River Focus. The San Diego River will act as the visual focus of development. It will be channeled to meet flood control requirements and enhanced as a wildlife and waterfowl habitat.

Uniform Design Standards and Guidelines. Consistent and compatible design standards and guidelines will apply throughout the Specific Plan area.

Traffic Generation. Traffic generated by on-site development will not exceed 67,000 Average Daily Trips (ADT), as established by the Mission Valley Community Plan.

The Levi-Cushman Specific Plan proposes a total of 5.3 million square feet of development. This will result in approximately 67,000 ADT when adjustments for light-rail transit are considered. This is virtually the same number of trips permitted under the amended Mission Valley Community Plan and the revised Mission Valley Development Intensity Regulatory Overlay District, Ordinance #00-16460, including amendments #16523, #16524, and #16880.

The "Implementation Guidelines," which summarize the development criteria to be used in evaluating PCDs and PRDs submitted within the LCSP project area, include maps of individual project sites.

An environmental impact report accompanies the Plan and assesses issues related to the character and intensity of development.

1.3 POLICY COMPATIBILITY

The land use and development program identified in this plan will create a physical environment that

- is consistent with goals of the City of San Diego General Plan and the Mission Valley Community Plan,
- creates a desirable residential environment,
- facilitates efficient business and commercial operations,

- creates a working environment sensitive to human needs and values, and
- protects adjacent land uses - particularly the San Diego River corridor - from flooding.

This Specific Plan implements important goals and policies of the Progress Guide and General Plan of the City of San Diego and the Mission Valley Community Plan.

From the Progress Guide and General Plan:

Fostering a physical environment that enables San Diego to fully and efficiently perform its indicated local, regional, state, national, and international role.

Fostering a physical environment that offers San Diegans a wide range of life-styles.

Fostering a physical environment that is responsive to the individual's psychological, aesthetic, and physical needs.

Achievement of the planned environment through efficient use of the City's land and other natural resources so as to maximize future developmental options.

Conservation of an urban environment that is in harmony with nature and retains strong linkages with it.

When completed, the proposed development will integrate residential, office, retail commercial, and recreational uses within a planned environment. By its very nature, a planned

use development provides a significant opportunity for fostering efficiency in land use and human activity as a result of locating complementary uses in proximity to one another. Because this particular development is sited on the San Diego River, there are special opportunities to provide a desirable development aesthetic that not only harmonizes with the river corridor but also creates a dramatic blending of urban development within a natural-appearing aquatic setting.

From the Mission Valley Community Plan:

Encourage high-quality urban development in the Valley which will provide a healthy environment and offer occupational and residential opportunities for all citizens.

Provide protection of life and property from flooding by the San Diego River.

Provide a framework for the conservation of important wetland/ riparian habitats balanced with expanded urban development.

Facilitate transportation through and within the Valley while establishing and maintaining an adequate transportation network.

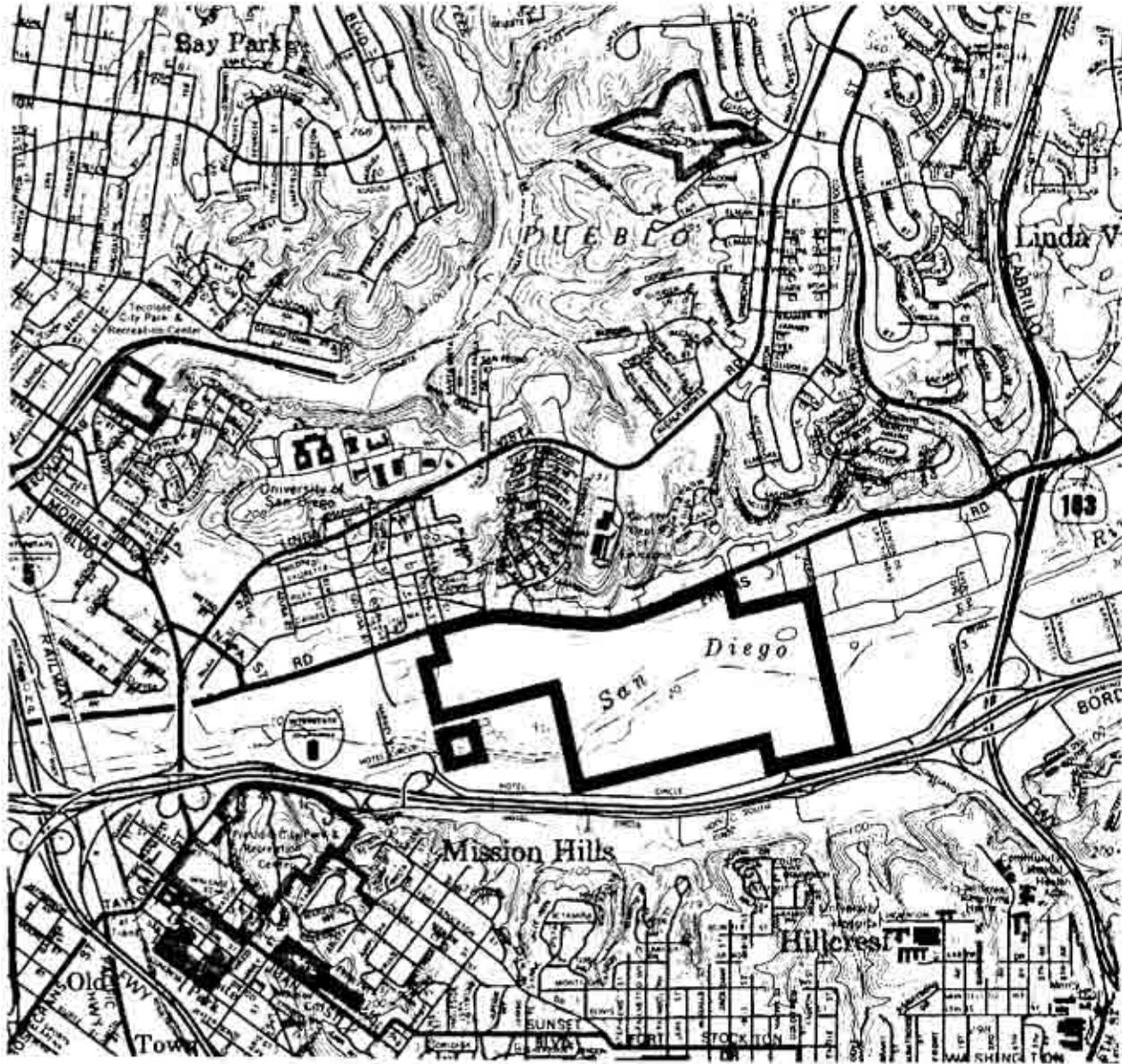
Provide public facilities and services that will attend to the needs of the community and the region.

Provide guidelines that will result in urban design which will be in keeping with natural features of the land and es-

tablish community identity, coherence, and a sense of place.

These goals, intended both for the Community Plan and Mission Valley itself, have a direct response within this Specific Plan:

- Residential and occupational opportunities are provided through a mixed-use development program that provides high-quality development with living and working components. See Section 2.1.
- A river channel will be created through the site that is capable of containing the U.S. Army Corps of Engineers' 49,000- cfs flood. See Section 2.3.
- Conservation and enhancement of the San Diego River wetlands and riparian habitat is a major product of this Specific Plan. See Section 2.3.
- Inter- and intra-valley transportation service is an important element in the success of the project. See Section 2.2.
- Public facilities and services required by the community - including police, fire, and utility service - are discussed in Section 6.0 and detailed within the Implementation Guidelines.
- Guidelines for urban design that are compatible with the Mission Valley Community Plan are included in Section 3.0 of the Specific Plan.



**LEVI - CUSHMAN
SPECIFIC PLAN**

6/LEVI-CUSHMAN SPECIFIC PLAN

FIGURE 1.2
LOCAL SETTING

1.4 LEGAL CONTEXT

The authority for and scope of specific plans is defined in the California Government Code, Title 7, Division 1, Article 8, Section 65450 et seq. Under these provisions, specific plans may be prepared for the "systematic implementation of the general plan."

Government Code Section 65451 provides that:

(a) A specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

(1) The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.

(2) The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewer, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.

(3) Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.

(4) A program of implementation measures including regulations, programs, public works projects, and financ-

ing measures necessary to carry out paragraphs (1), (2), and (3).

(b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

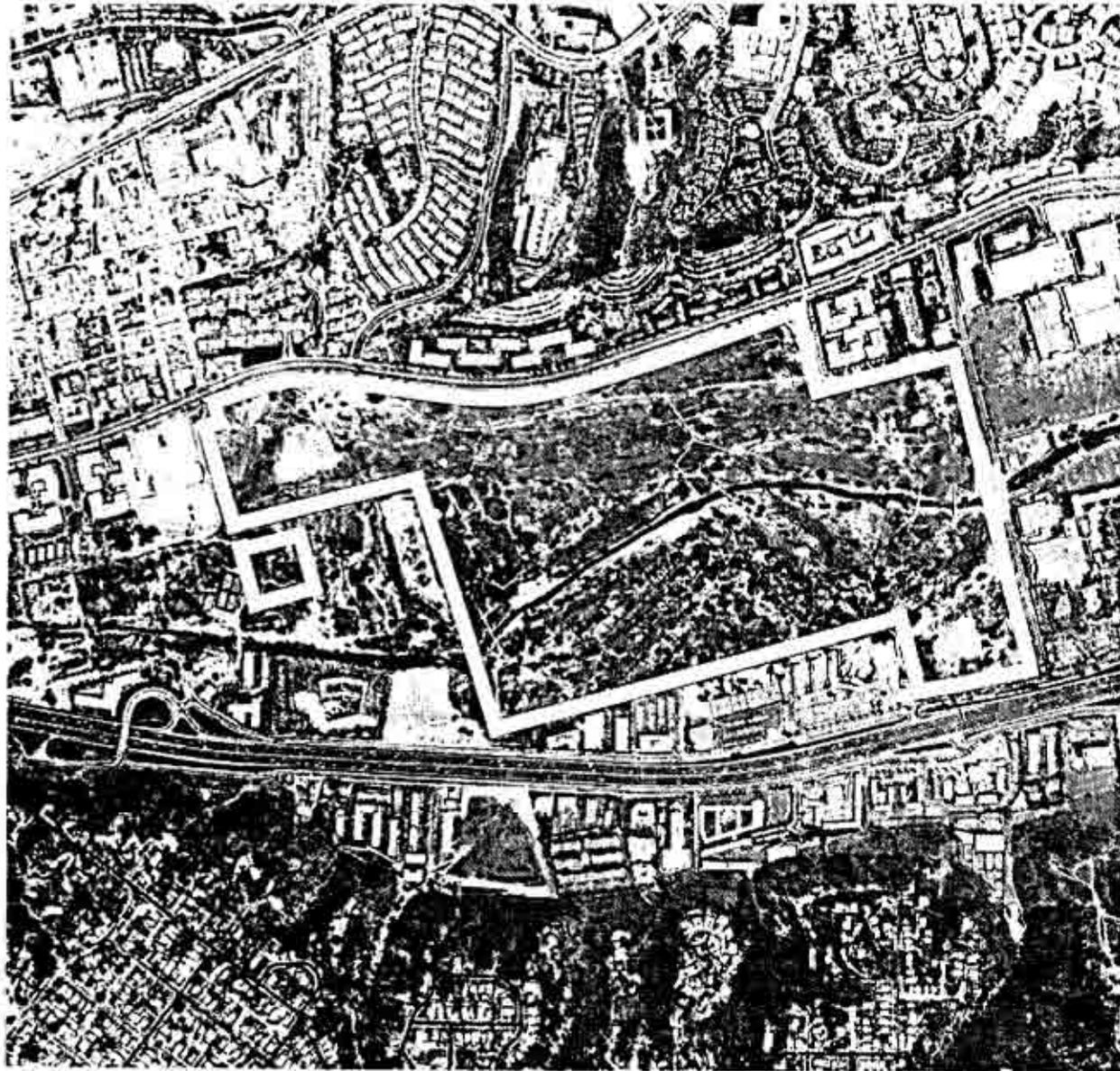
This Specific Plan complies with Government Code Section 65451, and is designed for adoption as the development plan for the Levi-Cushman property.

1.5 PLANNING CONTEXT

1.5.1 Background and Setting

At approximately the geographic center of the City of San Diego lies the Mission Valley planning area where, until the 1960s, agriculture and sand and gravel extraction were principal land uses.

The first major urban development in Mission Valley came with the Mission Valley Shopping Center, approved in 1958. During the late '50s and throughout the 1960s, Hotel Circle - a commercial development fringing the north and south sides of Interstate 8 - became an important commercial, recreation, and visitor-oriented area. Other significant projects constructed in Mission Valley during that period included San Diego-Jack Murphy Stadium, completed in 1967, and Fashion Valley Shopping Center, built in 1969. During the early 1970s, the religious order of the Poor Sisters of Nazareth sold much of the land surrounding Mission San Diego de Alcalá.



NO SCALE



**LEVI – CUSHMAN
SPECIFIC PLAN**

8/LEVI-CUSHMAN SPECIFIC PLAN

FIGURE 1.3
AERIAL VIEW

By the mid-70s, Mission Valley was firmly established as an urban center in San Diego.

One of the consistently important elements in the history of Mission Valley is the San Diego River. Initially, the river was a source of fresh water. Subsequently, it grew in importance as a scenic recreational asset. Today, however, the river has little visual prominence in San Diego and its impact is felt almost exclusively as a result of intermittent flooding and property damage. Significant flooding occurred most recently in 1978, 1979, 1980, and 1985.

The Mission Valley Planning Area, as defined by the San Diego Planning Department, extends from Interstate 5 on the west to approximately Fairmount Avenue on the east. Covering more than 2,000 acres, the Mission Valley Planning Area is the nexus of major freeways in the City - Interstates 8, 5, 805, and 15 - and State Route 163.

At present, Mission Valley contains a mix of retail, hotel, recreational, and office/commercial development, industrial uses, sand and gravel operations, and residential and institutional uses. In and among developed uses is a considerable amount of vacant land and such interim land uses as parking lots and golf courses. A visually striking impression of Mission Valley emerges from its discontinuous development: major regional shopping centers are adjacent to partially developed parcels adjacent to sand and gravel operations or vacant land. The sense of discontinuity is even further heightened by the juxtaposition of different architectural styles.

Two major new developments within Mission Valley have been approved by the City Council and several are in the planning stages.

The Specific Plan for the First San Diego River Improvement Project (FSDRIP) covers an area of approximately 254 acres lying roughly between State Route 163 and U.S. Interstate 805. Approved by the San Diego City Council in November, 1982 (amended July 1983 and April 1986), the plan calls for five major private developments adjacent to a new flood control channel. Development includes residences, commercial offices, commercial retail uses, and a visitor-oriented hotel.

The Northside Specific Plan, approved in November, 1984, proposes development of a 241-acre site just east of I-805 and north of I-8. The project includes residential, commercial office, hotel/motel, and specialty commercial use.

Planning efforts are also underway for office, hotel, and residential development on eight separate sites within Mission Valley owned by Atlas Hotels. Three of those sites lie immediately adjacent to the Levi-Cushman project.

In January of 1986, work began on a plan for the Warner Ranch property, a parcel of approximately 36 acres, which abuts the western boundary of the Levi-Cushman Specific Plan area.

Figure 1.4 shows ownership boundaries and Assessor's Parcel Numbers for property in the immediate vicinity of the LCSP site.

The western portion of Mission Valley is typical of the entire planning area in that it combines residential, office commercial, retail commercial, and recreational uses with underutilized and vacant land areas. In this western part of Mission Valley lies the Levi-Cushman property - the 200 acres currently used as the Stardust golf course and driving range - which is the subject of this Specific Plan.

The project area consists of a relatively level valley floor that gradually slopes up from the San Diego River. At the present time, the property provides virtually no riparian habitat or vegetation. Primary features of the site are a small channel for the San Diego River running through the approximate center of the golf course, and the course itself. Natural features and structures are visible from throughout the property and include views of natural slopes on the north and south sides of the valley as well as distant views down the center of the valley to the east and west. The project area itself is highly visible from the mesas and slopes on the north and south sides of the valley.

Surrounding the project site is the heavily used Interstate 8 on the south, the River Valley Golf Course on the west, multi-family residential units on the north, and broad asphalt parking areas serving Fashion Valley shoppers on the east.

1.5.2 Mission Valley Community Plan

The Mission Valley Community Plan (MVCP), adopted by the City Council on June 25, 1985, recognizes several significant

issues to be considered in the planning and development of Mission Valley: environmental quality, development intensity, circulation, and urban design.

The environmental quality concerns expressed within the Community Plan and Wetlands Management Plan principally involve the use, impact, and enhancement of the San Diego River. There is a strong emphasis on the need to revitalize the river corridor and give it greater prominence within the San Diego environment.

Development intensity and circulation are directly linked in the Community Plan inasmuch as the basis for regulating the intensity of development is the finite traffic capacity on the projected circulation system (freeways and surface streets). In the Community Plan, the capacity of the future circulation system is calculated based on the forecast upgrades to Mission Valley streets, freeways, intersections, and interchanges. That capacity is translated into a maximum number of vehicle trips.

In June of 1985, the San Diego City Council adopted the Mission Valley Development Intensity Regulatory Overlay District Ordinance which divides Mission Valley into 13 districts. Under this approach, the Levi-Cushman project is allocated approximately 67,000 ADT.

Figure 1.5 portrays the computations used to derive the ADT allocation for the project site based on the interim ordinance.

To understand what ADT means in terms of actual development, the Mission Valley Community Plan indicates that each

single-family house generates 10 trips a day; each hotel room, 10 trips; every thousand square feet of a community commercial shopping center, 70 trips; every thousand square feet of a large office complex, 16 trips; and so on. Overall, more than 30 distinct "vehicle generation rates" were included in the Community Plan and incorporated into the ordinance.

Changes to these trip generation rates were proposed by the City's Transportation and Traffic Engineering Division and have since been adopted by the City Council. The specific changes approved for the Levi-Cushman project include a 20 percent reduction in the hotel generation rate due to vacancy (now 8 trips per room); a 30 percent reduction for linked retail trips (now 49 trips per thousand square feet); and a 4 percent reduction in all generation rates in areas served by LRT. These adjusted ADT rates are used throughout this Specific Plan to compute the traffic generated by development within the Levi-Cushman project area.

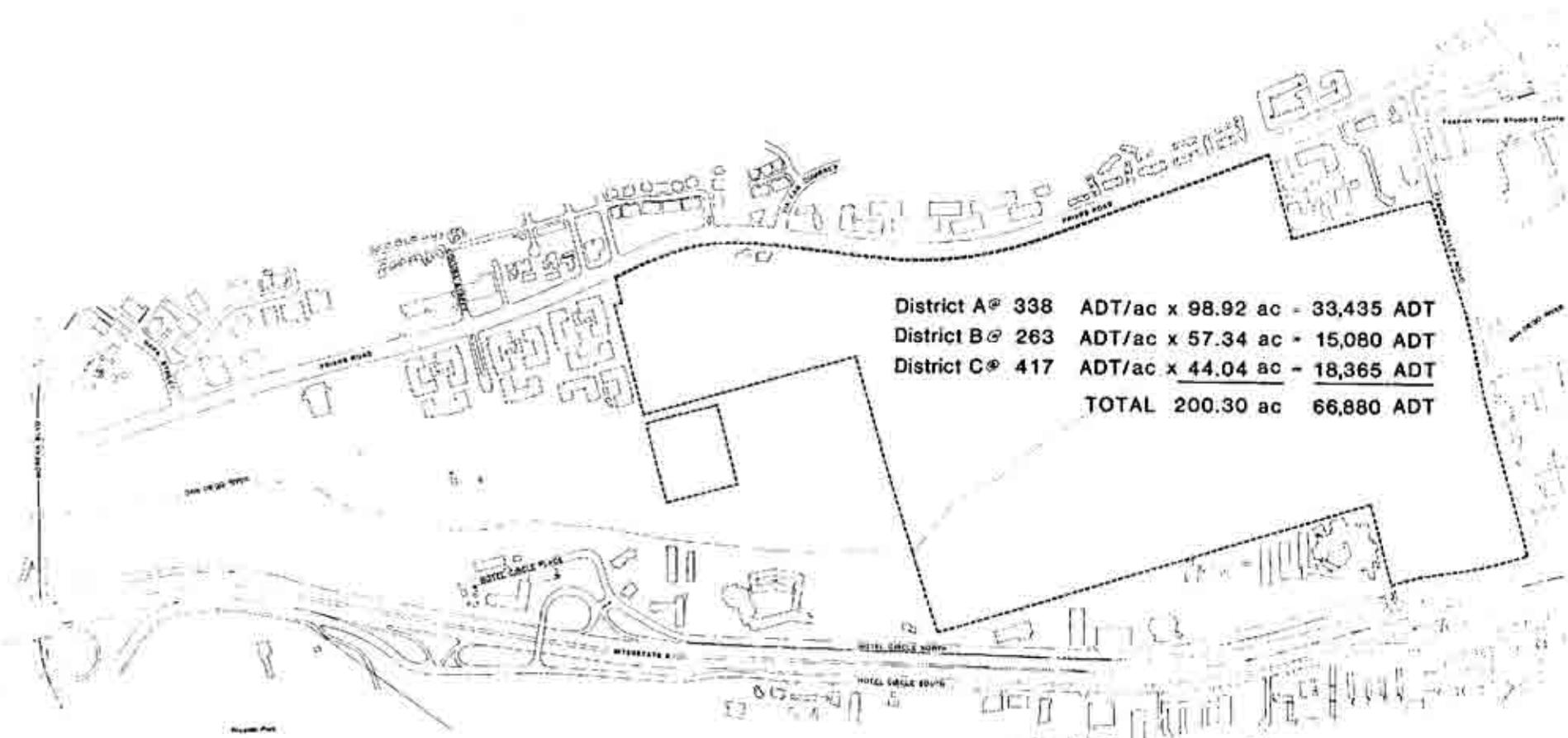
Another device used in the Mission Valley Community Plan to relate vehicle trips to land development is the Equivalent Dwelling Unit, or EDU. Initially, the City Planning Department determined that 10 ADTs were equal to 1 EDU. Thus, a single-family dwelling was equal to 1 EDU, a hotel room 1 EDU, shopping centers 7 EDU per thousand square feet, etc. Under the Mission Valley Community Plan, 67,000 ADT translated to 6,700 EDU.

This 10:1 equivalency between ADT and EDU changed when the number of ADT assigned particular uses was adjusted by the City's Transportation and Traffic Engineering Division.

Because trip generation figures were lowered (e.g., a hotel room is now calculated to generate 8 trips instead of the previously assumed 10 trips), the 67,000 ADT allocated to the Levi-Cushman property will support 7,594 EDU.

Background to the change in trip generation rates is discussed in the Circulation section of this Specific Plan and fully detailed within the Transportation Appendix of the LCSP environmental impact report.

All references within this Specific Plan to the Mission Valley Community Plan and the San Diego River Wetlands Management Plan refer to the document adopted by the City Council on June 25, 1985.



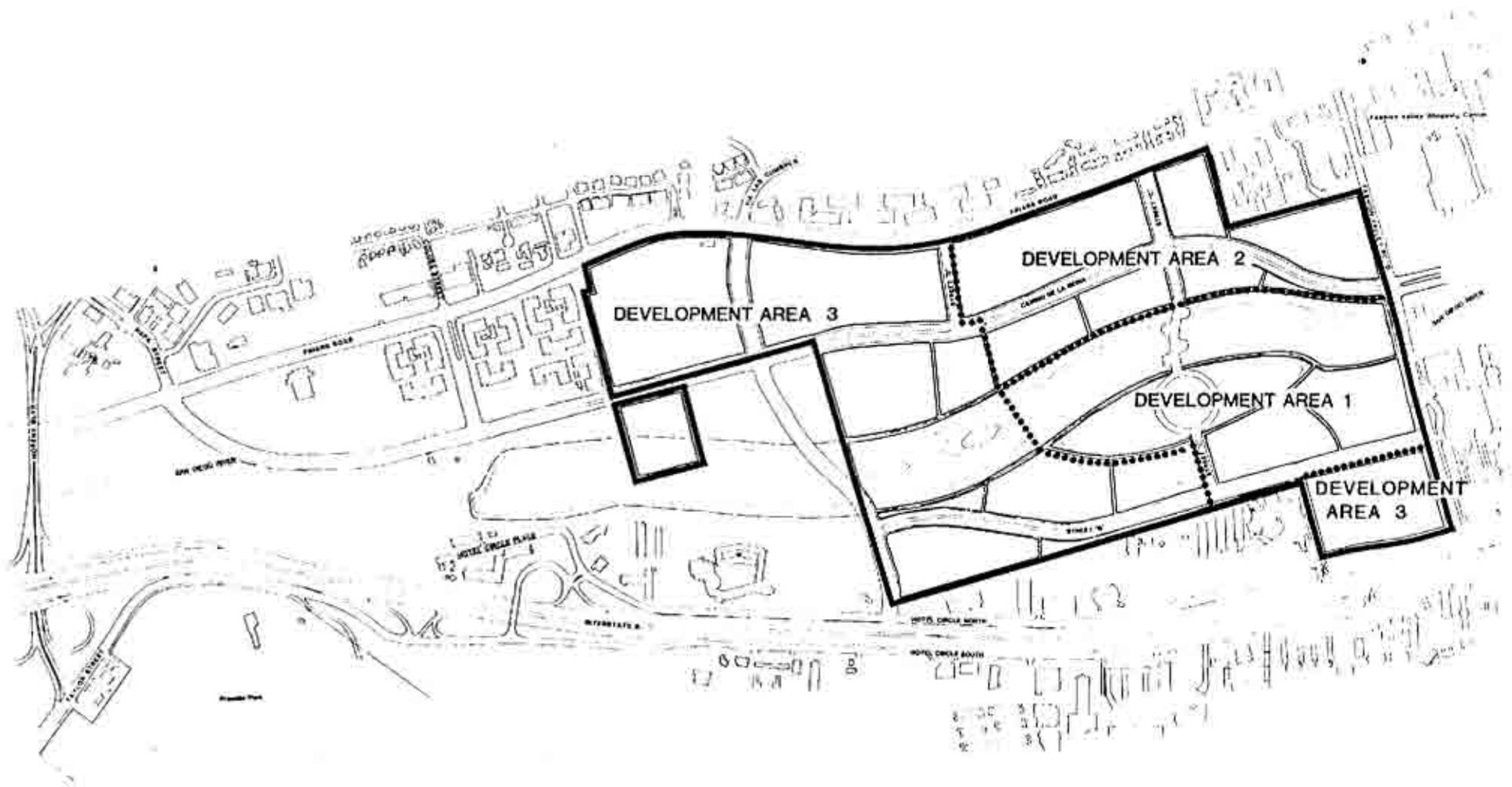
ADT ARE ALLOCATED WITHIN DEVELOPMENT INTENSITY DISTRICTS UNDER THE CITY OF SAN DIEGO'S 1985 INTERIM DEVELOPMENT ORDINANCE FOR MISSION VALLEY. WITHIN EACH DISTRICT, A DIFFERENT NUMBER OF TRIPS PER ACRE IS PERMITTED. THE LEVI-CUSHMAN SPECIFIC PLAN AREA INCLUDES PART OF DISTRICTS A, B, AND C.

FIGURE 1.5

**LEVI - CUSHMAN
SPECIFIC PLAN**



**ADT ALLOCATION
BASED ON INTERIM
DEVELOPMENT
ORDINANCE**



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 2.1



2.0 LAND USE PLAN

2.1 DESCRIPTION OF LAND USE PROGRAM

Figure 2.1, Project Development Plan, identifies the project boundary, river corridor, circulation system, major Development Areas, and sub-area parcelization.

Development on the 200-acre Levi-Cushman Mission Valley property will blend residential, retail, office, hotel, and recreational uses in a visually striking and environmentally sensitive water-oriented urban setting. Project design will allow for the development of urban densities and intensities adjacent to a biologically viable wildlife and waterfowl habitat area.

Physically, the mixed-use project will be characterized by:

A well-landscaped urban development with high-rise structures at the periphery and lower-rise structures near the river corridor;

A channelized and natural-appearing San Diego River which provides new wildlife habitat, serves as a flood control facility, and supplies new public recreation areas;

A 12-acre island created along the south shore of the San Diego River which features a dramatic theme tower; and

A narrow canal on the south side of the island providing a waterside environment for retail, office, and pedestrian uses.

The San Diego River effectively divides the project laterally into northern and southern sections. The two sections are joined on the east and west by major roadways and, in the center of the project, via a pedestrian bridge.

Overall, there is a greater concentration of residential uses north of the river, with office and retail development clustered south of the river. Retail uses are planned both north and south of the river.

Of the total 135 acres in the project planned for development, some 77 acres lie north of the San Diego River. Here, residential uses are expected to dominate, with offices, community commercial uses, retail stores, and hotel rooms occupying the balance of the site.

Approximately 53 acres planned for development lie south of the San Diego River. Office and retail will be the principal uses on the 12-acre island, with office and hotel uses dominating the developable area south of the river.

The bridge from the north shore to the island is for pedestrian access and transit shuttles and will feature temporary commercial stands and stalls to enliven the route and encourage pedestrian use. It will be designed as a 100-year crossing of the river and constructed to allow limited vehicular access for public transit within the project (e.g., jitney service, "elephant trains") and emergency vehicle access. The bridge is expected

to have a width of 30 feet to accommodate pedestrians, transit, and emergency vehicles. Commercial nodes may add up to 20 additional feet to the bridge width, resulting in a maximum width of 50 feet at any one point.

The island created along the south shore of the river will be separated from land on the south by a 40-foot-wide canal. The canal will be a man-made lake physically isolated from the river, but will portray a strong illusion of continuity with the river. Pedestrian walkways - a "Riverwalk" - and retail stores will be developed on either side of the canal, and it is anticipated that paddleboats or similar water-oriented rides would be made available.

Table 2.1 indicates the types of land use anticipated within the project by square feet, EDUs, and ADTs. Because development will be implemented through PCDs and PRDs, applications for use may show a variation of up to 5 percent in the number of ADTs and up to 15 percent in the residential units, hotel rooms, and square footages portrayed in Table 2.1. In no instance, however, will total development exceed the maximum of 67,000 ADT.

2.1.1 Mixed Use Requirement

Of importance to the entire concept of this development is the functional integration of uses, i.e., its mixed-use character. It is anticipated, for example, that a hotel may be located next to a retail commercial building or next to a building that houses retail, office, and residential uses. Dynamic interaction

among uses - and pedestrian connections to facilitate that interaction - will energize the entire development and play an important role in reducing auto dependency.

Each Development Area must contribute to the overall mixed-use character of the project. *Mixed use* means:

- (a) a structure housing multiple uses, e.g., office and retail;
- (b) a structure housing a single use sited on a parcel of land with one or more other structures housing a single but different use, with all such structures linked at the pedestrian level;
- (c) a structure housing a single use sited on a parcel of land with one or more other structures housing multiple uses;
- (d) a structure housing multiple uses sited on a parcel of land with one or more other structures housing multiple uses.

To assure a mixed-use project, each Development Area within the LCSP shall contain at least three distinct land uses (e.g., residential, hotel, retail, office), with no single land use accounting for more than 65 percent of the square footage within that Development Area.

2.1.2 Development Phasing and Implementation

Overall project phasing is described in the Implementation Guidelines and will be keyed primarily to market demand and availability of infrastructure.

**TABLE 2.1
ANTICIPATED DEVELOPMENT ALLOCATION^a**

	Residential ^b	Hotel ^c	Retail	Office	Total
DEVELOPMENT AREA 1					
Dwelling Units	60				
Hotel rooms		500			
K SqFt	78	375	100	500	1,053
EDUs	48	500	700	800	2,048
ADTs	480	4,000	4,900	8,000	17,380
DEVELOPMENT AREA 2					
Dwelling units	300				
Hotel rooms		250			
K SqFt	390	250	50	691	1,319
EDUs	240	250	350	1,106	1,946
ADTs	2,400	2,000	2,450	11,056	17,906
DEVELOPMENT AREA 3^d					
Dwelling units	969				
Hotel rooms		250			
K SqFt	1,260	250	50	1,391	2,889
EDUs	775	250	350	2,225	3,600
ADTs	7,327	1,680	2,058	20,604	31,669
TOTALS					
Dwelling units	1,329				
Hotel rooms		1,000			
K SqFt	1,728	751	200	2,582	5,261
EDUs	1,063	1,000	1,400	4,131	7,594
ADTs	10,207	7,680	9,408	39,660	66,955

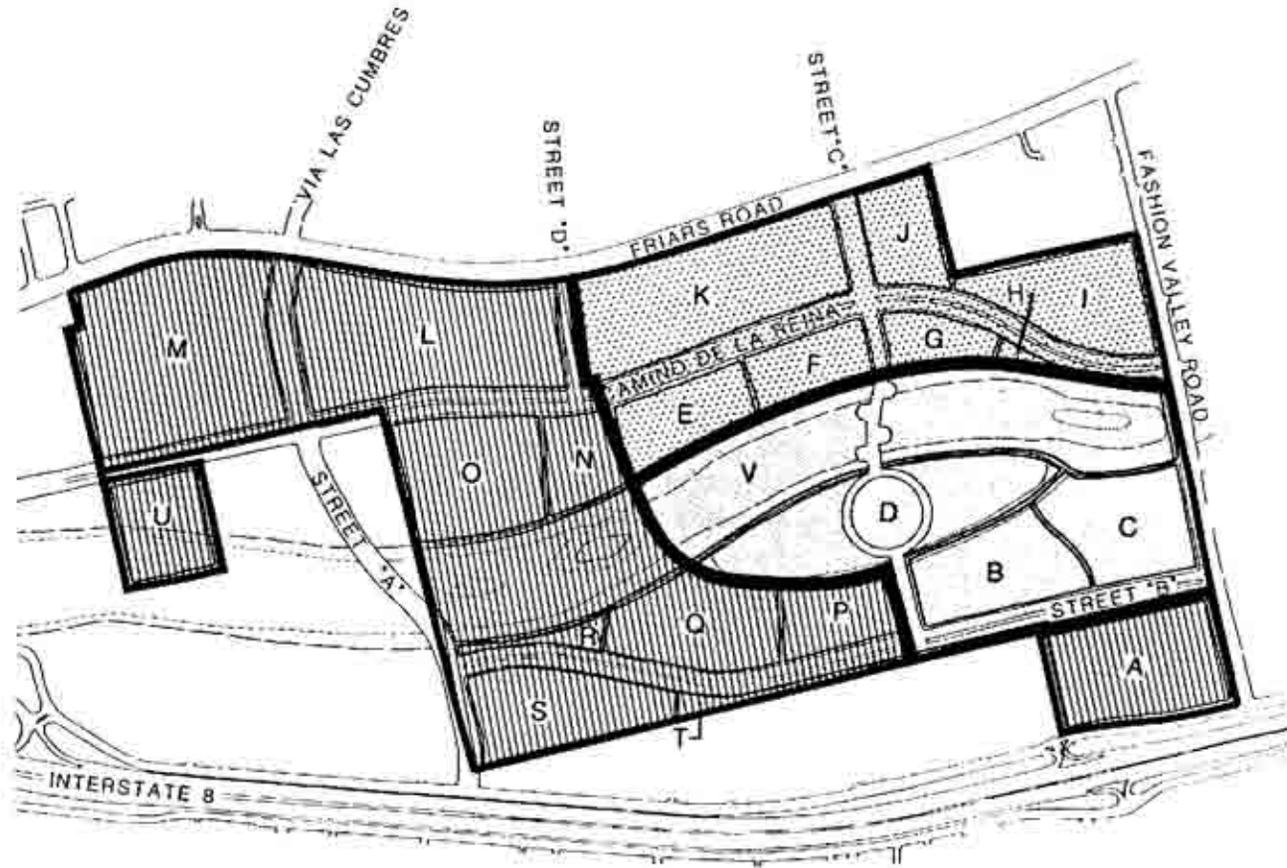
Notes:

a - ADT figures in this table reflect: 8 trips per multi-family residential unit; 8 trips per hotel room; 49 trips per thousand square feet of community commercial center; and 4 percent overall reduction for light-rail transit. See Circulation Section for details. Actual development may show a variation of up to 5 percent in the ADT figures portrayed by Development Area, though the total will not exceed 67,000 ADT. Development may not exceed units, rooms, or nonresidential square footage by more than 15 percent per Development Area.

b - Residential units are calculated at 1,300 square feet each.

c - Hotel rooms are calculated at 750 square feet each.

d - Light Rail Transit adjustments equal four percent of the cumulative ADT. LRT adjustments are made for the entire project in DA 3, after construction of the LRT has begun into Mission Valley.



LEGEND

DEVELOPMENT AREA 1:

 53.5 ACRES

DEVELOPMENT AREA 2:

 47.1 ACRES

DEVELOPMENT AREA 3:

 99.8 ACRES



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 2.2

It is anticipated that construction will start in Development Area 1 (DA 1), where approximately 20 percent of the total project square footage is planned. The balance of development will be shared between DA 2 and DA 3. In the 20 years required to complete the project, building may at times occur simultaneously in all Development Areas.

The Levi-Cushman Specific Plan will be implemented by PCD and PRD development applications that define use locations and structures within each Development Area. Development Areas are the minimum unit for which PCD and PRD applications can be submitted.

Every PCD or PRD submitted under the LCSP must provide an accounting for land use and ADTs within the project area to assure that mixed-use requirements are being met and that the maximum number of ADTs is not being exceeded. This will be accomplished by requiring that all PCD or PRD applications identify the number of ADTs, residential units, hotel rooms, and square feet of development associated with each land use type within the Development Area being processed, as well as a summary of ADT's, units, rooms, and square footage of previously approved and future Development Areas.

2.2 LAND USE ASPECTS OF THE VEHICULAR CIRCULATION SYSTEM

A discussion of the circulation and traffic system for the Levi-Cushman Specific Plan appears in Section 5 of this Specific Plan.

With the exception of Camino de la Reina, major streets in the project are identified with letter designations only. At the time planned development applications are submitted, street names will be proposed which relate to the final name selected for the overall development.

Freeway interchanges with Interstate 8 will be necessary at both Fashion Valley Road and Street A. It is recognized that neither Parcel A nor Parcel S can be developed until the design of these interchanges is completed. Consultation and coordination among Levi-Cushman, Caltrans, and adjacent property owners began in 1985 but, because of complex design issues associated with the interchanges, design studies have proceeded slowly. Only when the design of the interchanges at Fashion Valley Road and Street A are completed can development proceed at Parcels S and A, respectively. See Figure 2.2 for parcel locations.

2.2.1 River Crossings

Three river "crossings" are anticipated as part of the project:

(a) *Fashion Valley Road*: The existing Fashion Valley Road will be upgraded from a 1-year to a 10-year flood level crossing of the San Diego River. Ultimately, the road will run from Friars Road on the north to connect with Interstate 8 on the south. As it crosses the river, Fashion Valley Road will be inundated at the time of a 100-year storm and cause a slight back-water upstream.

(b) *Street C*: Street C right-of-way begins at Friars Road on the north, leads onto and off the island, and then terminates at Street B on the south. It is intended as a pedestrian bridge as it crosses the San Diego River and will be designed as a 100-year flood level crossing. The pedestrian bridge will accommodate limited public transit and emergency vehicle access.

(c) *Street A*: Street A will be a new connection between Friars Road and Hotel Circle North. Designed as a 100-year flood level crossing of the river, the road will incorporate a weir structure to assure a perennial body of water within the project area.

2.2.2 Light Rail Transit (LRT)

Location of the LRT, as part of the overall San Diego LRT system, is proposed in the median of Camino de la Reina. A major stop is proposed at the intersection with Street C where the LRT would interface with other transportation modes. However, final alignment of LRT facilities will be established by MTDB during final engineering studies.

2.2.3 Transportation Center

At the intersection of Camino de la Reina and Street C, a transportation center is planned. The transportation center will act as a focus for the various transit systems on the site and will serve as one of the major entrances to the project.

The concept for the center involves having the LRT drop

below grade as it approaches Street C, with a surface level overpass continuing to carry other private vehicular traffic. Passengers would board and alight the LRT and other public carriers from the below grade station.

Waiting areas and retail services appropriate to the transit rider will be provided at the Transportation Center, with parking facilities integrated into the overall structure. Access to both the open space and developed areas of the project will be incorporated into the Transportation Center design through a series of pedestrian and bicycle paths.

2.2.4 Parking

Most parking will be accommodated through on-site parking structures. By interconnecting parking facilities, traffic loading on surface streets will be reduced. Through use of shared parking facilities (e.g., hotel and office use), it may be possible to reduce the total number of parking areas. At least 75 percent of all required parking for a project will be provided in architecturally-integrated structures. The balance will occur in surface parking areas.

Since vehicular access to the island will be limited principally to traffic on Street C south of the island, parking for the shops, restaurants, and other retail uses on the island will be directed to intercept parking facilities off the island. Parcels F, G, P, and B will all contain parking facilities for vehicles otherwise destined for the island.

As a rule, parking garages will be located under or between buildings. Tops of parking structures will be landscaped or used for recreational purposes such as tennis courts or restaurants. Parking will not be permitted on roof surfaces. All required parking will be provided on-site and on-street parking will be prohibited.

2.3 LAND USE ASPECTS OF THE RIPARIAN REVEGETATION PROGRAM

A discussion of the flood management and environmental aspects of the San Diego River is contained in Section 4 of this Specific Plan.

2.3.1 Flood Channel

A flood control channel that varies between 400 and 450 feet wide and is approximately 26 feet deep will be constructed to carry the 100-year flood projected by the U.S. Army Corps of Engineers (49,000 cubic feet per second).

The channel will be soft-bottomed and natural appearing, with a maximum slope ratio of 2.5:1. Under normal conditions, the water surface area of the channel will be approximately 300 feet wide. In designing the channel, the flood flow from State Route 163 to the ocean was computer modeled with the HEC 2 program under the guidance of Dr. Howard Chang of San Diego State University.

Fashion Valley Road and Street A will be designed to pond the San Diego River at an elevation of approximately 13 feet

during dry weather conditions.

2.3.2 Habitat Areas

Edges and the banks of the river channel will provide riparian woodland, wetland marsh, and other habitat areas.

Consistent with the Mission Valley Community Plan, three habitat islands are included in the LCSP to increase the total area of wetland vegetation.

2.3.3 River Buffer

A 25-foot wide buffer will be located on each side of the river throughout the project. The buffer will contain a plant barrier to prevent direct access to the river and habitat areas, and may also contain pedestrian and bike paths, landscaped areas, and passive recreational areas.

2.3.4 Transition Areas

Fashion Valley Road is designed as a 10-year flood level crossing. In those years when flow exceeds that design level, river water will spill over the road and beyond the banks of the channel in an area on the eastern end of the project. In this designated floodway transition area, no structural development is permitted that would be endangered by such flows. Recreational and/or open space uses or LCSP entry monuments are considered appropriate uses so long as they conform to City flood control regulations. Consistent with that require-

ment, uses within the transition areas may include parks, parking areas, playing fields, par courses, or other recreational uses.

2.4 LAND USE ASPECTS OF THE DESIGN GUIDELINES

The LCSP is intended as a multiple-use urban project, with design standards and policies commensurate with urban uses. Urban design criteria and development policies are contained in Section 3.0 of this Specific Plan.

2.4.1 Height Limits

Basic LCSP development policies permit buildings up to 250 feet at the periphery of the site and require building heights to decrease and slope toward the river. At the center of the development, on the island, a theme tower is proposed that will rise dramatically and serve as the visual focus for the entire project. A sculptural form such as the Seattle Space Needle provides one possibility for the theme tower.

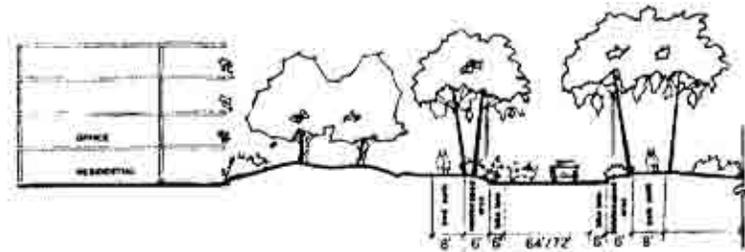
2.4.2 Open Space Network

Open areas within the Specific Plan include the river, the river buffer, parks, setbacks, hiking/biking/walking trails, theme entries, plazas, and privately maintained open areas within each parcel. These areas will total a minimum of 75 acres. Overall, a floor area ratio (FAR) of 0.6 results from the proposed development of 5.3 million square feet on 200 acres. Building bulk on each parcel will be a consequence of

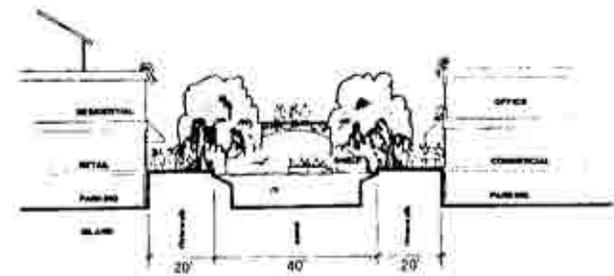
development intensity, height limit, lot coverage limits, and setback requirements.

2.4.3 Theme Entrances

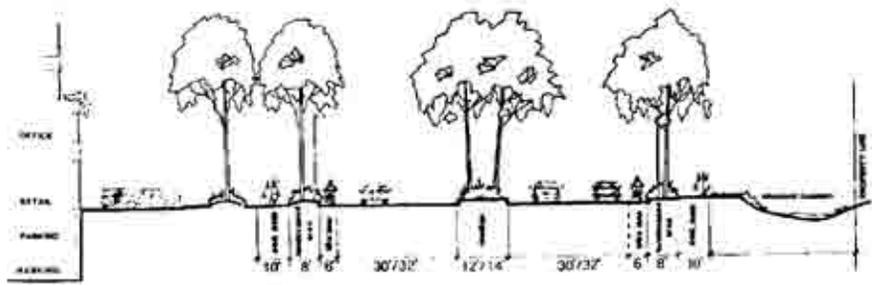
Major landscaped entrances will be created at several points on the perimeter of the project to announce and enunciate the dominant themes and images of the development. Water will be an element of each of these major entrances.



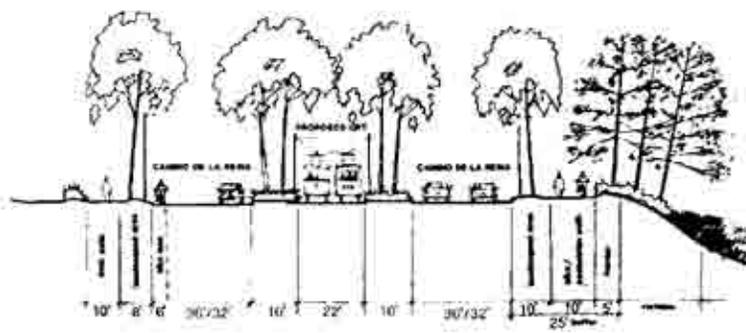
LOOKING NORTH ALONG STREET "C"
(BETWEEN PARCELS F&G)



LOOKING EAST ALONG THE CANAL (SOUTH OF THE ISLAND)



LOOKING EAST ALONG STREET "B"



LOOKING EAST ACROSS THE SAN DIEGO RIVER
NEAR FASHION VALLEY ROAD

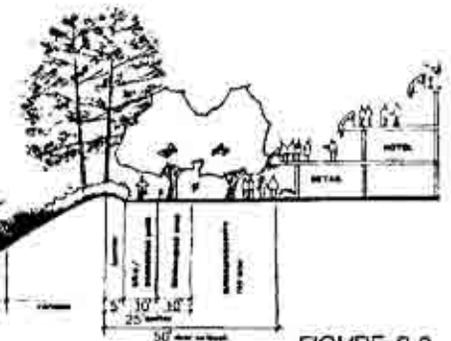


FIGURE 2.3

3.0 URBAN DESIGN AND DEVELOPMENT POLICY

3.1 GENERAL DESIGN POLICIES

Urban design deals with all aspects of urban life, from the sociology of the streets to the vitality of public spaces, from the creation of built environments to the management of these environments. Built environments define and articulate open space. For that reason, buildings that delineate quality urban open space must be of a form, mass, texture, color, and orientation that support the desired urban character. Within the Levi-Cushman Specific Plan area, a series of basic design themes are established. At the time of the first PCD/PRD submittal, these themes will be refined and detailed as part of a project design manual that covers architectural design, streetscape design, street planting, signage, floodway channelization, and a grading and erosion-reduction program.

An important environmental concern that has directly affected design of the entire project involves development adjacent to the floodway. The San Diego River Wetlands Management Plan notes that a "design sensitive zone" extends 150 feet from the wetlands corridor and requires special consideration to protect the wildlife value of the wetlands corridor. To minimize impacts of development on the wetlands corridor, the Wetlands Management Plan requires:

- A buffer area between the wetlands corridor and development along the entire length of both sides of the river;

- Passive public recreation along the river corridor, including pathways located along the edges of the wetlands;
- Reflective plate glass must not be used on buildings which face the river;
- Lighting for safety must be directed rather than general and should not illuminate habitat areas; and
- Buildings should be designed so that the skyline slopes toward the wetlands, allowing a wider flight path for birds.

These criteria were directly employed in the overall project design and, when appropriate, are specifically addressed by design policies.

3.1.1 Basic Design Themes

River Corridor: The San Diego River will act as the central focus of the entire LCSP development. Views will be preserved throughout the site into the enhanced wildlife and waterfowl river habitat.

Valley Setting: To echo the natural character of the Mission Valley setting, building heights will be terraced, with the largest and tallest structures generally located away from the San Diego River, at the perimeter of the development.

View Corridors: Preservation of the river corridor as the central view of the project and maintenance of view corridors throughout the project will serve to provide a visual openness to the development and will unify the river focus and urban character of the project.

Open Space Network: Within the LCSP area, open space areas will be interspersed throughout the site and linked to one another. Open areas will be defined and accentuated with corner monuments (entry signage), a central theme tower, an island, bridges, fountains, pools, and appropriately placed building - elements that will unify the project and make the entire mixed-use development visually whole and economically viable. Maintenance of all open areas will be funded by property owners.

The Island: The island (Parcel D) will be located on the south shore of the river and will serve as the prime activity center of the project area for retail and restaurant uses. It will provide a sense of central place for pedestrian use within the development.

Theme Tower: A dramatic tower is proposed to rise from the island to serve as the central focal point of the development and direct pedestrian usage to the island center.

Pedestrian Bridges: A major pedestrian bridge will span the San Diego River and link the north side of the river to the island. The bridge will be a highly active pedestrian route lined with temporary and varied retail uses such as food and flower kiosks. It will also provide transit and emergency vehicle ac-

cess to the island. A series of small bridges will cross a man-made canal south of the island and link with development south of the river. The canal will be lined on both sides with a highly urbanized riverwalk.

3.1.2 General Design Guidelines

Adapted from the San Diego City Zoning Ordinance, Sections 101.0900K, 101.0910D, and 101.0920D:

- (a) All development shall read as part of a single comprehensive project.
- (b) All development shall conform to the adopted plans of applicable government agencies.
- (c) All development plans shall provide for necessary circulation, open space, and off-street parking requirements.
- (d) All developments shall be functionally harmonious with existing or proposed adjoining uses.
- (e) All internal street systems shall be designed for safe and effective flow of vehicles without having a disruptive effect on facilities or common areas.
- (f) All facilities and structures shall be well-oriented to the topography of the site and well-integrated with the natural landscape features inherent to the site.

(g) All recreational and common areas shall be linked through an open space network.

3.2 ARCHITECTURAL CONSIDERATIONS

The design criteria and objectives included in this Specific Plan are intended to define and guide development in order to create a visually and functionally integrated urban environment.

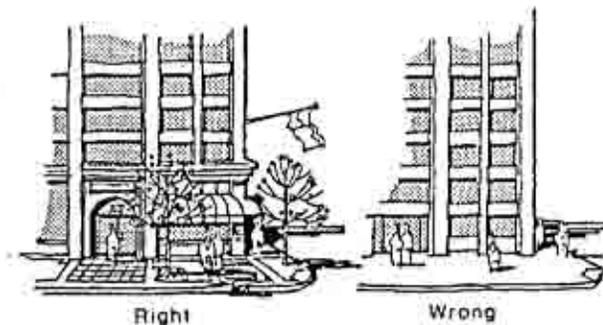
While detailed architecture will be defined at the time of the first PRD/PCD submittal, signature characteristics of the project will be its profuse landscaping and building forms that are contemporary, simple, and constructed of quality materials. Classic and functional architecture will extend throughout the project area. Reflective glass will not be used in any manner prohibited by the Mission Valley Community Plan.

Consistent architectural themes will be emphasized throughout the development in design, color, and finish as well as signage and landscaping. This consistency of themes will serve to unify the development, giving it a distinctive and widely recognized identity. The architecture should be harmonious within the project and complementary to the whole of Mission Valley. Tall buildings will enhance view corridors and provide ground-level landscape areas. These open areas can host shopping, eating, drinking, browsing, and other pedestrian activities.

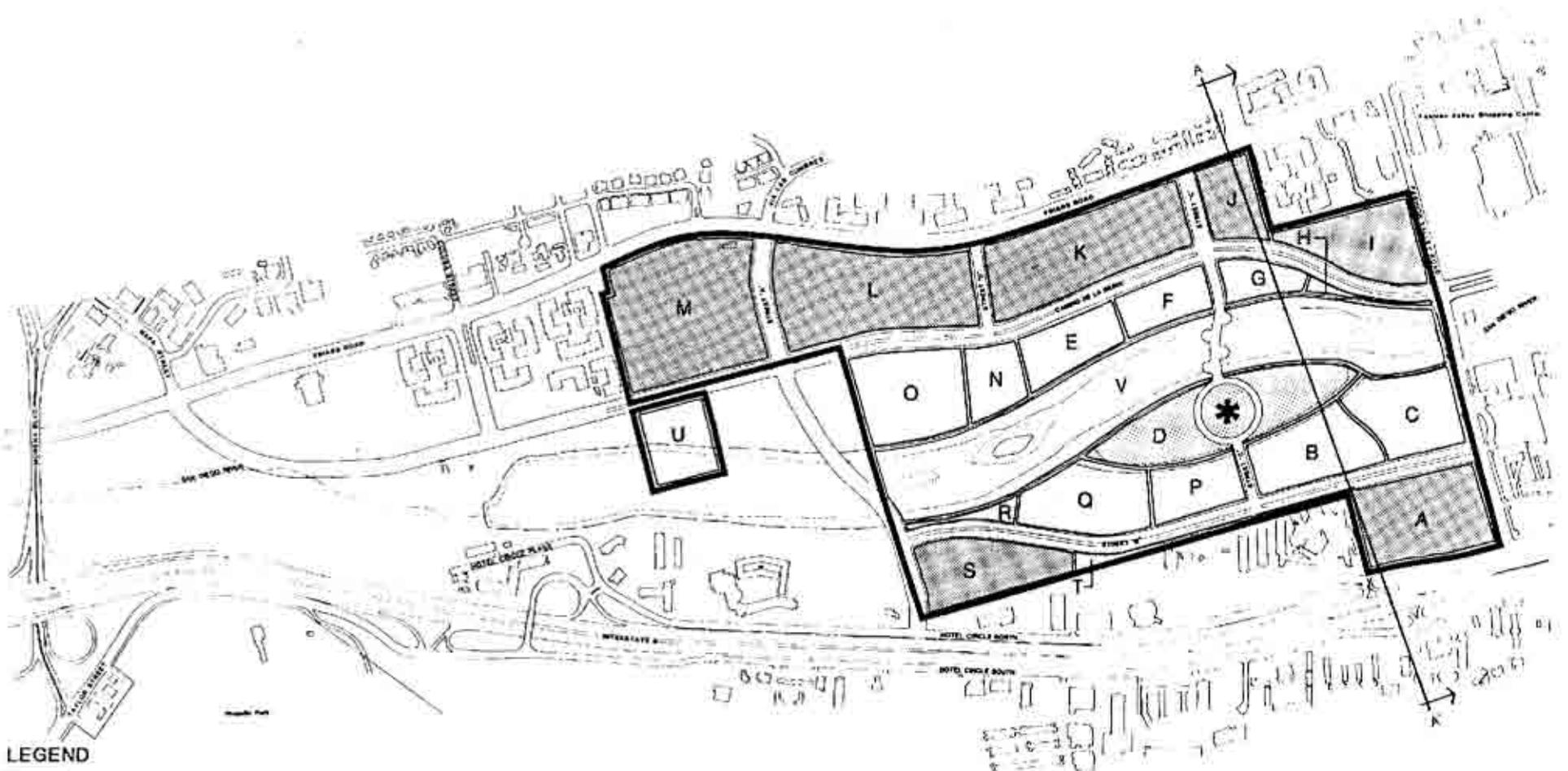
Height limits are defined within three height "bands" moving away from the river channel, as shown in Figure 3.1. The intent is to echo the valley form by having heights increase from the center of the project (the San Diego River) to the periphery (Friars Road, Street B). On the island, low-rise development will have a maximum height of 42 feet, except for the theme tower which will have its height determined during the review of the PCD for Development Area 1. A stepped-back profile is required of structures in the midzone, where height maximums range from 42 feet to 140 feet. At the perimeter zone, the third zone away from the channel, structures up to 250 feet will be allowed.

3.2.1 Materials and Treatments

- Construction materials shall convey the character of an urban project and reflect the Mission Valley setting.
- Special attention shall be paid to roof area treatment and materials in all buildings. Mechanical equipment shall be



DESIGN FEATURES INCREASE INTEREST
AT STREET LEVEL



LEGEND

-  LOW ZONE 42' MAXIMUM
-  MID ZONE 42'-140' MAXIMUMS
-  PERIMETER ZONE 140'-250' MAXIMUMS

***** THEME TOWER

SEE IMPLEMENTATION GUIDELINES FOR HEIGHT ENVELOPE ISOMETRICS

**LEVI - CUSHMAN
SPECIFIC PLAN**



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

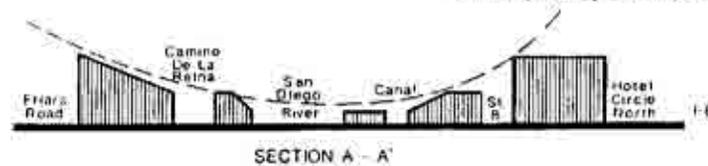


FIGURE 3.1

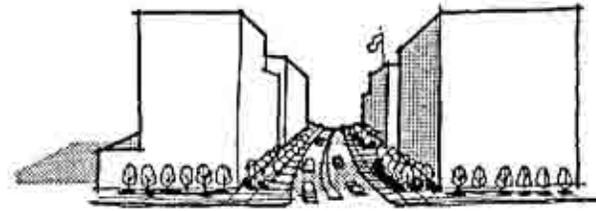
HEIGHT ZONES

enclosed. Pitched or other special roof forms are preferred when roofs are not intended for human activity.

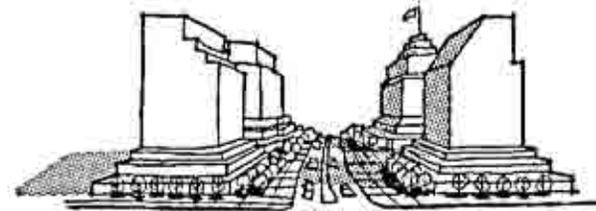
- Design features shall be incorporated in all structures to increase visual interest at street level.
- Transition element plant materials and/or berms shall be used wherever structures interface with the ground plane to create interest and to integrate the site with architectural forms with the site.

3.2.2 Form and Scale

- Structures shall create transitions in form and scale between large buildings and adjacent smaller buildings.
- Building massing shall present a cluster of related forms with landscaped open areas as an integral part of the site plan, to create courtyards and plaza areas between buildings
- Buildings shall terrace down to the river, to major streets, to major view corridors, and to open areas to maintain a comfortable scale relationship.
- Buildings shall be designed to create visual interest by varying form and facade to avoid monotonous block-like impact. Varying building levels and planes can create a visually satisfying structure and help define view corridors.

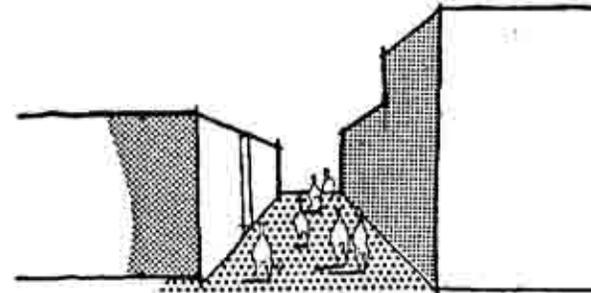


Wrong



Right

TERRACING DOWN TO VIEW CORRIDORS



Wrong



Right

VARYING FORM AND FACADE

3.2.3 Architectural Uses

- Parking garages shall be provided as an integral part of each new development, under or adjacent to each structure, thereby providing the most efficient and direct access. Ground-level spaces will be utilized for retail activity whenever feasible.
- Mid-rise and low-rise residential buildings shall make extensive use of balconies, decks, and roof terraces. Flat roof areas shall be designed for human use as terraces.
- Reflective glass shall not be used on building facades visible from the river and should not be used on buildings visible from the freeway.
- Safety lighting adjacent to the river corridor must be directed lighting as opposed to general lighting to prevent illumination of habitat areas.

3.3 OPEN SPACE NETWORK

To assure an open character within the project, major open space use areas will be created and linked to one another to form the Open Space Network, conceptually described in Figure 3.2. This open space network is defined in three parts:

River Open Space (40 acres) is composed of the San Diego River channel which will be designed and constructed to meet flood control requirements. See Flood Management, Section 4.2.

Recreational Open Space (11 acres) includes four park areas and the river buffer.

Landscape and Project Open Space (25 acres) includes building setbacks, theme entry areas, individual parcel open areas, pedestrian and bike paths within developed project areas, floodway transition areas, plazas, and the pedestrian bridge.

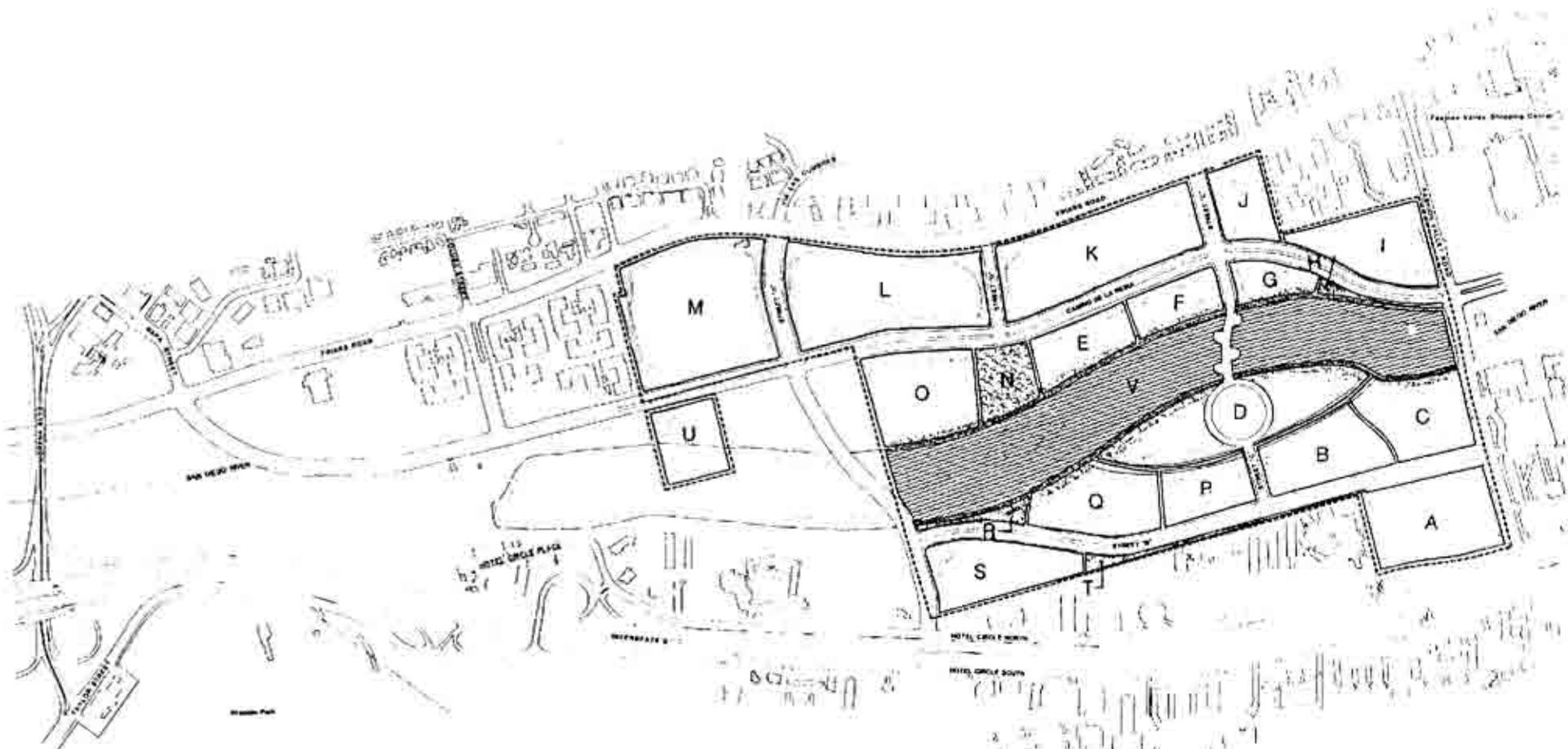
The landowner and/or project tenants will bear financial responsibility for constructing all elements of this open space network and assuring its maintenance in perpetuity. An open space easement will be granted to the City for River Open Space and a public access easement will be granted for Recreational Open Space.

Separate components of the Open Space Network are discussed below. Within individual parcels, the amount of open space is inversely proportional to the height of structures: the higher the structure, the greater the open space.

3.3.1 River Buffer

A continuous minimum 25-foot wide buffer area will be created along both sides of the river channel. It will always include a vegetative barrier and may include a pedestrian path, a bike path, landscaped areas, and passive recreational areas.

Flexibility in the design of the buffer shall be permitted to provide various use configurations. In no case, however, shall



LEGEND

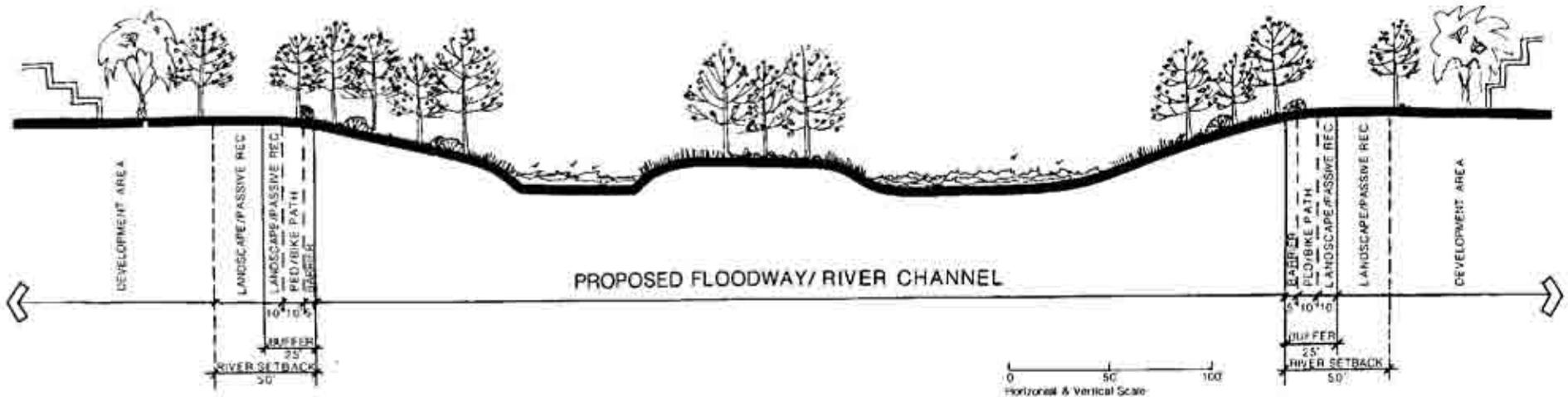
-  RIVER OPEN SPACE (40 AC)
-  RECREATIONAL OPEN SPACE (11 AC)
-  RIVER BUFFER PARKS
-  LANDSCAPE / PROJECT OPEN SPACE (25 AC)
-  SETBACKS
-  THEME ENTRIES
-  PARCEL OPEN SPACE
-  PEDESTRIAN / BIKE PATH WITHIN PARCELS

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

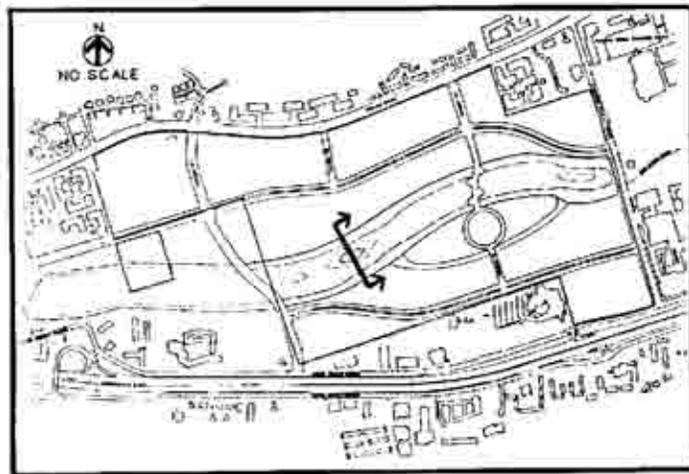
**FIGURE 3.2
OPEN SPACE
NETWORK**

**LEVI - CUSHMAN
SPECIFIC PLAN**





RIVER CROSS SECTION (LOOKING EAST)



The river buffer is 25 feet wide and runs along both sides of the San Diego River. It always includes a vegetative barrier that is no less than the first 5 feet adjacent to the top of the channel. This vegetative barrier will be planted with shrubs and willows to physically restrict access to the river. The river buffer may also include passive recreation/view areas and a pedestrian and/or bicycle path. In no case, however, will the paved area devoted to a ped/bike path within the buffer exceed 10 feet in width.

Along most of the river, a building setback of 50 feet is imposed. While the first 25 feet will be used as the river buffer, it is expected that the remaining 25 feet will be designed to merge with and visually appear as an extension of the buffer. Landscaping will transition from the natives used in the vegetative barrier to ornamentals typical of the development area. Pedestrian and/or bike paths and passive recreational areas may be located in the buffer and in the setback area - or they can meander between the two.

The principal distinction between the buffer and the setback is that a public access easement is required for the former. A public access easement also must be provided specifically for the pedestrian and/or bike path within the buffer/setback area. See Figure 3.4, Typical Design Adjacent To The Buffer.

FIGURE 3.3

the paved portion of pedestrian and/or bike path within the 25-foot buffer exceed 10 feet in width.

Within the buffer, a vegetative barrier to prevent physical access to the river shall be planted along the entire river's edge. It will have a minimum width of 5 feet and a maximum understory height of 4 feet. In conformance with the MVCP, the barrier will be planted with native riparian species including thorny shrubs such as wild rose and blackberry, other native shrubs of the coastal scrub community, and native trees, particularly riparian woodland species. See On-Site Plant Matrix for a list of permitted barrier trees, shrubs, and ground cover.

Visual access through the vegetative barrier will be provided through overstory breaks along at least 20 percent of the river's edge and will be coordinated with view corridors. None of these breaks shall be more than 50 linear feet in length.

Breaks in the barrier will consist of areas with only low plantings (i.e., no trees, only low shrubs and ground cover) to allow pedestrians visual access to the river. Suggested locations are shown on Figure 3.11 by the view arrows located along the river.

- To the maximum extent feasible, trees presently located on site will be relocated or used in place to accelerate the sense of maturity of project landscaping.
- Within the first 20 feet of the buffer, as measured from the top of the river channel, only native plants may be used.

Uses Adjacent to the River Buffer

A 50-foot building setback from the river channel is required throughout the project, except on the island where the setback is 30-feet. While the first 25 feet of the setback will be used as the buffer, the remaining portion of the setback will frequently be designed to look as if it were actually part of the buffer. Pedestrian and/or bike paths can meander within the buffer and setback areas, and may include passive recreation/view areas and landscaping which transitions from the natives used near the river to the ornamentals typical of the development area.

The river buffer is designed to border the San Diego River channel. At the eastern end of the project, the floodway fans out adjacent to Fashion Valley Road (See Figure 4.4). Within this "transition area," no uses or permanent structures are permitted which would impede the flow of water during flood conditions and all uses are subject to review by the City Engineer for compliance with applicable flood control regulations.

Typical uses permitted within the transition areas include roads, theme entries, passive use areas, picnic areas, benches, view/rest areas, pathways, jogging trails, bikeways, nature trails, fitness courses, golf courses, and other passive recreation areas.

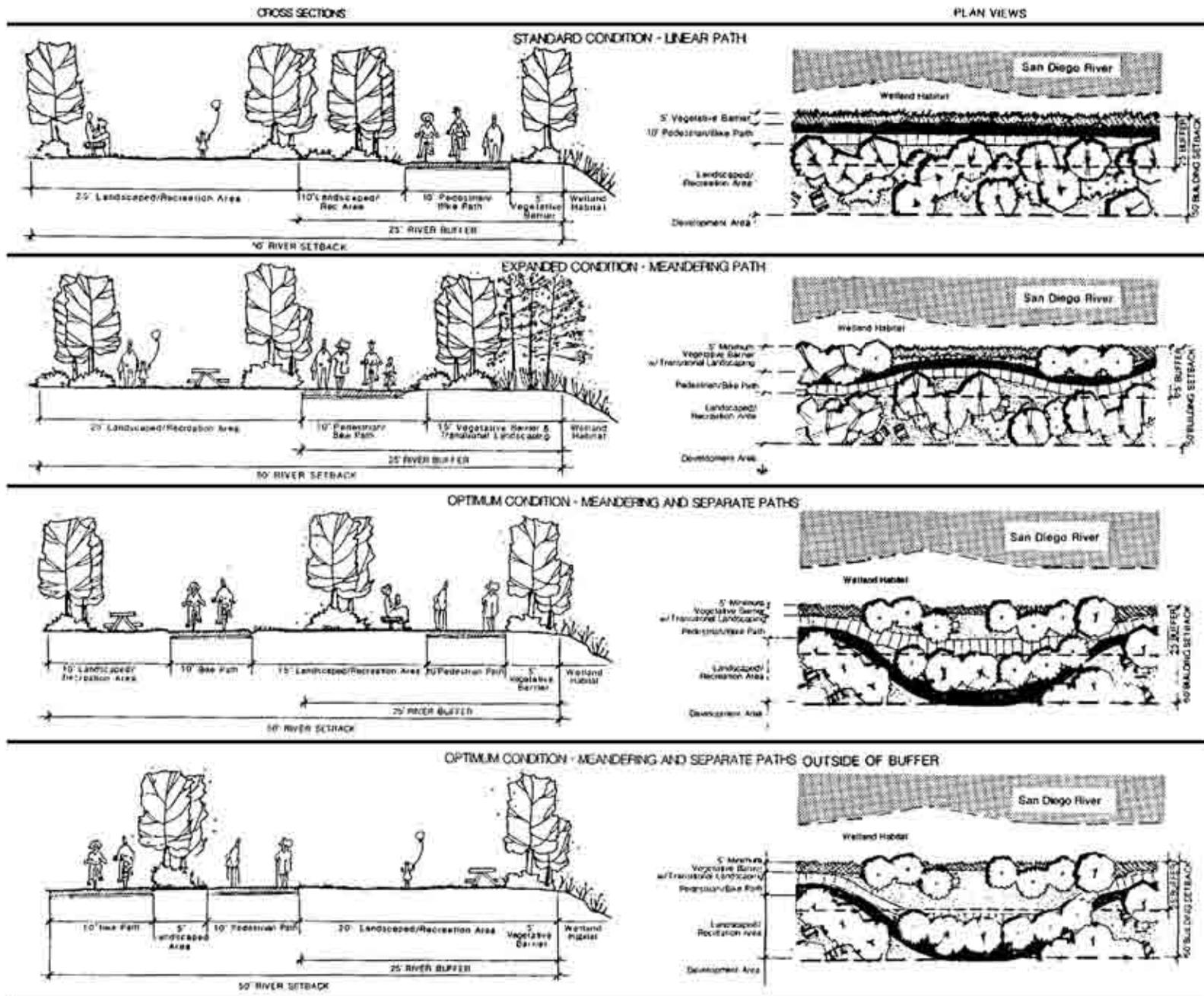


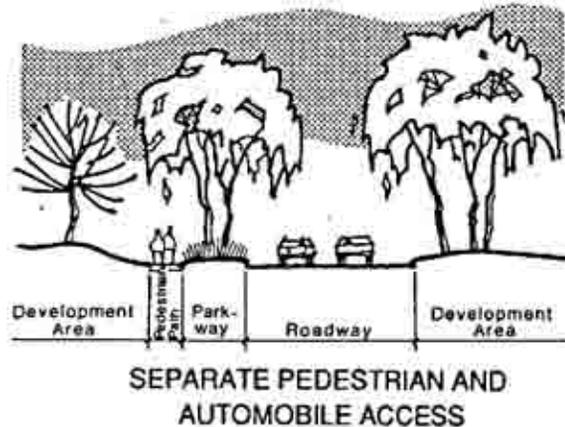
FIGURE 3.4

**LEVI - CUSHMAN
SPECIFIC PLAN**

**TYPICAL DESIGNS
ADJACENT TO THE BUFFER**

3.3.2 Pedestrian Circulation

The entire project will be designed to accommodate foot-traffic, with linked pedestrian walkways, paths, and sidewalks to permit access from one part of the project to any other part (see Figure 3.5). A continuous pedestrian and/or bike path will be located on both sides of the river and will connect with



pedestrian/bike paths on property east and west of the site. Sidewalks will also connect to the community-wide pedestrian network.

The central bridge across the San Diego River will function not only as a pedestrian link from the transportation center to the island urban core but also as an active urban space

Pedestrian Pathways

- Widths of pedestrian paths located *within* a public street right-of-way shall be determined by the classification of

the adjacent street and shall be separated from the street by a landscaped strip.

- When adjacent to a major street, the pedestrian path shall be 10 feet wide and the landscaped strip 8 feet wide.

- When adjacent to a four lane collector street, the pedestrian path shall be 8 feet wide and the landscaped strip 6 feet wide.

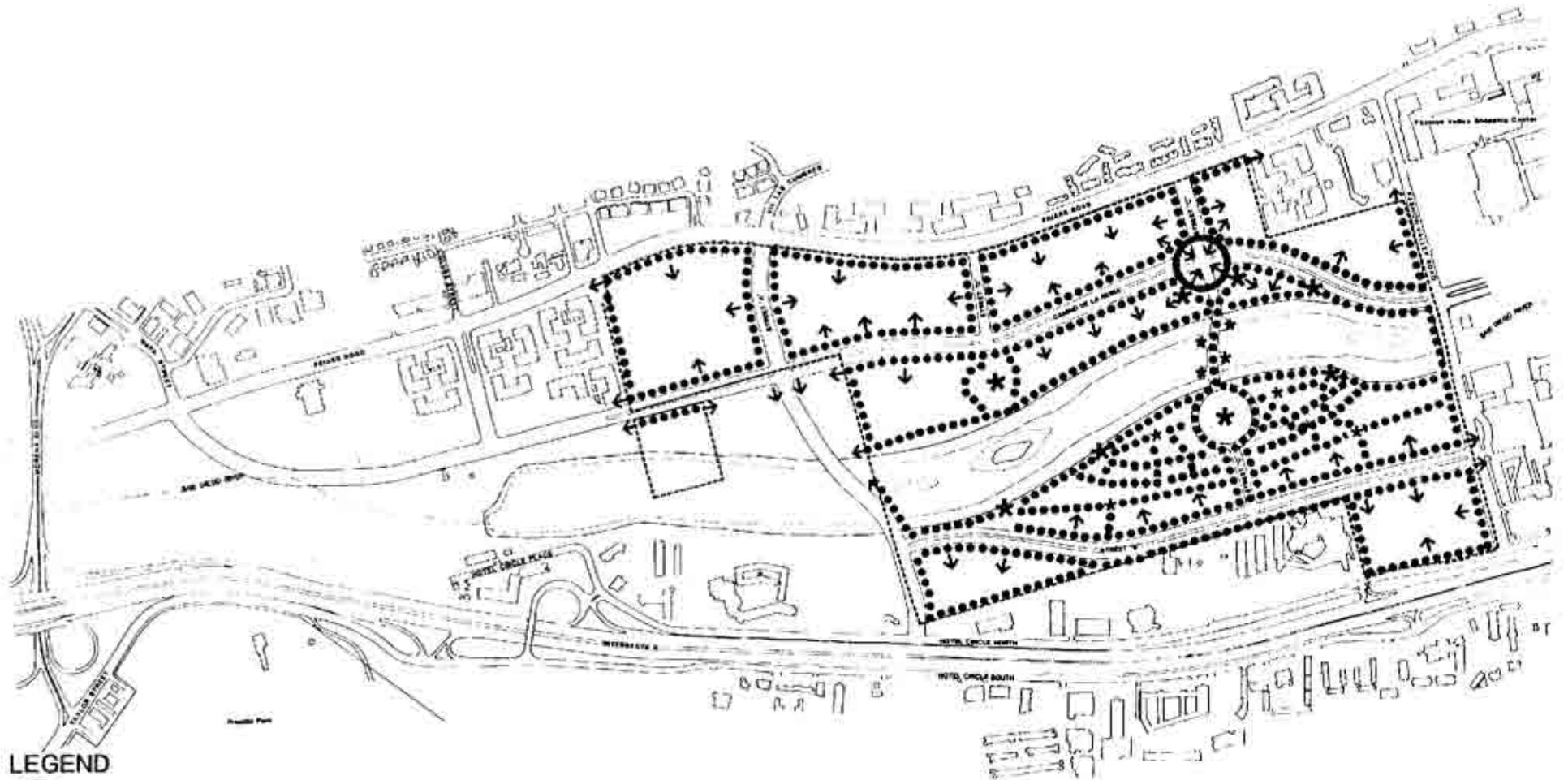
- When adjacent to a two lane street, the pedestrian path shall be 6 feet wide and the landscaped strip 5 feet wide.

- Widths of pedestrian paths which lie *outside* a public street right-of-way shall be no less than 6 feet wide except when they occur in the river buffer. While the pedestrian path along the river will be at least 10 feet wide, when it is located within the river buffer, the paved surface area must not exceed 10 feet in width.

- All pedestrian paths that are at least 10 feet wide shall be known as *primary* pedestrian paths.

- A primary pedestrian path shall run continuously along the San Diego River channel and be located within the required setback from the River.

- All primary pedestrian paths shall have adequate lighting and signing to provide for the safety of the users.



LEGEND

-  TRANSPORTATION CENTER
-  MAJOR PEDESTRIAN NODES
-  MINOR PEDESTRIAN NODES
-  PEDESTRIAN PATHS
-  CONTINUATION OF PEDESTRIAN PATH

**LEVI - CUSHMAN
SPECIFIC PLAN**



When pedestrian paths are located within a public street right-of-way, the minimum width of the path is determined by the street classification. The pedestrian path is always separated from the street by a landscaped strip.

Classification	Width of Pedestrian Path	Width of Landscaped Strip
Major Street	10'	8'
Four Lane Collector	8'	6'
Two Lane Street	6'	5'

Pedestrian paths which lie outside a public street right-of-way must be no less than 6' wide, except when they occur in the River Buffer. While the pedestrian path along the river will be at least 10' wide, when it is located within the River Buffer, the paved surface area must not exceed 10' in width.

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.5

**PEDESTRIAN
CIRCULATION
SYSTEM**

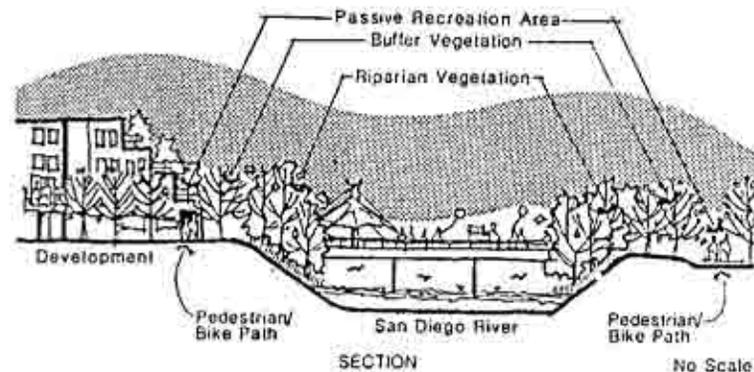
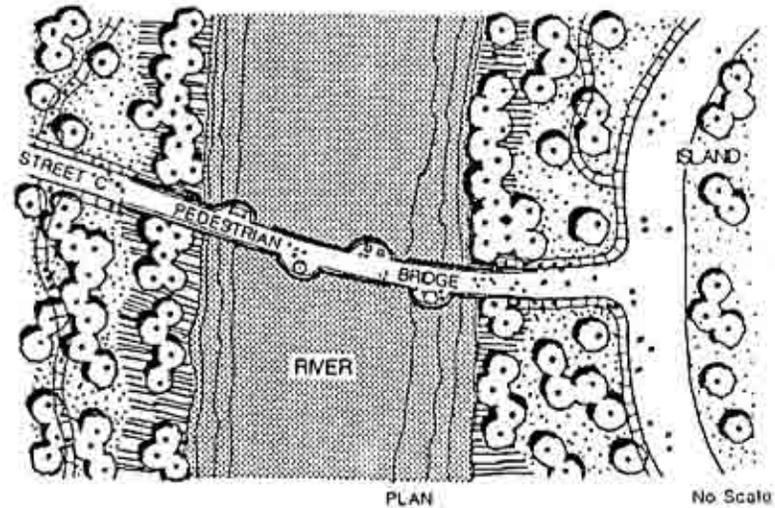
- All primary pedestrian paths shall have adequate gradients for handicap usage, per requirements of Title 24.

Desired Access

- Development oriented to the river shall have major pedestrian access from public streets, even in areas where parking lots are located between the building and the street.
- Separate internal circulation paths shall be provided to minimize conflicts between pedestrian, bicycle, and automobile traffic. In some instances, joint pedestrian and automobile access will be provided within the project.

Pedestrian Linkages

- Safe and convenient pedestrian movement shall be provided within, to, and from parking areas and also to surrounding projects and valley-wide pedestrian and public transit systems.
- Pedestrian paths located within the river buffer shall link to the community-wide trail system.
- The pedestrian path system shall connect recreational uses to one another and link recreational areas to all other use areas. Primary access to buildings fronting on the river shall not be from the pedestrian path within the buffer.



BRIDGE ACROSS THE SAN DIEGO RIVER

- All major residential, retail commercial, recreational commercial, and office commercial developments must have direct pedestrian links into adjacent open space parcels.

Pedestrian Crossings and Intersections

- On-grade street crossings shall be developed at major street intersections, designed in accordance with applicable City standards.
- Internal pedestrian paths may cross streets only at-grade at intersections and must have pavement markings such as patterned walkways, barriers, etc.
- Grade-separated pedestrian connections (bridges) would be permitted mid-block and may be appropriate between parcels or at streets to promote intra-project linkages. Connections should be designed to be safe and attractive and well integrated into the urban scene.

Pedestrian Bridge

The Street C bridge which spans the San Diego River shall function primarily as a pedestrian crossing, but also permit limited public transit and emergency vehicle access to the island.

- The traveled way of the pedestrian bridge shall not exceed a width of 30 feet.

- Four commercial nodes shall be planned adjacent to the traveled way of the bridge. These nodes are to be the site of temporary commercial stands and stalls intended to enliven bridge activity. Commercial nodes are not to add more than 20 feet to the traveled way of the bridge.

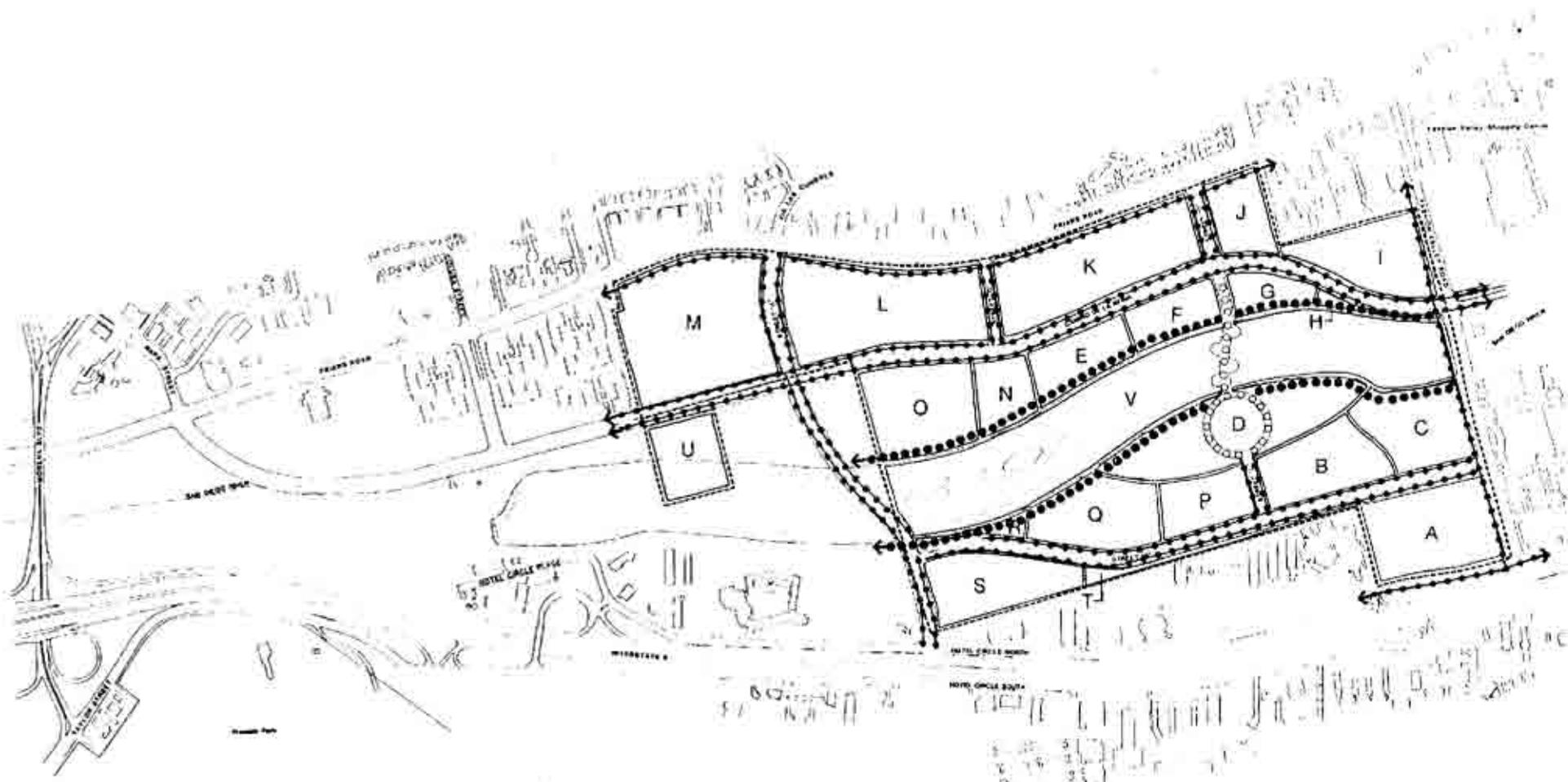
3.3.3 Bicycle Circulation

The primary bikeway system proposed for the LCSP area is shown in Figure 3.6. Bikeways will link retail commercial, residential, and open space areas within the project as well as to the community-wide bikeway system.

Because bicycle paths will connect with the city-wide system, a cyclist can ride through and then beyond the project. A variety of views and biking experiences will be provided along the bicycle system that encourage the rider to stop, relax, and browse before continuing on his/her journey.

(a) *Bicycle paths* are facilities separate from roadways used for two-way bicycle travel. They shall have a minimum width of eight feet. When merged with a primary pedestrian path, the combined width shall be a minimum of ten feet except when the ped/bicycle path occurs in the river buffer when its width shall be a maximum of ten feet. Bicycle paths shall conform to the Mission Valley Community Plan.

(b) *Bicycle lanes* are striped or marked lanes in the roadway designated for preferential one-way use. Bicycle lanes within the LCSP areas will be six feet wide and are proposed in Friars



LEGEND

BIKEWAYS

- BICYCLE PATHS
- - - - BICYCLE LANES
- — — BICYCLE ROUTES

Note: Design of the bikeway system must conform with standards established by the Mission Valley Community Plan (1985).

**LEVI - CUSHMAN
SPECIFIC PLAN**



38 / LEVI-CUSHMAN SPECIFIC PLAN

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.6

BIKEWAYS

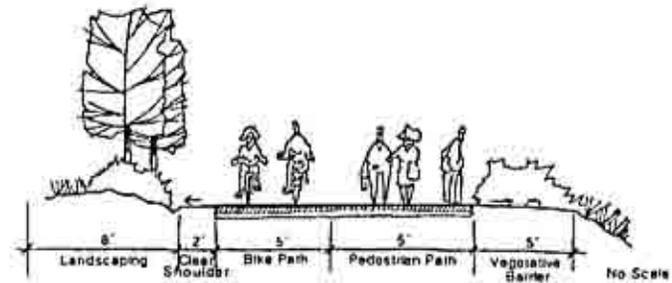
Road, Fashion Valley Road, Camino De La Reina, Street B, Street A, and Street D.

(c) *Bicycle routes* are signed bikeways shared with pedestrians or motor vehicles with no specially marked lane. Widths of routes vary based on vehicular traffic, road conditions, etc. Bicycle routes are proposed in the portions of Street C between Camino De La Reina and the south side of the canal to serve high-intensity uses such as the island center and other open space areas via the pedestrian bridge and island loop.

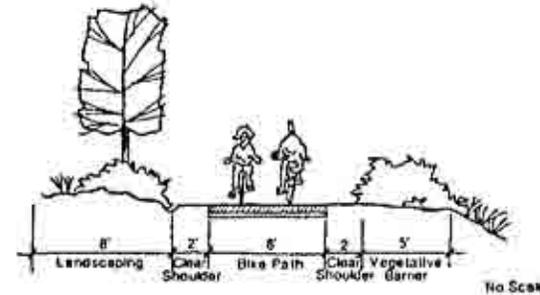
Additional bicycle access from project areas to the primary system must be accommodated on local streets and private roads, with no special lanes or signing.

Bikeway Design

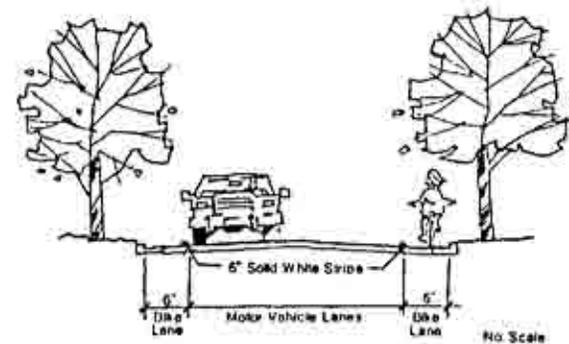
- A minimum two-foot horizontal and a minimum eight-foot vertical clearance to obstructions shall be provided at the outside edges of all bicycle paths. When a bicycle path is combined with a pedestrian path, the horizontal and vertical clearances are only necessary along one side of the path.
- Drainage inlet grates, manhole covers, etc., on all bikeways shall be designed and installed in a manner that provides an adequate surface for bicyclists.
- Uniform signs, markings, traffic control devices, etc., shall conform to the requirements of the "California Highway Design Manual," July 1983.



TWO-WAY BIKE/PEDESTRIAN PATH WITHIN THE BUFFER



TWO-WAY BIKE PATH ON SEPARATE ALIGNMENT



BIKE LANE MARKED IN ROADWAY

TYPICAL BIKEWAY CROSS SECTIONS

- All bikeways shall have adequate lighting and signing to provide for the safety of the users as determined by the City Engineer.
- Commercial and residential buildings shall provide secure bike racks to encourage bicycle use.

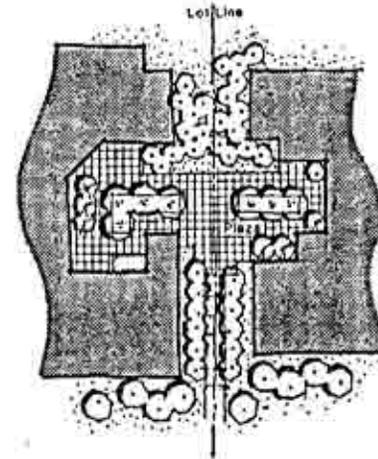
Lockers, showers, and changing facilities shall be encouraged at major developments in order to promote the use of bicycles and bikeways by employees.

3.3.4 Project Open Space

Project open space is any privately constructed and maintained outdoor space articulated for human use and/or relaxation. It includes but is not limited to courtyards, plazas, promenades, seating areas, recreational areas, parks, viewing areas, pathways, trails, children's play areas, and picnic areas. Project open space must occupy at least 10 percent of each parcel, exclusive of buffer area.

Shared development of project open space areas between adjacent parcels is encouraged.

- Usable open spaces such as mini-plazas shall be created between buildings to avoid a visual tunnel effect and should be linked to major open space areas.
- Private recreational and urban plaza areas shall be visually (through unobstructed views) and/or physically



USABLE OUTDOOR SPACES
CREATED BETWEEN BUILDINGS

(through pathways) linked to open spaces as part of the area-wide open space system.

- Recreation uses shall be provided within private developments and may include swimming pools; tennis, basketball, volleyball, handball, shuffleboard, and badminton courts; children's play areas; and picnic facilities.

3.4 SITE PLANNING AND VIEW CORRIDORS

A major urban design feature of the LCSP is the 12-acre island and theme structure proposed for the island. The theme tower, an exception to the rule that all tall structures be located away from the center of the project, is expected to be similar in character to structures like the Seattle Space Needle. Its height may exceed the 250-foot project maximum, although that determination will be made at the time the theme tower design is submitted for PCD approval. The tower will be a

focal point for the entire project and serve as a landmark to give orientation for direction and distance.

Because of the variety of parcel sizes and uses throughout the project, special attention must be given to the siting of each structure.

In site planning for the project, considerable emphasis is placed on establishing view corridors both within the specific plan area and also into the site from adjacent roadways. These views are as seen from automobiles and by pedestrians at the street level. These are the most critical view corridors due to the pedestrian orientation of the site. Availability of views from I-8 cannot be known at this time, due to the uncertainty of the character of development between the freeway and the LCSP area, but an attempt will be made to provide a view from I-8 into the river through Parcels A and B, C or D. Views into the site will still exist from the hillsides above Friars Road and above I-8, but these views will be primarily from private development areas. View corridors as seen from structures into the river corridor are also shown in Figure 3.7. View corridors will occur from Friars Road through Parcels L, K and O, E or F, to the river.

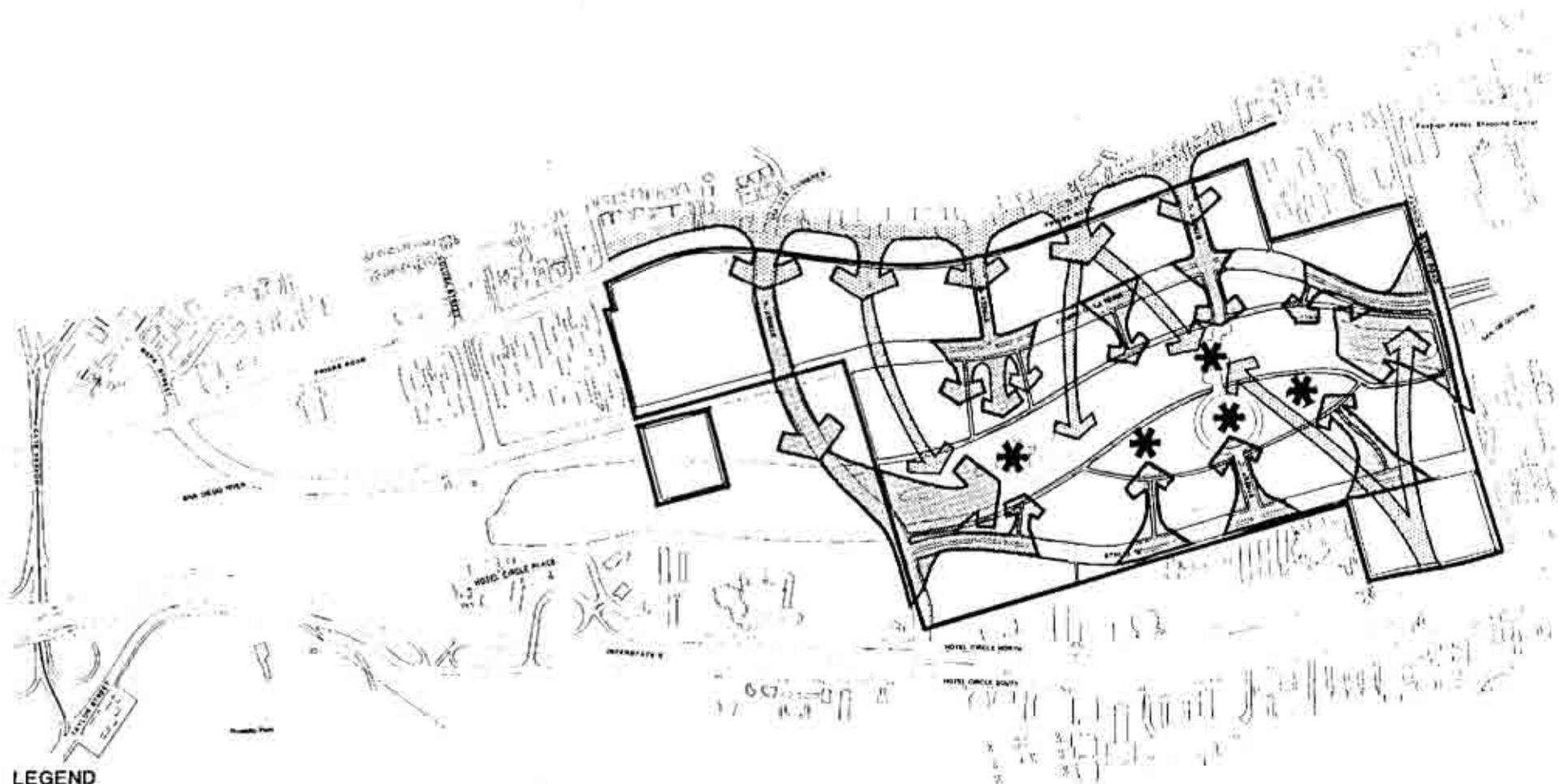
Large plazas and courts within the project are expected to have visual "terminations" such as sculpture and/or other art, the theme tower, special buildings, and landscape forms. The addition of water features such as pools, fountains, and artificial streams should also be utilized to provide visual focal points. These water features will be used to integrate the river with

the proposed development by carrying the river corridor feeling through to the interior.

Buildings must reflect the visual corridor objectives by organizing in a pattern which emphasizes these focal points. Providing interior view opportunities will define the urban character of the project through a variety of spaces linked by walkways and plazas, and then articulated by overhead structures and bridges which frame views and create a changing spatial experience for pedestrians.

Site Planning

- Tall buildings shall be located north of outdoor plaza areas, wherever possible, to maximize sun in the plazas. The most successful outdoor plaza spaces are usually found to the south and west of high-rise structures.
- Buildings shall be oriented to make the most efficient use of a site, provide landscaped open areas for human use, and preserve view corridors to the river.
- Buildings shall be designed and developed with heavily landscaped, park-like terraces and roofscapes.
- Buildings shall be sited to consider internal views to the river as well as views looking outward from the site.



LEGEND



VIEWS INTO THE SITE



MAJOR VIEW CORRIDORS WITHIN THE SITE



VIEW CORRIDOR TERMINUS

OVERVIEWS CREATED THROUGH THE PROJECT BASED ON TERRACING OF HEIGHTS REFER TO FIGURE 3.1

**LEVI - CUSHMAN
SPECIFIC PLAN**



NOTE: SEE INDIVIDUAL PARCEL MAPS FOR VIEW CORRIDOR REQUIREMENTS.

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.7

VIEW CORRIDORS

Views and View Corridors

- Views to and from the residential and commercial portions of the LCSP area to the rest of Mission Valley and the San Diego River shall be maximized.
- Views into the project from major local streets and the hillsides above Friars Road shall be provided into the site.
- Views from Fashion Valley Road, Camino De La Reina, and Street A to the theme tower and the island development shall be created.
- At least two view corridors shall be created from Friars Road to the river which provide views through Parcels L and K.
- Ground-level view corridors shall be provided from public streets. This will require that space between buildings be developed into landscaped links to the major open space areas.
- To maintain views to and across the river, building heights shall generally be lower adjacent to the river, then stepping up as they move away from the river corridor.
- Roof areas of large low-rise buildings which can be seen from above shall be designed to enclose mechanical equipment and use color, pattern, roof forms, materials, and plantings to have a positive visual impact.

3.5 CIRCULATION

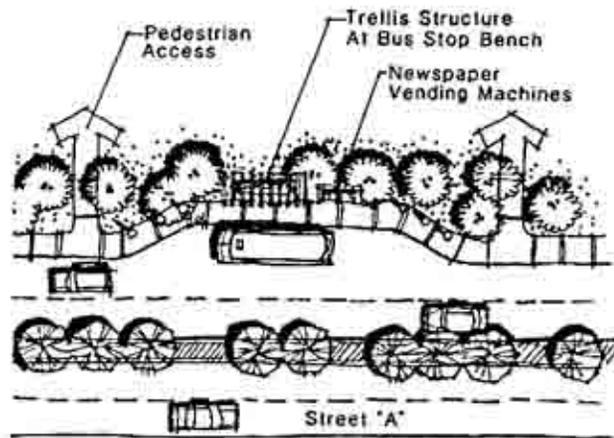
Within and adjacent to the LCSP project area, goods and people will move via light-rail transit, bus, automobile, truck, mini-bus (jitney), bicycle, and by foot. An integrated circulation system is critical to the success of the project and design objectives have been prepared to foster coordination among the system elements. Background to the circulation system is in Section 5.0.

3.5.1 Public Transportation

Light-rail transit (LRT) is incorporated in the plan following a generally east-west alignment in the median of Camino De La Reina. The exact alignment will be determined by the Metropolitan Transit Development Board.

- The LRT right-of-way will be reserved for 15 years at the time of recordation of the first final map in Development Area 2. An extension period of up to 5 years will be provided if the LRT is not constructed within the 15-year period and it is shown that substantial progress on implementation has been made.
- A below-grade LRT stop is proposed within a transportation center located at the intersection of Parcels F, G, J, and K. Auto traffic will be carried on an overpass of Street C. The transportation center will be integrated into the architectural design of the multi-use developments on those parcels.

- The plaza area located at the depressed LRT level shall incorporate landscaping, newsstands, kiosks, ticket booths, etc.
- Direct pedestrian walks from transit stops (bus or LRT) shall be provided to high activity areas where there is a concentration of commercial, office, parking, or recreation.
- Access from the LRT station to the project will be achieved through the use of portals, amphitheater-effect steps and ramps, ramped plazas, or all of these.
- In order to facilitate pedestrian movement, strong relationships shall be established between high activity parcels, such as those incorporating retail and office use, and tran-



TYPICAL BUS STOP PLAN

sit stops. Considerations include reasonable walking distances, tree-shaded walks, etc.

Friars Road will be used as the major bus and/or shuttle route serving the project area.

- Bus stops shall be integrated with buildings, pedestrian areas, urban plazas, LRT, and shuttle bus service to provide easy pedestrian access from bus stop to destination. Bus stops shall be provided as required by MTDB.
- Outdoor bus stops shall be designed to provide shelter from harsh weather.
- Bus stops shall be properly signed to be readily identifiable to pedestrian and bus passengers.
- Bus stops shall be designed to maximize security features and be located close to traffic signals and pedestrian crosswalks.
- The proposed bus and/or shuttle route to serve the project area should be part of the Mission Valley intra-valley shuttle service.

3.5.2 Automobile/Truck Circulation

Three automobile/truck circulation systems will be constructed in accordance with City standards within the project: public, service, and emergency systems. The public and service systems consist primarily of vans, autos, and service

trucks. The emergency system deals with fire, police, and ambulance vehicles. Public streets will be designed to accommodate use by all such vehicles.

Objectives to be achieved in the design of the vehicular circulation system include:

Vehicular Considerations

- When feasible, vehicular access should be provided through shared driveways at property lines.
- Emergency services vehicles (i.e., police, fire, and ambulance) shall have complete access to all structures within the project area as required by the City of San Diego safety codes.
- Driveway entrances to parking areas should minimize disturbances to the pedestrian continuity of the sidewalk areas.

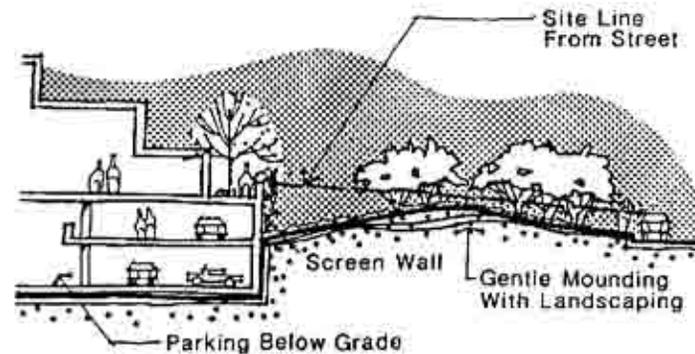
Parking Requirements and Ratios

- On-street parking will be prohibited.
- At least 75 percent of all parking required for a project will be accommodated in architecturally-integrated parking structures.
- At least 50 percent of the parking required for the island shall be met by garages off the island.

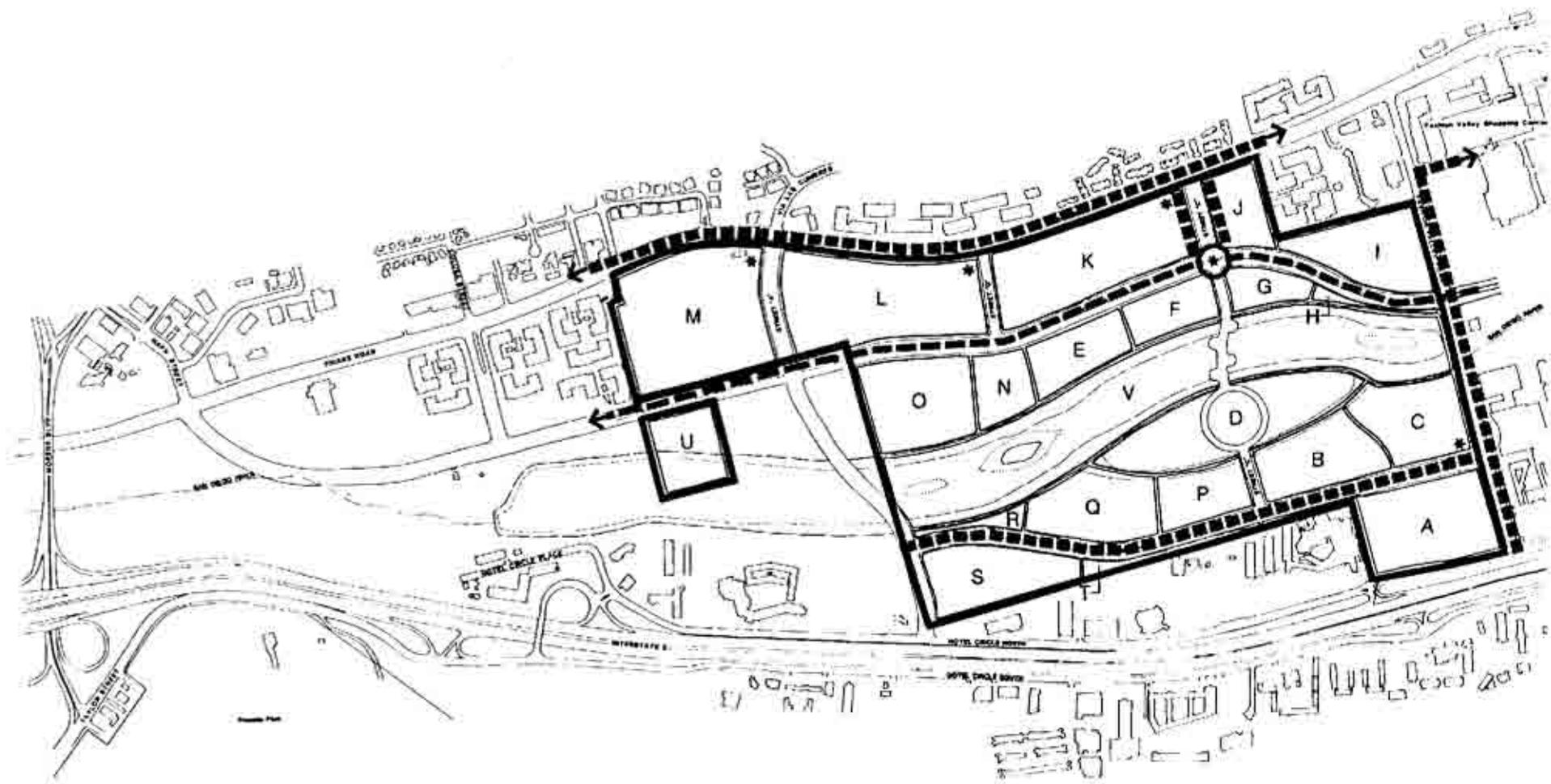
- Consolidated parking areas, as proposed within the Mission Valley Community Plan, shall be developed within the LCSP area.
- Parking requirements will be established based on uses shown within each PRD or PCD.
- Parking shall not be permitted on roof surfaces, including the roof of parking structures.

Parking Design Criteria

- Parking structures should be placed below grade and between or under buildings to reduce the visual prominence devoted to parking.



PARKING AREAS PLACED BELOW GRADE



LEGEND

- ★ RECOMMENDED BUS STOPS
- TRANSPORTATION CENTER
- ▬ BUS ROUTES
- ▬ LRT ROUTE

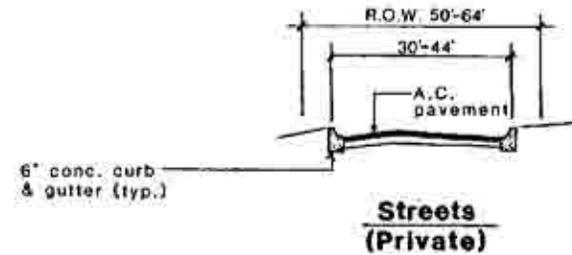
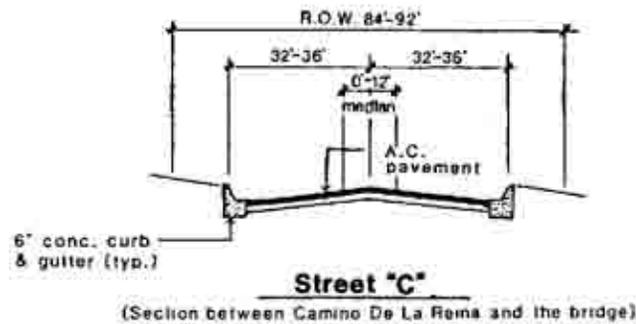
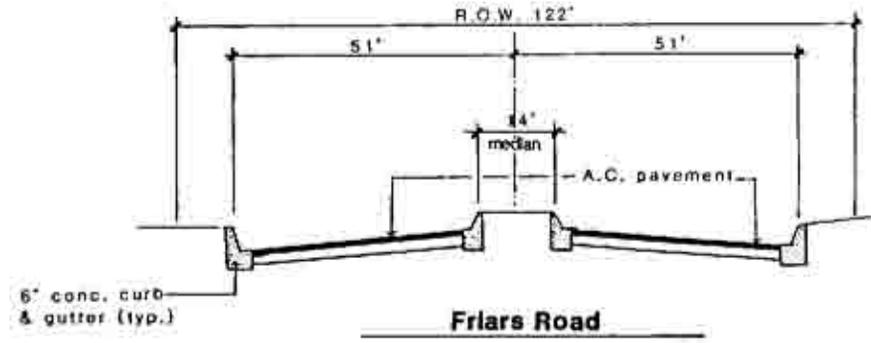
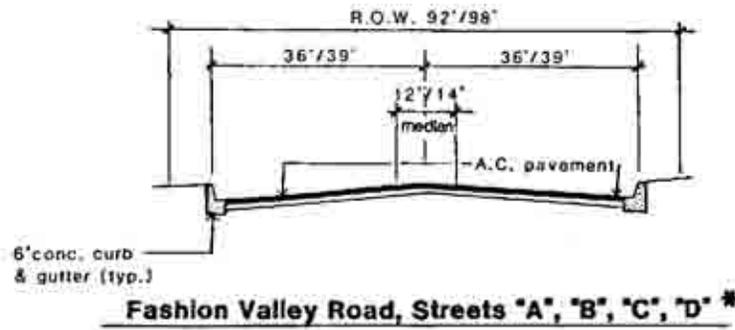
Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

**LEVI - CUSHMAN
SPECIFIC PLAN**



FIGURE 3.9

MASS TRANSIT



Note: Bike lane widths are not included in street dimensions and allowance must be added wherever bike lanes must be included within the street pavement area.

Requirements for sidewalk widths, landscaped medians, and parkway strips are specified within the Implementation Guidelines.

* For Camino De La Reina and pavement edge treatment see Figure 2.3.

- Parking areas shall not be located adjacent to the river corridor nor shall surface parking areas be visible from the river corridor.
- Parking areas shall be interconnected when possible in order to minimize the use of public streets by people looking for a parking place.
- Parking facilities shall be designed in consideration of future land use expansion. Initial parking facilities could be interim-use surface lots capable of eventually accommodating parking structures. Surface lots could also reserve land for future development. Landscape and buffering requirements for interim-use lots will be the same as for permanent lots.
- Large exposed parking areas shall be depressed, screened, and/or bermed to reduce their visibility.
- Large parking areas will generally feed off internal project streets rather than a public street area. This simplifies ingress and egress and provides drive up and drop off access.
- The use of public rights-of-way for the loading and unloading of goods will be discouraged by providing adequate delivery areas. Off-street loading and unloading bays shall be provided for commercial and retail developments.

3.6 STREETScape ELEMENTS

"Streetscape" involves the paving, street furniture, plantings, structures, and buildings associated with public or private streets. The total effect of these physical elements creates a built environment that strongly influences the activities taking place within the street area.

Streetscape is perceived from three basic levels: pedestrian/bicyclist, vehicular, and structure. Speed of travel distinguishes pedestrian from bicyclists and from vehicular streetscape; elevation differentiates perception from that at ground level. The elements of the streetscape perceived from the above levels consist of:

(a) Street furniture which comforts, services, and directs: fire hydrants; phone kiosks and booths; bicycle racks; newspaper racks; planters; tables; trash bins; bollards; seats/benches; railings; balustrades; tree guards; and drinking fountains.

(b) Spatial, visual, and coverage elements are the major elements utilized to create outdoor spaces: plantings; overhead structures; topography; and visual or functional components.

(c) Surfaces include paving (used as focus, accent, interface, edge); tree grates; and utility covers.

(d) Controls include light standards; stop lights; parking signs; and traffic bollards.

(e) Graphics include directional, informational, and traffic control signage; art; and sculpture.

(f) Architectural elements include space articulation; forms and shapes; transitions in form and scale; indoor and outdoor relationships; visual connections; and adjacent styles.

Objectives to be achieved in the development of the streetscape include the following:

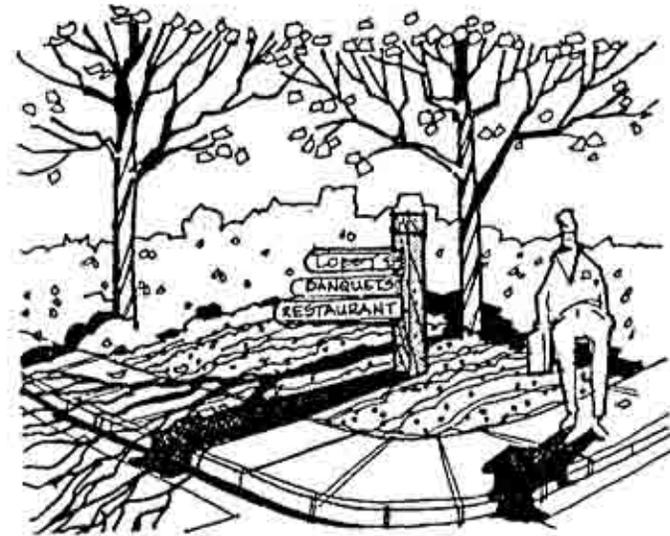
- Provide a visually pleasing, harmonious, and secure environment for private investment.
- Enhance major views.
- Complement adjacent uses through the scale and character of the street scene.
- Locate transportation nodes conveniently to effectively move pedestrians, goods, and vehicles throughout the area.
- Improve the quality of the environment by incorporating water features into the street scene.
- Arrange centers or groupings of activities to facilitate access and minimize conflicts between them.
- Provide a pedestrian network that includes spatial and design qualities that allow the pedestrian to feel that the space was created for him.
- Create an indoor/outdoor relationship between major interior spaces and major outdoor spaces or streetscape.
- Provide an integrated vehicular transportation and pedestrian circulation system with minimal conflicts between systems (vehicular, pedestrian, service, and transit).
- Provide focal points.
- Provide lighting that respects the functions and hierarchies of various street and activity centers.
- Design fire hydrants to have a trim sculptured look, clearly visible, but not obtrusive (no yellow color).
- Construct benches to be warm, inviting, vandal-resistant, and contoured for human comfort. No advertising should be allowed on them.
- Install trash receptacles throughout, including bus shelters.
- Integrate public telephones into the street scene and locate on or adjacent to a structure.
- Provide traffic signal structures which are compatible with the adjacent street furniture.
- Allow newspaper vending machines only in groups of uniformly designed units and locate in logical areas such as bus stops and near hotel lobbies.

- Utilize bollards as a safety separation between vehicles and pedestrians.
- Locate carefully items such as mailboxes; fire-call boxes; traffic speed and directional signs; traffic signal boxes; and electrical transformers. Coordinate materials and color within the streetscape.
- Create inconspicuous or concealed accent lighting, wherever used.
- Provide barrier-free design amenities for the handicapped.
- Provide for group and individual social interaction.
- Provide streetscape elements to support public events, food vendors, sidewalk cafes, and street entertainment.

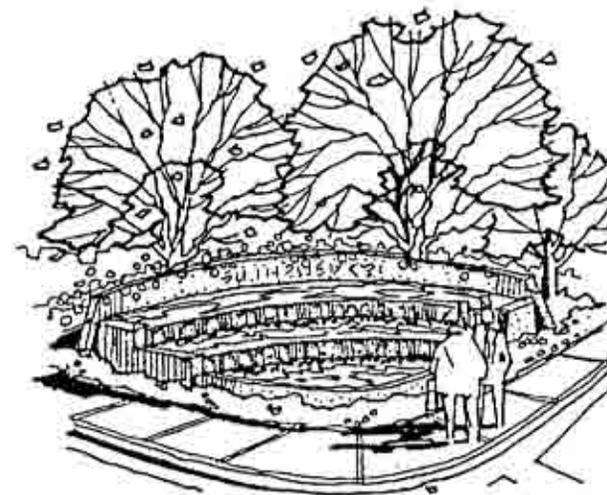
Signage

All signage and graphics for the Levi-Cushman Specific Plan shall conform to city codes. Objectives to be achieved in the development of street signage and graphics include:

- Coordinate all graphics (sign design and sign location) for public signing within the project. Assure consistency relative to type, style, form, color, and materials. Sign sizes should relate to the other design elements of the project.
- Maintain the proper scale and character of all street signs and graphics with adjacent buildings. Sign sizes should



TYPICAL DIRECTIONAL SIGN



THEME ENTRY MONUMENT

be subdued relative to the other design elements of the project and have simple forms and shapes.

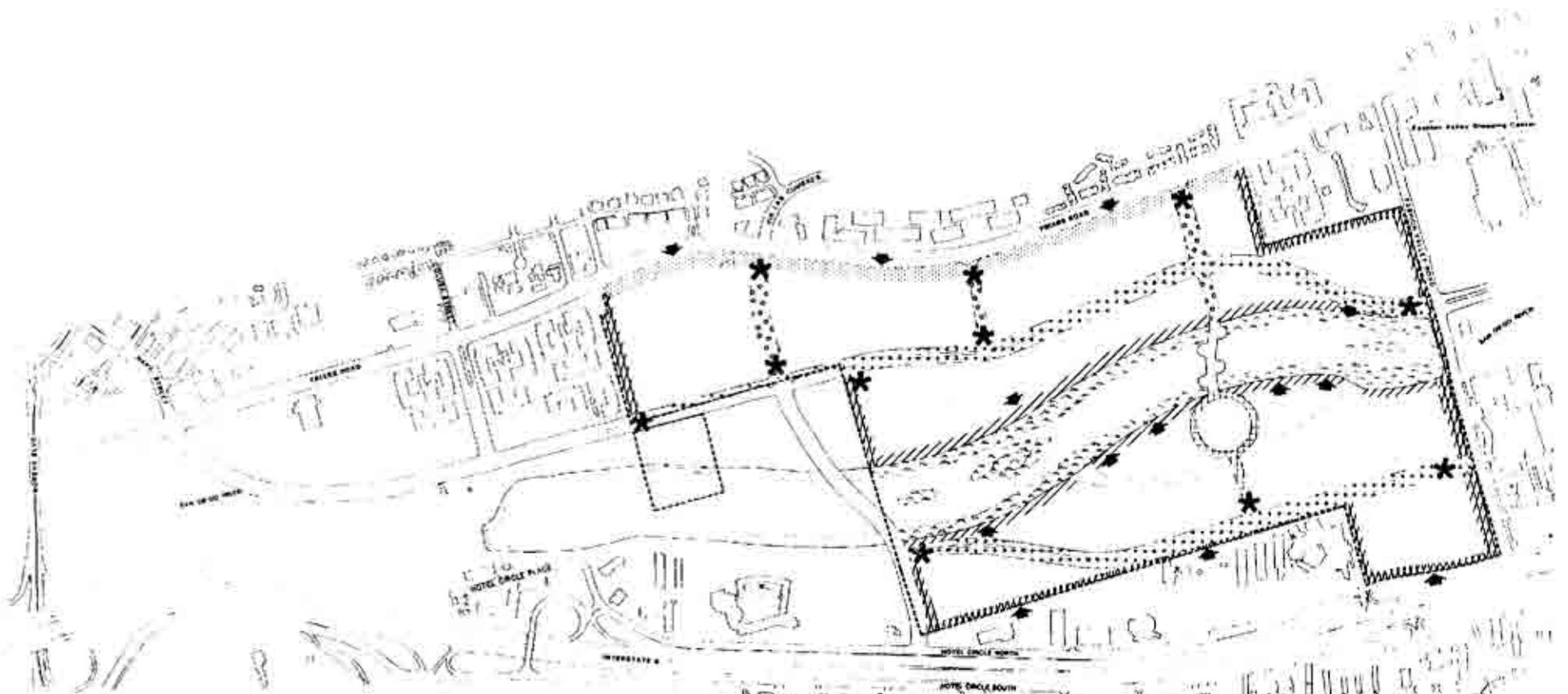
- Individual rather than multiple sign supports should be utilized, especially for major identification signs. Supports should be black, dark brown, or other dark flat colors to minimize visibility.
- Information should be located on a single sign rather than utilizing multiple signs.
- Coordinate graphics of street signing within the project area (in the design of the signs themselves and in their location). Sign locations should be prominent in order to establish a clear directional identification.
- Coordinate private development signing for directional signing, identifying entrances, etc., with consistency of the urban theme throughout the project.
- Emphasize the use of logo designs in building identification signs.
- Limit the amount of information bits occurring on any one sign.
- Minimize the number of colors utilized in any one sign. Use light or dark letters on a solid contrasting background.
- Limit freestanding signs to have a maximum size of 150 square feet.

- Prohibit signage immediately upon the top or roof of any structure.
- Prohibit flashing signs, stroboscopic, rotary beacon, chasing lights, or zip light sources.

3.7 LANDSCAPE DESIGN

Landscaping is of major importance in establishing the design character of the specific plan area and will promote continuity and compatibility throughout the project. These guidelines provide for a well maintained and organized appearance in areas not covered by buildings or parking; enhancement and preservation of existing site character; minimization of adverse visual and environmental impacts; and promotion of water conservation. The Conceptual Landscape Plan, Figure 3.11, illustrates the recommendations for the most visible areas of the development. Street trees, shrubs, and ground covers for public rights-of-way and theme entrances are to be taken from the Streetscape Plant Matrix. All other trees, shrubs, and ground covers are to be taken from the On-Site Plant Matrix, including plants for private development areas and the vegetative barrier. All landscape design must satisfy at least the minimum requirements of Chapter X, Article 1, Division 7, of the San Diego Municipal Code entitled "City-Wide Landscape Regulations," its technical supplement, and landscape standards of the Mission Valley Community Plan.

There are three distinctive "theme entry" situations within the LCSP site: major theme entries, secondary theme entries, and minor theme entries, Figure 3.12. A distinctive hierarchy in



STREETSCAPE PLANTINGS

-  FRIARS ROAD THEME TREE
-  EVERGREEN
-  FLOWERING TREE
-  TALL PALM TREES
-  ORNAMENTAL ENTRANCE PLANTING

RIVER CORRIDOR PLANTINGS

-  RIPARIAN VEGETATION
-  BUFFER VEGETATION

-  OVERSTORY SCREEN BREAK FOR VIEWS
-  SCREEN PLANTING

NOTE: SEE STREETSCAPE AND ON-SITE PLANT MATERIALS

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.11



the design of these entries must be achieved sensitive treatment of the landscape, water features, and monuments.

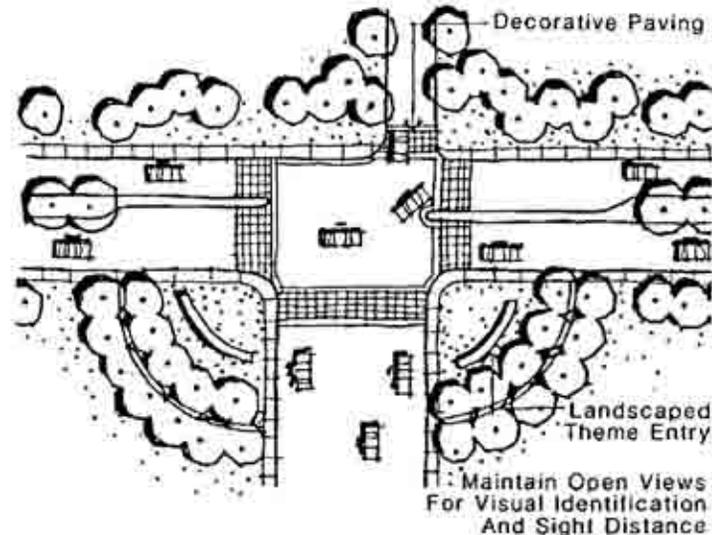
3.7.1 Streetscape

General design criteria pertaining to streetscape character within the LCSP area will be found in the preceding section, Section 3.6. The information within this section is specific to Landscape Design. All street trees will be derived from the Streetscape Plant Matrix, Table 3.1, and must be used in accordance with Figure 3.11, Conceptual Landscape Plan.

Streetscape Design

- Street trees shall be long-lived (60 years or more), strong, insect and disease resistant, deep-rooted, tolerant of street environments, low-maintenance, and low-water-use, if possible. To avoid a monoculture of trees and to promote a street hierarchy:
 - Medians and rights-of-way of all east-west collector streets will be of one tree type.
 - Medians and rights-of-ways of all north-south collector streets will be of one tree type different from that of the east-west streets.
- Rights-of-way on all residential access roads will be of one tree type different from that of east-west or north-south collector streets.

- Rights-of-way on the circular island road (Street C) will be of one tree type.
- To maintain vehicular sight distances and public safety, trees shall not be planted within 25 feet of any intersection nor within 10 feet of streetlights, fire hydrants, and driveways.
- Trees and other plants shall be the dominant elements of the major entry statements.
- Plantings designed for major entries must relate directly to adjacent plantings as well as provide a strong focal element. If an entry monument or sign is used, evergreen



TYPICAL LANDSCAPING AT MAJOR INTERSECTIONS

shrubs and vines shall be used as a backdrop to soften edges. Low plantings of ground cover or annual color can be used in the foreground.

The plant use and selection matrix has been prepared for inclusion into the LCSP streetscape scene. The variety of tree materials has purposefully been kept short to maintain continuity throughout the project. A single species will be chosen for each street.

Existing Trees

Existing on-site tree specimens will be analyzed on an individual basis for preservation in their present or in a new location. Efforts will be made to retain specimen trees.

3.7.2 Setbacks

The setback area between public streets and the buildable parcel area will be fully landscaped except for driveways, urban plazas, and pedestrian and/or bike paths.

- Berms will be used, whenever feasible, to screen undesirable views and provide a gentle undulation to the site. A 2:1 maximum side slope shall be utilized.
- Street trees shall be located adjacent to the curb and shall provide pedestrian scale and separate pedestrian from vehicular activity without reducing the required sidewalk area.

- Except for the vegetative barrier, all planting within setbacks shall be from the On-Site Plant Matrix.

3.7.3 Parking

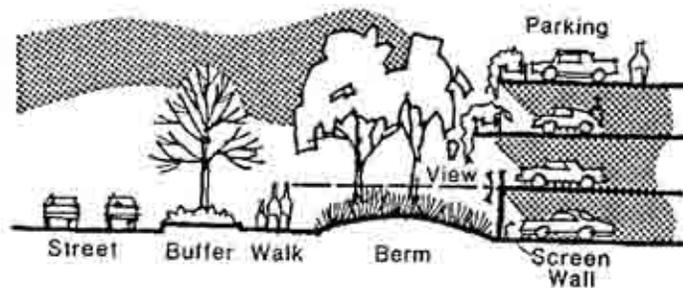
Parking garages and surface parking shall be visually screened by landscaping. The following guidelines should be applied to parking areas within the LCSP area:

- Surface parking areas shall be broken into sections which contain a maximum of 100 cars. Each parking area is to be separated by landscape buffers. Exclusive of setbacks from public streets, a minimum of 10 percent of the parking area shall be landscaped.
- Trees and shrubs may be combined with earthen berms to screen surface parking and parking structures from adjacent view corridors, development, streets, and river views.
- Cascading-type plant materials may be used in edge planters along each level of parking.
- Round-headed, shade-producing trees from the On-Site Plant Matrix are to be used on surface parking areas to reduce solar glare and provide variation in character.
- Trees shall have a mature height and spread of at least 30 feet. They should be long-lived (60 years or more), clean, strong, low-maintenance, and insect and disease resistant.

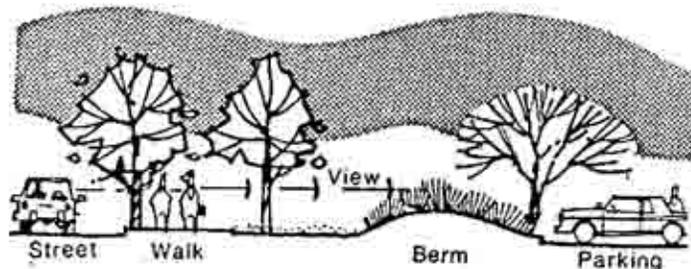
3.7.4 Open Areas (including pedestrian areas)

View Corridors

- A major objective of the landscape development should be to frame identified view corridors - especially up and down the river) - while providing the necessary erosion control and visual requirements.



SCREENING OF PARKING AREA
ADJACENT TO STREETS

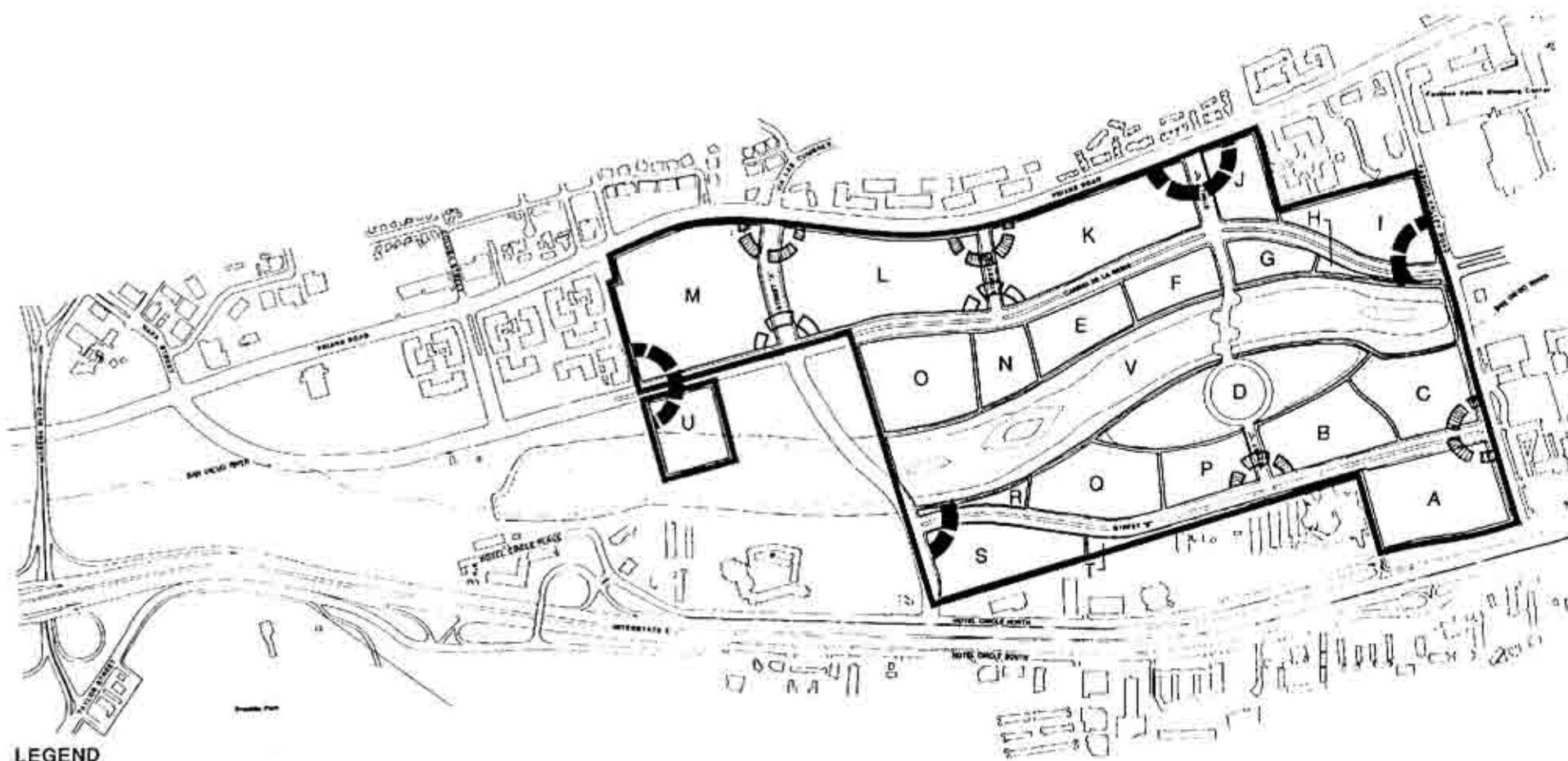


SCREENING OF PARKING STRUCTURE
ADJACENT TO STREETS

- To allow visibility at pedestrian levels, landscaping materials in the ground-level view corridors will include only tall trees with canopy vegetation, rather than short, dense trees.
- To screen unsightly or undesirable views near a slope area, large, dense shrubs shall be massed near the top of the slope, not the toe.

Landscape Design Requirements

- All areas not paved or built upon must be landscaped with trees, shrubs, and/or ground cover. Low-water-use plants and ground cover shall be used.
- Other than those areas in close proximity to the river or major streets, undeveloped areas need not be fully landscaped. As a requirement, these areas shall be seeded with a low-water-use ground cover mixture, which may be used in combination with existing trees. (Hydroseed Mix D is recommended, see Slope Planting Mixes found under Erosion Control in Section 3.10.3.)
- All graded slopes shall be promptly revegetated with ground cover, shrubs, and trees within 90 days of completion of grading.



LEGEND

- 

MAJOR THEME ENTRY
(120' RADIUS FROM CORNER)
- 

MINOR THEME ENTRY
(45' RADIUS FROM CORNER)
- 

SECONDARY THEME ENTRY
(90' RADIUS FROM CORNER)

**LEVI - CUSHMAN
SPECIFIC PLAN**



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.12

**THEME
ENTRY
HIERARCHY**

Plant List	Height				Rate		Form			Environmental Condition							Maintenance		Use Adaptation																							
										Water		Light		Roots		Tolerance																										
	50' - 100'	25' - 50'	10' - 25'	5' - 10'	1' - 5'	0' - 1'	Slow	Moderate	Rapid	Round/Dome	Broad Dome	Arching Vase	Low / Dense	Conical	Columnar	Mound	Mal	High	Medium	Low	Shade	Partial	Sun	Deep	Shallow	Invasive	Wind	Drought	Salt	Pest Free	Low	Medium	High	Street Tree	Parking Lot Tree	Entry Theme	Windbreak	Screening	Open Space	Special Treatment		
THEME TREES																																										
<i>Ficus retusa</i>	•						•																																			
<i>Platanus racemosa</i>																																										
<i>Populus fremontii</i>																																										
<i>Ulmus parvifolia</i>																																										
EVERGREEN NON-FLOWER TREE																																										
<i>Chamaerops humilis</i>																																										
<i>Magnolia grandiflora</i>																																										
<i>Phoenix reclinata</i>																																										
<i>Pinus canariensis</i>																																										
<i>Sequoia sempervirens</i>																																										
<i>Taxodium canariensis</i>																																										
ACCENT /FLOWERING TREE																																										
<i>Ceratonia siligua</i>																																										
<i>Erythrina coralloides</i>																																										
<i>Jacaranda acutifolia</i>																																										
<i>Koeleria bipinnata</i>																																										
<i>Liquidambar styraciflua</i>																																										
<i>Pyrus kawakami</i>																																										
TALL PALM TREE																																										
<i>Arecastrum romanzoffianum</i>																																										
<i>Washingtonia robusta</i>																																										
THEME SHRUBS																																										
<i>Abelia grandiflora</i>																																										
<i>Acacia oerfoides</i>																																										
<i>Agapanthus africanus</i>																																										
<i>Carex grandiflora</i>																																										
<i>Ceanothus griseus horizontalis</i>																																										
<i>Elaeagnus pungens</i>																																										
<i>Hemirocailia aurantiaca</i>																																										
<i>Lantana camara</i>																																										
<i>Lantana montivideris</i>																																										
<i>Moraea bicolor</i>																																										
<i>Nandina domestica</i>																																										
<i>Photinia fraseri</i>																																										
<i>Pinosporum tobira 'Variegata'</i>																																										
<i>Pinosporum tobira 'Wheeler Dwarf'</i>																																										
<i>Plumbago capensis</i>																																										
<i>Raphiolepis indica</i>																																										

TABLE 3.1
page 1 of 2

Landscape Design Criteria

- Trees from the On-Site Plant Matrix should be provided in sizes which meet or exceed requirements of current city-wide landscaping regulations.
- The project shall utilize landscaping materials compatible with the native vegetation along the river corridor. In the area of highest development intensity, the San Diego River vegetation shall be brought into the common open space created by surrounding buildings.
- The use of turf for strictly visual reasons shall be minimized because of relatively high water use and maintenance costs, except when required for recreation areas or theme entries. At theme entries, use of turf is limited to 50 percent of the total area.
- Use of cool season grasses shall be limited to highly visible project entrances and areas intended for active recreation.
- Large walls or fences shall be visually softened with large shrubs or small trees.

3.7.5 Irrigation

- All irrigation systems are to be below ground, automatic, and fully in compliance with building code requirements. Use of water-conserving systems such as drip irrigation, moisture sensors, and low gallonage heads is required.

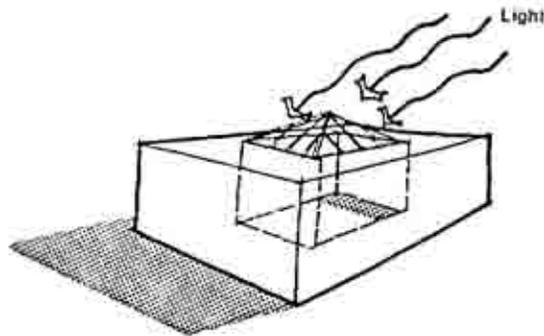
- All irrigation systems shall have separate water meters.
- All backflow control devices shall be located or screened so that they are not visible from public streets or parking areas.
- Spray from irrigation heads onto parking areas, drives, and walks shall be eliminated or minimized.
- Habitat areas in the riparian zone will be watered with a combination of overhead spray irrigation for hydroseeding and individual drip emitters for each shrub and tree. The system will be installed permanently, but will only operate for an initial vegetative establishment period.

3.8 CONSERVATION

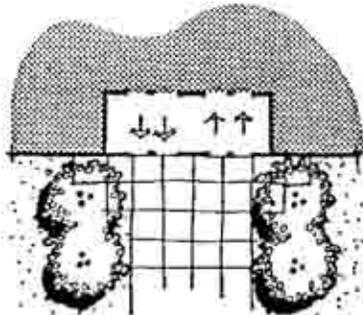
3.8.1 Energy Conservation

All new construction shall comply with building energy efficiency standards set forth in Title 24 of the California Administrative Code, Sections 1401 through 1410.

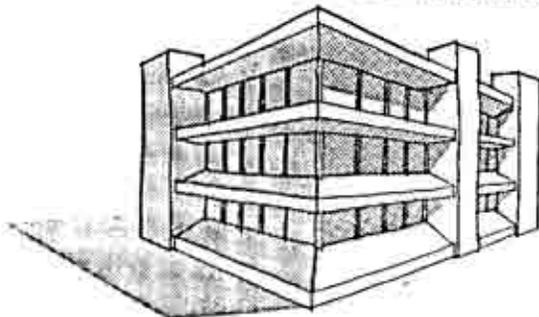
- Windows, skylights, light wells, and similar features shall be used to maximize natural lighting in work areas during daylight hours.
- Low-wattage light fixtures, dimmer switches, zoned lighting banks, and time-controlled lighting for public areas shall be used in the LCSP area.



BUILDING DESIGN
MAXIMIZES NATURAL LIGHTING

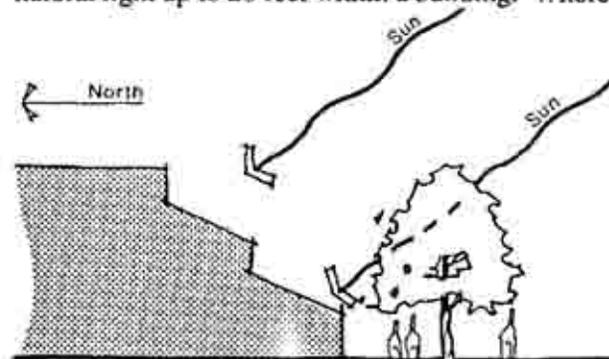


VESTIBULE AT ENTRYWAY
REDUCES HEAT OR COLD INFILTRATION



BUILDING FACADE WITH OVERHANG
REDUCES HEAT GAIN

- Vestibule use at entryways should be considered in order to reduce heat and cold infiltration into buildings.
- Cogeneration or district heating and cooling facilities usage will be encouraged.
- Overhangs or canopies shall be used to shade direct sun and reduce heat gain.
- Deciduous trees shall be used in south-facing and west-facing outdoor areas around buildings to provide solar access during winter months and shade in hot summer months.
- Large surface parking areas should be located to the east and north of adjacent buildings to reduce solar reflection on buildings.
- Building design should permit interior penetration of natural light up to 20 feet within a building. Where inte-



GLASS AREA ON BUILDING
ORIENTED TO THE SOUTH

rior areas are greater than 20 feet from windows, then skylights, light wells, interior courts, or similar architectural features should be provided.

3.8.2 Water Conservation

Water conservation can be achieved through the installation of pressure and flow reducing mechanisms within the water distribution system itself. The following objectives are water saving devices which have been deemed most appropriate and feasible to meet the water savings goal:

- Conserve water through the use of low-flow shower heads and faucets, low-flow toilets, cycle adjustment dishwashers, pressure regulators (maximum of 60 psi), hot water pipe insulation or instantaneous water heaters, automatic sprinkler systems with timers, and standard water meters and house connection pipe sizes (no oversizing).
- Conserve water through the use of low-water-use plant material.
- Conserve water through the use of drip-irrigation systems for tree plantings.
- Use of reclaimed water is encouraged.

3.9 NOISE CONSIDERATIONS

As development occurs within the LCSP area, the noise environment will be altered. The traffic volumes on roads will increase as a result of traffic generated by development within the specific plan area and by adjacent developments. Noise generated by the increased number of vehicles will also increase. The developments located adjacent to Friars Road could be subjected to noise levels in excess of City standards. Future development plans for the specific plan area should therefore contain measures to reduce potential noise effects through either site design or the construction of noise barriers, including the following:

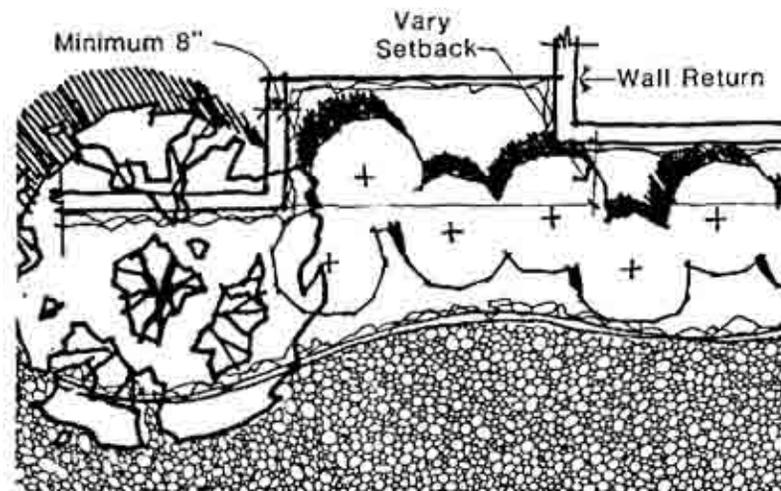
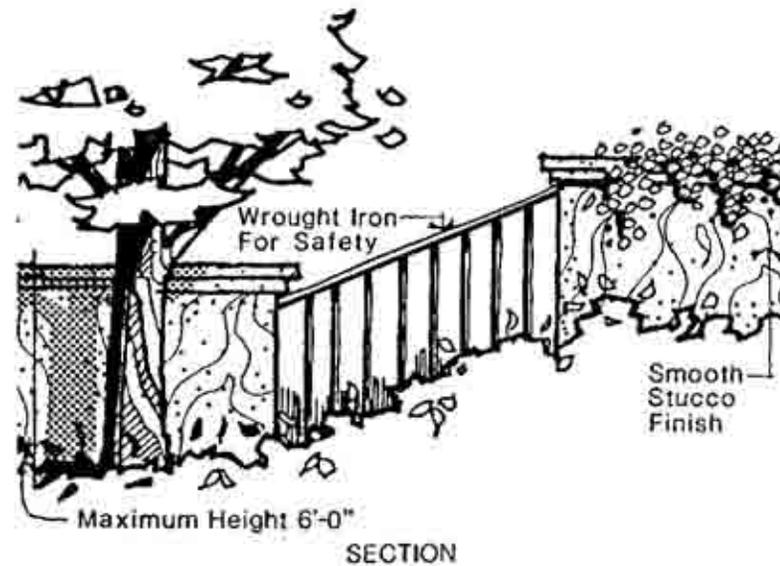
- An acoustical analysis shall be prepared for all the areas proposed for residential development at the time Planned Development permits are processed.
- Noise mitigation measures, including but not limited to walls, berms, setbacks, and orientation, shall assure that noise levels will not exceed standards set by the General Plan of the City of San Diego.
- Conformance with Section 24-2501 of the State Building Code, which applies to dwellings other than detached single-family homes shall be maintained.
- Careful site planning shall be utilized to reduce potential noise effects, particularly of outdoor recreation areas. Locating land uses such as garages or parking lots immediately adjacent to Friars Road and other noise pro-

ducers and setting development back from the street would help to accomplish this objective.

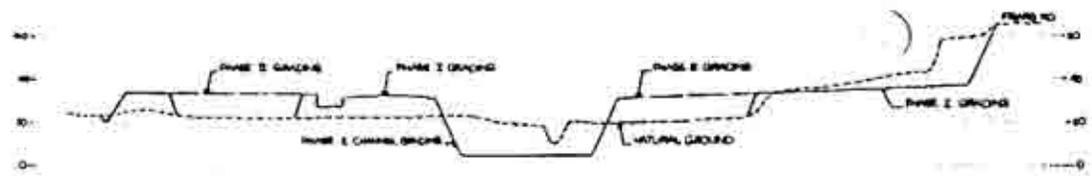
- In all areas adjacent to Friars Road, either setbacks or elevation differences sufficient for noise buffering will be maintained. Accurate readings for noise levels shall be determined for all proposed development along Friars Road prior to site design to determine if increased setbacks and/or offsets are necessary for noise mitigation.
- Berms are the preferred noise attenuation method along Friars Road. In areas where berms are not feasible for noise attenuation, walls may be used for the same purpose. The character of these walls should create visual interest by offsets in facade to avoid strictly linear walls and therefore relieve monotony and allow incorporation of landscaped recesses.
- When perimeter walls are used in the project, these walls will be of a strong, simple, unadorned character with a minimum 8" thickness and maximum 6'0" height.
- Tops of all perimeter walls should be kept horizontal. Where grade changes occur, the walls should stop and incorporate a short return. Spaces between walls should be heavily planted.

3.10 EARTH MOVING/GRADING

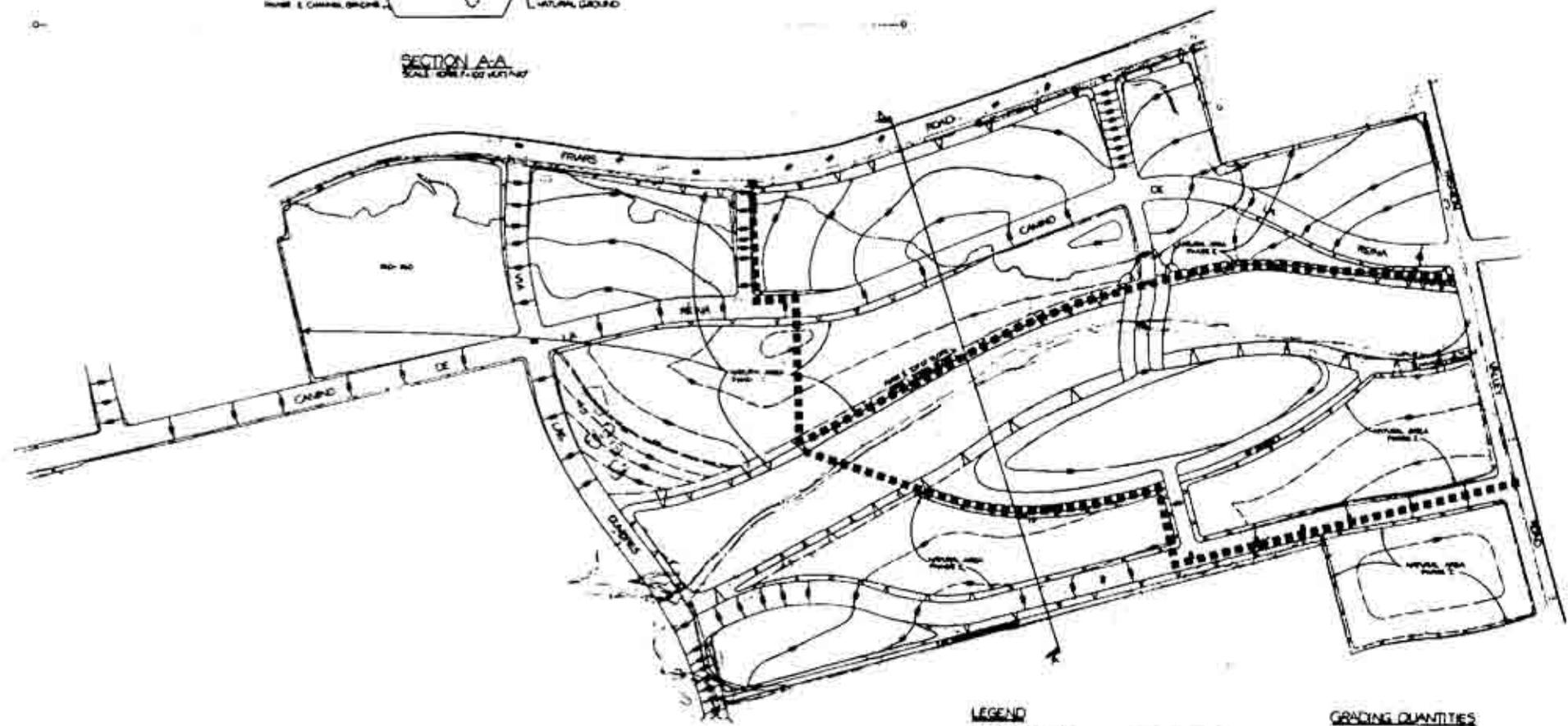
Grading within the project area will occur in a sequence determined by the overall phasing of development, although grad-



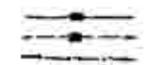
PERIMETER WALL TREATMENT:
GRADE CHANGE AND ARTICULATION



SECTION A-A
SCALE: 1/8" = 1'-0" HORIZONTAL



LEGEND
 PHASE I GRADING
 PHASE II GRADING
 DAYLIGHT LINE



GRADING QUANTITIES

CLD*	CHANNEL	OTHER	TOTAL
	800,000 CY	837,000 CY	1,637,000 CY
FILL	PHASE I	PHASE II	
	1,000,000 CY	1,000,000 CY	
EXCISE	PHASE I	PHASE II	
	800,000 CY	1,000,000 CY	

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

LEVI - CUSHMAN
 SITE PLANNING ARCHITECTS

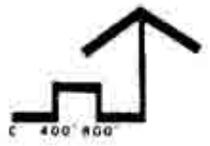


FIGURE 3.13

PRELIMINARY GRADING PLAN

ing for the river channel will be an early element of the development program. A preliminary grading study, Figure 3.13, indicates that imported fill material will be necessary to achieve the grade relationships identified in the Specific Plan. Existing loose and porous soils will be removed and recompact as required by the soils engineer prior to subsequent placement of fill materials. Suitable fill materials will be imported from off-site as required to construct fills per plan. Surcharge may be required in some areas to expedite consolidation of subsoils. A complete earth-moving and grading program will be provided with the first PCD/PRD submittal.

3.10.1 Flood Channel

The proposed flood channel involves excavation to as low as elevation 5 (mean sea level datum). Off-site grading will occur west of the project to accommodate Street A. Design proposals will be coordinated with Warner Ranch property owners on the western boundary of the project area. It is anticipated that all material excavated will be suitable for fill on-site and in roadway areas.

Channel slopes will be curvilinear in order to create a natural setting. Slope protection will be provided where required in areas of high velocity during flood stage. Slopes will generally be 2.5:1 in the main channel. Grading in the flood channel will require some work below the existing groundwater level and will involve restrictions regarding work during the rainy season.

The flood channel through the project is coordinated with but designed to be independent of upstream and downstream development. If development downstream of the project has not occurred by the time the channel through the LCSP area is completed, then a drainage swale will connect the western end of the new channel to the eastern end of the existing channel.

3.10.2 Streets

Major street grading for Street A, Camino De La Reina, and other on-site collector streets will be accomplished according to City of San Diego grading specifications to provide a suitable roadway subgrade. All slopes adjacent to roadways will be 2.5:1 or flatter and curvilinear in form to blend in with existing topography and the proposed site grading. Grading will be necessary off-site to the west whenever the connection of Camino de la Reina with Napa Street occurs to permit LRT use.

3.10.3 Site Grading

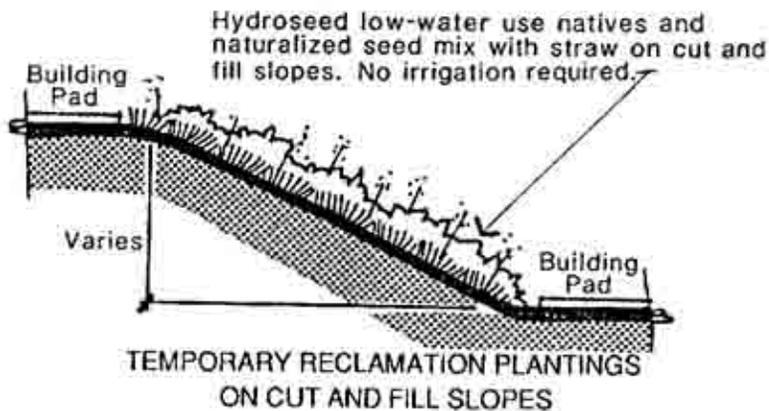
Site grading will consist of normal cut and fill grading operations and will be constructed according to the recommendations of a qualified soils engineer to provide suitable building sites for designated land uses. Grades will generally be dictated by architectural considerations but must also be established to maintain building sites above the 100-year flood level and provide a suitable grade relationship to the adjacent roadways. Grading for the flood control channel will provide fill materials for street construction. Suitable erosion control

techniques will be used to maintain existing drainage facilities in operation during all construction operations.

It is anticipated that all slopes will be curvilinear in form and meet the stability requirements of the soils engineer and the City engineer.

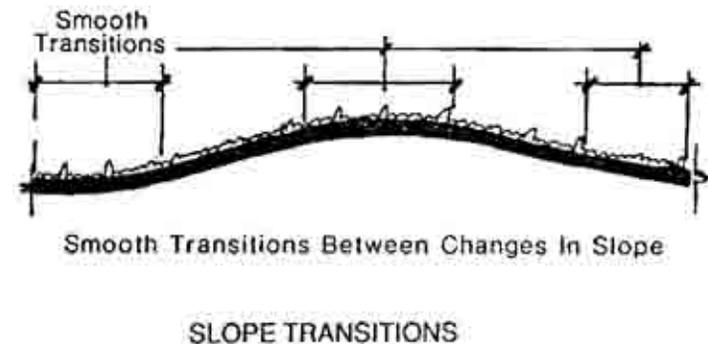
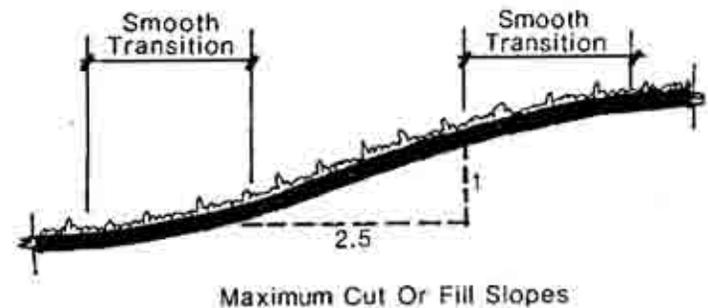
Slope Treatment

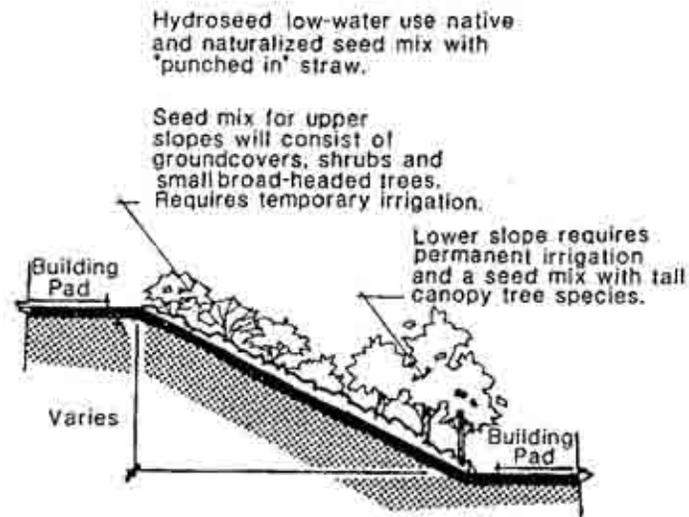
- In general, sharp, angular forms shall be contour graded to reflect the natural terrain. All graded slopes shall be landscaped. Where appropriate, buildings should be sited to conceal graded slopes.
- No cut or fill slopes of any type will be steeper than 2.5:1 with smooth vertical transitions.
- Cut slopes over ten feet in vertical height will be serrated to provide a more suitable surface for revegetation, as determined by EQD.



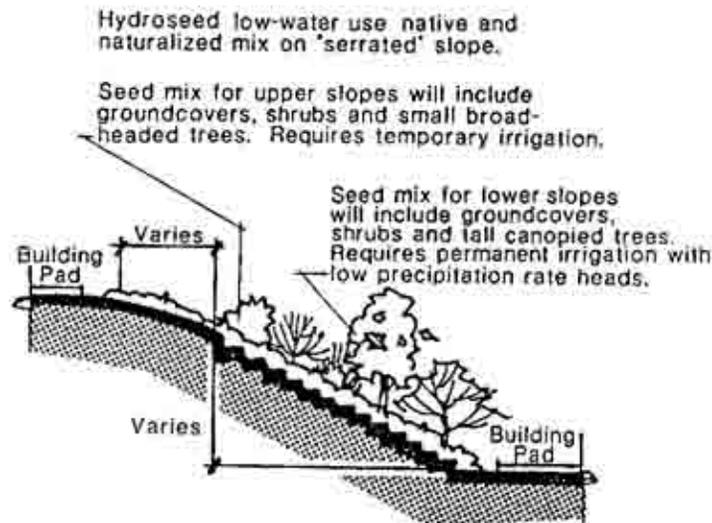
Erosion Control

- Measures shall be taken during construction to control runoff and erosion from construction sites. Filter fabric fences, heavy plastic earth covers, gravel berms, or lines of straw bales are a few of the techniques which shall be considered.





PERMANENT PLANTINGS ON FILL SLOPES



PERMANENT PLANTINGS ON CUT SLOPES

- Resurfacing of parking lots and roadways should take place as soon as practicable and not at the completion of construction.
- Phasing of grading will take place so that prompt revegetation or construction can control erosion.

3.10.4 Slope Planting Mixes

Hydroseed Mix A

For use on temporary slope areas of greater than 5:1 slope:

Eriogonum fasciculatum
Eschscholzia californica
Lupinus succulentus
Plantago indica
Salvia mellifera
Trifolium hirtum "hykon"

Hydroseed Mix B

For use on lower portions of permanent slopes:

Acacia cultriformis
Baccharis pilularis ssp. consanguinea
Callistemon citrinus
Cistus corbariensis
Encelia californica
Eriogonum fasciculatum
Eschscholzia californica

Eucalyptus cladocalyx
Eucalyptus polyanthemus
Fremontodendron mexicanum
Heteromeles arbutifolia
Parkinsonia aculeata
Prunus caroliniana
Rhus laurina
Schinus terebinthifolius

Hydroseed Mix C

For use on upper portions of permanent slopes:

Acacia cultriformis
Acacia longifolia
Baccharis pilularis ssp. consanguinea
Cistus villosus
Encelia californica
Eriogonum fasciculatum
Eschscholzia californica
Eucalyptus lehmanni
Fremontodendron mexicanum
Lupinus succulentus
Mimulus puniceus
Plantago indica
Rhus integrifolia

Hydroseed Mix D

For use on temporary flat areas not exceeding 5:1 slope:

Bromus mollis
Bromus rubens
Eschscholzia californica
Lupinus succulentus
Plantago indica

4.0 RIPARIAN REVEGETATION PROGRAM

4.1 EXISTING CONDITIONS, PROGRAMS, AND LIMITATIONS

The Riparian Revegetation Program for the Levi-Cushman property implements the goals of the San Diego River Wetlands Management Plan, Appendix G of the Mission Valley Community Plan:

...to define a means of maintaining and improving the overall quality of the wetlands associated with the San Diego River while allowing for development in Mission Valley. The intent of the plan is to establish a framework for accomplishing this goal by incorporating biological considerations into planning for development and flood management on the river. (MVCP, p. G-9)

The San Diego River Riparian Revegetation Program for the Levi-Cushman property consists of:

- (a) A redesign of the floodway to incorporate a 100-year flood control channel from Fashion Valley Road to the west end of the Levi-Cushman property at Street A;
- (b) A revegetation plan for the establishment of wetland habitats;
- (c) A management, maintenance, and monitoring plan for the flood control channel; and

- (d) A series of improvements to the visual quality of the San Diego River.

The San Diego River floodway lies entirely within the boundaries of the existing golf course and encompasses approximately half of the Levi-Cushman property. This effectively limits development to a few narrow strips of land on the north and south of the floodway. No native wetland habitat exists on the property outside the narrow channel of the river itself. At Fashion Valley Road the San Diego River floodway is approximately 800 feet wide but narrows quickly to a width of some 400 feet. At the west end of the property it broadens again to 800 feet.

4.2 FLOOD MANAGEMENT

Reducing flood risk to both existing and proposed development in Mission Valley is a primary component of the Riparian Revegetation Program. This will be accomplished by channelizing the floodway of the San Diego River between Fashion Valley Road and Street A with a natural-appearing waterway with vegetated slope areas.

A peak water flow of 49,000 cfs was estimated by the U.S. Army Corps of Engineers for the river based on development of the entire watershed to its maximum potential. The flood control channel designed as part of this project will convey a peak discharge of 49,000 cfs without raising the calculated



LEGEND

- FLOODPLAIN FRINGE
- EXISTING FLOODWAY
- - - - - PROPOSED FLOODWAY

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 4.1

**LEVI - CUSHMAN
SPECIFIC PLAN**



**FLOODWAY,
EXISTING
AND PROPOSED**

LEVI-CUSHMAN SPECIFIC PLAN/73

surface of the existing 100-year flood level upstream or downstream of the project. To accomplish this, the existing floodway will be narrowed to a width of approximately 450 feet. Maximum depth will be approximately 26 feet, with the tops of the channel banks one foot above the level of a 100-year flood. The channel will be trapezoidal with 2.5:1 slopes. The area of floodway within the specific plan will be reduced from approximately 106 acres to 39 acres.

Because of the importance of minimizing damage to landscaping and limiting erosion of banks during flood conditions, the channel has been designed to maintain maximum flow velocities below seven feet per second in the vegetated portion of the channel. A minimum water depth in the project area of six feet will be maintained by a weir structure incorporated into the road crossing at the western end of the property. A drop structure to the west of Fashion Valley Road will act as an energy dissipater for flow onto the property. Riprap or other slope protection will be provided where flow velocities are calculated to be most severe and where erosion could be expected to occur. This condition is anticipated near Fashion Valley Road, at the upstream "nose" of the river islands, along pier embankments, and along the channel banks near Street A. In all cases, riprap will be earth covered.

At Fashion Valley Road, the river crossing will be improved to permit the flow of a 10-year flood level under the road, as will Camino De La Reina as it crosses Fashion Valley Road. The new crossing through the center of the property - i.e., the bridge to the island - will be designed above the 100-year flood

level. As well, all buildable pads within the property will be designed above the 100-year flood level.

4.3 WETLANDS REESTABLISHMENT AND MANAGEMENT

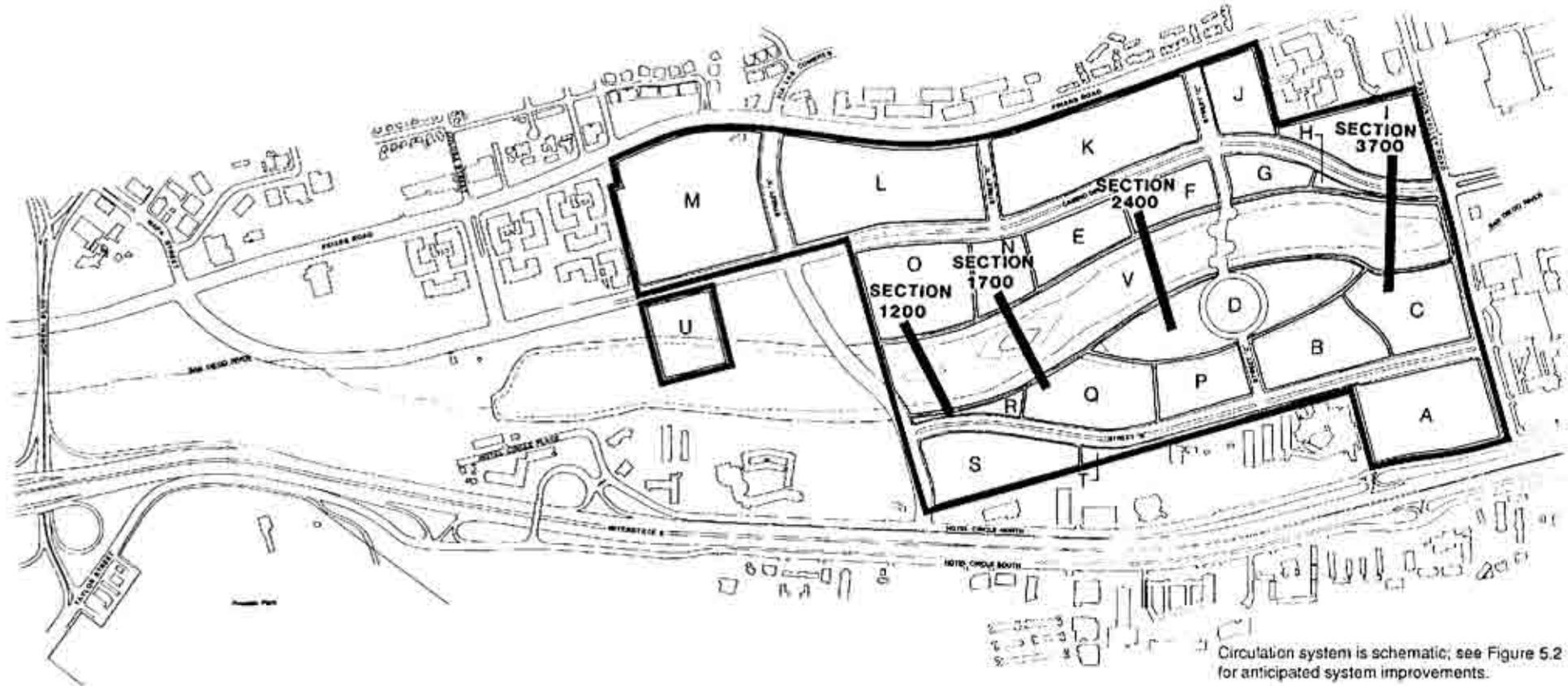
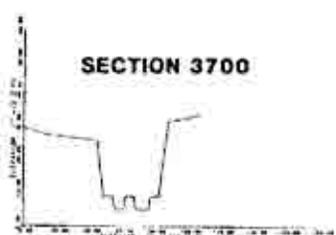
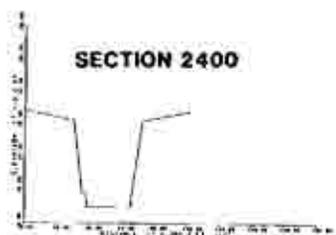
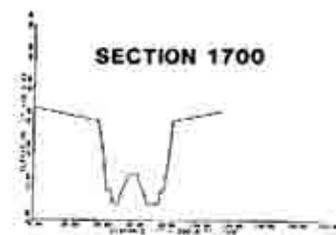
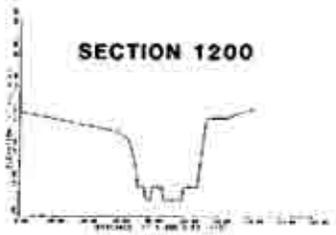
Mitigation for development within existing floodway is defined in the San Diego River Wetlands Management Program:

The established FW zone boundary encompasses a sensitive resource area wherein no modifications shall be permitted unless mitigation is accomplished in agreement with [the San Diego River Wetlands Management] plan. (MVCP, p. G-17)

The purpose of mitigation is also defined and qualified as to intent and limitations:

The primary purpose of this [plan] is to protect, preserve and enhance wetlands . . . , it is recognized that the floodway is within an urban setting and must serve multiple uses, [not] solely serve as wildlife habitat. (MVCP, p. G-15)

The Riparian Revegetation Program developed for this Specific Plan includes provision for a belt of continuous riparian habitat through the Levi-Cushman property. A conceptual wetland habitat design, depicted in Figure 4.3, shows areas of riparian woodland, freshwater marsh, and open water habitats in the channel. Details of the habitat reestablishment



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 4.2

program within the floodway are contained in the Riparian Revegetation Program, which is included in the LCSP EIR and in the Implementation Guidelines.

The Riparian Revegetation Program contains specific information on habitat development goals for the flood control channel and defines habitat species composition in the revegetation area, planting specifications, irrigation system requirements, and a management, maintenance, and monitoring plan.

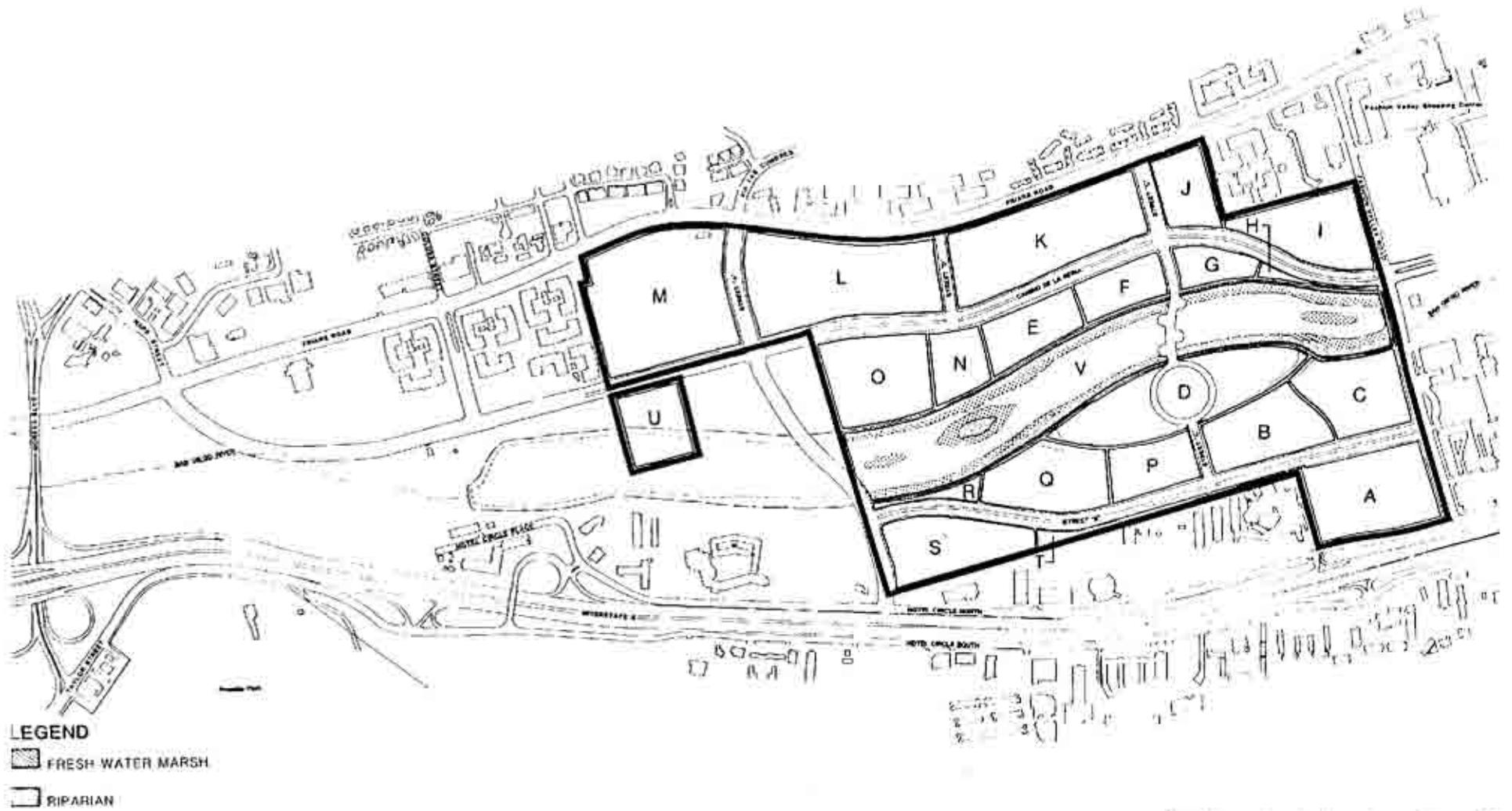
Included as part of the Riparian Revegetation Program are details concerning the management and maintenance of the floodway and marsh habitats during and after project construction. A technical management committee with representatives from the City of San Diego Environmental Quality Division, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game, working with the project biologist, will provide technical recommendations for attaining specified performance standards within the five-year monitoring period.

Appropriate construction phasing and revegetation under the Riparian Revegetation Program are critical to attaining Specific Plan objectives. To this end, the flood control channel will be developed in two phases, and the vegetation contract will include specifications and performance standards defined by the Riparian Revegetation Program and approved by the U.S. Fish and Wildlife Service. In addition to conforming with overall development phasing, channel construction phasing will allow for refining the revegetation strategy for

the entire channel area based on success of the initial revegetation phase. The project biologist will be an independent consultant charged with the responsibility for implementing a monitoring program to assure satisfactory completion of various tasks and phases and to provide data to the technical management committee. Construction and revegetation of the first phase of the channel will be incorporated into the first development phase. Implementation of channel construction and revegetation through the remainder of the project area will be triggered by any development in Development Area 3.

This revegetation plan is based on preliminary channel design studies and hydrologic data; therefore, refinements may occur at the request of the City Planning Director and City Manager during the development of the final Riparian Revegetation Program.

The intention of the Riparian Revegetation Program is the creation of wetlands habitat through the reach of the San Diego River that crosses the Specific Plan area. This wetlands will be a natural lake during the dry season providing habitat for a variety of water-dependent wildlife species and a free-flowing river during the wet portion of the year. The shallow water of the dry season lake (depths of six to seven feet) should be deep enough to inhibit filling in with vegetation, yet shallow enough to allow adequate mixing to prevent degraded water quality. Periodic dredging of the open water channel will be required as normal maintenance to assure the flood conveyance of the facility.



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 4.3

**LEVI - CUSHMAN
SPECIFIC PLAN**

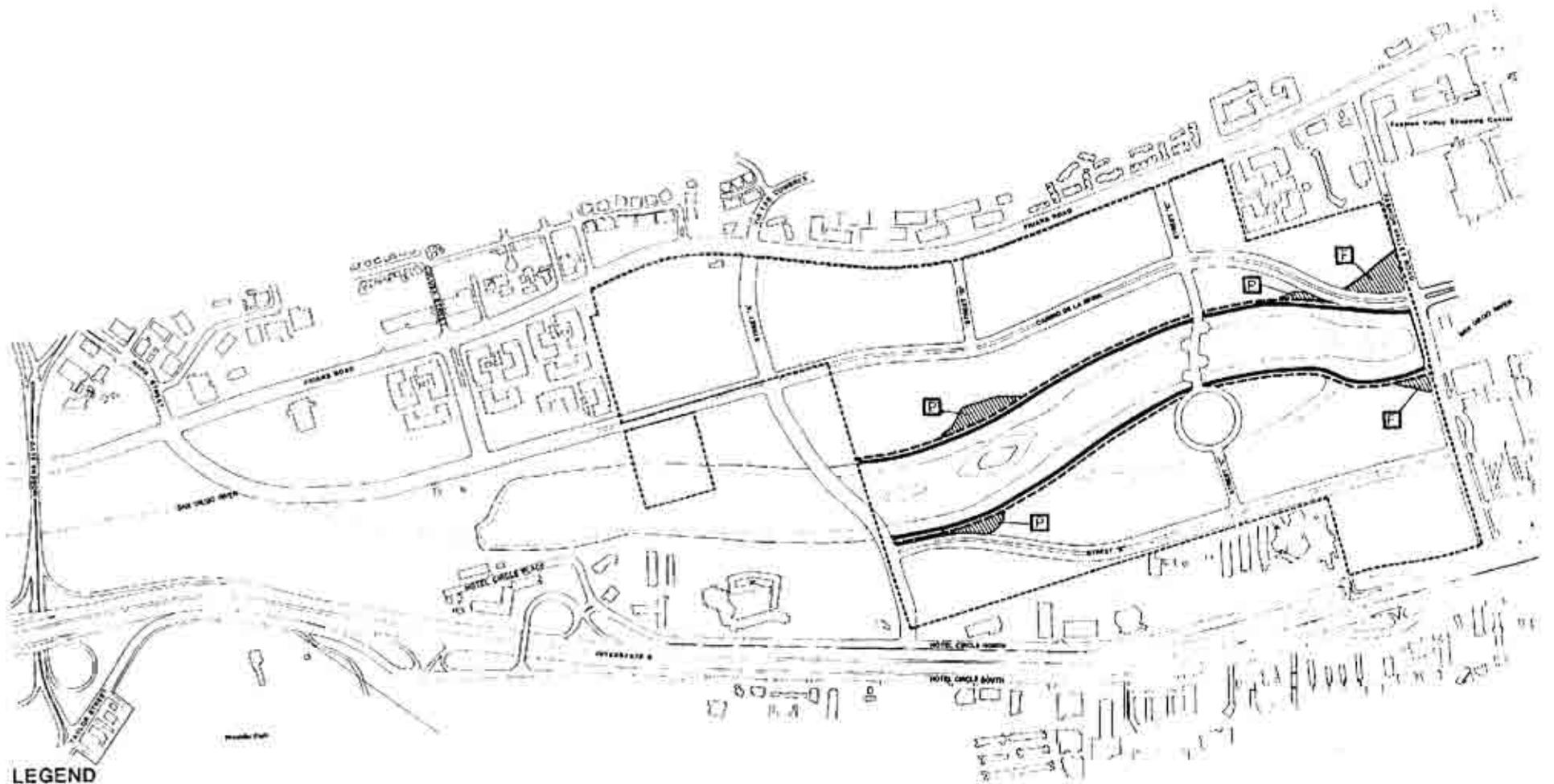


**REVEGETATED
RIPARIAN AREAS**

Management and maintenance of the wetlands reestablishment on the Levi-Cushman property will be the responsibility of the project proponents, although the City of San Diego may assume this responsibility so long as it is funded by LCSP landowners or tenants. A monitoring program will document the establishment and subsequent development of vegetation and habitat quality in the floodway five years after completion of the revegetation plan and will serve as a basis for subsequent maintenance recommendations. The management program will provide for three categories of activities:

- (a) Maintenance of biological resources in accordance with the scope of the revegetation program;
- (b) Maintenance of the hydraulic characteristics of the channel to insure adequate flood control; and
- (c) Maintenance of aesthetic quality of the facility.

To create and maintain a viable wildlife corridor within the floodway, habitat areas must be protected from excessive human disturbance. Habitat degradation can occur through noise, visual, or physical disturbance - the same forms that also degrade aesthetic values of the river corridor for human use. The vegetative barrier which begins at the top edge of the river channel will be planted with native riparian species trees and shrubs and function as a continuation of the wetland habitat. Where park sites and floodway transition areas abut the barrier, there will be an opportunity for special treatment areas where native species mingle with ornamental trees and shrubs.



LEGEND

- TOP OF CHANNEL
- - - VEGETATIVE BARRIER
- SPECIAL TREATMENT AREAS LANDSCAPED WITH NATIVE/ ORNAMENTAL TREES AND SHRUBS
- PARK AREA
- FLOODWAY TRANSITION AREA

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

**LEVI - CUSHMAN
SPECIFIC PLAN**



**FIGURE 4.4
SPECIAL
TREATMENT
AREAS**

5.0 CIRCULATION

5.1 FREEWAY SYSTEM

Figure 5.1 shows the existing freeway and street system in the project area. Also shown on Figure 5.1 are 1985 SANDAG two-way weekday traffic flows in the area.

Interstate Highway 8 (I-8), located just south of the project area, is one of San Diego's major east-west travel corridors. It connects downtown employment centers and those north of Mission Valley with residential areas to the east. Interstate 8, carrying both regional and commuter traffic, has a two-way average daily traffic (ADT) volume of approximately 185,600 in the vicinity of the project.

Primary access to I-8 in the project area is via two frontage roads on either side of the freeway - Hotel Circle North and Hotel Circle South. Hook ramps provide east- and westbound access to the freeway from these frontage roads. The eastbound on-ramp near the Mission Valley Inn transitions to a connector ramp for northbound and southbound State Route 163 (SR 163) traffic. In addition to the I-8 access ramps adjacent to the Mission Valley Inn and Stardust Hotel, there are I-8 interchanges with Hotel Circle North and Hotel Circle South-Taylor Street to the west of the project.

Interstate Highway 5 (I-5) is located about one mile west of the project site and is accessed via I-8 or by the Morena Boulevard/Tecolote Road (Sea World Drive) interchange to the northwest. Interstate 5 is a major north-south travel cor-

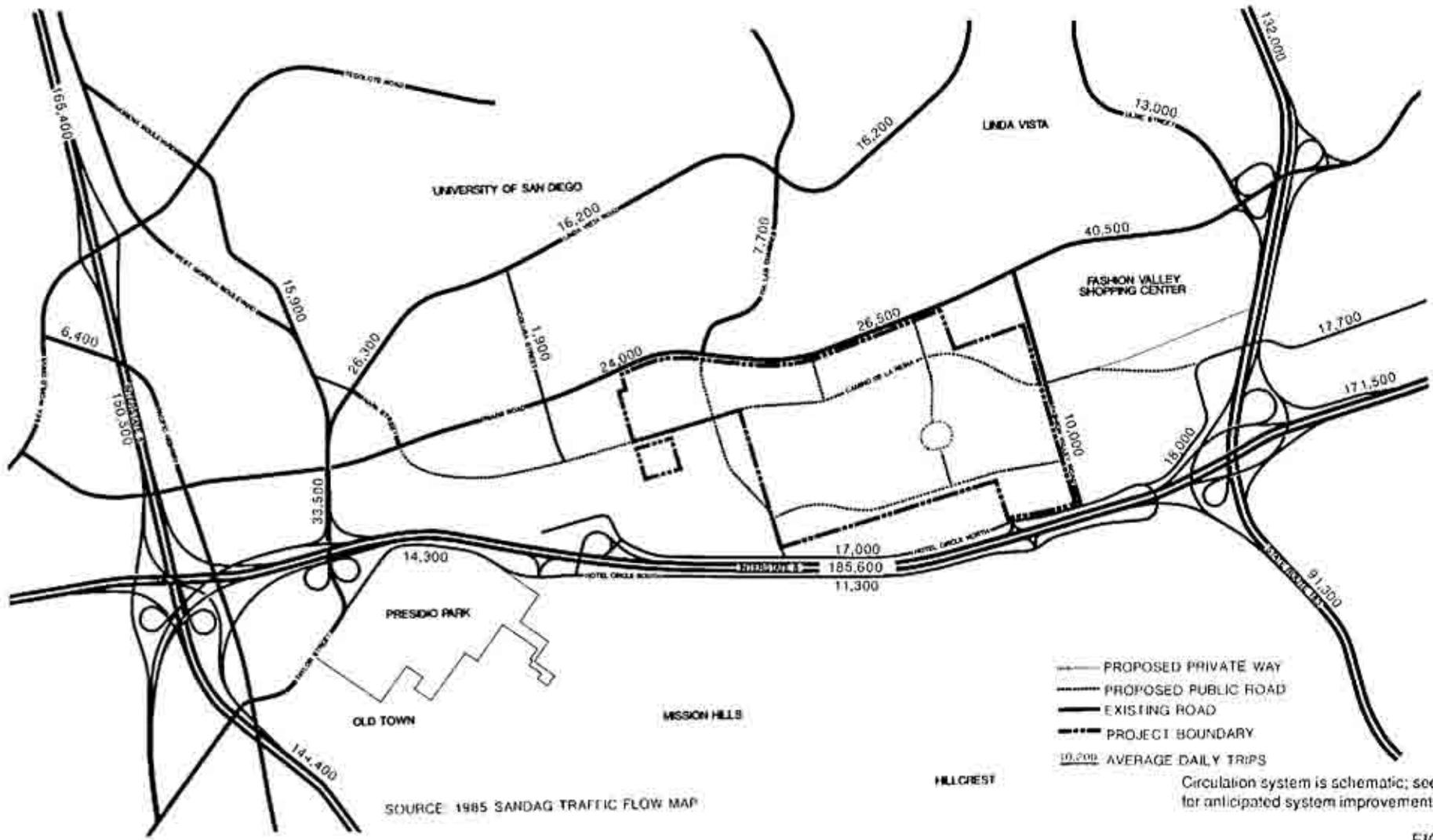
ridor between the north coastal area and metropolitan San Diego. Weekday volumes on the segment of I-5 between I-8 and the Morena/Tecolote (Sea World Drive) interchange average approximately 150,500 ADT.

State Route 163 (SR 163) is located about 0.4 mile east of the project area and carries a weekday average two-way volume of 132,000 ADT on the segment just north of I-8. Route 163 provides a north-south connection between downtown and the residential, commercial, and industrial areas north of Mission Valley.

5.2 STREET SYSTEM

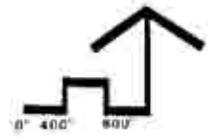
The Mission Valley street system serves two regional shopping centers, San Diego Jack Murphy Stadium, high density residential development, office complexes, and entertainment/dining establishments. Friars Road, the primary arterial street in the valley, functions smoothly most of the time because there are few intersections and east of Frazee Road there is virtually no driveway access. However, some major streets in the area experience congestion during the peak travel periods because they are not built to major street standards.

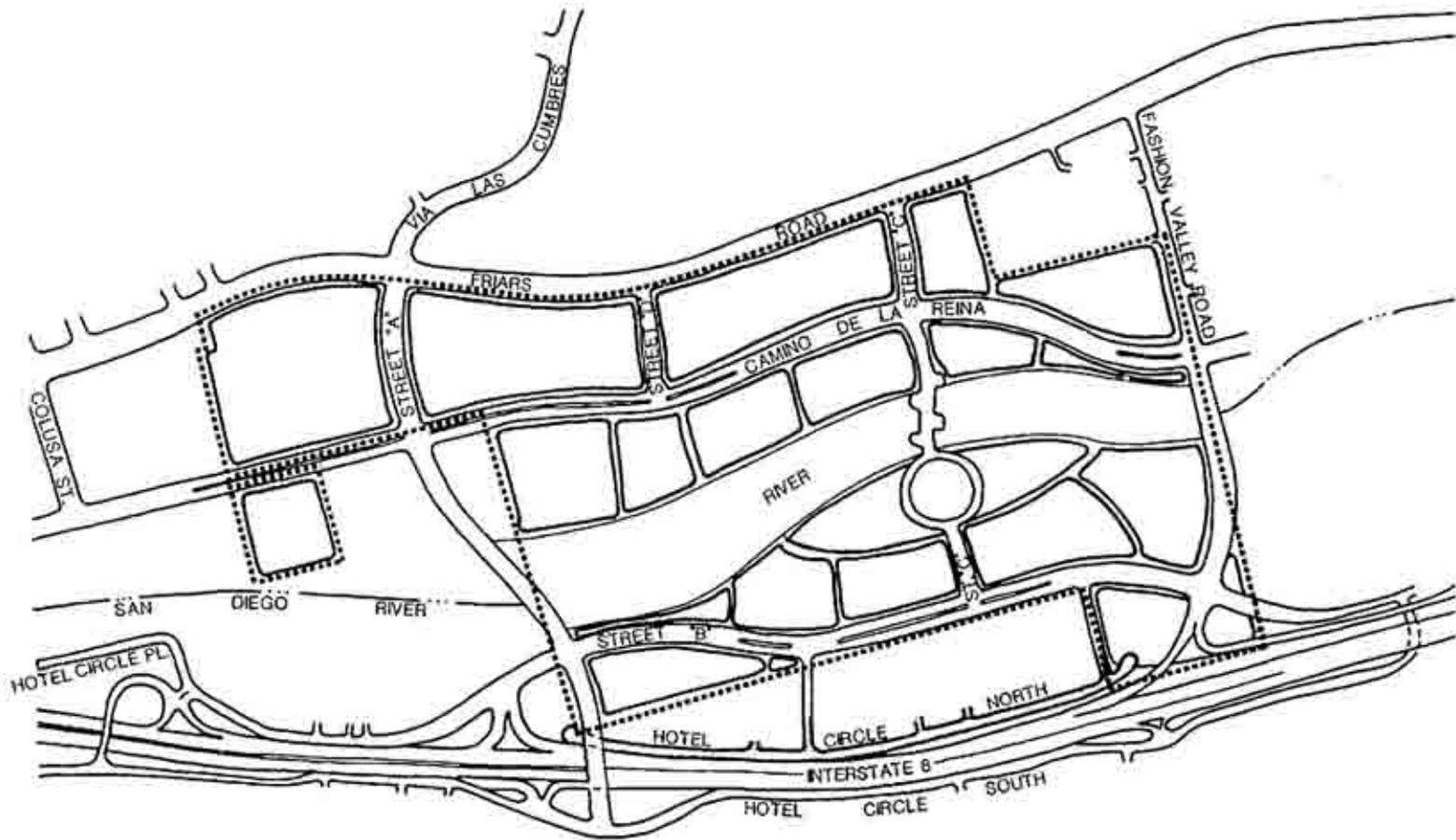
East of Fashion Valley Road, Friars Road has two westbound and three eastbound lanes and carries an average weekday flow of 40,500 trips. West of Fashion Valley Road, Friars Road is four lanes with a two-way left-turn lane and a



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 5.1





**LEVI - CUSHMAN
SPECIFIC PLAN**

82 / LEVI-CUSHMAN SPECIFIC PLAN



No scale.

FIGURE 5.2

**PROPOSED CUL DE SAC
OF HOTEL CIRCLE NORTH**

separated bike lane along the south side. Weekday traffic volumes average about 26,500 trips. The Mission Valley Community Plan proposes that Friars Road between Fashion Valley Road and Colusa Street to the west be striped for six lanes.

The Community Plan also proposes that Hotel Circle North and Hotel Circle South be developed as three or four-lane collector roads to provide a loop frontage road system parallel to I-8. However, to comply with Caltrans' preferred access improvements to Interstate 8, Hotel Circle North between Fashion Valley Road and the extension of Via Las Cumbres is now proposed to cul-de-sac at each end (Figure 5.2). A new four-lane major street, Street B, will be constructed parallel to Hotel Circle North between Fashion Valley Road and Via Las Cumbres and will maintain the loop road concept of the community plan. Hotel Circle North currently has one lane of traffic in each direction and a two-way left-turn lane; weekday traffic volumes are approximately 17,000. Parking is presently allowed along some parts of the street. Hotel Circle South has one westbound and one eastbound lane with parking presently allowed on some parts of the south side. Weekday traffic averages 11,300 trips west of the I-8 on-ramp in front of the Mission Valley Inn.

Colusa Street, designated in the Community Plan as a four-lane collector road south of Friars Road, is currently a two-lane road which terminates within the Presidio Place residential development west of the project area. Colusa Street north of Friars Road is two lanes and presently carries about 1,900 vehicles daily.

Via Las Cumbres is currently four lanes between Friars Road and Linda Vista Road, carries 7,700 ADT on weekdays, and terminates at Friars Road. The Mission Valley Community Plan proposes an extension of Via Las Cumbres as a four-lane major road between Friars Road and Hotel Circle North. This new road would intersect the future Camino De La Reina - which parallels Friars Road - before feeding into Hotel Circle North.

The Community Plan also proposes new SR 163/Friars Road improvements that would separate the southbound-to-westbound ramp from the traffic signal at Friars Road and Ulric Street. Improvements planned or proposed by Caltrans in the vicinity of the project are shown on Figure 5.3. The feasibility of these improvements is being considered jointly by Caltrans and the City. Implementation of these projects or alternatives will result in significant access and traffic circulation improvements in the project area.

5.3 PROJECT ACCESS AND PARKING

The Mission Valley Community Plan identifies the most serious parking deficiencies as being located "at or near major office complexes, restaurants . . . and in residential areas." It designates various sites for consolidated parking, including one site within the Specific Plan area.

Development within the project will provide off-street parking facilities that are attractively designed and integrated within the high intensity core area. The parking pattern will be created through the joint use and physical interconnection

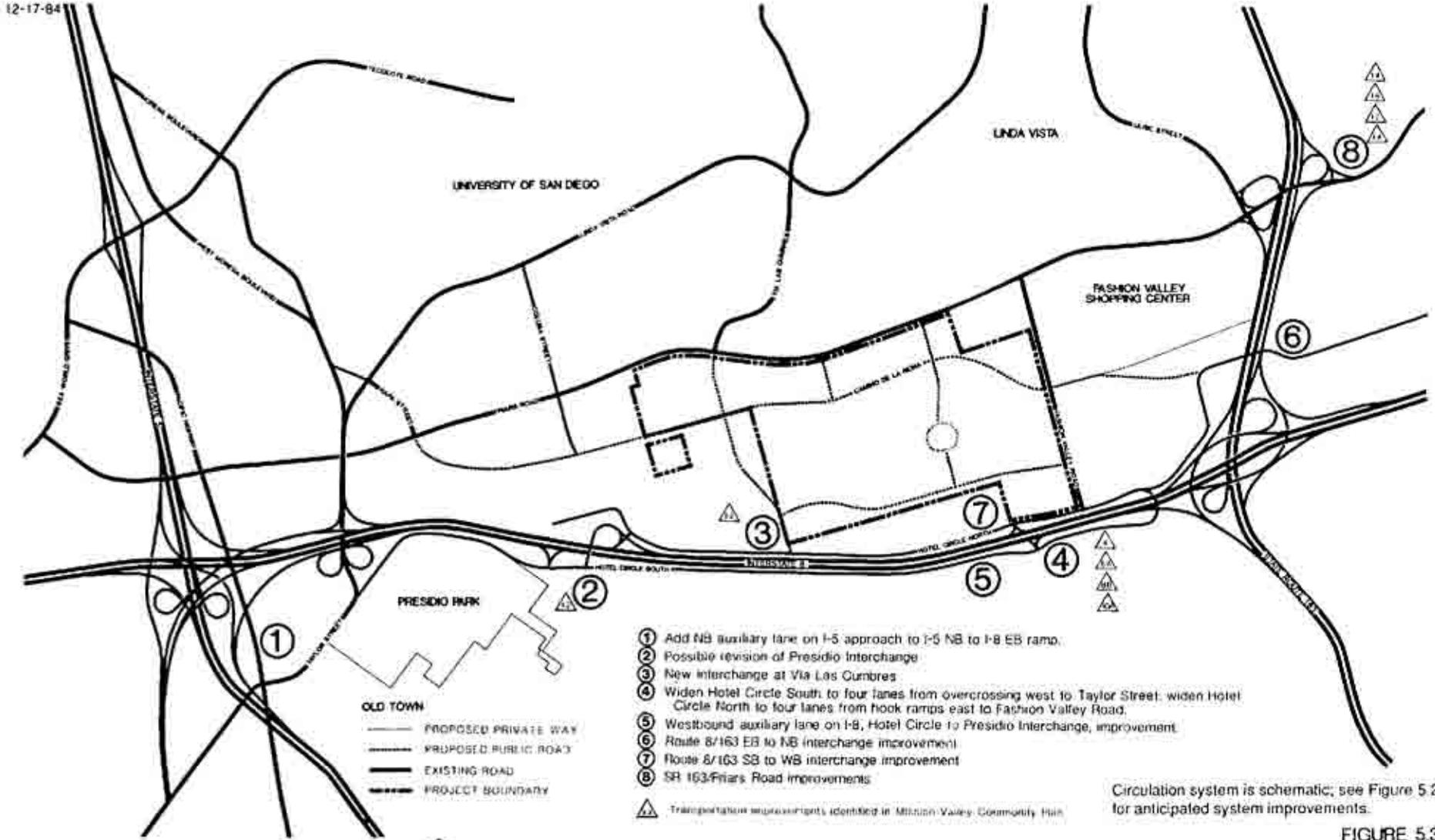
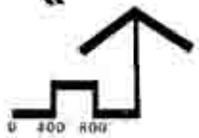


FIGURE 5.3

LEVI - CUSHMAN
 SPECIFIC PLAN



84 / LEVI-CUSHMAN SPECIFIC PLAN

CALTRANS PROPOSED
 IMPROVEMENTS

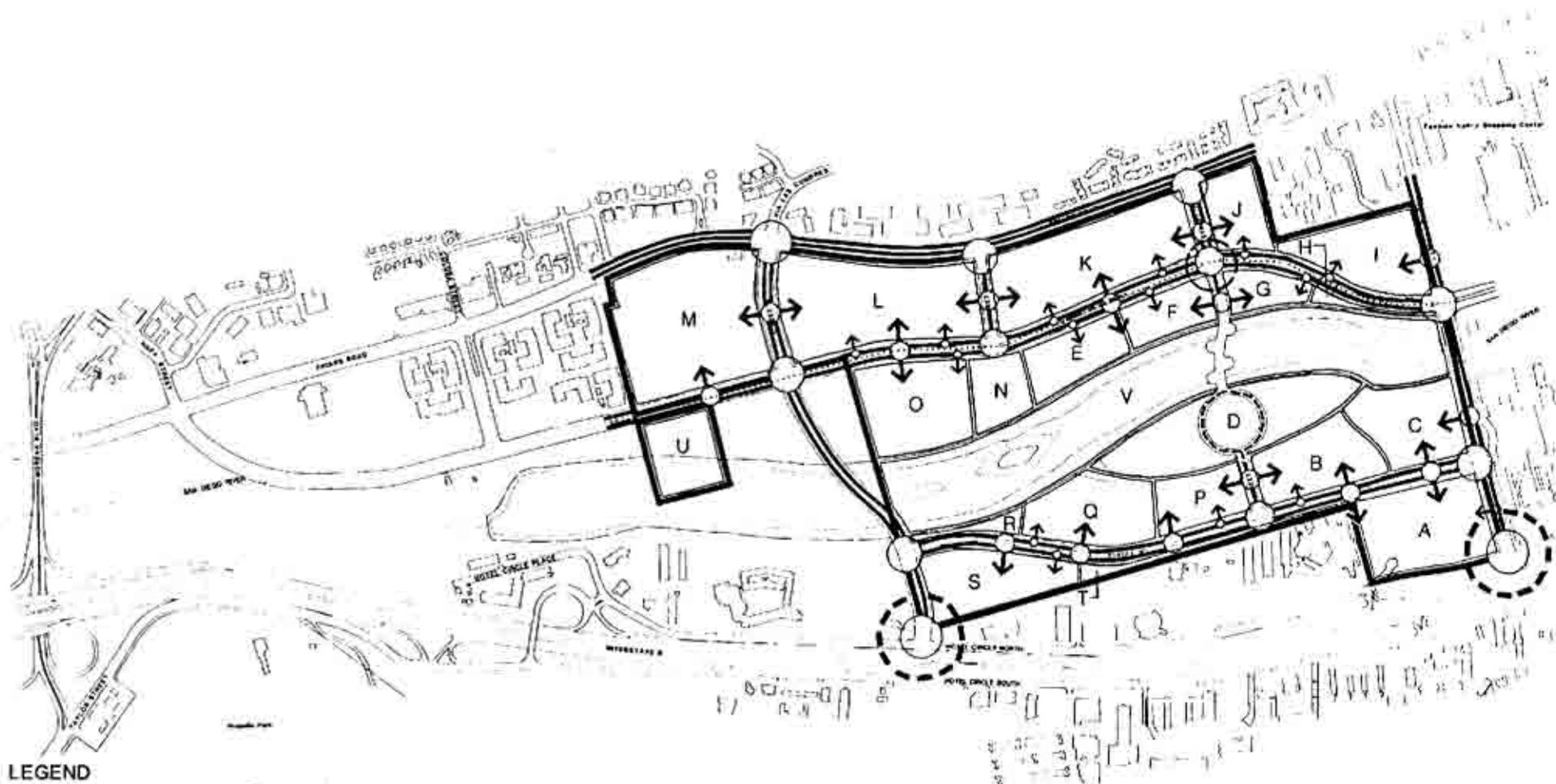
of parking areas and garages when feasible. Higher density developments such as hotels and large office buildings will include parking facilities within the buildings themselves to allow for greater open space and landscaped area throughout the project.

Private vehicle access to the island from the north, as shown on the project Circulation Plan, Figure 5.4, will be prohibited. Access from the south is planned to be available at all times. Few private driveways will be permitted in the project in order to preserve traffic capacity yet provide convenient and safe access. LRT tracks are proposed to be located in the median of Camino De La Reina. Therefore, vehicular movements to and from the access points shown on Figure 5.4 will be limited to right turns in and out only unless the access or a street intersection is signalized. Limiting access is necessary to assure efficient and safe trolley operation. Also, trolley signal preemption will be necessary. At signalized intersections along the trolley route, turns and movements across the LRT tracks will be permitted. Signalization of intersections will occur only when warrants approved by the City Engineers and Council are met. The determination of which locations will be signalized will be made by the City Engineers in consultation with MTDB at the time site-specific development plans are submitted to the city.

Since the proposed project has mixed uses, some areas may provide the opportunity for the sharing of parking. Recent studies by the Urban Land Institute (ULI, Shared Parking, 1983) specifically addressed multi-use/mixed-use developments. Studies clearly indicate that some combinations of

land uses require less parking space than the same land uses would individually require at freestanding or isolated locations. Similarly, the ULI data gathered revealed that overall external traffic generation for mixed-use projects is somewhat reduced from the normal traffic generation expected from individual land uses. The ULI study concluded that:

- *Hourly accumulation of parking is significantly different for various types of land uses.*
- *There are important seasonal variations which represent another form of time differential.*
- *Parking demand was not found to be sensitive to regional factors or city size.*
- *Site-specific factors such as transit accessibility are more directly related to parking demand.*
- *Reductions in parking space requirements resulting from shared parking have occurred and indicates the following factors:*
 - (a) *Actual peak occupancy is consistently lower than simply adding single use peak parking demands.*
 - (b) *Parking estimates based on shared parking demands using time differentials are more reliable than simple gross parking demand estimates.*



- LEGEND**
- PUBLIC ROADS
 - - - PRIVATE ROADS
 - INTERSECTIONS
 - ←○ PRIMARY ACCESS
 - ←○ SECONDARY ACCESS
 - L.R.T.
 - TRANSPORTATION CENTER
 - - - FREEWAY CONNECTION

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 5.4

(c) Captive market effects often significantly reduce requirements for shared parking.

Parking for the proposed project will be provided in accordance with the City's Zoning Code and as determined by the Department of Engineering and Development.

5.4 LIGHT-RAIL TRANSIT

The San Diego Trolley Light-Rail System opened in 1981 and has been highly successful in attracting ridership. It currently connects downtown San Diego and the South Bay area, ending at the Mexican border. Several extensions of the system have been proposed and the Mission Valley Community Plan shows an alignment through Mission Valley which would extend from the railroad tracks near Old Town to I-15. As shown in Figure 5.5, in the project area, the trolley would run a course generally along Camino De La Reina then continue east beyond Fashion Valley Road. Stations would be located at Napa Street, Street C, and in the Fashion Valley Shopping Center. A development agreement will also incorporate appropriate language regarding Levi-Cushman's fair-share responsibilities for funding LRT construction costs and participation in operating or capital costs for the intra-valley shuttle. Sufficient right-of-way to provide for the LRT will be reserved with recordation of the first final map for Development Area 2. The right-of-way will be dedicated when construction of the Mission Valley LRT commences.

The light-rail alignment and station proposal for the Specific Plan shown on Figure 5.6 refines the Community Plan recom-

mendations. The trolley station within the project area is proposed within a transportation center which would incorporate parking, pedestrians, bicycles, autos, bus, and commercial activity areas. Access between the island and the trolley station/transportation center could be provided via a privately operated jitney system. LRT and jitney systems will significantly enhance the likelihood that the mixed use and transit trip reductions discussed in the next section of this report will be achieved within the project area.

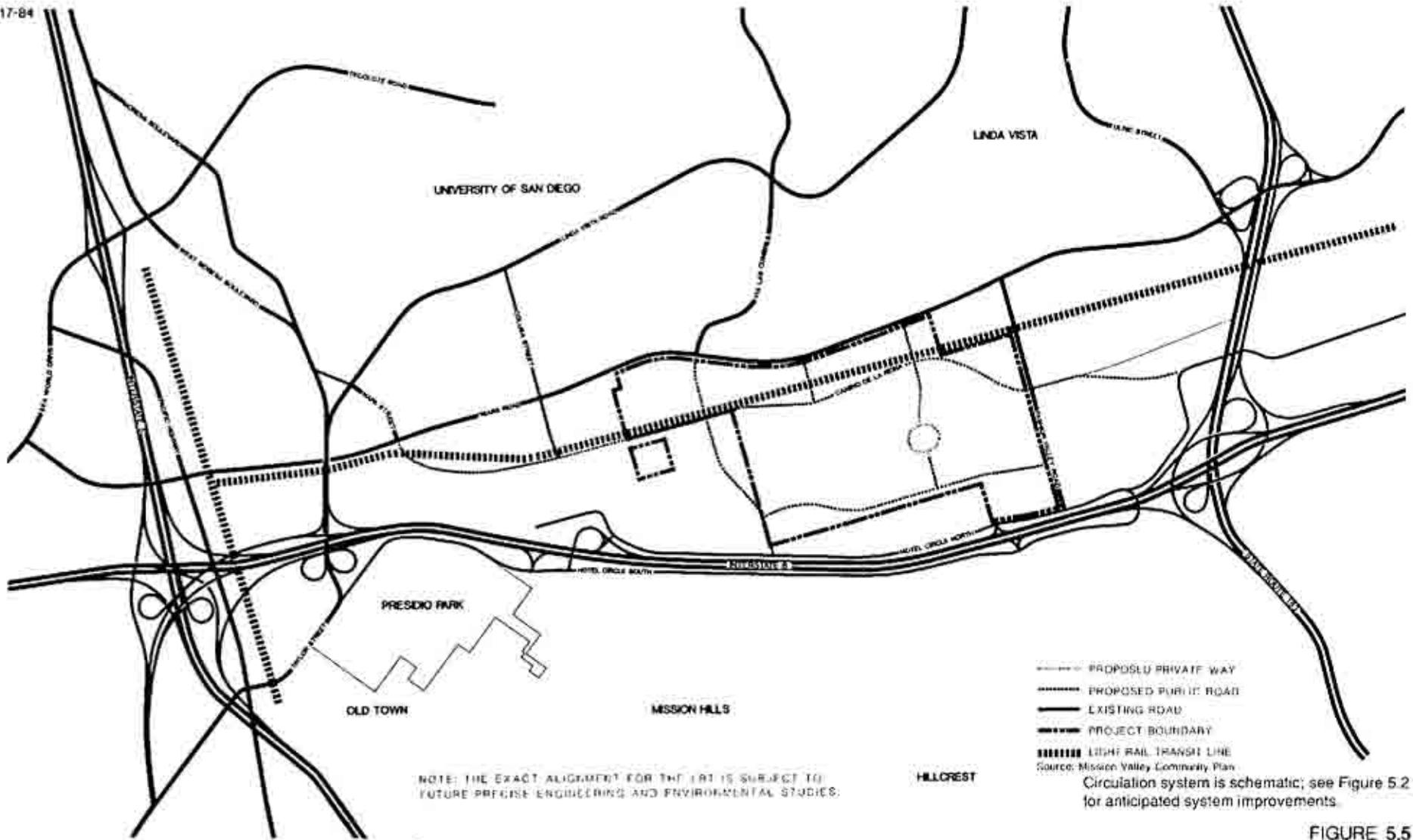
5.5 TRIP GENERATION ESTIMATE

The Levi-Cushman project will generate approximately 66,954 daily trips (see Table 5.1). The basis for this estimate is the City of San Diego's Recommended Trip Generation Rates (7-29-86) which have been adjusted to take into consideration the effect of the Mission Valley LRT.

While a six percent peak period adjustment for light rail transit was initially discussed for use in this analysis, only a four percent adjustment was actually approved and used. It should also be noted that the LRT adjustment for the entire site was applied only to Development Area 3, which is expected to be the last increment of development for the project. Since there is currently a preliminary engineering feasibility study underway for the Mission Valley LRT corridor, it is expected that these estimates of transit impacts will be refined to a greater extent during the next several months.

Details of the ADT calculations for the Levi-Cushman Specific Plan can be found in the "Transportation Analysis"

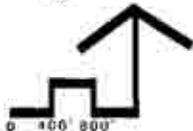
12-17-84



- PROPOSED PRIVATE WAY
- PROPOSED PUBLIC ROAD
- EXISTING ROAD
- PROJECT BOUNDARY
- ||||| LIGHT RAIL TRANSIT LINE

Source: Mission Valley Community Plan
Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 5.5



12-17-84

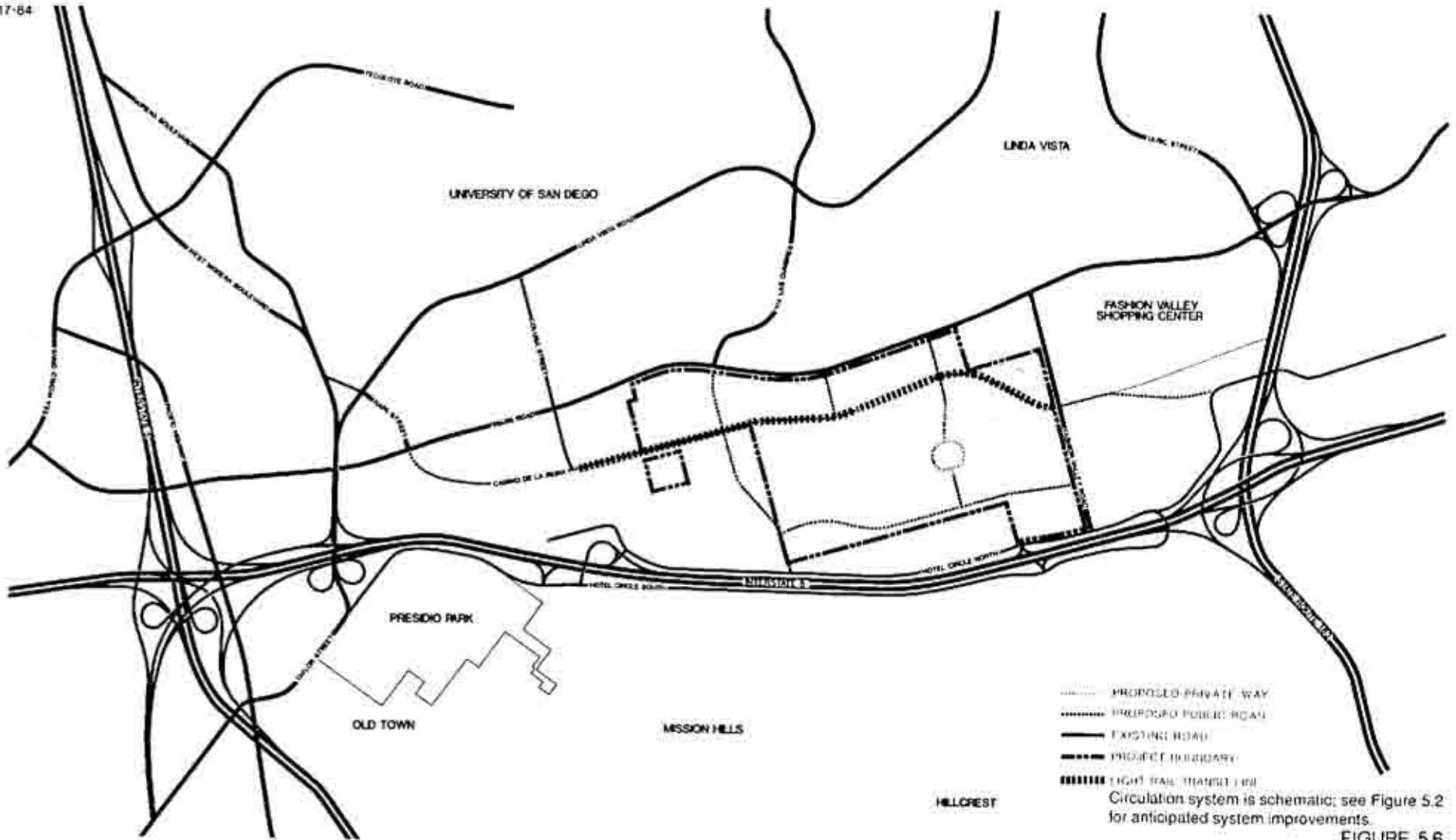


FIGURE 5.6

LEVI - CUSHMAN
SPECIFIC PLAN



PROJECT
RECOMMENDED
LRT ALIGNMENT

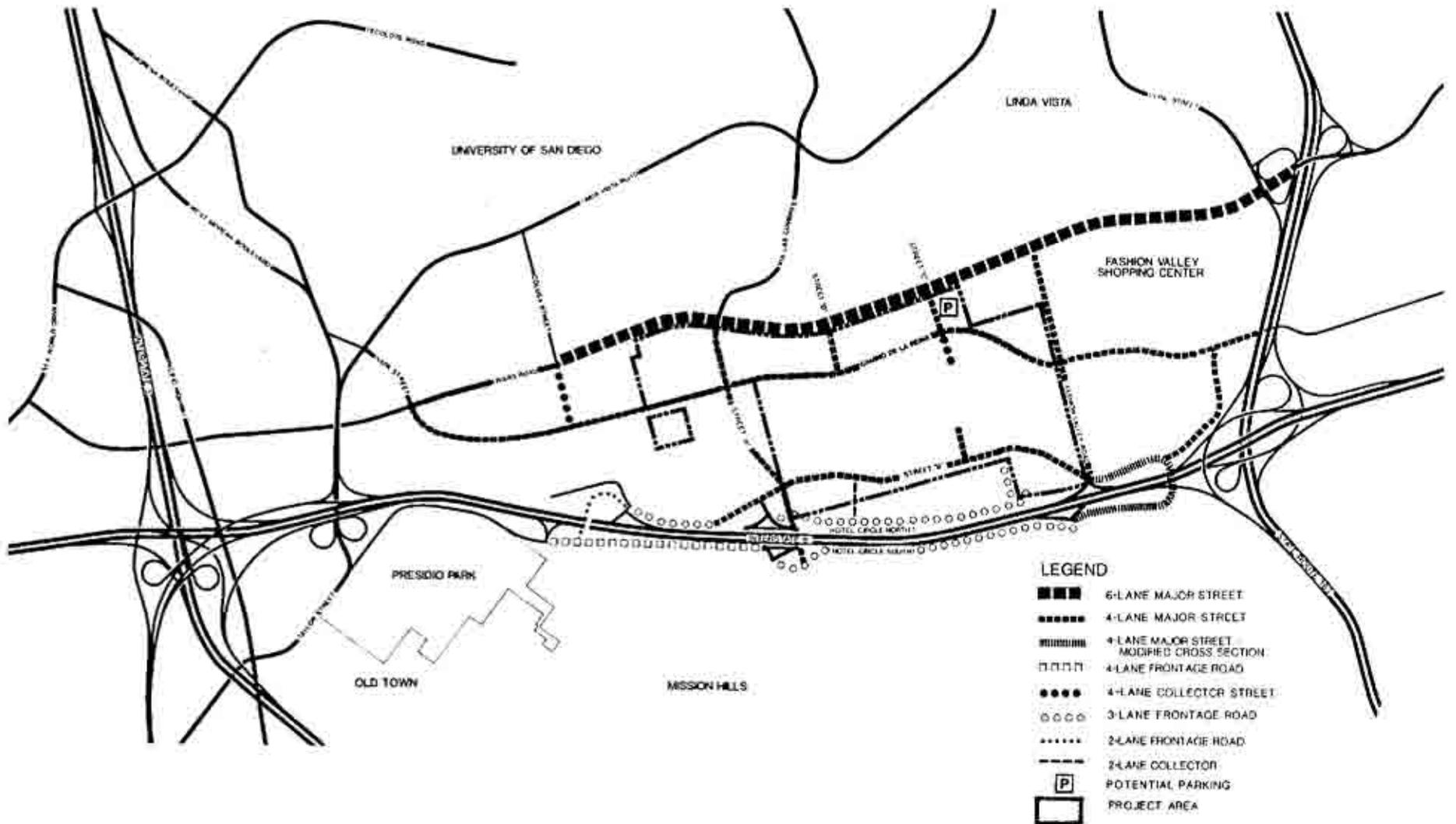
included as part of the LCSP EIR. As can be observed from Table 5.1, the expected cumulative traffic generation expected from the project after applying the revised rates is 66,954 ADT. For this same area, under the Mission Valley ordinance, a total trip allocation of 66,880 ADT is permitted. The proposed project is therefore almost identical, in terms of trip generation, to that permitted by the Community Plan.

Since the expected project trip generation is about the same (66,954 vs. 66,880) as that permitted by the plan and ordinance, cumulative impacts and mitigation as identified in the Community Plan will be applicable. Other relevant mitigation programs include the Recommended Street Classification, Figure 5.7; and Phasing of Transportation Improvements, Table 5.2.

**TABLE 5.1
PROJECT TRIP GENERATION**

Use	Development Area			Rate	Unadjusted ADT			4% LRT R/W Adjustment*			ADT Adjusted for LRT, Vacancy and Passerby Trips		
	1	2	3		1	2	3	1	2	3	1	2	3
Residential (units)	60	300	969	8/du	480	2,400	7,752	0	0	425	480	2,400	7,327
Hotel (rooms)	500	250	250	8/room	4,000	2,000	2,000	0	0	320	4,000	2,000	1,680
Retail (K SqFt)	100	50	50	49/K SqFt	4,900	2,450	2,450	0	0	392	4,900	2,450	2,058
Office	500	691	1,391	16/K SqFt	8,000	11,056	22,256	0	0	1,652	8,000	11,056	20,604
TOTALS											17,380	17,906	31,669
TOTAL PROJECT GENERATION											66,954		
TOTAL ALLOCATION BY REVISED INTERIM ORDINANCE											66,880		

* Light-rail transit adjustment equals 4% of unadjusted cumulative ADT.



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

**LEVI - CUSHMAN
SPECIFIC PLAN**

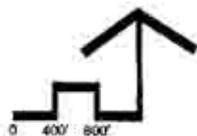


FIGURE 5.7
**RECOMMENDED
STREET
CLASSIFICATIONS
WEST MISSION VALLEY**

TABLE 5.2
MISSION VALLEY PHASING OF TRANSPORTATION IMPROVEMENTS

EDU* GROUP	SECTOR	PROJECT	LOCATION	IMPROVEMENT
A	1	Texas Interchange		Widen bridge over I-8 to six lanes (CALTRANS). Widen to four lanes, Mission Center Rd. to I-805. Widen to six lanes, Friars Rd. to Camino del Rio No. Includes improving interchanges ramps at the Friars Road Interchange. Restripe to three lanes and prohibit parking from the eastbound Hotel Circle Interchange ramps to Camino de la Reina. Provide increased intersection capacity and signalization at both the eastbound and westbound ramps.
	2	Camino del Rio So.		
	3	Mission Center Rd.		
	4	Hotel Circle So.		
	5	Hotel Circle/ I-8 Ramps		
200 B	1	Friars Road		Restripe for six lanes, Colusa Street to Ulric St. Construct as a four-lane major between Ilega Street and Fashion Valley Road.
	2	Camino de la Reina		
200 C	8A	Hotel Circle So.		Remove parking and restripe for three lanes between the I-8/Presidio overcrossing and the eastbound Hotel Circle Ramps. Widen to four lanes between the eastbound Hotel Circle ramps and Camino de la Reina. Widen to four lanes between eastbound Presidio ramps and the I-8/Presidio overcrossing.
	8B	Hotel Circle So.		
	9	Hotel Circle So.		
200 D	4	Hotel Circle No.		Widen to four lanes between westbound I-8 Ramps and Camino de la Reina. Construct and widen to a four-lane major between Fashion Valley Road and SR-163. Widen to four lanes between Hotel Circle North and Avenida del Rio.
	10A	Hotel Circle No.		
	10B	Camino de la Reina		
400 D	4	Camino de la Reina (existing)		Widen to four lanes between Hotel Circle North and Avenida del Rio.
	4	Camino de la Reina (existing)		
3,000 E	1, 3	Via Las Cumbres Interchange		Construct when Via Las Cumbres is connected or when listed EDU's are developed. (Approximately 75% of build-out in these sectors.)
1,500 F	1-4	Via Las Cumbres		Construct between Friars Road and Hotel Circle North. Construct new southbound-westbound off-ramp.
	1-4	SR-163 and Friars Road		
500 G	1, 2, 4-7	SR-163 and Friars Road		Add dual lefts for eastbound-northbound on-ramps; widen north leg of intersection to accept two turning lanes. Improve to a four-lane street along north side of river between Camino de la Reina and Mission Center Road. Cut back median on bridge to allow three west-bound lanes through signal for northbound on-ramps; approximately 85% of build-out in these sectors. Move northbound on-ramps eastward or replace with a loop or flyover; approximately 95% build-out in these sectors.
	1, 2, 4-7	Hazard Center Drive		
4,700 G	1, 2, 4-7	SR-163 and Friars Road		Widen to four-lane major, SR-163 to Mission Center Road. Restripe for three lanes, Camino del Arroyo to Mission Center Road.
	1, 2, 4-7	SR-163 and Friars Road		
18,000 G	1, 2, 4-7	SR-163 and Friars Road		Widen to six lanes between Friars Road and Camino del Rio North; improve interchange for all moves at Friars Road.
	1, 2, 4-7	SR-163 and Friars Road		
400 H	5, 7	Camino de la Reina		Widen to six lanes between Friars Road and Camino del Rio North; improve interchange for all moves at Friars Road.
	5, 7	Camino del Rio No.		
200 I	6, 8	Stadium way		Widen to six lanes, Camino del Este to Stadium Way Widen to four lanes, Stadium way to I-805.
	6, 8	Stadium way		
500 J	8	Camino de la Reina		Widen to four lanes, Camino del Este to Stadium Way Widen to four lanes, Stadium way to I-805.
	8	Camino del Rio No.		
500 K	8, 8, 11	westbound I-8 ramps to/from Camino del Rio North		Continue in the vicinity of I-805.
	8, 8, 11	westbound I-8 ramps to/from Camino del Rio North		
1,000 L	9-12	Hilly Way		Construct between Friars Road and Camino del Rio North; Build Interchange at Friars Road. Construct between I-15 and Fairmount Avenue. Extend south across San Diego River to Camino del Rio North.
	9-12	Camino del Rio No.		
3,000 L	9-12	Camino del Rio No.		Widen to four lanes, I-805 to I-15. Widen to four lanes, Hilly way to I-15.
	9-12	Rancho Mission Rd.		
800 M	11	Camino del Rio No.		Widen to four lanes, I-805 to Hilly way.
	11	Camino del Rio No.		
200 N	11, 12	Camino del Rio So.		Widen to four lanes, I-805 to I-15.
	11, 12	Camino del Rio No.		

* Total cumulative EDU's in sector(s) indicated that are not contained in tentative or final maps approved prior to 5/3/82.

SOURCE: MISSION VALLEY COMMUNITY PLAN, AUGUST 1984

6.0 PUBLIC SERVICES AND FACILITIES

6.1 SCHOOLS

Mission Valley as a whole is served by eight elementary schools, five junior high schools, and four senior high schools located in communities bordering Mission Valley. The specific plan area is served by Carson Elementary School, Montgomery Junior High School, and Kearny High School.

Although no universities or community colleges are located or planned within the specific plan area, National University, University of San Diego, San Diego State University, San Diego City College, San Diego Mesa College, and Grossmont College are relatively close to the area.

School locations are illustrated in Figure 6.1.

The residential development proposed by the Specific Plan would create multi-family dwelling units. Because the number of those units is uncertain, it is currently unknown if the need to reopen previously closed school facilities would be required.

Student generation rates per household are not available for the Mission Valley community because of the relatively low number of residential units and their recent construction. According to the San Diego City School District, the best estimate for student generation would be the rate for new condominium development in north University City. This rate ranges be-

tween 0.5 and 1.5 elementary students per household and is the lowest rate for multi-family development in the City.

Because no public schools currently exist or are planned within the Mission Valley community, both the availability of schools and the distance of the schools to residential development are of concern.

The developers will reach an agreement with the San Diego City School District on the provision of private funds for school facilities and for access to existing facilities, if considered necessary by the school district, as a condition of approval of future Subdivision Maps.

6.2 PARK FACILITIES

The developer will comply with Council Policy 600-11, "Credit for Park and Recreation Facilities provided by Subdivisions," and accepts full responsibility for the provision of private neighborhood recreational facilities (Neighborhood Parks) in accordance with the standards of the Progress Guide and General Plan. These facilities may include any of an extensive inventory of facilities that are normally provided in standard Neighborhood Parks. According to existing City Council Policy, the developer will not be required to provide standard Neighborhood Parks so long as all the facilities required are provided in the private recreational facilities. This will permit flexible development of facilities and activity

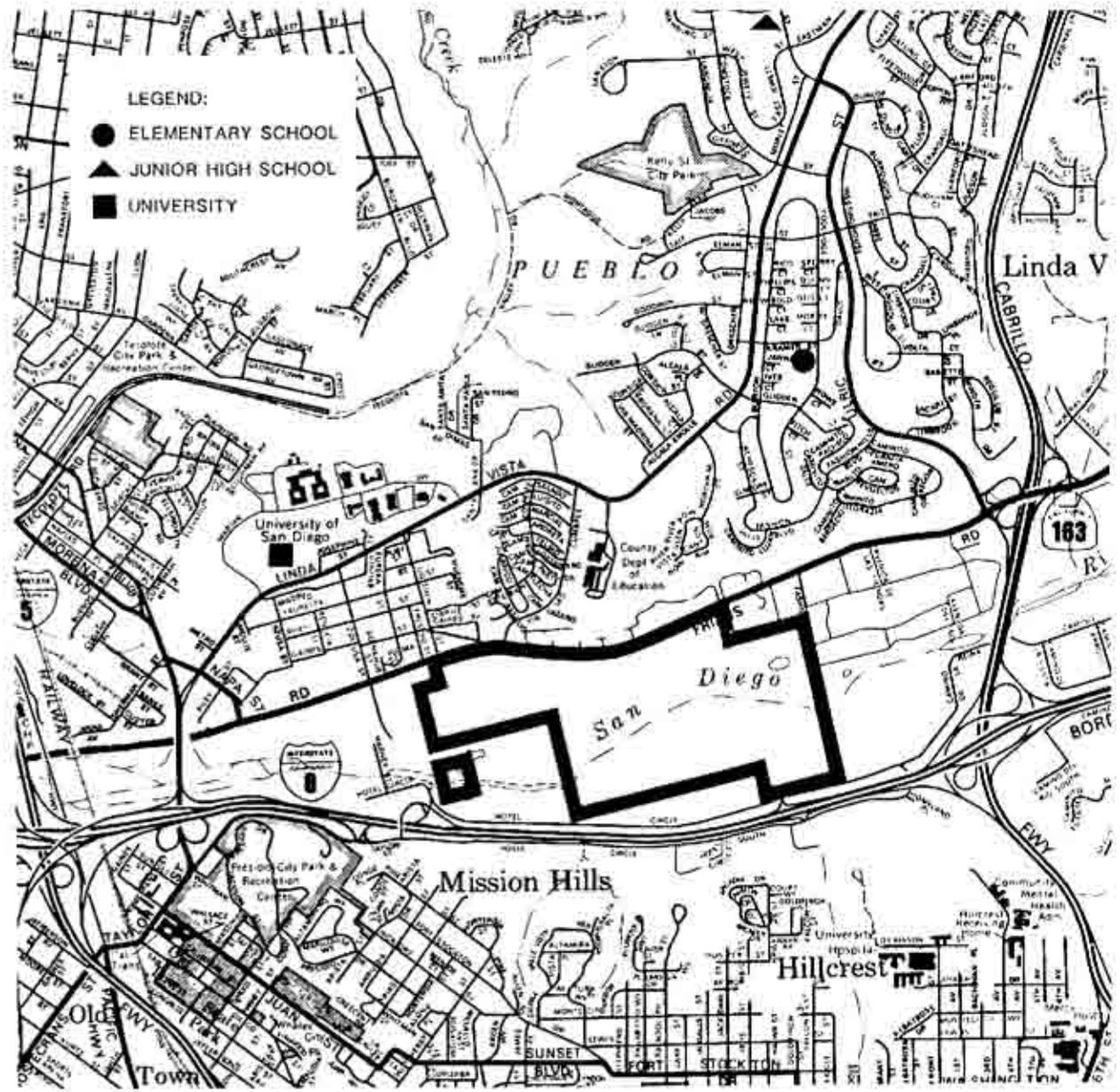


FIGURE 6.1

LEVI - CUSHMAN
SPECIFIC PLAN

SCHOOL LOCATIONS

LEVI-CUSHMAN SPECIFIC PLAN/95

centers in keeping with the needs and interests of various groups in different areas.

This concept will apply throughout the project area and will assure that each resident has adequate privately provided park and recreational facilities. The provision for, and maintenance of, these private recreational facilities will be assured by deed restrictions on each individual parcel or by Conditions, Covenants, and Restrictions (CC&Rs). The residential developments could include patios, swimming pools, and tennis, basketball, and volleyball courts.

The population-based standard for neighborhood parks identified in the Recreation Element of the Progress Guide and General Plan requires a 10-acre park for a residential population of 3,500 to 5,000 and a community park of 20 acres for a residential population of 18,000 to 25,000.

With a buildout estimated at 1,329 units, the Levi-Cushman project will generate a population of approximately 3,325. Using City standards, this local population represents a requirement for about 7.8 acres of neighborhood park and 3 acres of a community park.

Because of the unique character of the LCSP project, it is inappropriate to treat it as if it were a traditional subdivision. As proposed, the project area includes a total of more than 75 acres within an open space network. This involves approximately

River Open Space: 40 acres of river channel;

Recreational Open Space: 5 acres of river buffer, 6 acres of park area (Parcels N, H, R, T);

Landscape/Project Open Space: 11 acres of landscaped building setback, 14 acres of individual parcel park/recreational area (10 percent of parcel area), and 14 miles of pedestrian paths and biking trails.

Using Park and Recreation Department categories, this means the LCSP area provides 40 acres of river open space, 11 acres of recreational open space, and more than 25 acres of landscaped or project open space.

This project not only provides park and recreational facilities equivalent to that required by the General Plan, but the LCSP open space network exceeds the land area requirement for both neighborhood and community parks. Open space and public access easements will be granted in perpetuity to the City for elements within the open space network.

Funding for the construction and maintenance of the entire open space network will be the responsibility of the project landowner and/or tenants. For the first five years after construction of the flood control facility, the river buffer, parks, and other areas on which open space and/or public access easements are granted, the developer will be responsible for all monitoring and maintenance. Following that period, monitoring and maintenance will be funded through one or more maintenance districts established within the project area.

This property is subject to payment of a park fee prior to the filing of the final subdivision map in accordance with San Diego Municipal Code Section 102.0406 et seq.

This property is also subject to a Building Permit park fee in accordance with San Diego Municipal Code Section 96.0401 et seq.

6.3 PUBLIC SERVICES AND UTILITIES

Sewer and water services will be provided by the City of San Diego Water Utilities Department. Water service is available in Friars Road at Fashion Valley Road from an existing 16" diameter line which will be looped and interconnected to existing smaller diameter distribution lines in Hotel Circle North through the proposed street system.

Sewer service will be provided by the 66" diameter North Mission Valley and 27" South Mission Valley trunk sewers. Sewer collector mains will be installed throughout the project as required and will connect to the existing trunk sewers. Encroachments into sewer easements with permanent structures will not be allowed. North Mission Valley trunk sewer may require replacement or paralleling in the foreseeable future. Therefore, a 50-foot-wide working easement and a new 25-foot permanent easement may be required by the City.

Existing public drainage facilities will be extended through the project within public storm drain easements in storm drain facilities designed according to City engineers' requirements. Storm drains will be installed within the project in a combina-

tion of public and private drainage systems in accordance with City design standards that keep building sites from flooding for up to 100-year frequency storm runoff.

Solid waste disposal for the LCSP area will be provided by the City of San Diego, which uses the Miramar landfill.

Electric service will be provided from existing systems adjacent to the site, primarily those in Friars Road. Initial feeds will originate at SDG&E's Old Town substation (Gaines at Napa), with future feeds coming from some combination of the Old Town substation and the Fashion Valley substation, or a new substation not yet sited.

Existing underground telephone systems in Friars Road are the principal source for the site. Pacific Bell's University Central Office (Sixth Avenue at University) is where dial tone will originate. One or more electronic equipment enclosures located on-site will be required by the utility to enhance pair availability.

The principal gas source for the site will be SDG&E's existing 20-inch transmission main in Friars Road. This main will adequately serve the site.

Cox Cable has existing systems in Friars Road from which this site will receive cable TV signal.

All sewer, water, gas, electric, telephone, and cable lines will be undergrounded.

Police and fire protection is provided to the project area by the City of San Diego Police Department Western Division at 5215 Gaines Street and the City of San Diego Fire Department Station 18 at 4676 Felton Street and Station 23 at 2190 Comstock Street. A new station is proposed for construction in 1988 and will be located in the east Mission Valley area. While that station can provide service to the LCSP area, an additional station is also proposed in the western Mission Valley area near the I-8/SR-163 interchange.

The specific plan area is in close proximity to the following City of San Diego libraries: the Linda Vista Branch at 6950 Linda Vista Road and the Mission Hills Branch at 4193 Park Boulevard.

Hospitals near the project area are Sharp Cabrillo Hospital at 3475 Kenyon; Alvarado Internal Medical Group, Inc., at 6367 Alvarado Court; Mercy Hospital and Medical Center at 4077 Fifth Avenue; and University Hospital, UCSD Medical Center, at 225 Dickinson Street.

7.0 COMPATIBILITY WITH APPLICABLE PLANS AND PROGRAMS

7.1 INTRODUCTION

The Levi-Cushman Specific Plan was prepared in accordance with the Progress Guide and General Plan of the City of San Diego, the Mission Valley Community Plan, and the governing City plans and state law pertaining to specific plans.

7.2 PROGRESS GUIDE AND GENERAL PLAN

The Progress Guide and General Plan of the City of San Diego is the City's comprehensive plan which serves as an overall guide to future development. The General Plan includes goals, objectives, guidelines, and standards. In addition to the general plan, each of the subareas to the city has a community plan which provides guidelines for specific development proposals within individual communities.

The General Plan includes two goals with respect to preservation of the natural environment. These are:

Acceptance of a land ethic that involves the balanced coexistence of man, vegetation, and wildlife.

Protection of all wildlife and vegetation that does not constitute a clear and direct danger to man (p. 127).

The Levi-Cushman Specific Plan calls for the preservation of this resource and its use as an open space and passive recreation feature of the plan. Therefore, the Levi-Cushman Specific Plan is consistent with the General Plan in that it will implement General Plan goals related to preservation of the natural environment.

The General Plan includes guidelines for development in floodplains which emphasize preservation of natural resources and the development of park and recreational uses wherever possible (p. 98).

The Levi-Cushman Specific Plan calls for the creation of a wetlands habitat area throughout the project. Passive recreation uses will be encouraged landward from the habitat area. Additionally, an open space system through the Levi-Cushman site provides a valuable link within the San Diego River valley subsystem. In this way, the Levi-Cushman Specific Plan furthers the open space goals of the City's General Plan and Open Space Plan.

The General Plan designates the Mission Valley corridor in which this site is located as an "urbanized" area. This designation conceives of the area as becoming more diversified in land use, in employment opportunities, and in housing variety. The land use proposal of a multiple-use development on the

site is similar in concept to the General Plan's recommendation for urbanized areas in the city.

The General Plan identifies Mission Valley as a potential mass transit corridor. The Levi-Cushman Specific Plan includes provisions for accommodating transit proposals. Accordingly, the specific plan is supportive of the General Plan's transportation goals.

7.3 THE MISSION VALLEY COMMUNITY PLAN

The Mission Valley Community Plan was adopted by the San Diego City Council in June of 1985. The Plan guides future new development in the Mission Valley area, an area of 1,982 acres bound on the north by Friars Road, on the south by a 150-foot contour line south of Interstate 8, on the east by the San Diego River east of I-15, and on the west by I-5.

The Mission Valley plan recommends a development concept for the entire planning area known as "Moderate Development - Integrated Use Emphasis." The key features of this concept are as follows:

- (a) a deliberately planned multiple-use approach to development;
- (b) an emphasis on an integration of commercial-retail, commercial-recreation, office, and residential uses;

- (c) encouragement of residential development in order to complement the commercial and office development presently prevalent in Mission Valley;

- (d) the addition of resident-oriented community facilities and services;

- (e) a comprehensive transportation system with an emphasis on achieving a viable internal circulation network; and

- (f) a natural appearing soft-bottomed floodway solution to flood protection in order to contain a 100-year flood under year 2000 conditions.

Multi-use development is further defined by the Mission Valley Community Plan, on pages 81-88, as follows:

A "multi-use development" means a relatively large-scale real estate project characterized by:

- *two or more significant revenue-producing uses (such as retail, office, residential (either as rentals or condominiums and which are financially supportive of the other uses), hotel/motel, and recreation - which in well-planned projects are mutually supporting);*
- *significant functional and physical integration of project components including uninterrupted pedestrian connections including relationships, if available, to adjacent developments;*

- *development in conformance with a coherent plan (which frequently stipulates the type and scale of uses, permitted densities, and related items); and*
- *public transit opportunities and commitments.*

This definition clearly differentiates multi-use development from other forms of land use and also identifies "common denominator" characteristics of multi-use projects with a minimum number of criteria.

These two or more uses should be significant (e.g., retail should be more than site-serving convenience facilities) and revenue-producing (e.g., to amortize cost over time and provide a reasonable return). In most multi-use projects, revenue-producing uses consist of retail, office, residential, and/or transient (hotel/ motel) facilities. Two or more revenue-producing uses in the project usually imply large scale.

Another defining characteristic of multi-use development is a significant physical and functional integration of project components. All project components should be interconnected by pedestrian ways, although (physically) this integration can take many forms:

- a vertical mixing of project components into a single structure, often occupying only one parcel;

- careful positioning of key project components around centrally-located focal points (e.g., a shopping gallery or hotel containing a large central court);
- interconnection of project components through an elaborate pedestrian circulation network (e.g., subterranean concourses, walkways and plazas at grade, and aerial bridges between buildings, or "skyways");
- extensive use of escalators, elevators, moving sidewalks, bridges and other mechanical or structural means of facilitating horizontal and vertical movement by pedestrians.
- permanent pedestrian linkages to public transit systems.

Whatever their form, "coherent" plans for multi-use development typically set forth at a minimum the types and scale of land uses, permitted densities, and those areas on the site where different kinds of development are to occur. Plans for project entailing substantial public improvements should specify respective responsibilities and financial obligations (e.g., for provision of on-site and off-site improvements) on the part of public and private sectors. These documents guide - and in the case of some projects, govern - development as to scale, timing, type, and density of buildings and relationships among project components, open space, and public improvements on the site. This distinguishes such projects from unplanned mixing of uses often resulting from the separate, unrelated actions of several different developers. In Mission Valley, multi-use projects (in the form of specific plans) are

proposed for the majority of the large undeveloped parcels and redevelopable areas.

There are four significant revenue-producing land uses in Mission Valley. They are: 1) Commercial-Retail; 2) Commercial-Office; 3) Commercial-Recreation; 4) Residential. The four revenue-producing uses in a single project create a "multi-use" development usually found in a large-scale project.

Multi-use projects may also include separate structures on separate parcels of land providing that the creation of parcels and designation of uses is the result of a plan approved for the entire designated project and it meets the three basic criteria for a multi-use project.

Multi-use is an option for developers. It may be applied for through a Planned Commercial Development (PCD) Permit or through a Specific Plan. In general, the Specific Plan should be used for projects of ten or more acres. This may vary, however, and should be determined on a case-by-case basis. An application for multi-use project should include:

- Location, scale, size, and proposed use of all buildings.
- A schematic plan of pedestrian areas (plazas, courtyards, etc.) and interconnecting usable paths.
- Vehicular access plan including streets, parking, goods delivery, and linkages to the public circulation system (freeways and major surface streets).

- A landscaping plan to tie the various uses together.
- A financing and maintenance plan for any and all public facilities or improvements.
- Linkages to the public transit system.

Other land use controls as may be required to conform to the urban design guidelines included in the Urban Design Element of this Plan.

This multi-use option is intended to encourage comprehensive developments which will minimize the need for an over reliance on automobile access and emphasize pedestrian orientation and proximity to public transit. Density bonuses may be given to such developments if they can incorporate some of the bonus provisions included in the Development Intensity Element. Additional development intensity based upon increased traffic generation may be permitted if it can be shown that: 1) the additional traffic generation can be accommodated; or 2) additional improvements can be made to the circulation/transportation system which will accommodate the increase in traffic generation.

Objective

- Provide new development and redevelopment which integrates various land uses into coordinated multi-use projects.

Proposals

- Include a variety of revenue-producing uses in each large scale multi-use project.
- Ensure functional and physical integration of the various uses within the multi-use project and between adjacent uses or projects.
- Combine uses within a multi-use project to create a 24-hour cycle of activity.

Development Guidelines

- Multi-use development projects should include all of the following design elements:

Separate vehicular access and delivery loading zones.

People-oriented spaces.

Compatibility with adjacent development.

Uninterrupted pedestrian connections.

- Encourage activity on a 24-hour basis within a development project by including one or more of the following types of uses in addition to office and retail:

Restaurants

Theaters

Hotels

Residences

- Multi-use development projects should be processed and evaluated through the use of Planned Commercial Development (PCD) permits and/or Specific Plans.

Land Use Mix

The Mission Valley Community Plan recommends that the Levi-Cushman site be developed as multiple-use according to a specific plan. The development mix as presented in the Levi-Cushman Specific Plan is well-mixed with residential and nonresidential uses. Residential, hotel, retail, and office uses, closely linked as discussed in the Urban Design and Development section of this plan, can each utilize open space and specialty commercial resources, allowing the development to have activity around the clock. Also, multiple-use is desirable from a traffic point of view since trip generation is at different peak times and directions. A multiple-use project also allows associated uses to share parking facilities, so that uses with different peak hours can overflow into each other's parking. This creates a more efficient use of land and resolves the problem of parking inefficiency identified in the Mission Valley plan.

The Urban Design and Development section of the Specific Plan describes in detail the integration of the multiple-use

development within the Levi-Cushman project area. The central core of office and specialty commercial uses directly connected to residential use, hotels, the light-rail transit station, bus lines, and the San Diego River provides the ideal definition for a multiple-use project.

Floodplain Management

The Mission Valley Community Plan identifies the San Diego River as a potential aesthetic and economic asset to the community, one which provides visual and physical relief from the intensifying urbanization of the valley. This potential is one which has largely been ignored by existing development, which has been oriented away from the river. In addition, the river poses a potential flood hazard to the surrounding area.

The San Diego River laterally divides the site, with the result that much of the property falls within the floodplain fringe. The floodplain fringe delineates the entire area of inundation in a 100-year storm, as established by the Army Corps of Engineers in 1973. Under existing conditions, the floodplain fringe limits the extent and nature of development which is allowed unless pad areas are created at a level two feet above potential flooding limits. The Levi-Cushman project is channelizing a portion of the San Diego River and modifying the 100-year water surface within the project. All development in the project area intended for permanent human habitation will be at least two feet above this floodplain elevation.

The Mission Valley plan recommends that a flood management facility be constructed the entire length of the San Diego

River in the planning area. The plan also recommends that additional study be undertaken, including a Wetlands Management Plan.

The floodplain fringe areas within the Levi-Cushman site will be developed in accordance with both City zoning and applicable state and federal regulations.

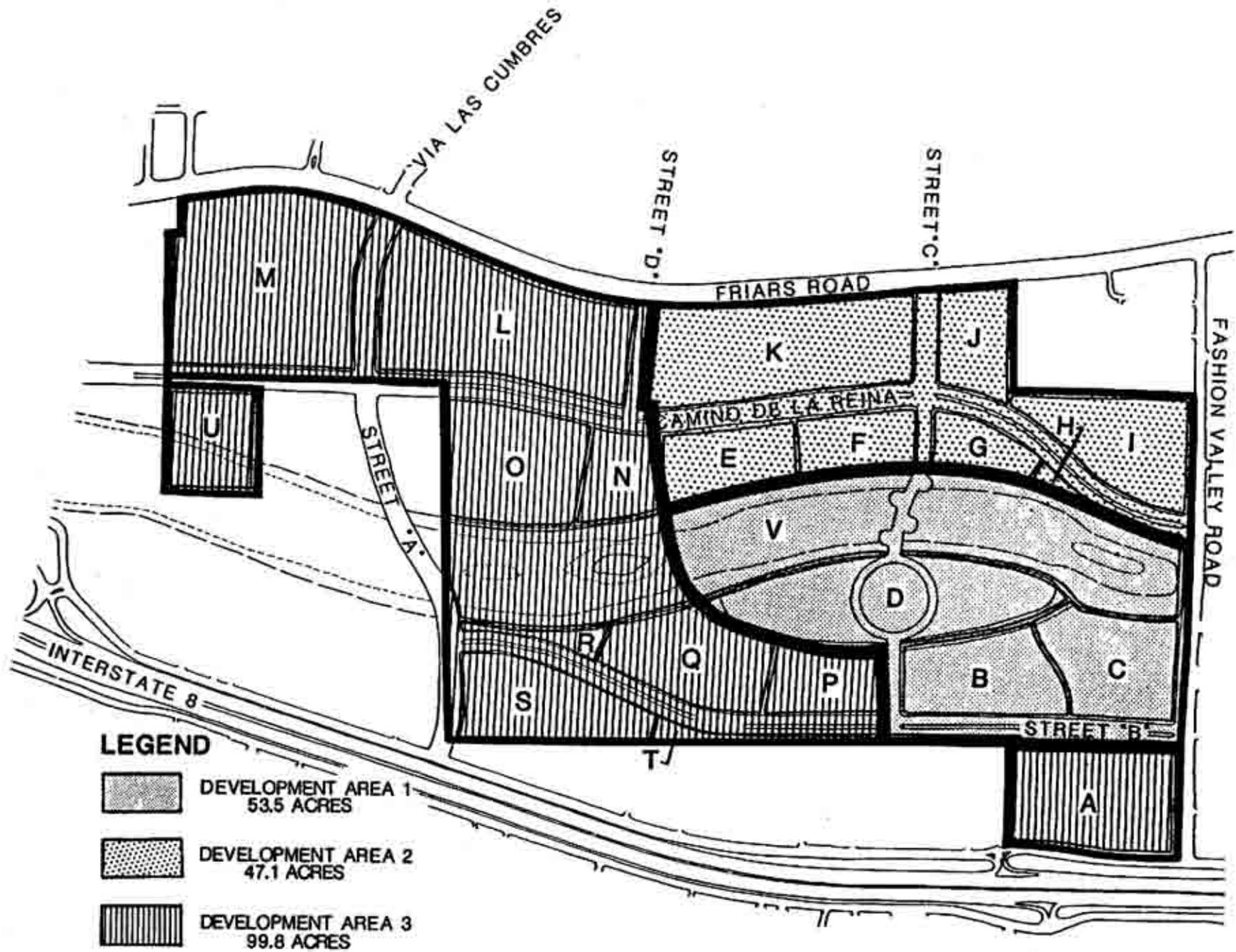
LEVI-CUSHMAN SPECIFIC PLAN

Implementation Guidelines

TABLE OF CONTENTS

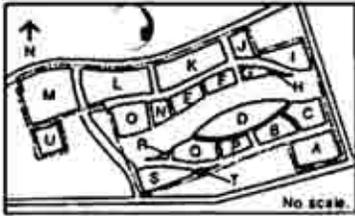
I. GENERAL CRITERIA	1	9. Theme Tower	4
A. SUBMISSION REQUIREMENTS	1	10. Transportation Center	4
1. Consistency	1	II. DEVELOPMENT CRITERIA	5
2. Processing	1	A. HEIGHTS	5
3. Underlying Zoning	1	1. Perimeter Zone	5
4. Minimum Size Submittal	1	2. Mid Zone	5
5. Development Summary	1	3. Low Zone	5
6. Programs to Accompany Initial Submittal	1	B. LOT COVERAGE MAXIMUMS AND LANDSCAPING MINIMUMS	5
7. Engineering Review	2	1. Maximum Coverage	5
8. Minor Changes	2	2. Minimum Landscaping	5
B. LAND USE AND INTENSITY CONTROLS	2	C. SETBACKS	6
1. Mixed Use Requirements	2	1. Minimum Requirements	6
2. Phasing	2	2. Measurement	6
3. Room/Unit/SF Maximums	2	3. Permitted Use	6
4. ADT Maximums	3	D. ARCHITECTURE	6
5. Floor Area Ratio	3	E. SITE PLANNING FOR VIEWS	6
C. PROJECT THEME ELEMENTS	3	1. Orientation	7
1. The Island	3	2. Grouping	7
2. Pedestrian Bridges	3	3. View Corridors and Sight Lines	7
3. River Channel and Buffer	3		
4. Open Space Network	3		
5. Architectural Consistency	3		
6. Sloping Heights	3		
7. Continuity of Edges	4		
8. View Corridors	4		

F. OPEN SPACE NETWORK	7	J. ENERGY CONSERVATION	19
1. General Requirements	7	1. Compliance Requirements	19
2. River Channel	8	2. Architectural Methods	19
3. River Buffer	8	K. WATER CONSERVATION	20
4. Primary Pedestrian Bridge	9	1. Mechanisms and Fixtures	20
5. Parks and Open Use Areas	10	2. Landscaping	20
6. Floodway Transition Areas	10	L. NOISE ATTENUATION	20
7. Theme Entries	10	1. Acoustical Analysis	20
8. Project Open Space	11	2. Mitigation	20
9. Pedestrian Paths	11	3. Code Conformance	20
10. Bikeways	12	M. GRADING METHODS	20
G. CIRCULATION	13	N. PUBLIC FACILITIES AND IMPROVEMENTS	20
1. Integrated System	13	III. PARCEL MAPS	33
2. Transportation Center	13	Parcels A through U	
3. Public Transit/Bus	13	IV. RIPARIAN REVEGETATION PROGRAM	35
4. Public Transit/LRT	14	V. DEFINITIONS	37
5. Auto/Truck Circulation	14		
6. Parking	15		
H. STREETScape AND SIGNAGE	16		
I. LANDSCAPE DESIGN	16		
1. General Requirements	17		
2. Streetscape Planting	17		
3. Surface Parking Planting	18		
4. On-Site Planting	18		
5. Landscape Area	18		
6. Irrigation	19		

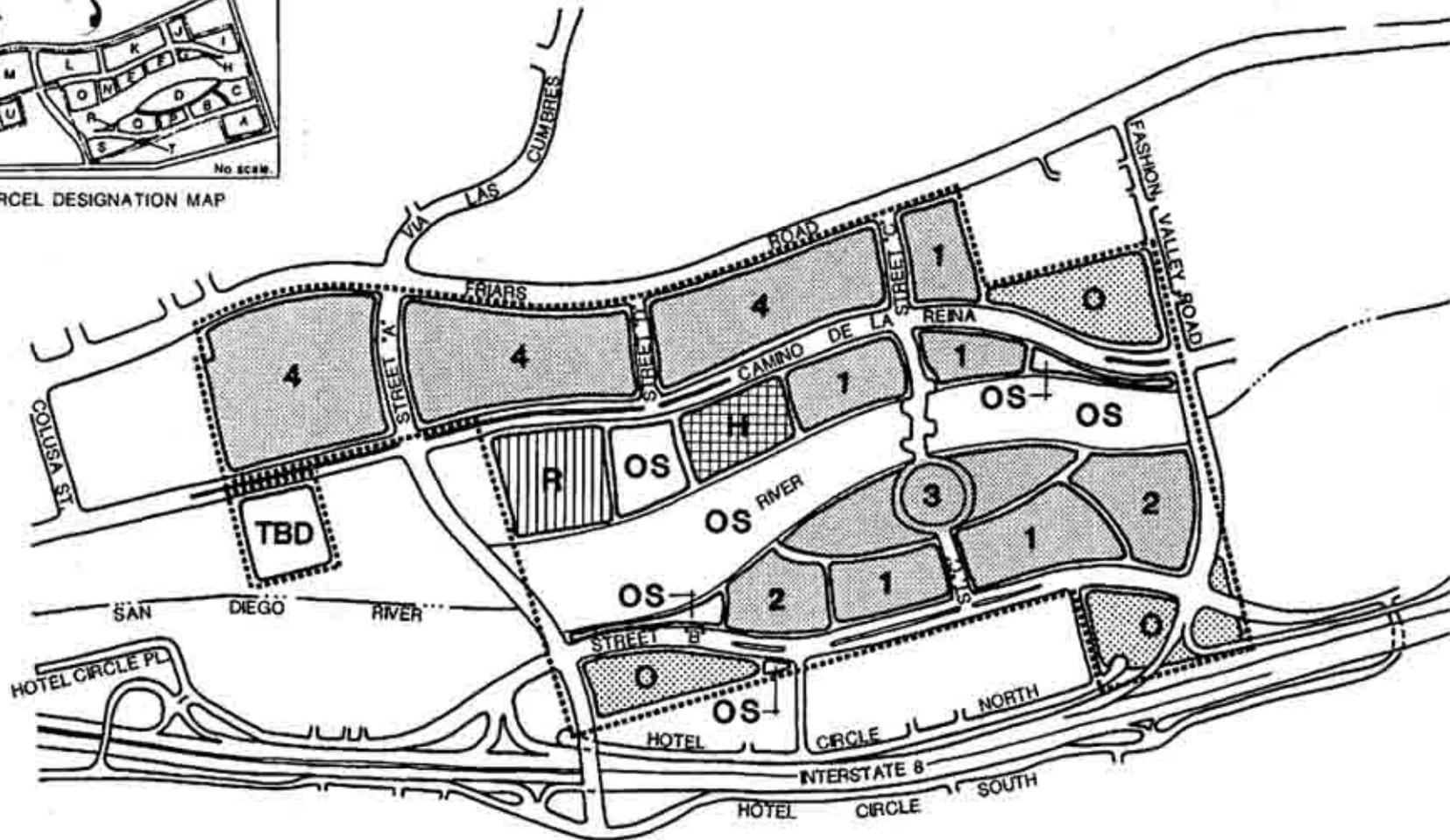


**LEVI - CUSHMAN
SPECIFIC PLAN**

**KEY TO
PARCEL LOCATIONS**



PARCEL DESIGNATION MAP



LEGEND



COMMERCIAL-HOTEL



COMMERCIAL-OFFICE



RESIDENTIAL



MIXED USE-OFFICE/RETAIL



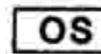
MIXED USE-HOTEL/RETAIL



MIXED USE-OFFICE/RESIDENTIAL/RETAIL



MIXED USE-RESIDENTIAL/RETAIL



OPEN SPACE



TO BE DETERMINED



No scale

LEVI - CUSHMAN
SPECIFIC PLAN

SUMMARY
OF LAND USES

I. GENERAL CRITERIA

A. SUBMISSION REQUIREMENTS

1) Consistency - All development within the Levi-Cushman Specific Plan area must be consistent with the Levi-Cushman Specific Plan (LCSP) and these Implementation Guidelines (IG). If inconsistencies or ambiguities arise between text and graphics in either of these documents, the more restrictive interpretation shall apply unless otherwise approved by the Planning Director.

2) Processing - Plans for development within the project must be processed under the requirements and procedures of the City of San Diego Planned Commercial Development (PCD) or Planned Residential Development (PRD) regulations (Section 101.0910 and 101.0900).

3) Underlying Zoning - For development criteria not established by the Specific Plan or Implementation Guidelines, all PCD applications shall rely on applicable provisions of the City of San Diego "CA" ("Area Shopping Center") zoning regulations. For development criteria not established by the Specific Plan or Implementation Guidelines, all PRD applications shall rely on applicable provisions of the R-1000 zoning regulations. Wherever discrepancies occur between zone regulations and the LCSP/IG, the Specific Plan and Implementation Guidelines shall prevail.

4) Minimum Size Submittal - The minimum area for which a PCD/PRD can be submitted is a Development Area, as identified on the Key to Parcel Locations, LCSP Figure 2.2.

5) Development Summary - Development applications must identify the Average Daily Trips (ADT), residential units, hotel rooms, and square feet of development associated with each land use type within the Development Area being processed, as well as a summary of ADTs, units, rooms, and square footages of previously-approved and yet-to-be-approved Development Areas.

6) Programs to Accompany Initial Submittal - The first planned development application shall be accompanied by a series of descriptive programs which refine guidelines and criteria appearing in the LCSP. These programs are:

Architectural Design

Streetscape Planting

Streetscape Design

Street Name Program

Sign Program

Floodway Channelization

Earth Moving and Grading,

Initial submittals shall contain basic criteria applicable throughout the project area, with specific details on application within the accompanying PCD or PRD.

7) Engineering Review - In addition to those approvals normally required from the City Engineer as part of the LCSP development process, the following shall also apply:

a) Prior to approval of the first Planned Development within the Levi Cushman Specific Plan area, the preliminary grade and alignments for all streets within the entire LCSP area shall be approved by the City Engineer; and

b) The street system proposed for the project must be designed to the satisfaction of the City Engineer per the drawing entitled "Restudy Overlay to Study Plan #1" dated June 29, 1987, or an amendment thereto which is agreeable to the City Engineer.

8) Minor Changes - Some changes to the project design described within the Plan are anticipated as a normal consequence of detailed planning and engineering. All plans will be subject to the review of the Planning Director and City Engineer to assure conformance with applicable public policies and standards. As well, the Planning Director may approve minor adjustments in parcel dimension, lot coverage, road alignment, river channel alignment, and development area acreage without a specific or community plan amendment so

long as those adjustments are in substantial conformance with and meet the spirit and intent of the LCSP and IG.

B. LAND USE AND INTENSITY CONTROLS

1) Mixed Use Requirements - Each of the three Development Areas (DA1, DA2, and DA3) shall contain at least three of the following land uses: residential, hotel, retail, office. No single land use shall account for more than 65 percent of the square footage within that Development Area.

2) Phasing - Phasing must be established within each Development Area so that no more than 80 percent of the allowable square footage of any land use can be approved unless construction commences on at least two other land uses. Maximum square footages are shown in Table 2.1 of the LCSP.

3) Room/Unit/SF Maximums - Development shall not vary more than 15 percent from the following levels of use in each

	RESIDENTIAL UNITS	HOTEL ROOMS	000'S OF SQ FEET OF DEVELOPMENT	
			RETAIL	OFFICE
DA 1	60	500	100	500
DA 2	300	250	50	691
DA 3	<u>262</u>	<u>250</u>	<u>50</u>	<u>1391</u>
PROJECT TOTAL	1329	1000	200	2582

Development Area (DA). An increase in development in one DA shall be balanced by a reciprocal decrease in use in another DA to assure that project development totals remain unchanged.

4) **ADT Maximums** - Each Development Area within the project shall not exceed by more than 5 percent the following ADT levels, and in no case shall the 200-acre LCSP area generate more than 67,000 ADT:

- DA 1 17,380
- DA 2 17,906
- DA 3 31,669 (Includes 2700 trips as LRT allowance; see IG Section II/G4f for conditions)

5) **Floor Area Ratio** - The Floor Area Ratio (FAR) for the entire project is 0.6. Maximum FAR's within each Development Area are:

- DA 1 0.50 (1.1 million square feet/53 acres)
- DA 2 0.65 (1.3 million square feet/47 acres)
- DA 3 0.70 (2.9 million square feet/100 acres)

C. PROJECT THEME ELEMENTS:

Each major theme element noted here shall be separately evaluated for conformance with LCSP policy and development criteria.

1) **The Island** - Parcel D shall be designed as an island and shall serve as the prime activity center for retail, office and restaurant uses. It is to be the focus of public use for the entire project.

2) **Pedestrian Bridges** - A pedestrian bridge shall be designed to span the San Diego River and link the north side of the river to the island. The bridge is to be lined with temporary and varied retail uses such as food and flower kiosks. A series of small bridges shall be designed to cross the artificial canal created south of the island and link with development south of the river.

3) **River Channel and Buffer** - The San Diego River channel corridor shall be designed to accommodate a 49,000 cfs flood level and significantly enhanced as a wildlife and water-fowl preserve. Human use of and direct physical access to the river is prohibited. A continuous river buffer shall be provided immediately adjacent to both sides of the channel.

4) **Open Space Network** - All major open space use areas, including pedestrian and bicycle paths, shall be linked to one another throughout the project area. Pedestrian and bicycle paths shall link with the community-wide trail system.

5) **Architectural Consistency** - All development plans shall read as part of a single comprehensive project. Consistent and compatible architectural design, colors, finishes, signage and landscaping shall be used.

6) **Sloping Heights** - Height policies permit tall buildings at the periphery of the project and gradually decreasing building heights as development moves closer to the river. This echoes the natural character of the Mission Valley setting.

7) Continuity of Edges - At the perimeter of the LCSP project area, development including but not limited to the river buffer, pedestrian/bike paths, and streetscape furnishings shall be continuous and/or functionally harmonious with existing or approved uses on adjacent parcels.

8) View Corridors - The San Diego River shall be the central focus and view corridor for the project. Other view corridors shall be provided from pedestrian and vehicular ways.

9) Theme Tower - A dramatic theme tower is proposed for the island. It shall serve as the major focal point for the project and will direct pedestrian usage to the island center. The theme tower is not subject to height limit imposed on island development and its height will be established during the PCD review of Development Area 1.

10) Transportation Center - Within the northeast portion of the LCSP area, a transportation center will focus public transit (stops for LRT, buses), private transit (intra-valley shuttle, taxi cabs, jitneys), traveler-oriented services (visitor accommodations, restaurants, ticket booths), and vehicle parking facilities. Pedestrian walkways and bike paths shall connect the transportation center with all other portions of the project.

II. DEVELOPMENT CRITERIA

A. HEIGHTS

Throughout the project, building profiles are generally designed to slope toward the river. See Height Zones, LCSP Figure 3.1, and height envelopes diagrammed on Parcel Summary Maps. Building heights along the river channel will generally be one or two stories, then step up as they move away from the river. Three height zones are applied within the project:

- 1) **Perimeter Zone** - Within this zone, heights range from a maximum of 250 feet at the perimeter of the project to a maximum of 140 feet. Parcels S and A have only a 250 foot height maximum and do not have sloping height requirements since an interchange with Interstate 8 will be constructed on an as-yet unknown portion of these parcels. A simple height maximum is therefore established to preserve development options.
- 2) **Mid Zone** - Heights range from a maximum of 140 feet to a maximum of 42 feet. The maximum height of 140 feet extends across 50 percent of the mid zone parcels between Camino De La Reina and the river and between Street B and the canal. From this 50 percent point, the height envelope slopes down to 42 feet along the river and canal.
- 3) **Low Zone** - Heights are permitted up to a maximum of 42 feet, except for the theme tower whose height will be established during the PCD review of DA 1.

B. LOT COVERAGE MAXIMUMS AND LANDSCAPING MINIMUMS

1) **Maximum Coverage** - The portion of a parcel which may be covered with structural development shall vary based on permitted heights:

- a) **Perimeter Zone** - No more than 40 percent of the gross area of each parcel within the Perimeter Zone may be covered by structural development.
- b) **Mid Zone** - No more than 50 percent of the gross area of each parcel within the Mid Zone may be covered by structural development.
- c) **Low Zone** - No more than 60 percent of the gross area of each parcel within the Low Zone may be covered by structural development.

2) **Minimum Landscaping** - The area within each parcel which is restricted from coverage by structural development shall be inversely proportional to the height (i.e., Perimeter Zone - 60 percent; Mid Zone - 50 percent; Low Zone - 40 percent). This area shall be fully landscaped with living plant material and permanently maintained, except that driveways, urban plazas, street furniture, active and passive recreational uses, and pedestrian and/or bike paths shall be permitted.

C. SETBACKS

1) Minimum Requirements -

a) From the top of the river channel (typically the edge of the floodway) - 50 feet except on the Island where it shall be 30 feet.

b) From the top of the canal - 20 feet.

c) From Friars Road - 50 feet

d) From Fashion Valley Road, Camino De La Reina, Street A, Street B, Street C (except between the river and the canal) and Street D - 30 feet.

On north-south public streets designated as view corridors, setbacks shall be increased by two feet for each story that the building exceeds three stories in height to promote views to and from the river corridor. With the approval of the Planning Director, a building step-back may be substituted in lieu of this increase in setback.

e) From all internal public streets - 20 feet.

f) From adjacent parcels - 20 feet except when a parcel is developed in conjunction with an adjacent parcel at which time the required setback is 0 feet.

2) **Measurement** - All setbacks from public streets shall be measured from the property line.

3) **Permitted Use** - All setbacks shall be fully landscaped with living plant material and permanently maintained, except that driveways, urban plazas, street furniture, picnic areas, viewing areas, hiking and jogging trails, and pedestrian and/or bike paths shall be permitted.

D. ARCHITECTURE

An Architectural Design Program shall accompany the first planned development application and shall be based on the LCSP Urban Design and Development Policy, Section 3.0. The Architectural Design program shall contain design criteria for the entire project area regarding:

- Architectural character, including overall design, scale, massing, color, and finish;
- Functional relationships between buildings and exterior spaces; and
- Construction materials.

At the time applications are submitted for PCD/PRD processing for each DA, architectural site plans (plan views, elevations, landscaping) shall be provided for each parcel.

E. SITE PLANNING FOR VIEWS

1) **Orientation** - Buildings shall be configured to optimize river views.

2) **Grouping** - Groups of buildings should be sited to maximize landscaped open space areas and preserve view corridors. Development along Friars Road shall not be so closely spaced as to create a block wall effect prohibiting views into the project and acting to visually enclose the street.

3) **View Corridors and Sight Lines** - Views toward the river shall be provided throughout the project based on the identification of View Corridors, LCSP Figure 3.7.

a) **North-South Street View Corridors** - Ground level view corridors shall be provided along all north-south public streets to the river.

b) **Through-Parcel View Corridors** - At least two ground level view corridors shall be provided between Friars Road and the river which permit views through parcels. One of these views will be provided through Parcels L and O, and another through Parcels K and E or K and F. Another view corridor shall be designed from Interstate 8 through Parcels A and C or Parcels A, B, and D into the river.

c) **Sight Lines** -

Views shall be provided into the site from Interstate 8 and hillsides above Friars Road.

Views shall be provided from Fashion Valley Road, Camino De La Reina, and Street A to the proposed theme tower and island.

Views shall be provided from the transportation center at Camino De La Reina and Street C to the river corridor.

F. OPEN SPACE NETWORK

The LCSP open space network is composed of the river corridor, river buffer, pedestrian bridges, park and open use areas, floodway transition areas, theme entries, project open space, pedestrian paths, and bikeways.

1) General Requirements

a) **Construction and Maintenance** - The landowner and/or project tenants shall bear financial responsibility for constructing the open space network. Funds for maintenance shall be guaranteed through creation of one or more maintenance districts for areas where public access or open space easements are granted. Project open space and private recreational areas shall be constructed and maintained by owners' associations or by individual owners or tenants. Landscaping of all raised street medians and areas between curbs and sidewalks which lie within public rights-of-way will be provided by the developer and maintained through a maintenance district.

b) **Recreational Emphasis** - Recreational uses shall be provided within private developments and may include swimming pools; tennis, basketball, volleyball, handball, shuffleboard, and badminton courts; children's play areas; and picnic facilities.

c) Linkage - Private outdoor recreation and urban plaza areas must be physically or visually linked to a project-wide open space system. Open space areas between buildings shall be developed into landscaped links to the major open space areas.

d) Clustering - Structures should be clustered to maximize open spaces and open use areas.

2) River Channel

a) Design - The first project development application shall be accompanied by a detailed design for channelizing the floodway of the San Diego River between Fashion Valley Road and Street A with a natural appearing waterway and vegetated slope areas. The floodway channel shall be capable of conveying a peak discharge of 49,000 cfs without raising the calculated surface of the existing flood level either upstream or downstream of the project and shall be designed to function with or without development of adjacent upstream or downstream properties. See Channel Design Cross Sections, LCSP Figure 4.2

b) Flood Control Compliance - River channel design shall be reviewed for compliance with applicable flood control regulations and policies by the Floodway Management Section of the City of San Diego Engineering and Development Division.

c) Revegetation/Wetland Program Compliance - The Riparian Revegetation Program included within these Im-

plementation Guidelines shall govern the improvement, maintenance, management, and monitoring of wetland habitat within the channelized portion of the San Diego River which lies in the LCSP project area. All mitigation conditions identified within the LCSP EIR shall apply to this project, including requirements for use of rip-rap and synthetic mesh netting on portions of the flood control channel to minimize erosion and ensure slope stability, and mitigation to prevent runoff from the entire site from entering the flood control facility. Detailed conditions are specified within the EIR.

d) Open Space Easement - An open space easement shall be granted for that area of the San Diego River covered by the first phase of construction of the channelized floodway at the time of recordation of the first final map for Development Area 1. An open space easement shall be granted for that area covered by the second phase of construction of the San Diego River channelized floodway at the time of recordation of the first final map for Development Area 3.

3) River Buffer

a) Location and Components - A river buffer with a width of 25 feet shall be located immediately adjacent to the top of the river channel (typically the San Diego River 100-year floodway), and shall include a vegetative barrier no less than five feet wide with an understory growth no greater than four feet high which denies access into the river. The river buffer may also include a pedestrian and

bike path, landscaped areas, and passive recreational areas. Within the first 20 feet of the river buffer, as measured from the top of the channel, only native vegetation shall be planted. Since the setback requirement along most of the river is 50 feet, it is expected that portions of this setback will be designed to merge with and visually appear to be an extension of the buffer. Therefore, flexibility in the design of the buffer shall be encouraged to assure a variety of buffer configurations. See River Cross Section and Buffer, LCSP Figure 3.3, and Typical Designs Adjacent to the Buffer, LCSP Figure 3.4.

b) Vegetative Barrier -

- Plants within the vegetative barrier shall be limited to those identified in the On-Site Plant Matrix, LCSP Table 3.3, as suitable for barrier vegetation. Additions may be made to this plant list at the discretion of the Environmental Quality Division.
- A break in the plant overstory shall be provided along at least 20 percent of the barrier to permit views into the river. These view breaks shall be aligned and coordinated with view corridors, but in no case shall the view break be greater than 50 linear feet.

c) Pedestrian and Bicycle Path - A primary pedestrian path and a bicycle path shall be included within the river buffer and/or within the 50-foot setback from the river, designed to standards described in Sections F9 and F10 below. In no case, however, shall the paved area devoted

to a combined pedestrian/bicycle path within the buffer exceed 10 feet in width.

d) Public Access Easement - A public access easement shall be granted for the river buffer and the pedestrian and bicycle paths located within 50 feet of the river channel at the time of recordation of the first final map for each Development Area.

4) Primary Pedestrian Bridge

a) Location - A bridge oriented primarily for pedestrian use shall continue the right-of-way for Street C, span the San Diego River, and link the transportation center to the island.

b) Use - The bridge shall be designed for pedestrian use but shall also accommodate limited public transit and emergency vehicle access to the island. Retail commercial uses shall be permitted on the bridge so long as they are mobile in character, directed to pedestrians using the bridge, and include but are not limited to temporary food, flower, and general merchandise vendors.

c) Design - The traveled way of the bridge shall not exceed a width of 30 feet and shall be designed to provide pedestrian, limited transit, and emergency vehicle access. Up to two commercial nodes shall be permitted on each side of the bridge adjacent to the traveled way. Each node shall add no more than 20 feet to the width of the bridge nor have a net use area greater than 800 square feet. At no

point shall the maximum overall width of the bridge exceed 50 feet. The bridge shall be designed with the minimum practical number of vertical supports.

5) Parks and Open Use Areas

a) Location and Use - Parcels N, H, R, and T, or other parcels providing no less than six acres with at least 1700 linear feet adjacent to the river channel, shall be designated for park and open use.

b) Special Treatment Areas - Parcels designated for Park and Open Use which lie adjacent to the river channel shall employ landscaping which transitions from native riparian plants within the vegetative barrier and buffer to ornamental vegetation. Use of meandering pedestrian and bike paths is appropriate within Special Treatment Areas. See Special Treatment Areas, LCSP Figure 4.4.

c) Public Access Easement - A public access easement shall be granted for Park and Open Use Areas which lie within a particular Development Area at the time of recordation of the first final map of that Development Area.

6) Floodway Transition Areas

a) Location and Use - Overflow from a 100 year storm is expected west of Fashion Valley Road adjacent to the San Diego River channel. Within these Floodway Transition Areas, no uses shall be permitted which impede the flow of water during flood conditions. Permitted uses in-

clude but are not limited to theme entry areas, parks, parking areas, roads, pedestrian paths, bikeways, playing fields, golf courses, par courses, picnic areas, rest/view areas, and similar recreation uses. See Special Treatment Areas, LCSP Figure 4.4.

b) Compliance - Uses proposed within Floodway Transition Areas shall be reviewed for compliance with applicable flood control regulations by the Floodway Management Section of the City of San Diego Engineering and Development Division.

7) Theme Entries

a) Location and Use - Ten sites are designated within the LCSP area which are to serve as landscaped entries into the project. Entries shall announce and enunciate dominant themes of the development with monumentation, vegetation, and signing. Theme entries may include fountains, pools, or other water elements. See Theme Entry Hierarchy, LCSP Figure 3.12.

b) Types - Three types of theme entries are designated.

- A *major theme entry* includes monumentation and is measured by a radius of 120 feet from the corner where the entry is located.
- A *secondary theme entry* incorporates some water or monument features and is measured as a radius of 90 feet from the corner where the entry is located.

- A *minor theme entry* includes monument features and is measured as a radius of 45 feet from the entry corner.

8) Project Open Space

a) Recreational Canal

Location and Design - A privately constructed and maintained artificial canal bordering the south side of the island shall visually but not literally connect to the river channel. Bridges over the canal will link the island to nearby development.

Use - Recreational use of the canal may include but is not limited to paddleboats and water taxis.

Water Quality - A water quality monitoring and maintenance program for the closed-circulation canal system shall accompany plans for development of the canal.

b) Individual Parcels

Minimum Area - At least ten percent of the buildable area of each parcel (the development area as defined on Parcel Summary Maps) shall be devoted to outdoor space intended for human use and/or relaxation. This area is considered free of structural development and shall be included when calculating the percentage of parcel area necessary to satisfy the Minimum Landscaping requirement of IG Section II/B2.

Uses - Project open space includes but is not limited to courtyards, plazas, promenades, seating areas, recreational areas, pedestrian and bicycle paths, parks, viewing areas, children's play areas, and picnic areas.

9) Pedestrian Paths

a) **Location** - Pedestrian paths shall be located throughout the project area, connect all uses to one another, and link to the community-wide pedestrian and public transit systems. Development adjacent to the river channel shall not directly abut the primary pedestrian path located within the required setback from the river. Safe and convenient pedestrian movement shall be provided from parking areas to surrounding projects. All uses must have direct pedestrian links into open space areas. See Pedestrian Circulation System, LCSP Figure 3.5.

b) Design Standards -

Width When Adjacent a Public Street - Widths of pedestrian paths located within a public street right-of-way shall be determined by the classification of the adjacent street and shall be separated from the street by a landscaped strip.

- When adjacent to a major street, the pedestrian path shall be 10 feet wide and the landscaped strip 8 feet wide.

- When adjacent to a four lane collector street, the pedestrian path shall be 8 feet wide and the landscaped strip 6 feet wide.
- When adjacent to a two lane street, the pedestrian path shall be 6 feet wide and the landscaped strip 5 feet wide.

Widths When Not Adjacent a Public Street - Widths of pedestrian paths which lie outside a public street right-of-way shall be no less than 6 feet wide except when they occur in the river buffer. While the pedestrian path along the river will be at least 10 feet wide, when it is located within the river buffer, the paved surface area must not exceed 10 feet in width.

Lighting - Primary and secondary pedestrian paths shall have adequate lighting and signing to provide for the safety of users during nighttime hours.

Gradient - All primary pedestrian paths shall have adequate gradients for handicap usage, per requirements of Title 24.

Crossings - On-grade crossings shall be developed at major street intersections in accordance with applicable City standards.

10) Bikeways

a) **Location -** Bikeways shall be located throughout the project area, connect uses to one another, and link to the community-wide bikeway system designated on Friars Road. See Bikeways, LCSP Figure 3.6.

b) **Design Standards -**

Bicycle Paths - Bicycle paths are two-way facilities separate from roadways. When designed exclusively for bicycles, paths shall have a width of eight feet with a two-foot shoulder on either side. A minimum eight-foot vertical clearance to obstructions shall be provided at the outside edge of the bike path. When a bicycle path is combined with a pedestrian path, it shall be ten feet wide with the two-foot horizontal and eight-foot vertical clearance required only on one side of the path. See Typical Designs Adjacent to the Buffer, LCSP Figure 3.4.

Bicycle Lanes - Bicycle lanes are striped or marked lanes in the roadway designated for preferential one-way use. Bicycle lanes shall be six feet wide. See Typical Bikeway Cross Sections, LCSP page 39.

Bicycle Routes - Bicycle routes are signed bikeways shared with pedestrian or motor vehicles with no specially marked lane. Widths of routes vary based on vehicular traffic and road conditions.

c) **Conformance** - At the time of construction, bikeway signs, markings, traffic control devices, etc., shall conform to the requirements of the MVCP bikeway design standards.

d) **Bike Racks** - Commercial and residential buildings shall provide secure bike racks.

G. CIRCULATION

1) Integrated System

An integrated circulation system shall be provided in the LCSP project area which accommodates bicycles, buses, Light Rail Transit (LRT), and both private and commercial vehicles.

2) Transportation Center

a) **Location and Use** - A transportation center shall be developed within the LCSP project which includes public transit stops, services for travelers, and parking facilities. Proposed at the intersection of Parcels F, G, J, and K, the transportation center will be the LRT station within the project. See LRT/Transportation Center, LCSP Figure 3.8.

b) **Timing** - Design of the Transportation Center shall be submitted with the planned development application for DA 2.

c) **Architectural Integration** - The transportation center shall be integrated into the architectural design of development on Parcels F, G, J, and K.

d) **Below Grade Access** - Concept designs indicate the LRT will run below the Street C intersection at Camino De La Reina.

3) Public Transit/Bus

a) **Route Location** - Friars Road will be the major bus and/or shuttle route serving the project area. Final determination of bus stop locations must be made in conjunction with MTDB. See Mass Transit, LCSP Figure 3.9.

b) Bus Stop Design -

- Bus stops shall be integrated into or constructed as part of pedestrian areas, urban plazas, and LRT and shuttle stops for the convenience of transit patrons and to provide shelter from harsh weather.
- Bus stops shall be designed to maximize security features and located close to traffic signals and pedestrian crosswalks.
- Bus stops shall be properly signed to be readily identifiable to pedestrian and bus passengers.

4) Public Transit/LRT

a) Location - The light rail transit route through the project is proposed within the Camino De La Reina right-of-way. See Vehicular Access and Circulation, LCSP Figure 5.4.

b) Right-of-Way Reservation - A 35-foot wide right-of-way will be reserved for the LRT for a 15 years period at the time of recordation of the first final map in DA2. An extension of up to 5 years will be provided if the LRT is not constructed within the 15 year period but it is shown that substantial progress on implementation has been made.

c) Station Reservation - A portion of the transportation center will be reserved for an urban LRT station for a 15 year period at the time of recordation of the first final map in DA2. An extension of up to 5 years will be provided if the LRT is not constructed within the 15 year period but it is shown that substantial progress on implementation has been made. A maximum 60-foot by 360-foot right-of-way reservation for the station will be provided.

d) Right-of-Way and Station Dedication - Dedication of a right-of-way for the LRT trackage and station shall take place at the request of MTDB upon commencement of construction of the Mission Valley LRT only if the final alignment of the LRT has been approved by the Metropolitan Transit District through the LCSP project area. The precise dedication of the LRT right-of-way will

depend on final engineering and design. In no event shall the right-of-way be greater than then 35 foot reservation. Any portion of the original reservation which becomes excess after the final engineering and design shall revert back to the LCSP project.

e) LRT Track and Station Construction Costs - The cost of initial construction of the LRT trackage and the LRT station lying within the LCSP project area will be borne by LCSP area owners and/or tenants. At their option, owners and/or tenants may construct these facilities using plans approved by MTDB and the City Engineer.

f) ADT Adjustment - Because the reservation and dedication of the LRT right-of-way and station will have a positive impact by reducing traffic in Mission Valley, the LCSP project shall receive an allowance of 2700 ADT to be applied in DA3 in exchange for said reservation and dedication. This will permit a total of 31,700 ADT in DA3.

5) Auto/Truck Circulation

a) Street Classification - Street classifications are as proposed in Recommended Street Classifications/West Mission Valley, LCSP Figure 5.7.

b) Street Design - Street section design shall be as shown in Typical Street Sections, LCSP Figure 3.10.

c) **Emergency Access** - Emergency service vehicles must have complete access to all structures and adequate vehicular turning radii in areas of public concentration.

6) **Parking**

a) **Street Parking** - Only off-street parking shall be permitted within the LCSP project area. On-street parking is prohibited.

b) **Structured Parking** - At least 75 percent of all parking required for a project shall be accommodated in architecturally- integrated parking structures.

c) **Island Parking** - At least 50 percent of parking required for development on the island shall be met by parking facilities off the island. Those facilities shall be located on Parcels F, G, P, and B. At least 50 percent of the parking required for development on the island - whether provided on or off the island - shall be accommodated in parking structures.

d) **Consolidated Parking Areas** - Consolidated parking areas as proposed within the Mission Valley Community Plan shall be developed within the LCSP project area.

e) **Interconnections** - Parking areas and parking structures should be interconnected with one another when feasible.

f) **Access** - Large parking areas of over 120 cars should feed off internal project streets.

g) **Loading/Unloading Bays** - Off-street loading and unloading bays shall be provided.

h) **Perimeter Landscaping** - Perimeter of parking garages and surface parking areas shall be screened with landscaping. See Landscaping Design, IG Section II/H3d.

i) **Surface Parking Areas**

Location - Surface parking shall not be located adjacent to nor be visible from the river corridor.

Design - Permanent surface parking areas greater than one acre in size shall be depressed below the level of the public street and/or fringed with earthen berms. Surface parking areas shall be broken into sections which contain a maximum of 100 cars. Each parking section is to be separated by landscaped buffers at least 10 feet wide and a minimum of 10 percent of the surface parking area (exclusive of setback) shall be landscaped. No parking stall shall be located more than 30 feet from a tree.

j) **Parking Structures**

Location - Parking structures shall not be located adjacent to the river corridor.

Design - Parking structures shall be provided as an integral part of each new development. Parking structures should be placed below grade and between or under buildings to reduce their visual prominence. Parking is not permitted

on roof surfaces. Tiered parking structures shall not be greater than two stories in height unless permitted by the Planning Director.

H. STREETScape AND SIGNAGE

A complete streetscape and signage program shall accompany the first planned development application. The Streetscape Design Program and the Street Signage and Graphics Program shall be based on the LCSP, Section 3.6.

The Streetscape Design program shall contain design criteria for the entire project area regarding:

- Spatial, visual and functional criteria for streetscape design;
- Architectural criteria governing scale, harmony and form;
- Transportation nodes and traffic relationships.
- Conceptual locations, limitations, and use of streetscape plant materials;
- Street furniture, structures, lighting, and traffic control elements;
- Security and safety elements, including handicap access;
- Acceptable materials and colors.

At the time applications are submitted for PCD/PRD processing for each DA, information regarding specific streetscape material at specific locations shall be provided for each parcel.

The Street Name Program program shall contain recommendations for naming all streets of four or more lanes throughout the entire project area. At the time applications are submitted for PCD/PRD processing for each DA, names of all remaining streets within that development area shall be submitted.

The Sign Program program shall contain sign design and location criteria for the entire project area including:

- Materials, scale, type, style, form and colors to be used in signs;
- Sign types and locations which are permitted and prohibited; and
- Theme entry monument design.

At the time applications are submitted for PCD/PRD processing for each DA, information regarding specific sign types, design, and location shall be provided for each parcel.

I. LANDSCAPE DESIGN

A Streetscape Planting Program shall accompany the first planned development application. That Program shall identify specific street trees to be used on all major north-south and

east-west roads within the project, in accordance with the Conceptual Landscape Plan, LCSP Figure 3.11.

1) General Requirements

a) Conformance - All landscape design shall meet or exceed the requirements of Chapter X, Article 1 of Division 7, of the San Diego Municipal Code, City-Wide Landscape Regulations, its technical supplement, and the landscape standards of the Mission Valley Community Plan.

b) Vegetation Permitted - Except for on-site trees present or relocated within the site, all trees used within the project must appear in either the On-site Plant Matrix, LCSP Table 3.2, or in the Streetscape Plant Matrix, LCSP Table 3.1, and shall be used in accordance with the Conceptual Landscape Plan, LCSP Figure 3.11.

c) Screening -

- Berms should be used to screen undesirable views. Berms shall have a 2:1 maximum side slope and a minimum height of 30 inches.
- To screen unsightly or undesirable views near a slope area, large dense shrubs shall be massed near the top rather than the toe of the slope.
- Large walls or fences shall be visually softened with large shrubs or small trees.

2) Streetscape Plantings

a) Characteristics - All street trees shall be long-lived (60 years or more), deep-rooted, low-maintenance, strong, insect and disease resistant, and tolerant of street environments.

b) Median and Rights-of-Way Tree Types -

- Medians and rights-of-way of all *east-west collector streets* shall be planted with trees of one type. At least 50 percent shall be a minimum 24-inch box size.
- Medians and rights-of-way of all *north-south collector streets* shall be planted with trees of one type different from that of the east-west streets. At least 50 percent shall be a minimum 24-inch box size.
- Rights-of-way on the circular *island road* (Parcel D, Street C) shall be planted with trees of one type.
- Rights-of-way on all *residential access roads* shall be planted with trees of one type different from that of east-west or north-south collector streets.

c) Sight Distances - Trees must not be planted within 25 feet of any intersection nor within 10 feet of street lights, fire hydrants and driveways. Determination of adequacy of sight distances shall be made by the City Engineer.

d) **Streetscape Plant Hierarchy** - At the intersection of various plantings, the following hierarchy shall apply: Buffer planting always takes precedence; theme entry planting takes precedence over other types of vegetation; east-west street plantings takes precedence over north-south street planting.

3) **Surface Parking Planting** -

a) **Coverage** - In addition to required setbacks from public streets, a minimum 10 percent of any surface parking area shall be landscaped. See Circulation, IG Section II/G6i.

b) **Tree Type, Height, and Spread** - Round-headed, shade-producing non-deciduous trees must be used on surface parking areas. At maturity, trees must have height and spread of at least 30 feet.

c) **Characteristics** - Trees must be long-lived (60 years or more), deep-rooted, clean, low-maintenance, strong, insect and disease resistant, and tolerant of street environments.

d) **Screening** - Trees and shrubs should be combined with berms to screen surface parking areas from adjacent view corridors, development, streets, and river views. Screening shall be a minimum of 30 inches in height.

4) **On-Site Planting**

a) **Graded Areas** -

- Areas that are graded but not paved or built upon must be landscaped within 90 days of completion of grading with low- water-use groundcover mix.

- Graded slopes must be revegetated with groundcover, shrubs, and trees within 90 days of completion of construction.

b) **View Corridors** - Landscaping should frame view corridors, especially to the San Diego River. Trees within identified view corridors shall include only tall canopy trees rather than short, dense trees.

c) **Turf Areas** - Use of turf is to be minimized except for recreational areas or theme entries. At theme entries, use of turf is limited to 50 percent of the total area. Cool season grasses shall be limited to highly visible project entrances and areas designed for active recreation.

5) **Landscaped Area Within Street Rights-of-Way** -

When pedestrian paths are located within public street rights-of-way, a landscaped area shall separate the pedestrian path from the street.

a) **Adjacent to Major Streets**, the ten foot pedestrian path shall be separated from the curb by an eight foot landscaped strip;

b) Adjacent to Four-Lane Collector Streets, the eight foot pedestrian path shall be separated from the curb by a six foot landscaped strip; and

c) Adjacent to Two-Lane Streets, the six foot pedestrian path shall be separated from the curb by a five foot landscaped strip.

6) Irrigation

a) Subsurface System - All irrigation systems must be automatic, below ground, and fully in compliance with building code regulations.

b) Conservation - Water-conserving irrigation systems shall be used, including drip systems, moisture sensors, and/or low gallonage heads.

c) Metering - Separate water meters must be provided on all irrigation systems.

d) Screening - Backflow control devices must be screened from public view.

e) Overspray - Irrigation overspray into paved areas shall be minimized.

f) Vegetative Barrier/Wetland Habitat - Habitat areas in the riparian zone shall be watered with a combination of overhead spray irrigation for hydroseeding and individual drip emitters for each shrub and tree. The system will be

permanently installed although operated only for the time necessary for the vegetation to establish, as determined by EQD.

J. ENERGY CONSERVATION

1) Compliance Requirements - All new construction shall comply with building energy efficiency standards set forth in Title 24 of the California Administrative Code, Sections 1401 through 1410.

2) Architectural Methods

a) Daylight Emphasis - Windows, skylights, light wells, and similar features shall be used to maximize natural lighting in work areas during daylight hours.

b) Light Fixtures - Low-wattage light fixtures, dimmer switches, zoned lighting banks, and time controlled lighting in public areas shall be used throughout the LCSP project.

c) Shade - Overhangs or canopies shall be used to shade direct sun and reduce heat gain.

d) Vegetation - Deciduous trees shall be used in south-facing and west-facing outdoor areas around buildings to provide solar access during winter months and shade in summer months

K. WATER CONSERVATION

1) **Mechanisms and Fixtures** - Low-flow shower heads and faucets, low-flow toilets, pressure regulators, sprinkler system timers, etc. should be utilized.

2) **Landscaping** - Low-water-use plant material and drip irrigation systems shall be used.

L. NOISE ATTENUATION

1) Acoustical Analysis

a) **Noise Readings** - Noise level readings shall be taken for all development along Friars Road prior to site design.

b) **Acoustical Analysis** - An acoustical analysis shall be prepared for all areas proposed for residential development at the time Planned Development permits are processed.

2) Mitigation

Noise mitigation measures including but not limited to walls, berms, and setbacks shall assure that noise levels to which residents are exposed will not exceed standards set by the General Plan of the City of San Diego.

In all areas adjacent to Friars Road, either setbacks or elevation differences sufficient for noise buffering will be maintained. Accurate readings for noise levels shall be determined for all proposed development along Friars Road prior to site

design to determine if increased setbacks and/or offsets are necessary for noise mitigation.

Berms are the preferred noise attenuation method along Friars Road. In areas where berms are not feasible for noise attenuation, walls may be used for the same purpose. The character of these walls should create visual interest by offsets in facade to avoid strictly linear walls and therefore relieve monotony and allow incorporation of landscaped recesses.

When perimeter walls are used in the project, these walls will be of a strong, simple, unadorned character with a minimum 8" thickness and maximum 6'0" height.

Tops of all perimeter walls should be kept horizontal. Where grade changes occur, the walls should stop and incorporate a short return. Spaces between walls should be heavily planted.

3) **Code Conformance** - Conformance with Section 24-2501 of the State Building Code, which applies to dwellings other than detached single-family homes, shall be maintained.

M. GRADING METHODS

An Earth Moving and Grading Program for each Development Area shall accompany the first planned development application for that Development Area. The Program shall detail a grading and erosion control program in accordance with Earth Moving/Grading, LCSP Section 3.10, including rough grading program for the entire project; phasing of grading for flood

channel, streets, and parking lots; and erosion control techniques.

At the time applications are submitted for PCD/PRD processing for each DA, grading plans shall be provided for each parcel.

N. PUBLIC FACILITIES AND IMPROVEMENTS

The following Schedule of Public Facilities and Improvements identifies on- and off-site improvements, methods of financing, and anticipated phasing for facilities associated with the Levi-Cushman Specific Plan. Actual share of costs is identified in Exhibit F of the Development Agreement.

The Schedule of Public Facilities and Improvements lists specific public transit and open space network facilities which must be provided with each phase and general public (non-road) improvements which must be completed with all phases. Road improvements are reproduced directly from the LCSP EIR Table 6, "Chevron Transportation Improvements." The landowner and/or project tenants shall bear the responsibility for constructing and maintaining all public facilities listed herein to the degree determined under the provisions of the Development Agreement. When "Subdivision Improvement" is indicated as the method of implementation in the Schedule of Public Facilities and Improvements, then funds for the maintenance of these improvements shall be guaranteed through creation of one or more maintenance districts within the LCSP project area.

Typically, the requirement for all on-site project-related facilities within a Development Area is triggered by the submission of a planned development application for that DA. Major exceptions are:

1) River Channel

The detailed design for complete channelization of the San Diego River between Fashion Valley Road and Street A shall accompany the first planned development application. The design shall describe the entire two-phase construction program even though the second phase is not expected to commence until DA3.

Funding for construction of the entire channel must be assured prior to approval of final maps for the initial development within the LCSP project area.

Building permits shall not be issued until completion of the flood control channel and revegetation plan adjacent to the building site.

2.) Pedestrian Bridge

Design and construction of the pedestrian bridge which lies within DA 1 and spans the San Diego River shall not be required as a condition of development for DA 1. Design and construction of the bridge shall be required as a condition of development of DA 2, or it may be required prior to the issuance of a building permit for DA 2 if requested by the City (a) following approval of planned developments within DA 1

and (b) if construction of the LRT has begun into Mission Valley.

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS

DEVELOPMENT AREA 1 - ON-SITE IMPROVEMENTS

<u>Project Name</u>	<u>Description</u>	<u>Financing/Implementing Method</u>
----------------------------	---------------------------	---

PUBLIC TRANSIT

Bus turnouts and bus stops	Street improvements to accommodate busses as required by the San Diego Transit Corporation.	Subdivision Improvement
-----------------------------------	--	--------------------------------

OPEN SPACE NETWORK

San Diego River	Phase I channel improvements to 100-year flood level per LCSP	Subdivision Improvement
River Buffer	Minimum 25'-wide buffer with vegetative barrier and associated uses.	Subdivision Improvement

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

DEVELOPMENT AREA 2 - ON-SITE IMPROVEMENTS

<u>Project Name</u>	<u>Description</u>	<u>Financing/Implementing Method</u>
PUBLIC TRANSIT		
Bus turnouts and bus stops	Street improvements to accommodate busses as required by the San Diego Transit Corporation.	Subdivision Improvement
LRT right-of-way for trackage	Provide a maximum 35' rightof-way to accommodate the LRT trackage throughout project area.	Final Map Condition
LRT right-of-way for station	Provide a maximum 60' x 360' right-of-way to accommodate LRT station.	Final Map Condition
OPEN SPACE NETWORK		
River Buffer	Minimum 25'-wide buffer with vegetative barrier and associated uses.	Subdivision Improvement
Open Use Areas	Parcel H	Subdivision Improvement
Pedestrian Bridge (Across San Diego River)	Construct as per LCSP/IG	Subdivision Improvement

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

DEVELOPMENT AREA 3 - ON-SITE

Project Name	Description	Financing/Implementing Method
PUBLIC TRANSIT		
Bus turnouts and bus stops	Street improvements to accommodate busses as required by the San Diego Transit Corporation.	Subdivision improvements
OPEN SPACE NETWORK		
San Diego River	Phase II channel improvements to 100-year flood level per LCSP	Subdivision Improvement
	Drainage swale west of Street A to connect to existing low-flow channel if no downstream improvements	Subdivision Improvement
	Pilot channel constructed west of Street A if down stream development has not already improved river and if Camino De La Reina is constructed from west project boundary to Napa St.	Subdivision Improvement
River Buffer	Minimum 25'-wide buffer with vegetative barrier and associated uses.	Subdivision Improvement
Open Use Area	Parcels N, R, T	Subdivision Improvement

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

GENERAL PUBLIC IMPROVEMENTS WHICH MUST BE COMPLETED WITH EACH PHASE

<u>Project</u>	<u>Description</u>	<u>Financing Method</u>
Pedestrian Paths within or adjacent to buffer and ROW	Construct/maintain on-site pedestrian paths	Subdivision Improvement
Bikeways within or adjacent to buffer and ROW	Construct/maintain on-site bikeways.	Subdivision Improvement
Landscaping within ROW	Construct/maintain on-site landscape strip between curb and pedestrian path.	Subdivision Improvement
	Construct/maintain on-site landscaped medians.	Subdivision Improvement
Water	Provide interior water system.	Subdivision Improvement
	Trunk water.	Water Fees/City
Sewer	Provide interior sewer system.	Subdivision Improvement
	Trunk sewer.	Sewer Fees/City
Storm Drainage	Provide a storm drainage	Subdivision Improvement

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

GENERAL PUBLIC IMPROVEMENTS WHICH MUST BE COMPLETED WITH EACH PHASE

<u>Project</u>	<u>Description</u>	<u>Financing Method</u>
Gas & Electric	Install Facilities	Subdivision Improvement/SDG&E
Telephone Service	Install Facilities	Subdivision Improvement/Telephone Company
Cable television	Install Facilities	Subdivision Improvement/CATV

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

GENERAL PUBLIC IMPROVEMENTS WHICH MUST BE COMPLETED WITH EACH PHASE

<u>Project</u>	<u>Description</u>	<u>Financing Method</u>
Parks		Park Fee/City
Schools	Schools provided by the San Diego Unified School District	School Fees/SDUSD
Fire Station	Provide fire station on west side of Rt163, near interchange.	Development Agreement/City
Miscellaneous Road Improvements	Provide intersection improvements, signing and signal modifications.	Subdivision Improvement/ Development Agreement
MVCP Transportation Improvements	Provide various road improvements listed in the MVCP.	All Phases with thresholds as listed in Table 6/LCSP EIR. Costsharing basis as determined by the City Engineer and PFFP or Development Agreement.

NOTES AND DEFINITIONS

1. A subdivision improvement is required by the city to be complete or bonded prior to recording of a final map.
2. A map condition is required to be accomplished to the satisfaction of the City Engineer prior to recording a final map.
3. A final map requirement refers to a component of a final map, for instance a dedication of easement would appear on the final map document.
4. A development agreement identifies the terms of participation in specified improvement projects.

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

TABLE 6

CHEVRON TRANSPORTATION IMPROVEMENTS

(PROJECTS TO BE ASSURED TO THE SATISFACTION OF THE CITY ENGINEER BEFORE THRESHOLD CAN BE EXCEEDED)

<u>DEVEL. AREA</u>	<u>ON/OFFSITE</u>	<u>IMPROVEMENT***</u>	<u>OTHER PROJECTS</u>	<u>LEVI CUSHMAN SPECIFIC PLAN ONLY</u>	<u>COMMENTS</u>
1 A&B	Onsite	Construct new North/South street (4 lane collector) between Hotel Circle North and "B" Street fronting Dev. Area 1.	0	N.A. With first final map of Dev. Area 1	Project Access
1 A&B	Onsite	Construct Street B as a 4-lane major from Street C to Fashion Valley Road, with adjacent tentative map.	0	N.A. With first final map of Dev. Area 1	Project Access
1 A&B	Onsite	Construct Street C as a 4-lane major from the river to Street B, with adjacent tentative map.	0	N.A. With first final map of Dev. Area 1	Project Access
1 A&B	Onsite*	Realign and widen Fashion Valley Road as a 4-lane major street with all abutting improvements south of Friars Road (78/98 cross-section) to align with reconstructed westbound I-8 off and on ramps. Access to Fashion Valley Road shall be via a new signalized intersection about one half way between New Casino de la Reina and relocated Hotel Circle North. This improvement shall be assured prior to approval of the first final map for development area 1.	0	1-4 With first final map of Dev. Area 1	Any development in sectors 1-4 to be conditioned with participation in this improvement, the extent of participation to be determined by the City Engineer.
1 A&B	Offsite*	Modify & signalize the westbound on and off ramps to I-8 at Hotel Circle North and the eastbound on and off ramps at Hotel Circle South, concurrent with Community Plan projects 10-A and 8-B. Realign Hotel Circle North between Camino de la Reina and Fashion Valley Road and improve the intersection of Hotel Circle South and Camino de la Reina to a "T" configuration as shown in concept in Appendix F-2, and as described in Community Plan Project 10-A. Additional right-of-way dedication necessary for the reconstruction of Hotel Circle North between Fashion Valley Road and Camino de la Reina to the satisfaction of the City Engineer or as shown in concept in Appendix F-2 shall be agreed to by the adjacent property owner.	0	1-4 With first final map of Dev. Area 1	Any development in sectors 1-4 to be conditioned with participation in these improvements.
1 A&B	Offsite*	Improve the Fashion Valley Road river crossing to accommodate a 10 year design, in connection with Community Plan project 10-A.	0	1-4 With first final map of Dev. Area 1	Any development in sectors 1-4 to be conditioned with participation in this improvement.
1 A&B	Offsite*	Widen and signalize the "River Valley" project access at the Hotel Circle North/most westerly I-8 ramps to provide necessary through and turn lanes as required by the City Engineer. These improvements are to be provided by "River Valley" or before council approval of the first final map for Development Area 1.	0	3,4 First final map of Dev. Area 1	Any development in sectors 3, 4 to be conditioned with participation in this improvement.

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

(PROJECTS TO BE ASSURED TO THE SATISFACTION OF THE CITY ENGINEER BEFORE THRESHOLD CAN BE EXCEEDED)

<u>DEVEL. ON/OFFSITE AREA</u>	<u>IMPROVEMENT***</u>	<u>OTHER PROJECTS ENU SECTOR</u>	<u>LEVI CUSHMAN SPECIFIC PLAN ONLY</u>	<u>COMMENTS</u>	
** 1 ASB Offsite* Various Lcns.	Participate in Community Plan Transportation Improvement Projects Numbers 6, 8B, 10A, 10B, 11, 14 and 19A (see table 2) as determined by the city engineer.				
	6 Friars Road - Restripe for six lanes, Colusa Street to Ulric Street (Fashion Valley Road to Ulric Street assured prior to the first final map for Development Area 1) plus appropriate abutting improvements (102/122 Cross-Section).	400	1	First final map of Dev. Area 1	Levi-Cushman Specific Plan Development Area I to assure striping for 6 lanes between Fashion Valley Rd. and Ulric Street only.
	8b Hotel Circle South - Widen to four lanes between the eastbound Hotel Circle ramps and Camino de la Reina.	200	3	First final map of Dev. Area 1	_____
	10a Hotel Circle North - Widen to four lanes between westbound I-8 ramps and Camino de la Reina.	200	4	First final map of Dev. Area 1	_____
	10b Camino de la Reina - Construct and widen to a four lane major between Fashion Valley Road and SR-163.	2,900	4	2,900 E.D.U. in sectors 1,3,4	_____
	11 Camino de la Reina (existing) - Widen to four lanes between Hotel Circle North and Avenida del Rio. To be assured at the 400 equivalent dwelling unit (E.D.U.) threshold for sector 4, shown in Table 2.	400	4	400 E.D.U. in sector 4	_____
	14 SR-163 and Friars Road - Add dual lefts for eastbound-northbound on-ramps; widen north leg of interseccion to accept two turning lanes. To be assured at the 500 E.D.U. threshold shown in Table 2 for sectors 1, 2, 4 - 7.	500	1,2,4-7	500 E.D.U. in sectors 1, 2, 4-7	_____
	19A Camino de la Reina - Widen to four lane major, SR-163 to Mission Center Road. To be assured at the 400 E.D.U. threshold for sectors 5 and 7, shown in Table 2.	400	5,7	400 E.D.U. in sectors 5, 7	Levi-Cushman level of participation in improvements to be included in the development agreement.
	NOTE: Mission Valley Transportation Improvement Project Numbers 8B, 10A, and 10B to be assured prior to approval of the first final map for development area 1.				
2 ASB Onsite	Construct Street C as a 4 lane major between Friars Road and Camino De La Reina and as a 4-lane collector from the river to Camino De la Reina, with adjacent tentative maps.	0	N.A.	First final map of adjacent tentative maps in Dev. Area 2	On-site street not needed for community-wide circulation in this phase.

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

(PROJECTS TO BE ASSURED TO THE SATISFACTION OF THE CITY ENGINEER BEFORE THRESHOLD CAN BE EXCEEDED)

** DEVEL. ON/OFFSITE AREA	IMPROVEMENT***	OTHER PROJECTS EDU. SECTOR	LEVI CUSHMAN SPECIFIC PLAN ONLY	COMMENTS
2 A&B Onsite	Construct Street D as a 4-lane major from Friars Road to Camino De La Reina, with adjacent tentative maps.	0	N.A. First final map of adjacent tentative maps in Dev. Area 2	These are on-site streets not needed for community-wide circulation in this phase.
2 A&B Onsite	Construct Camino De La Reina as a 4-lane major from Street D to Fashion Valley Road, with adjacent tentative maps.	0	N.A. First final map of adjacent tentative maps in Dev. Area 2	
2 A&B Offsite*	Improve the Route 163/Friars-Ulric southbound off ramp to increase capacity. (Community Plan Project #16 to be assured at the 7,500 E.D.U. threshold shown in Table 2).	7,500	1-4 7,500 E.D.U. in sectors 1-4	_____
2 A&B Offsite*	Construct a westbound Friars to southbound Morena - I-5 connection (optional at the discretion of the City Engineer).	6,000	1-4,5,7 6,000 E.D.U. in sectors 1-4, 5, 7	This is an optional improvement Not in the Community Plan
2 A&B Offsite* Various Locals.	Participation in Community Plan Transportation Improvement Project Numbers 6 and 17 (see Table 2) as determined by the city engineer.			
	6 Friars Road - Restripe for six lanes, Colusa Street to Ulric Street. (Colusa Street to Fashion Valley Road assured prior to first final map of Development Area 2).	400	1 First final map of Dev. Area 2	Levi-Cushman Specific Plan Development Area 2 to assure striping for 6 lanes between Fashion Valley Road and Colusa Street only.
	17 SR-163 and Friars Road - Cut back median on bridge to allow three westbound lanes through signal for northbound on-ramps; approximately 85% of build-out in these sectors. To be assured at the 4,700 E.D.U. threshold shown in Table 2.	4,700	1,2,4-7 4,700 E.D.U. in sectors 1, 2, 4-7	_____
3 A&B Onsite	Construct Camino De La Reina as a 4-lane major street from the west project boundary to Street D, to be constructed concurrently with the new Via Las Cumbres interchange.	0	N.A. First final map of Dev. Area 3	To be constructed concurrently with the new interchange.
3 A&B Onsite	Construct Street B as a 4-lane major street from Street C to Street A, to be constructed concurrently with the new Via Las Cumbres interchange.	1,500	1-4 First final map of Dev. Area 3	To be constructed concurrently with the new interchange.
3 A&B Onsite	Construct Street A as a 4-lane major street (including a river bridge) from Friars Road to Street B, to be constructed concurrently with the new Via Las Cumbres interchange.	1,500	1-4 First final map of Dev. Area 3	To be constructed concurrently with new interchange (this is the extension of Via Las Cumbres from Friars Road to the new interchange.)

SCHEDULE OF PUBLIC FACILITIES AND IMPROVEMENTS - Cont'd

(PROJECTS TO BE ASSURED TO THE SATISFACTION OF THE CITY ENGINEER BEFORE THRESHOLD CAN BE EXCEEDED)

<u>DEVEL. AREA</u>	<u>ON/OFFSITE</u>	<u>IMPROVEMENT***</u>	<u>OTHER PROJECTS EBL SECTOR</u>	<u>LEVI CUSHMAN SPECIFIC PLAN ONLY</u>	<u>COMMENTS</u>	
3	A&B Offsite*	Construct Camino De La Reina as a 4-lane major street from the west project boundary to Napa Street. (Community Plan Project #7). To be constructed concurrently with the new Via Las Cumbres interchange.	1,500	1	First final map of Dev. Area 3	_____
3	A&B Offsite*	Widen Hotel Circle North to four lanes between the Hotel Circle North overcrossing of I-8 and Via Las Cumbres. To be constructed concurrently with the new Via Las Cumbres interchange.	3,000	1,3	First final map of Dev. Area 3	To be constructed in connection with the new interchange.
3	A&B Offsite*	Construct a new interchange at Street A and I-8. (Community Plan Project #12 to be assured prior to approval of the first final map for Development Area 3).	3,000	1,3	First final map of Dev. Area 3 (3530 E.D.U. in Dev. Areas 1 & 2)	_____
3	A&B Offsite*	Provide Right of Way for San Diego Trolley, as determined in the development agreement, or as determined by the City Engineer. ¹¹	N.A.	N.A.	N.A.	_____
3	A&B Offsite*	Participate in Community Plan Transportation Improvement Project numbers 8A, 15 and 18 (see table 2) as determined by the city engineer.	_____	_____	_____	_____
	8a	Hotel Circle South - Remove parking and restripe for three lanes between the I-8/Presidio overcrossing and the eastbound Hotel Circle Ramps prior to approval of the first final map for Development Area 3.	200	3	First final map of Dev. Area 3	_____
	15-33	Hazard Center Drive - Improve to a four-lane street along north side of river between Camino de la Reina and Mission Center Road, at the 12,000 E.D.U. threshold shown in Table 2, for sectors 1, 2, 4-7.	12,000	1,2,4-7	12,000 E.D.U. in sectors 1, 2, 4-7	_____
	18	SR-163 and Friars Road - Move northbound on-ramps eastward or replace with a loop or flyover; approximately 95% build-out in these sectors, at the 18,000 E.D.U. threshold shown in Table 2, for sectors 1, 2, 4 - 7.	18,000	1,2,4-7	18,000 E.D.U. in sectors 1, 2, 4-7	_____

* The extent of Chevron responsibility for these improvements to be included in the development agreement.

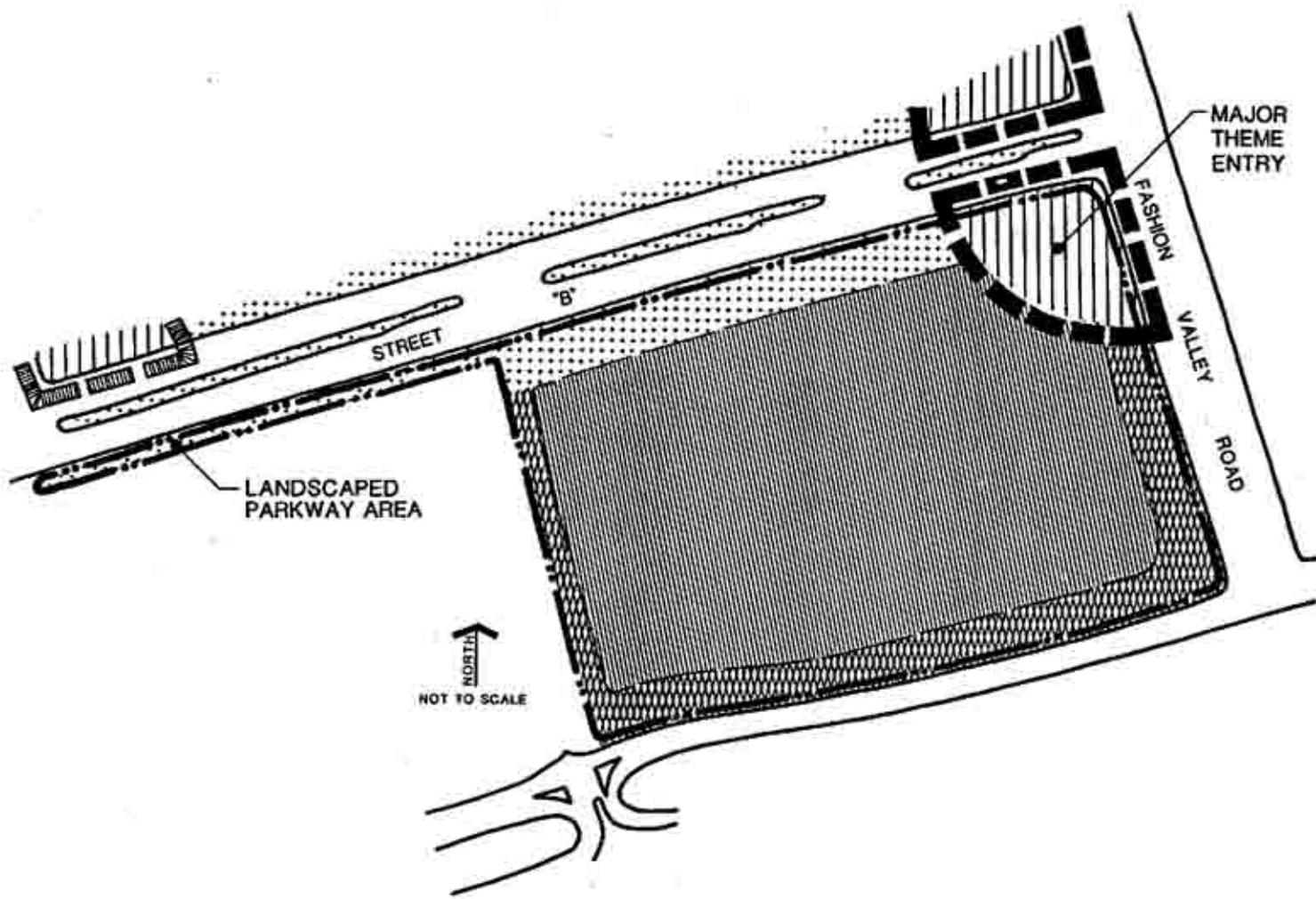
** Development to proceed in listed sequence unless revisions to the traffic analysis revise this phasing of improvements.

*** Assured improvements to be completed, under contract, bonded, scheduled in the City Capital Improvements Program, or programmed in the State Transportation Improvements Program, to the satisfaction of the City Engineer.

¹¹NOTE: The 4% LRT bonus (1,652 ADT) applies only after construction of the LRT is assured to the satisfaction of the City Engineer.

III. PARCEL MAPS

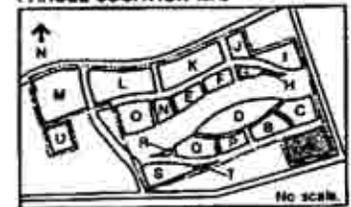
The parcel maps which follow provide schematic illustrations of the land-based criteria imposed by the LCSP and the IG. Maps are provided for all parcels.



LEGEND

- PARCEL BOUNDARY
- [Vertical Hatching] DEVELOPMENT AREA
- [Horizontal Hatching] NOISE BUFFER
- [Cross-hatch] FRIARS ROAD THEME TREE
- [Dotted] EVERGREEN
- [Small Dotted] FLOWERING TREE
- [Vertical Lines] ORNAMENTAL ENTRANCE PLANTING
- [Grid] TALL PALM TREE
- [Wavy] RIPARIAN VEGETATION
- [Diagonal Hatching] SCREEN/SETBACK PLANTING
- [Diagonal Hatching] BUFFER AREA PLANTING
- ▲ SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 60 PERCENT

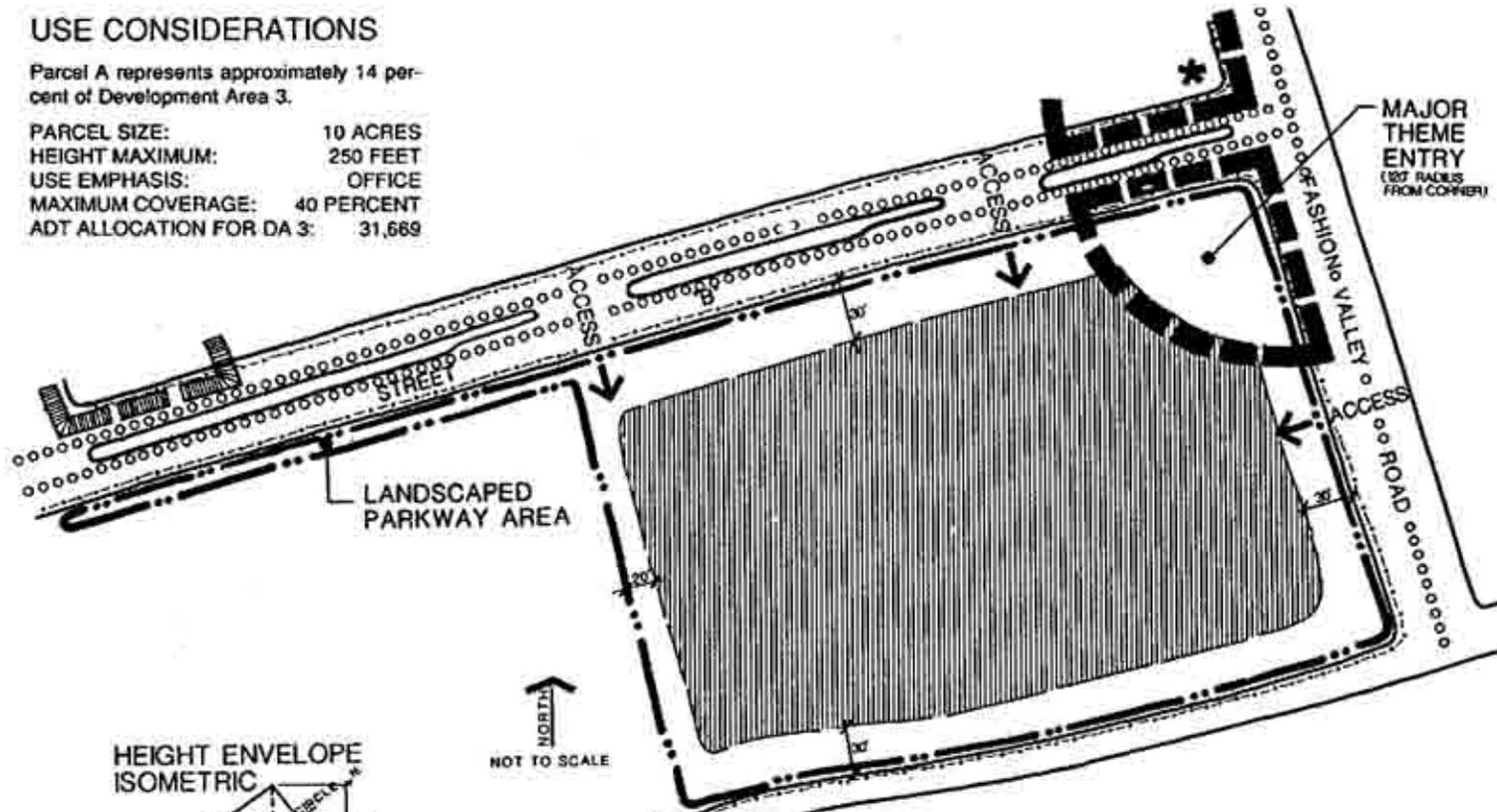
**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL A
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel A represents approximately 14 percent of Development Area 3.

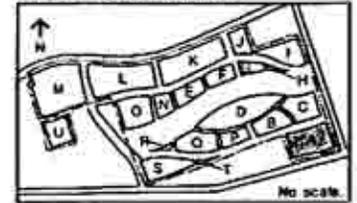
PARCEL SIZE: 10 ACRES
 HEIGHT MAXIMUM: 250 FEET
 USE EMPHASIS: OFFICE
 MAXIMUM COVERAGE: 40 PERCENT
 ADT ALLOCATION FOR DA 3: 31,669



LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- ++ LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP



HEIGHT ENVELOPE ISOMETRIC



SPECIAL ELEMENTS

Development pattern of Parcel A will be contingent on adoption of a final design for the I-8/Fashion Valley Road interchange. Parcel A will not develop until that design is adopted.

A location adjacent to the freeway interchange and a 250' height maximum give development on Parcel A high visibility and special prominence. Development on this site influences the perception of the entire project and must therefore clearly express LCSP themes.

Since Parcel A is located outside the central LCSP area, connections with the rest of the project must be emphasized, especially via pedestrian, bikeway, streetscape, and open space linkages and architectural continuity.

Sloping height requirements do not apply to Parcel A since the area required by the I-8 interchange has not been determined and a reasonable development envelope must be preserved.

Attention must be given to the project "edges," especially to assure that a suitable transition is made to adjacent off-site areas.

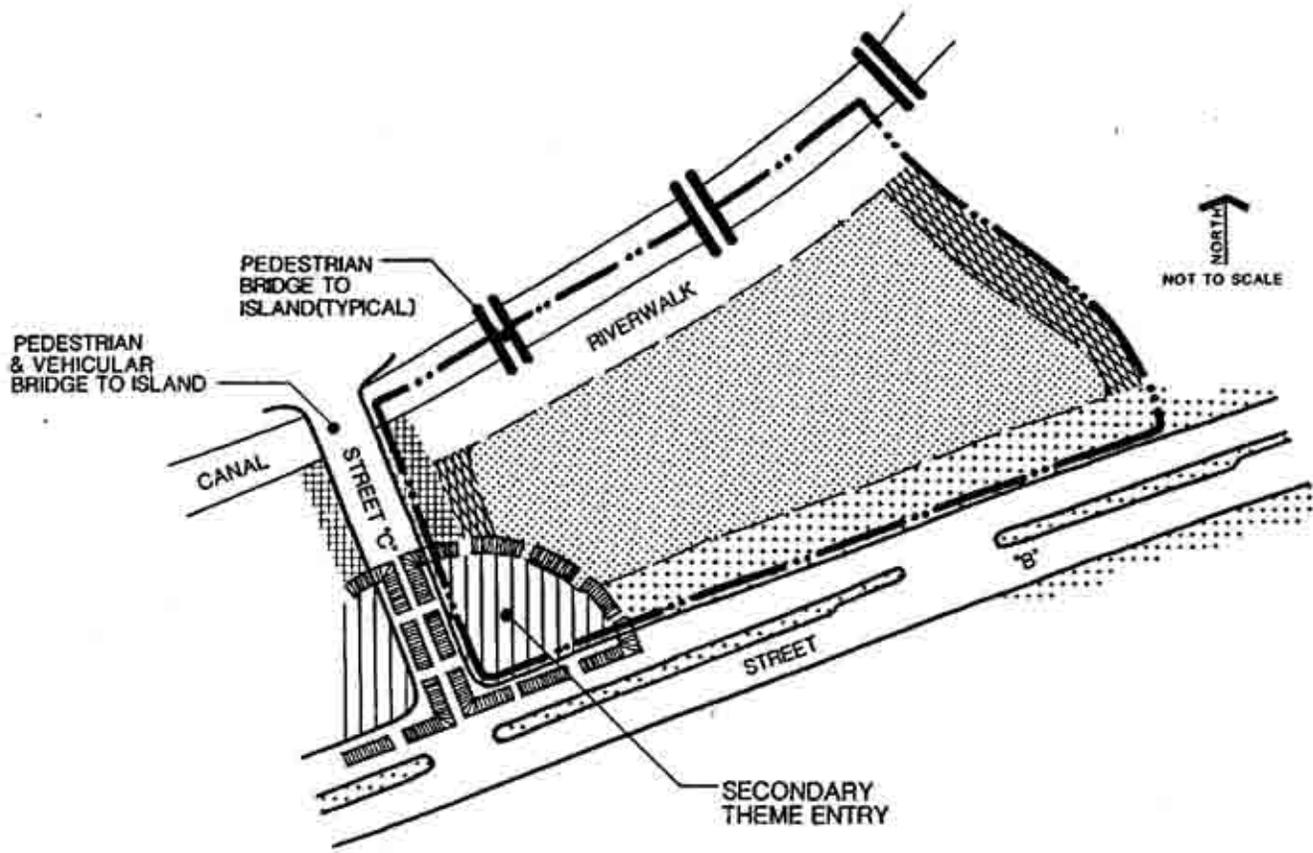
Design of the theme entry must be coordinated with the theme entry design on Parcel C.

Massing of development must permit a through-view from I-8 to the river.

Accommodation must be made for the eastern end of Hotel Circle North to cul-de-sac into Parcel A.

LEVI - CUSHMAN
 SPECIFIC PLAN

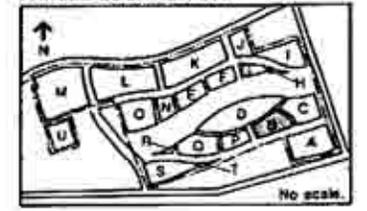
PARCEL A
 SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- [Stippled pattern] DEVELOPMENT AREA
- [Horizontal lines] NOISE BUFFER
- [Cross-hatch pattern] FRIARS ROAD THEME TREE
- [Dotted pattern] EVERGREEN
- [Large dots pattern] FLOWERING TREE
- [Vertical lines] ORNAMENTAL ENTRANCE PLANTING
- [Grid pattern] TALL PALM TREE
- [Wavy lines] RIPARIAN VEGETATION
- [Diagonal lines] SCREEN/SETBACK PLANTING
- [Diagonal lines] BUFFER AREA PLANTING
- ▲ SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 50 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL B
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel C represents approximately 27 percent of Development Area 1.

PARCEL SIZE: 7 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: RETAIL/HOTEL
 MAXIMUM COVERAGE: 40 PERCENT
 ADT ALLOCATION FOR DA 3: 17,3800

SPECIAL ELEMENTS

Development on Parcel C must include a riverwalk along the canal, pedestrian bridge(s) to the island, a buffer along the river channel, and bikeways and pedestrian paths. A bus stop is proposed near the Fashion Valley Road/Street B intersection.

Coordination with Parcels B and D is necessary to assure bridge, riverwalk, buffer, pedestrian, and bike system design continuity.

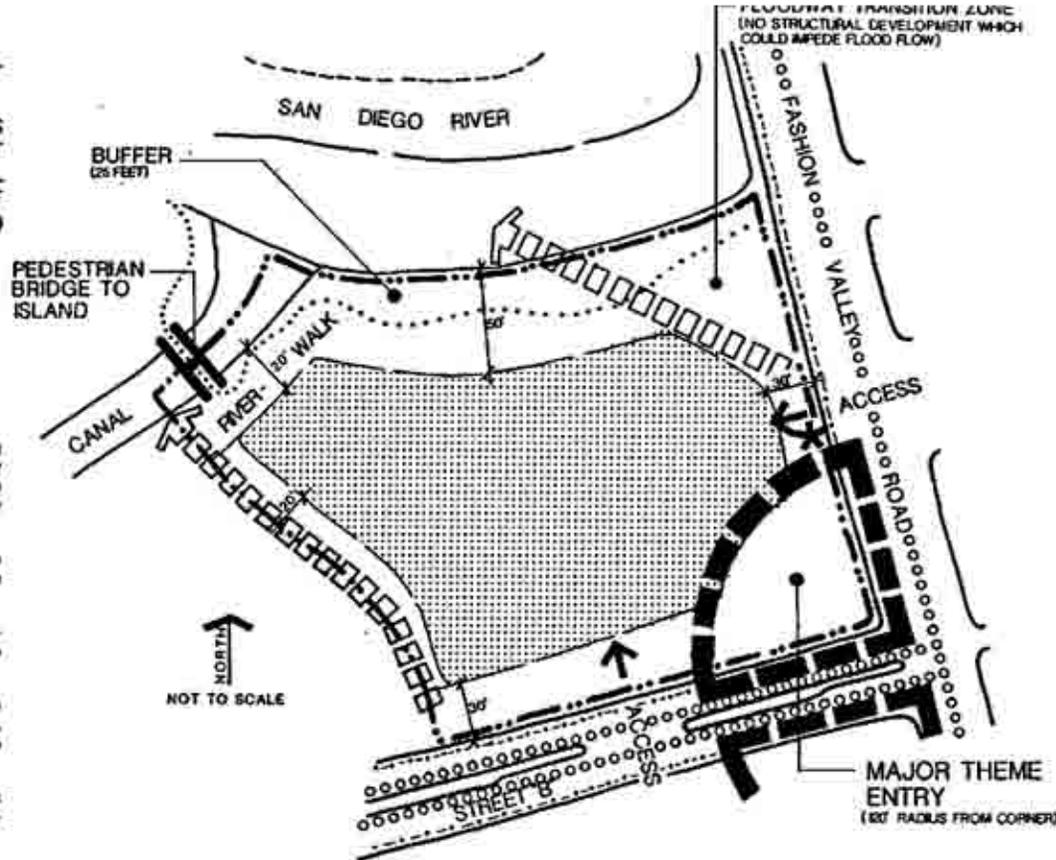
Since Parcel C will develop prior to Parcel A, it will establish the entry theme design that will subsequently be adopted for Parcel A.

The transition zone in northeast corner of parcel provides an opportunity for meandering pedestrian and bike paths, native and ornamental vegetation, and passive recreation areas.

Special design attention is necessary as the riverwalk merges with the buffer on the north western portion of parcel.

A view corridor must be established along the western border of the parcel and visually terminate at a park, sculpture, etc. on the island. Views must be provided through the transition zone into the river channel.

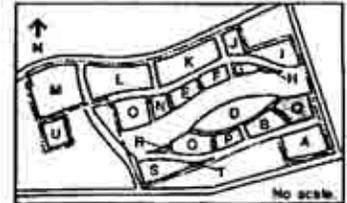
Massing of development on Parcel C must permit a through-view from Interstate 8 to the river unless that view corridor is provided through Parcel B.



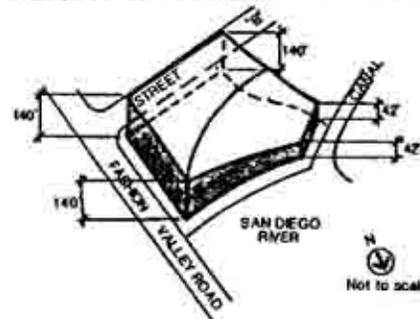
LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- VIEW CORRIDOR
- ACCESS POINTS
- RECOMMENDED BUS STOP
- BUS ROUTES
- LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP

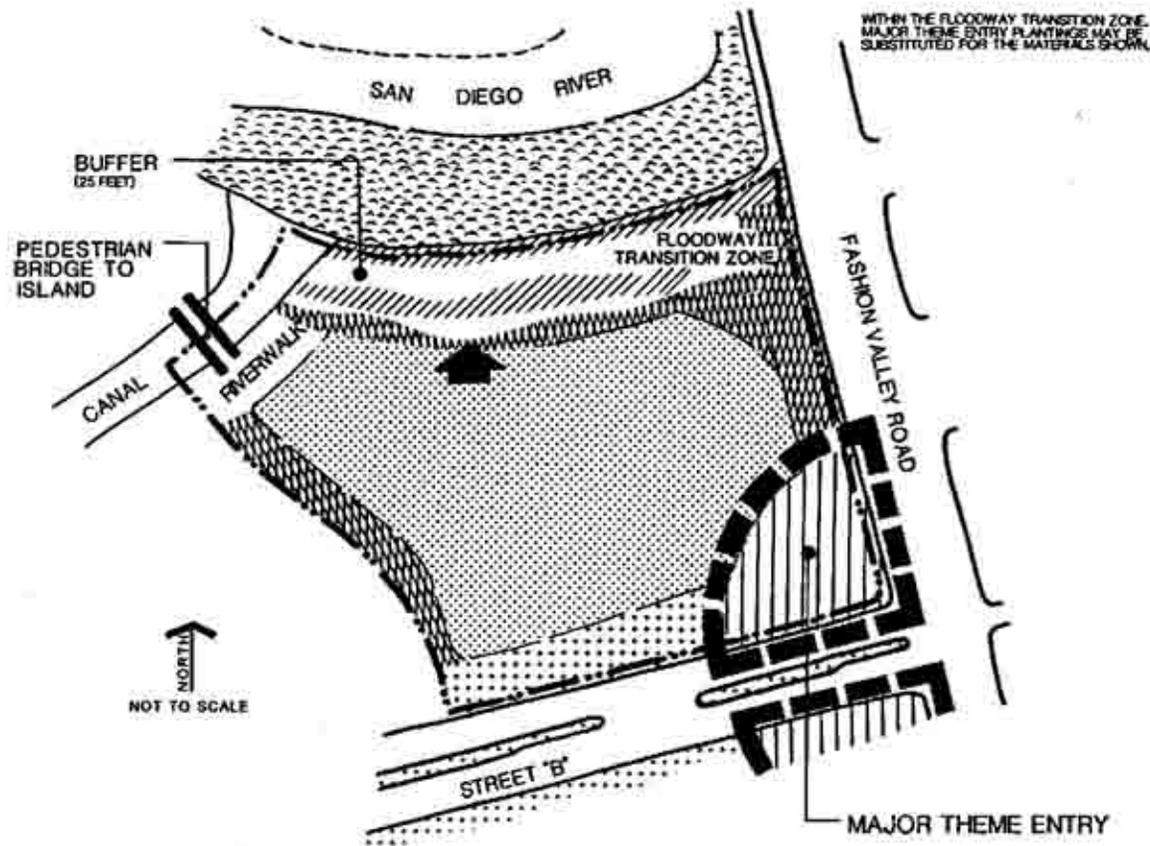


HEIGHT ENVELOPE ISOMETRIC



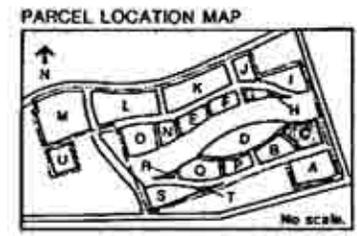
**LEVI - CUSHMAN
 SPECIFIC PLAN**

**PARCEL C
 SUMMARY MAP**



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS



MINIMUM LANDSCAPING: 60 PERCENT

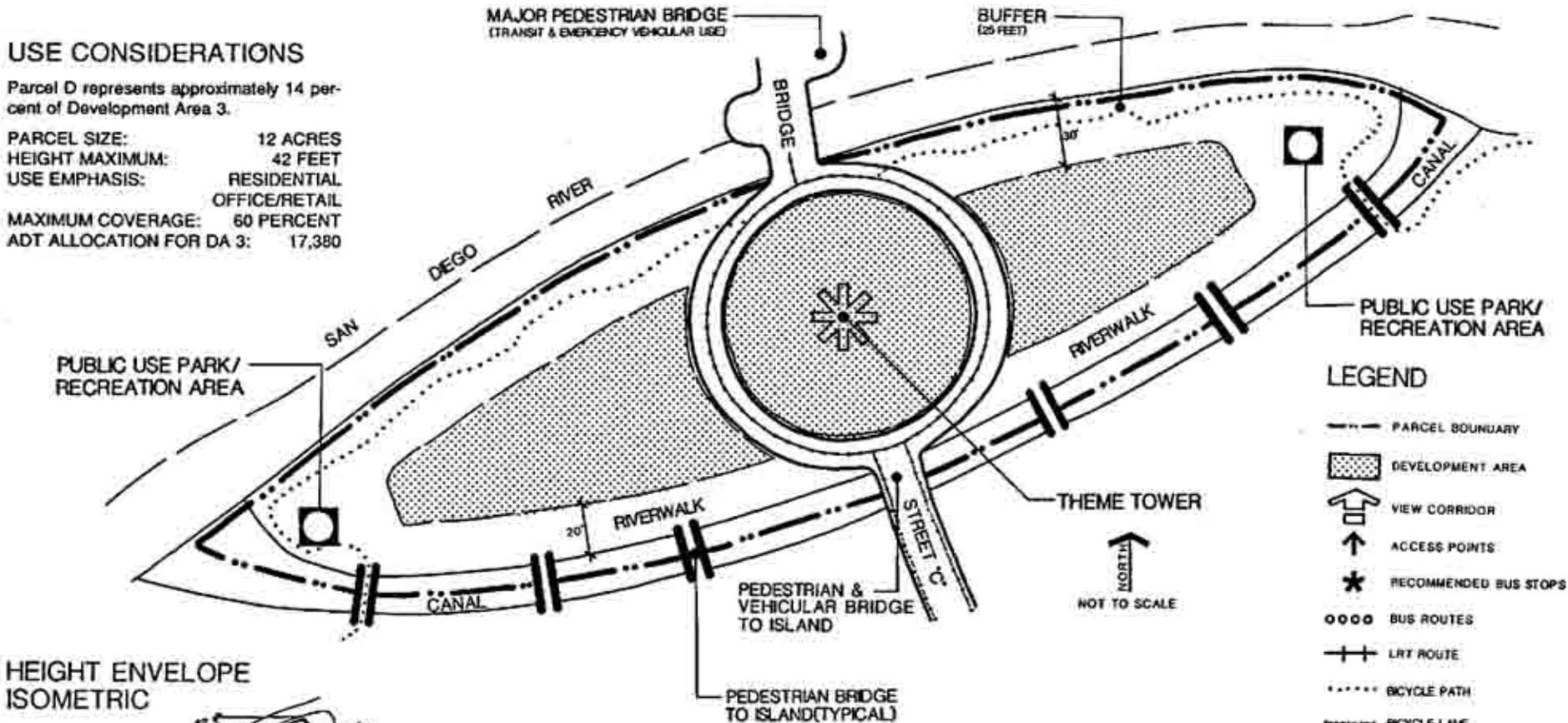
**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL C
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel D represents approximately 14 percent of Development Area 3.

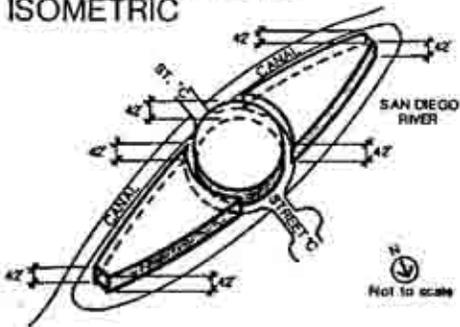
PARCEL SIZE: 12 ACRES
 HEIGHT MAXIMUM: 42 FEET
 USE EMPHASIS: RESIDENTIAL OFFICE/RETAIL
 MAXIMUM COVERAGE: 60 PERCENT
 ADT ALLOCATION FOR DA 3: 17,380



LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- ○ ○ ○ BUS ROUTES
- +— LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

HEIGHT ENVELOPE ISOMETRIC



SPECIAL ELEMENTS

Development on Parcel D must include a river buffer, a riverwalk along the canal, pedestrian bridge(s) across the canal, a central pedestrian and vehicular bridge south via Street C, and bikeways and pedestrian paths.

Coordination with Parcels P, B, C, and Q is necessary to assure bridge, riverwalk, buffer, and pedestrian and bike system design continuity.

To emphasize the pedestrian nature of the island, at least 50 percent of the parking needs of the island are to be met by parking facilities off the island.

Public use areas are to be provided at both ends of the island and may include amphitheater, parks, recreation areas, picnic or viewing areas, sculpture gardens, etc.

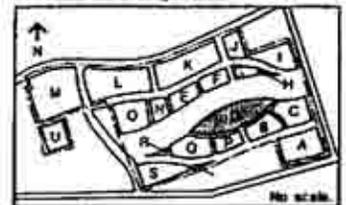
Special design attention is necessary as riverwalk merges with buffer at both ends of the island.

Theme tower height to be determined at PCO stage.

Program to be provided for water quality management and monitoring for the closed circuit canal system.

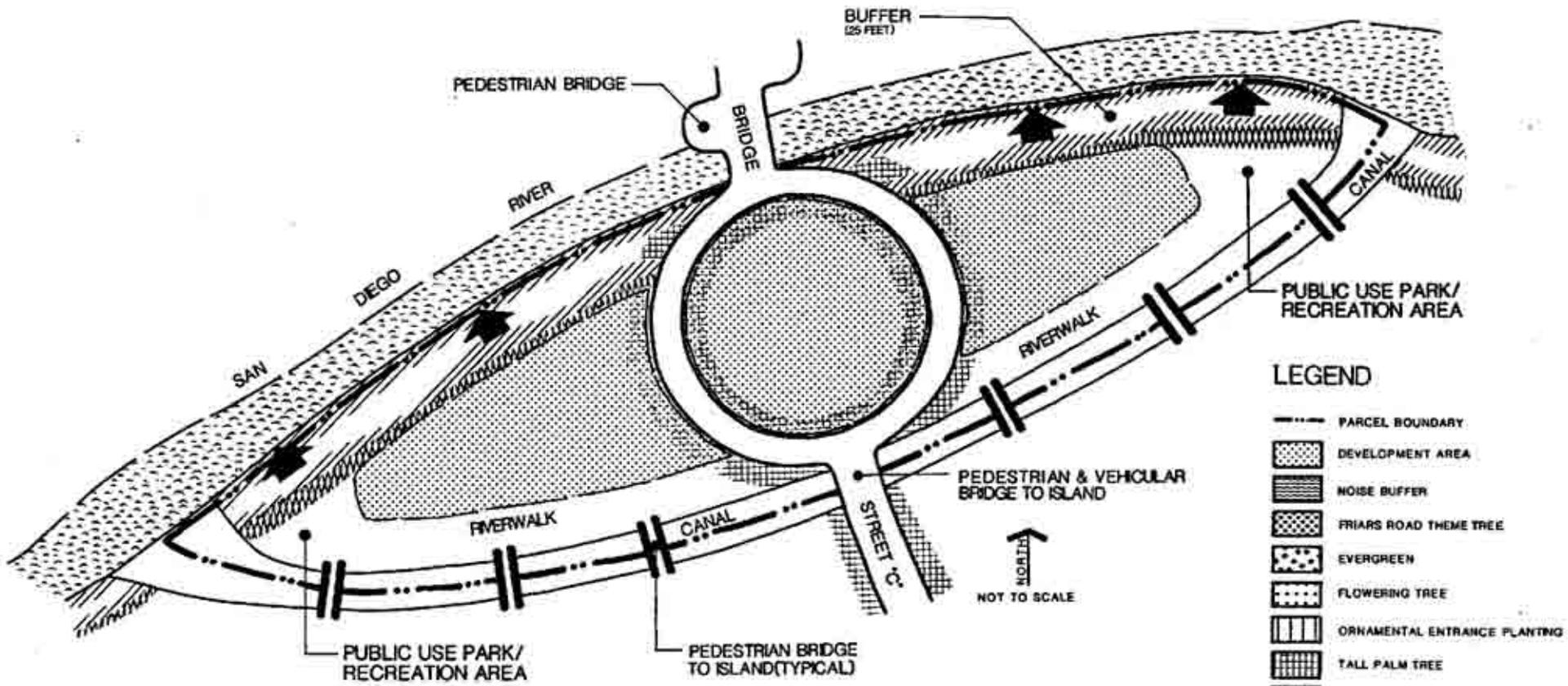
Massing of development on Parcel D must permit a through-view from I-6 to the river.

PARCEL LOCATION MAP



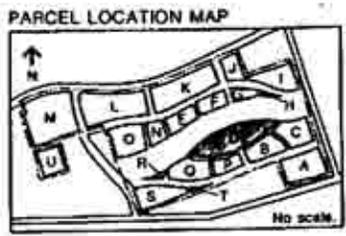
**LEVI - CUSHMAN
 SPECIFIC PLAN**

**PARCEL D
 SUMMARY MAP**



- LEGEND**
- PARCEL BOUNDARY
 - [Stippled pattern] DEVELOPMENT AREA
 - [Horizontal lines] NOISE BUFFER
 - [Cross-hatch pattern] FRIARS ROAD THEME TREE
 - [Dotted pattern] EVERGREEN
 - [Small circles] FLOWERING TREE
 - [Vertical lines] ORNAMENTAL ENTRANCE PLANTING
 - [Grid pattern] TALL PALM TREE
 - [Wavy lines] RIPARIAN VEGETATION
 - [Diagonal lines] SCREEN/SETBACK PLANTING
 - [Diagonal lines] BUFFER AREA PLANTING
 - ▲ SCREEN BREAK FOR VIEWS

NORTH
↑
NOT TO SCALE



MINIMUM LANDSCAPING: 40 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL D
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel E represents approximately 11 percent of Development Area 2.

PARCEL SIZE: 4 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: HOTEL
 MAXIMUM COVERAGE: 50 PERCENT
 ADT ALLOCATION FOR DA 2: 17,906

SPECIAL ELEMENTS

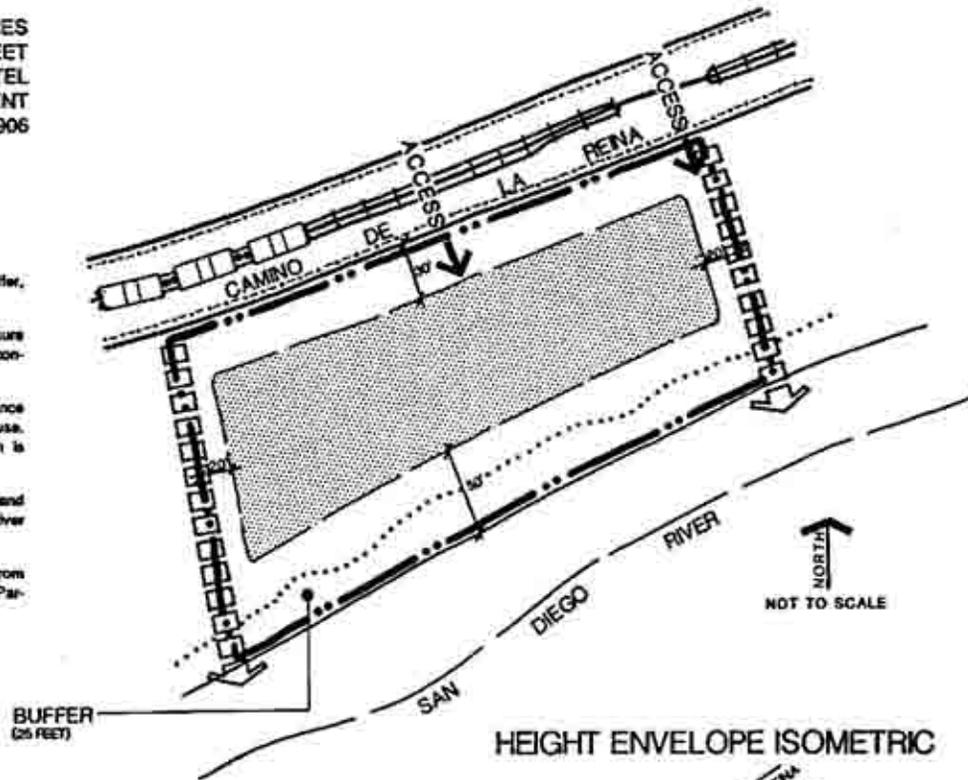
Development on Parcel E must include a river buffer, bikeways and pedestrian paths.

Coordination with Parcels N and F is necessary to ensure river buffer, pedestrian, and bike system design continuity.

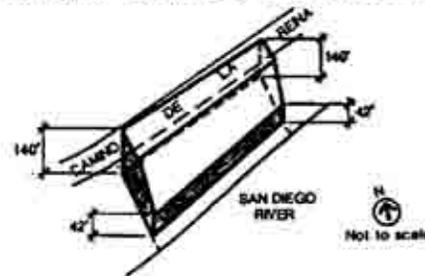
Special use and design opportunities are available since the adjacent Parcel N is dedicated to park and open use. Compatibility and continuity in planting and design is necessary between Parcel N and E.

View corridors are to be provided along both east and west borders of the parcel which terminate at the river channel.

Two through-parcel view corridors are required from Friars Road via Parcels L and K, and then through Parcels O, E, or F to the river.



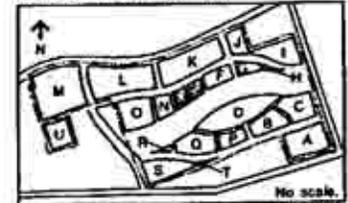
HEIGHT ENVELOPE ISOMETRIC



LEGEND

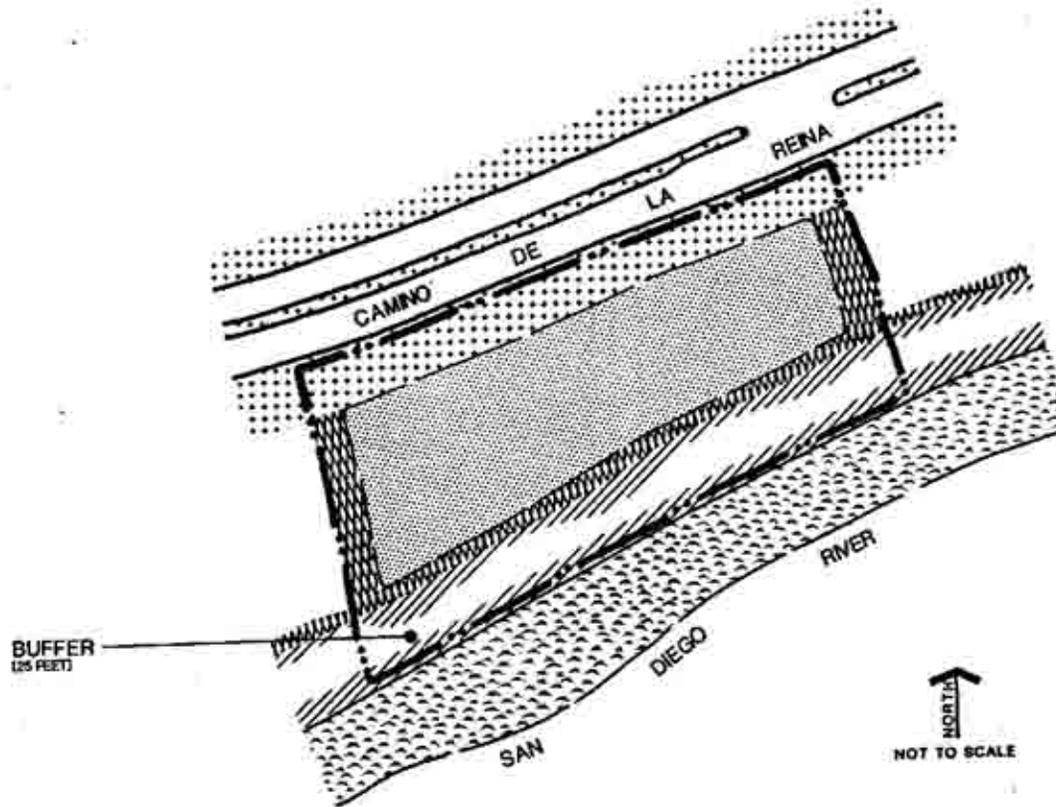
- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- +— LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP



LEVI - CUSHMAN
 SPECIFIC PLAN

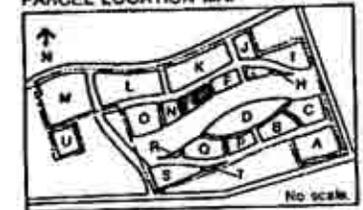
PARCEL E
 SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- [Stippled Box] DEVELOPMENT AREA
- [Horizontal Lines Box] NOISE BUFFER
- [Cross-hatch Box] FRIARS ROAD THEME TREE
- [Dotted Box] EVERGREEN
- [Dotted Box] FLOWERING TREE
- [Vertical Lines Box] ORNAMENTAL ENTRANCE PLANTING
- [Grid Box] TALL PALM TREE
- [Wavy Lines Box] RIPARIAN VEGETATION
- [Diagonal Lines Box] SCREEN/SETBACK PLANTING
- [Diagonal Lines Box] BUFFER AREA PLANTING
- [Arrow Box] SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 50 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL E
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel F represents approximately 13 percent of Development Area 2.

PARCEL SIZE: 5 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: OFFICE/RETAIL
 TRANSPORTATION CENTER
 MAXIMUM COVERAGE: 50 PERCENT
 ADT ALLOCATION FOR DA 2: 17,906

SPECIAL ELEMENTS

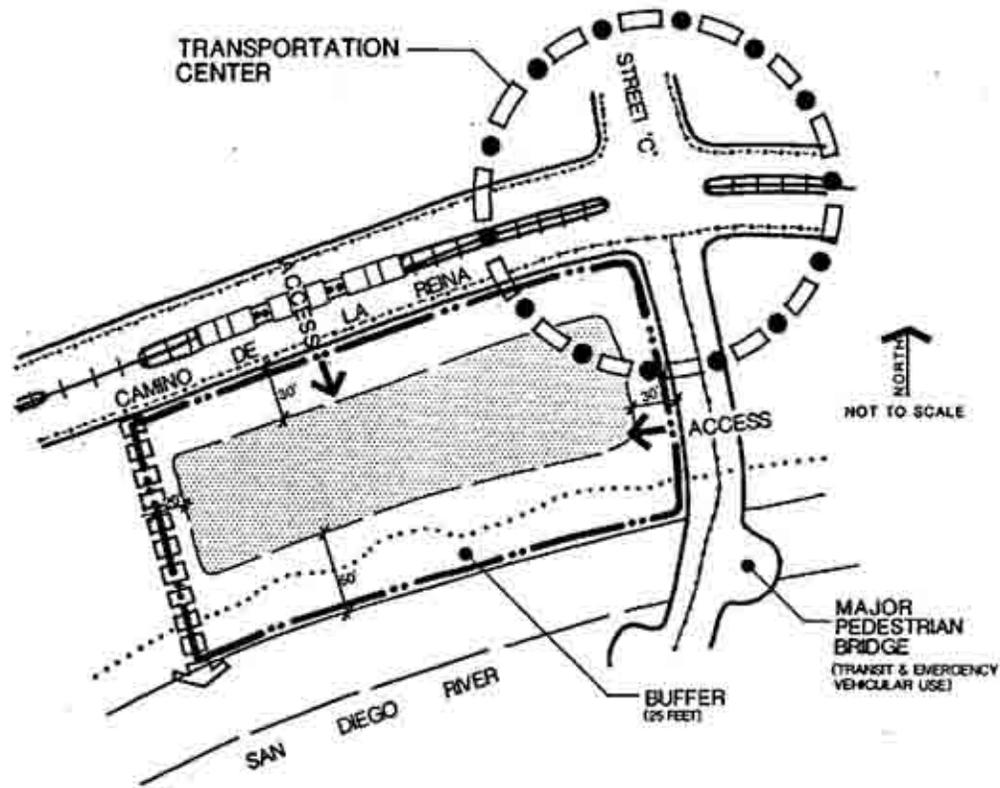
Development on Parcel F must include a river buffer, a portion of the transportation center, bikeways and pedestrian paths.

View corridors are to be provided along both east and west borders of the parcel. The view corridor on the west end of Parcel F will terminate at the river channel. The view corridor along Street C will direct views to the central pedestrian bridge.

Coordination with Parcels E and G is necessary to assure river buffer, pedestrian, and bike system design continuity. Coordination with Parcel G, J, and K is necessary to assure transportation center design continuity.

Parcel F, as a gateway to the island, is a prime area for supporting the requirement that at least 50 percent of the parking needs of the island be met by facilities off the island.

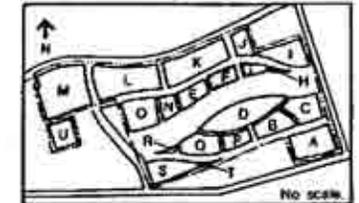
Two through-parcel view corridors are required from Friars Road via Parcels L and K, and then through Parcels O, E, or F to the river.



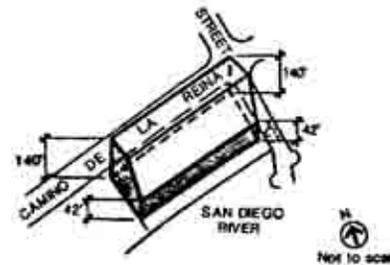
LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- ○ ○ ○ BUS ROUTES
- +—+— LRT ROUTE
- ***** BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP

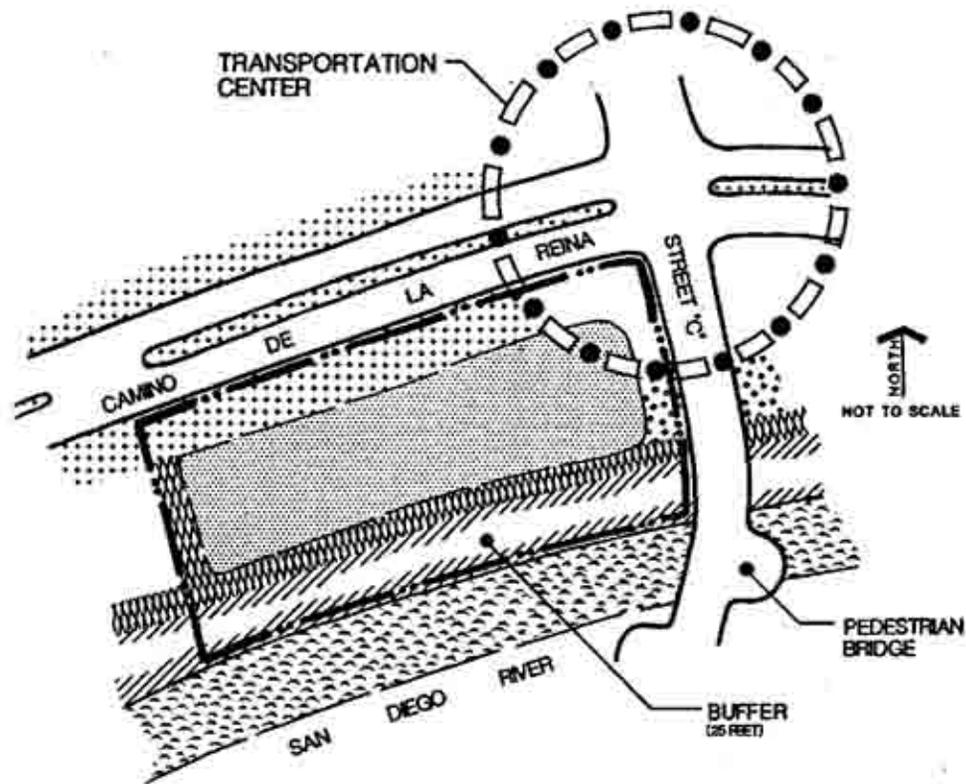


HEIGHT ENVELOPE ISOMETRIC



LEVI - CUSHMAN
 SPECIFIC PLAN

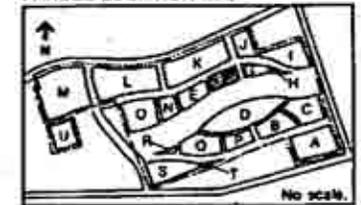
PARCEL F
 SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- [Dotted Box] DEVELOPMENT AREA
- [Horizontal Lines Box] NOISE BUFFER
- [Cross-hatch Box] FRIARS ROAD THEME TREE
- [Stippled Box] EVERGREEN
- [Dotted Box] FLOWERING TREE
- [Vertical Lines Box] ORNAMENTAL ENTRANCE PLANTING
- [Grid Box] TALL PALM TREE
- [Wavy Box] RIPARIAN VEGETATION
- [Diagonal Hatching Box] SCREEN/SETBACK PLANTING
- [Diagonal Hatching Box] BUFFER AREA PLANTING
- [Arrow Box] SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 50 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL F
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel G represents approximately 8 percent of Development Area 2.

PARCEL SIZE: 3 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: OFFICE/RETAIL
 TRANSPORTATION CENTER
 MAXIMUM COVERAGE: 50 PERCENT
 ADT ALLOCATION FOR DA 2: 17,908

SPECIAL ELEMENTS

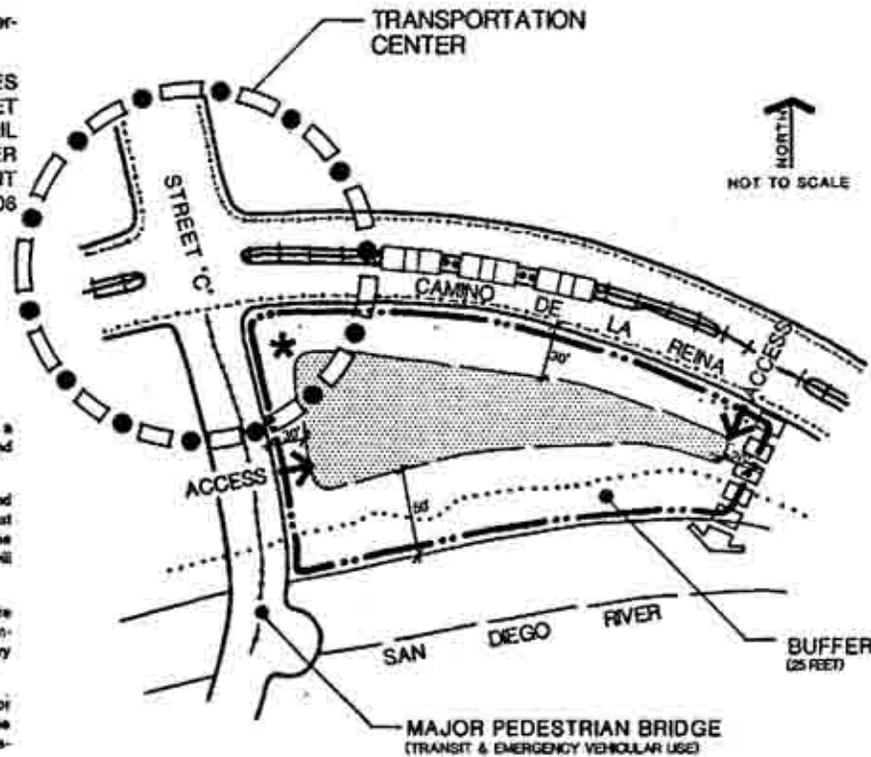
Development on Parcel G must include a river buffer, a portion of the transportation center, bikeways and pedestrian paths.

View corridors are to be provided along both east and west borders of the parcel. The view corridor on the east end of Parcel G will terminate at the river channel. The view corridor along the west end of the parcel Street C will direct views to the central pedestrian bridge.

Coordination with Parcels F and H is necessary to assure river buffer, pedestrian, and bike system design continuity. Coordination with Parcels F, J, and K is necessary to assure transportation center design continuity.

Parcel G, as a gateway to the island, is a prime area for supporting the requirement that at least 50 percent of the parking needs of the island be met by facilities off the island.

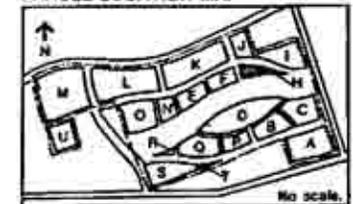
Special use and design opportunities are available because the adjacent Parcel H is dedicated to park and open use. Compatibility and continuity between Parcels G and H is particularly important at the eastern edge of Parcel G where the use of a meandering bikaped path is especially suitable.



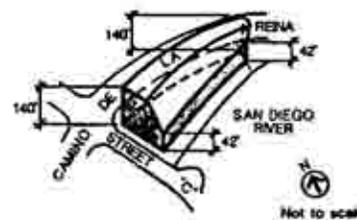
LEGEND

- PARCEL BOUNDARY
- [Hatched Box] DEVELOPMENT AREA
- [Arrow pointing up] VIEW CORRIDOR
- [Arrow pointing up] ACCESS POINTS
- [Star] RECOMMENDED BUS STOPS
- o o o o BUS ROUTES
- +--- LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP

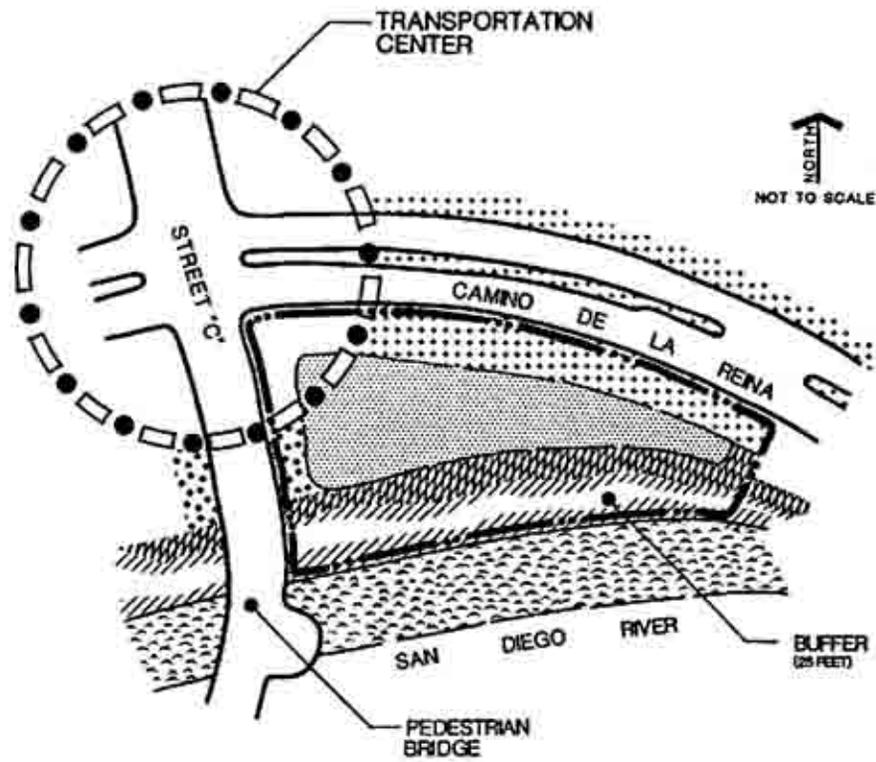


HEIGHT ENVELOPE ISOMETRIC



LEVI - CUSHMAN
 SPECIFIC PLAN

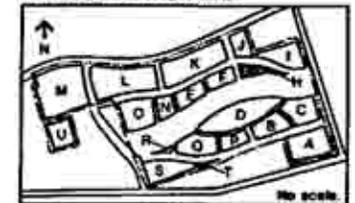
PARCEL G
 SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 50 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL G
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel H is part of Development Area 2.

PARCEL SIZE: 1 ACRE
 USE EMPHASIS: PARK/OPEN AREA
 ADT ALLOCATION FOR DA 2: 17,908

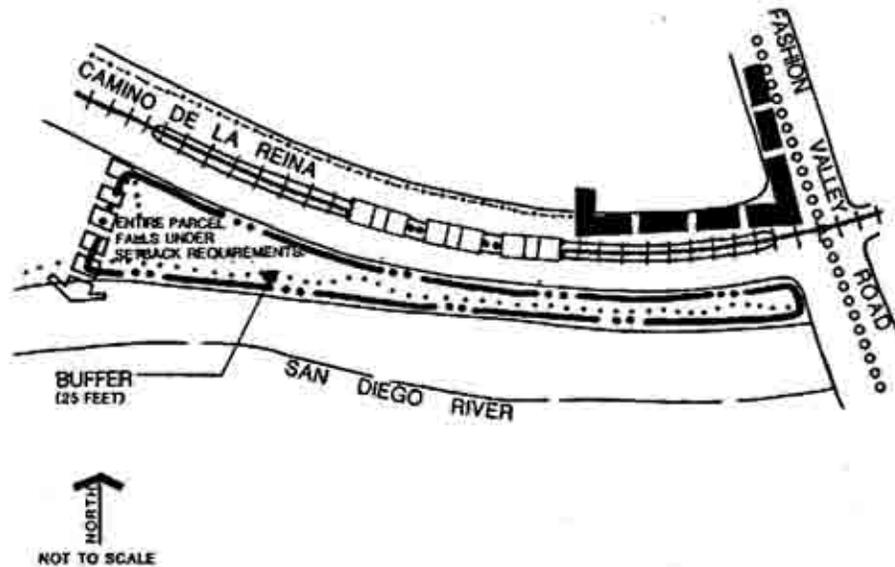
SPECIAL ELEMENTS

Location next to the San Diego River at the eastern entrance of the project provides visual prominence to Parcel H. That prominence is further emphasized by the adjacent theme entry on Parcel I and the role of Parcel H in leading to the transportation center.

Because a portion of Parcel H lies within a flood way transition area, use and development on the parcel must be jointly planned with uses in the floodway transition area of Parcel I and approved by the Floodway Management section of the City's Engineering and Development Division to assure compatibility with floodplain development standards. Height maximums do not apply since the area lies within the floodway.

Development on Parcel H must include a buffer along the river channel and a special treatment area where riparian vegetation will merge with ornamental plantings.

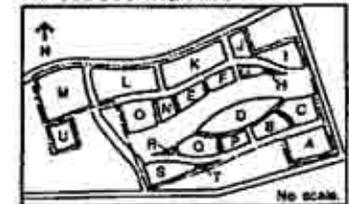
While a view corridor is shown on the western border of the parcel, the entire site actually functions as a view corridor terminating at the river channel.



LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- 🏠 VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- ○ ○ ○ BUS ROUTES
- ⊕ LRT ROUTE
- BICYCLE PATH
- - - - BICYCLE LANE
- BICYCLE ROUTE

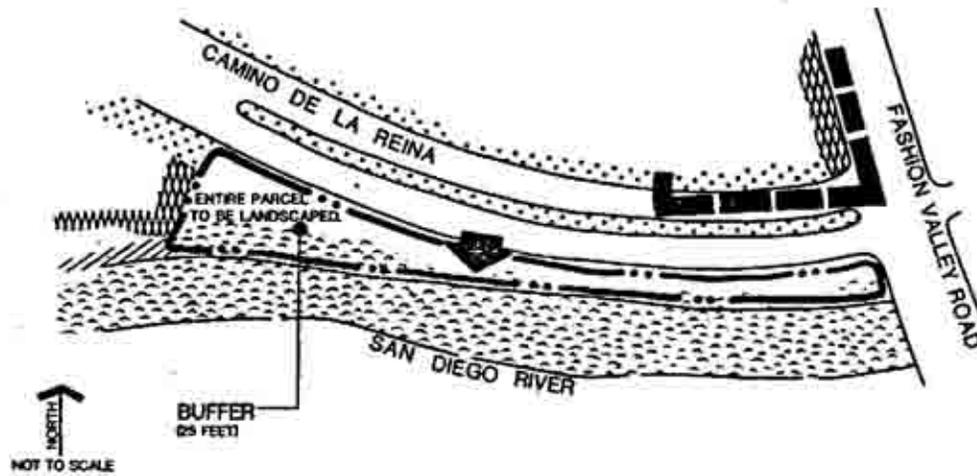
PARCEL LOCATION MAP



**LEVI - CUSHMAN
 SPECIFIC PLAN**

**PARCEL H
 SUMMARY MAP**

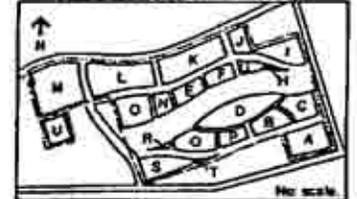
LEVI - CUSHMAN SPECIFIC PLAN



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



PARCEL H LANDSCAPE SCHEMATIC

USE CONSIDERATIONS

Parcel I represents approximately 19 percent of Development Area 2.

PARCEL SIZE: 7 ACRES
 HEIGHT MAXIMUM: 140-250 FEET
 USE EMPHASIS: OFFICE
 MAXIMUM COVERAGE: 40 PERCENT
 ADT ALLOCATION FOR DA 2: 17,906

SPECIAL ELEMENTS

A 250-foot height maximum in combination with a location behind the open use Parcel H will give Parcel I exceptional river view opportunities which should be emphasized in project design.

Development on Parcel I must include a major theme entry, bikeways, and pedestrian paths.

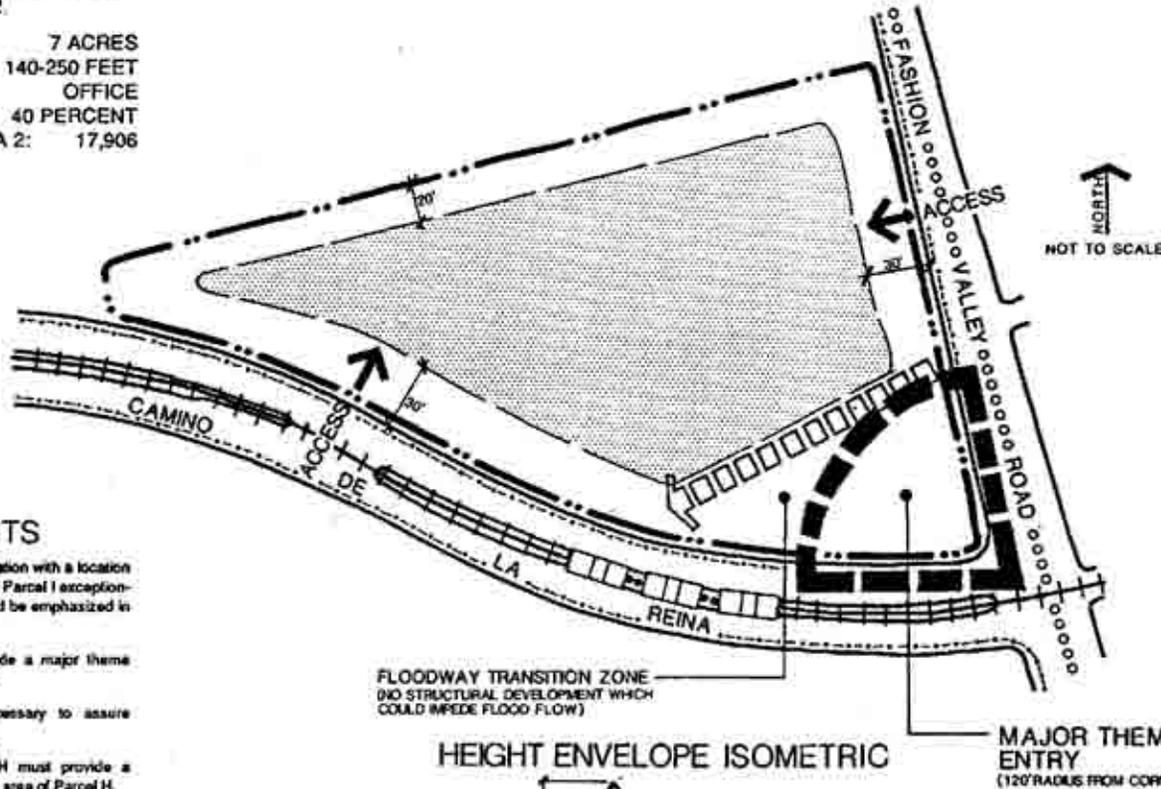
Coordination with Parcel J is necessary to assure pedestrian and bike system continuity.

Design of development on Parcel H must provide a gradual height transition from the open area of Parcel H.

Design of the major theme entry and/or other uses on the southeastern portion of the parcel in the transition area must be approved by the Floodway Management section of the City's Engineering and Development Division to assure compatibility with floodplain development standards.

Attention to project "edges" must assure a suitable transition to adjacent off-site areas.

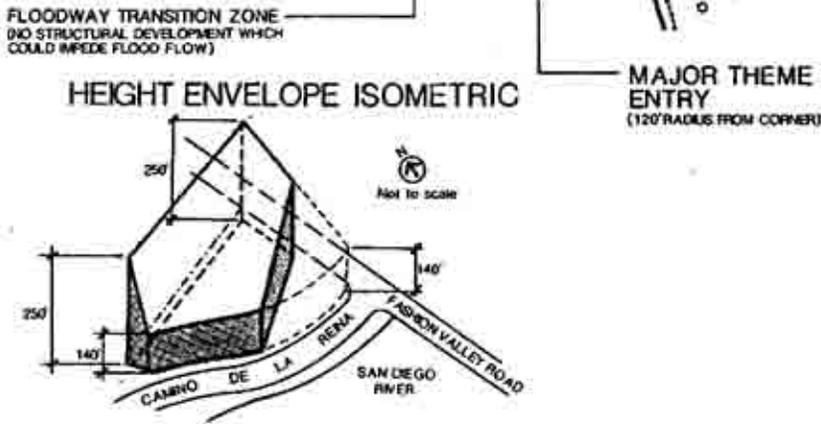
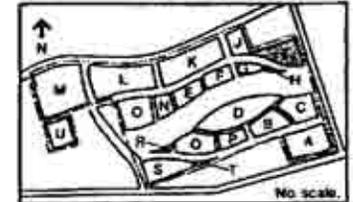
LEVI - CUSHMAN SPECIFIC PLAN



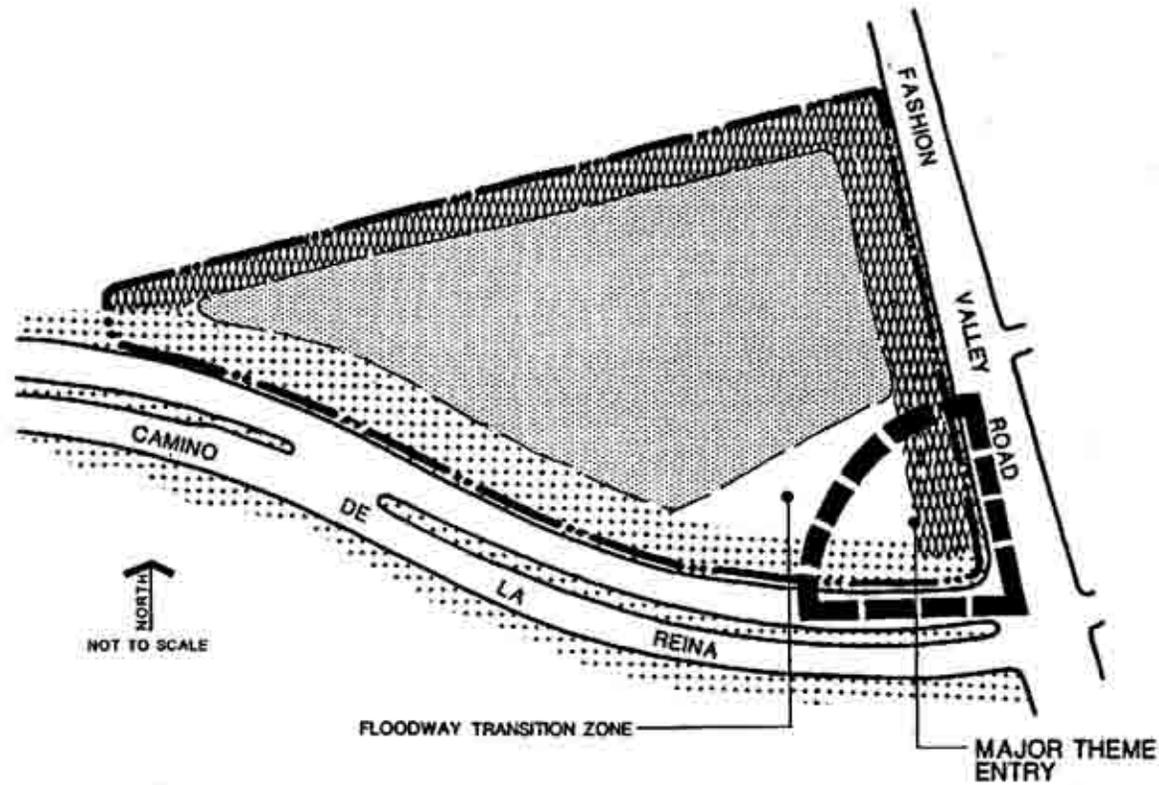
LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ▭ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- ++ LRT ROUTE
- BICYCLE PATH
- - - - BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP



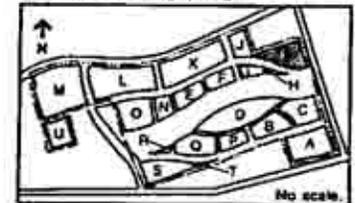
PARCEL I SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 60 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL I
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel J represents approximately 11 percent of Development Area 2.

PARCEL SIZE: 4 ACRES
 HEIGHT MAXIMUM: 140-250 FEET
 USE EMPHASIS: OFFICE/RETAIL
 MAXIMUM COVERAGE: 40 PERCENT
 ADT ALLOCATION FOR DA 2: 17,906

SPECIAL ELEMENTS

A location on Friars Road at Street C makes Parcel J one of the principal entry areas to the entire project. Development on this site influences the perception of the entire project and must therefore clearly express LCSP themes.

Development on Parcel J must include a major theme entry, a portion of the transportation center, blueways and pedestrian paths.

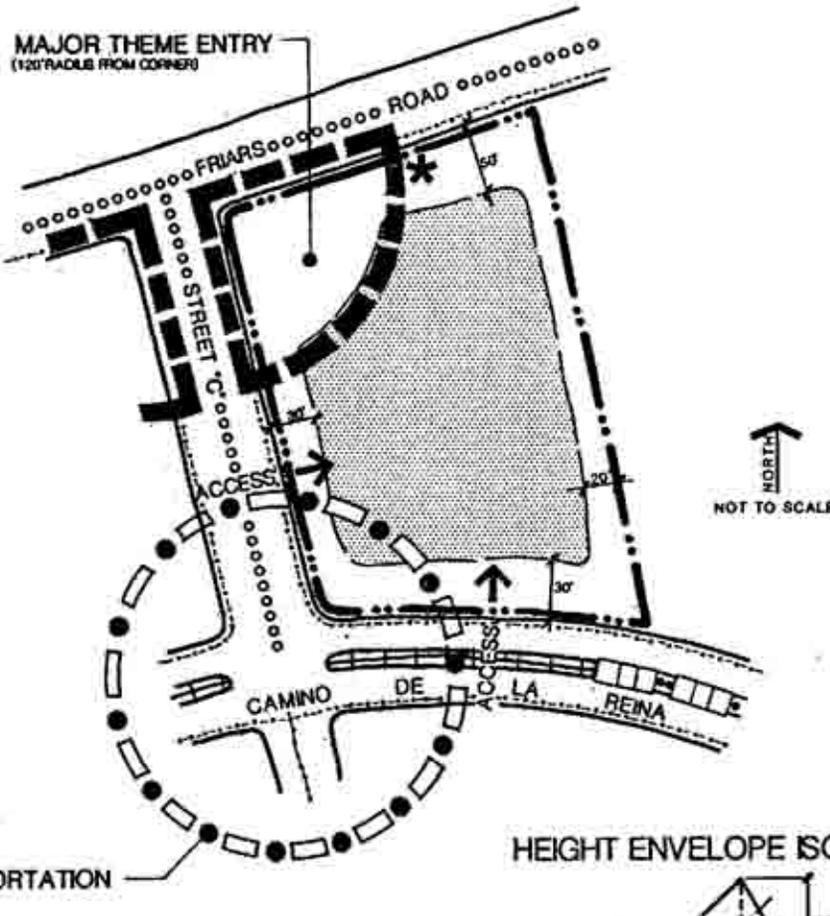
A major view corridor is to be provided at the west end of the parcel along Street C leading views through the transportation center to the central pedestrian bridge.

Design of the theme entry must be coordinated with the theme entry on Parcel K.

Coordination with Parcels F, G, and K is necessary to assure transportation center design continuity.

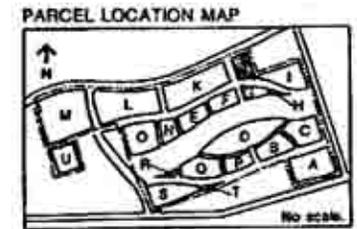
Parcel J is a prime candidate for a consolidated parking area to support a park-and-ride facility at the transportation center.

Attention must be given to project "edges" to assure that a suitable transition is made to adjacent off-site areas. Development along Friars Road shall not create a wall effect that prohibits views into the project.

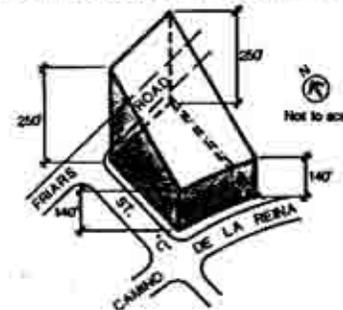


LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- ○ ○ ○ BUS ROUTES
- +— LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

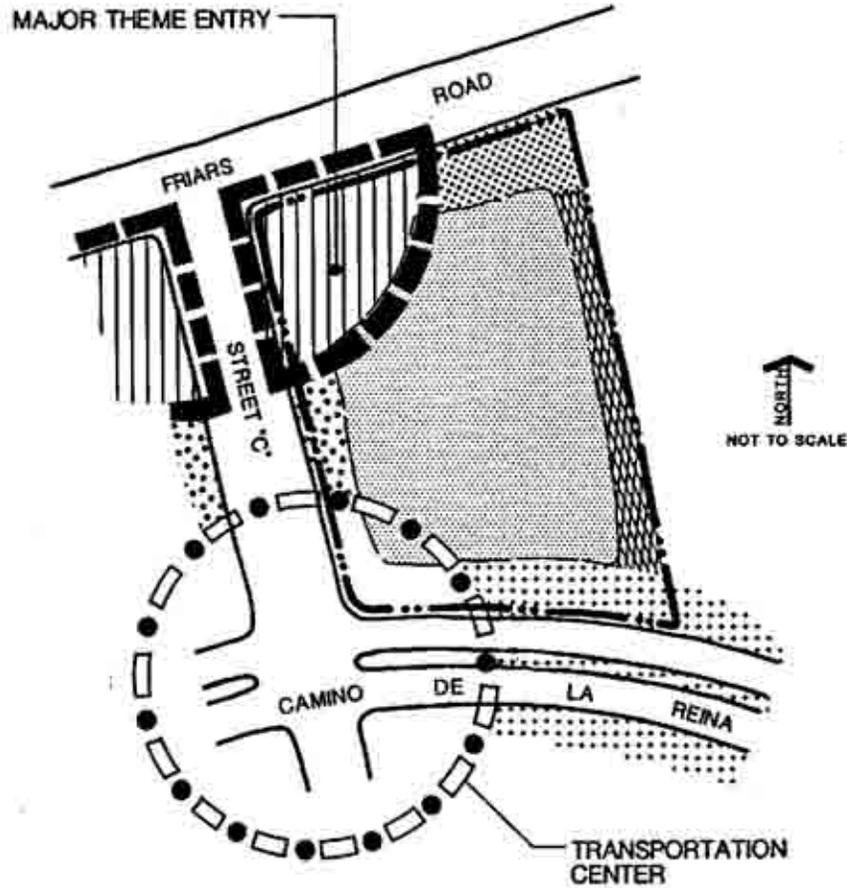


HEIGHT ENVELOPE ISOMETRIC



LEVI - CUSHMAN
 SPECIFIC PLAN

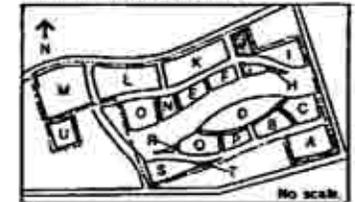
PARCEL J
 SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 60 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

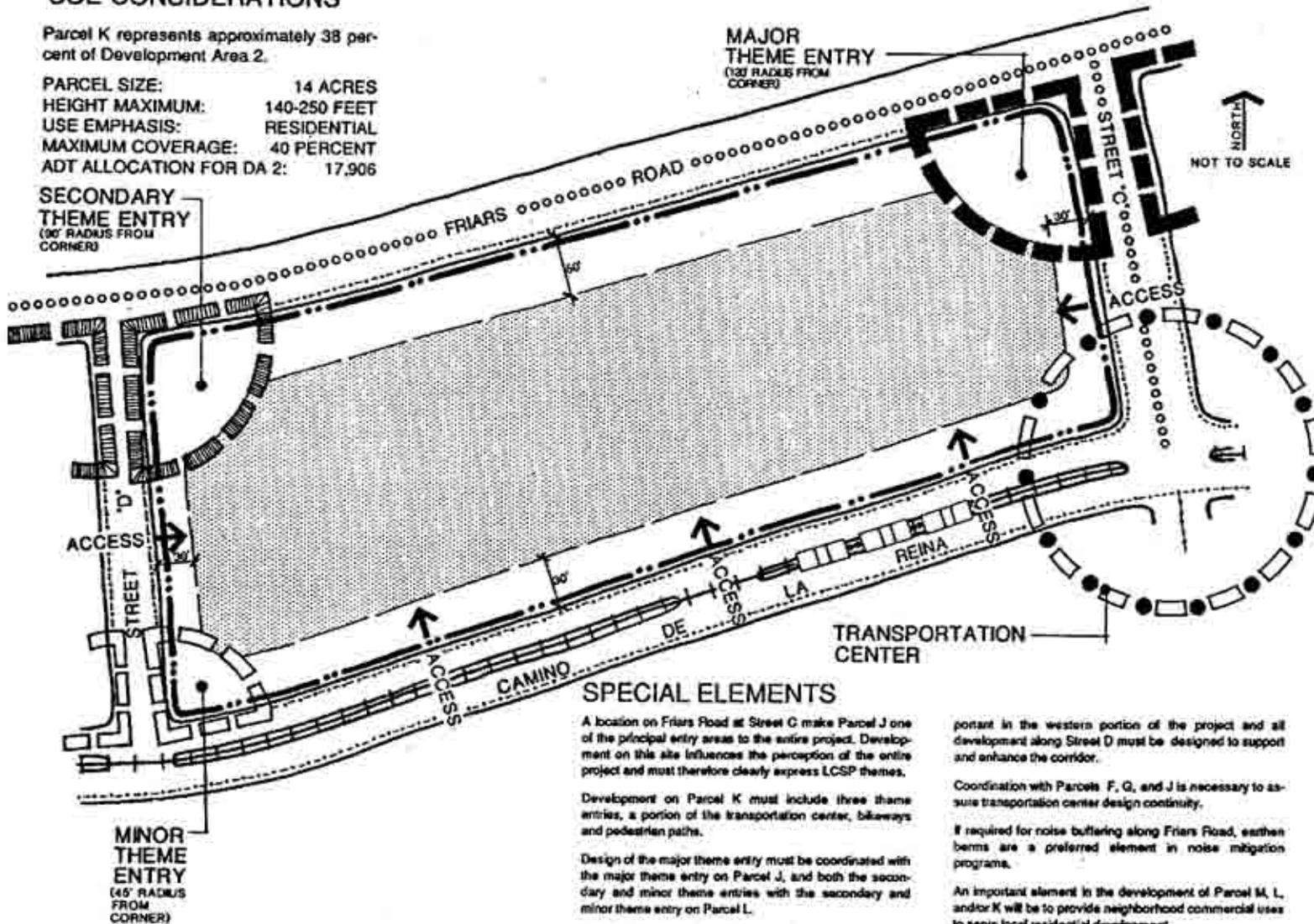
**PARCEL J
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel K represents approximately 38 percent of Development Area 2.

PARCEL SIZE: 14 ACRES
 HEIGHT MAXIMUM: 140-250 FEET
 USE EMPHASIS: RESIDENTIAL
 MAXIMUM COVERAGE: 40 PERCENT
 ADT ALLOCATION FOR DA 2: 17,906

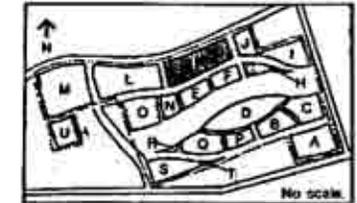
SECONDARY
 THEME ENTRY
 (90° RADIUS FROM
 CORNER)



LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- +— LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP



SPECIAL ELEMENTS

A location on Friars Road at Street G make Parcel J one of the principal entry areas to the entire project. Development on this site influences the perception of the entire project and must therefore clearly express LCSP themes.

Development on Parcel K must include three theme entries, a portion of the transportation center, bikeways and pedestrian paths.

Design of the major theme entry must be coordinated with the major theme entry on Parcel J, and both the secondary and minor theme entries with the secondary and minor theme entry on Parcel L.

A major view corridor is to be provided at the east end of the parcel along Street C which directs views through the transportation center on to the central pedestrian bridge. Another major view corridor is to be provided at the west end of the parcel along Street D which directs views into the park setting of Parcel N and, ultimately, to the river channel. This view corridor along Street D is the most im-

portant in the western portion of the project and all development along Street D must be designed to support and enhance the corridor.

Coordination with Parcels F, G, and J is necessary to assure transportation center design continuity.

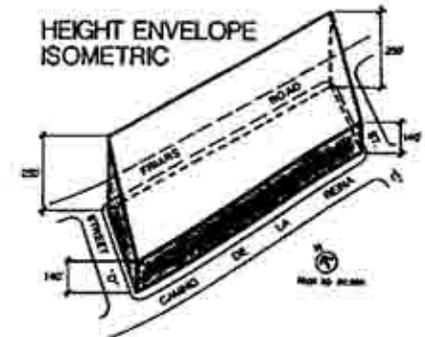
If required for noise buffering along Friars Road, earthen berms are a preferred element in noise mitigation programs.

An important element in the development of Parcel M, L, and/or K will be to provide neighborhood commercial uses to serve local residential development.

Development along Friars Road shall not create a wall effect that prohibits views into the project.

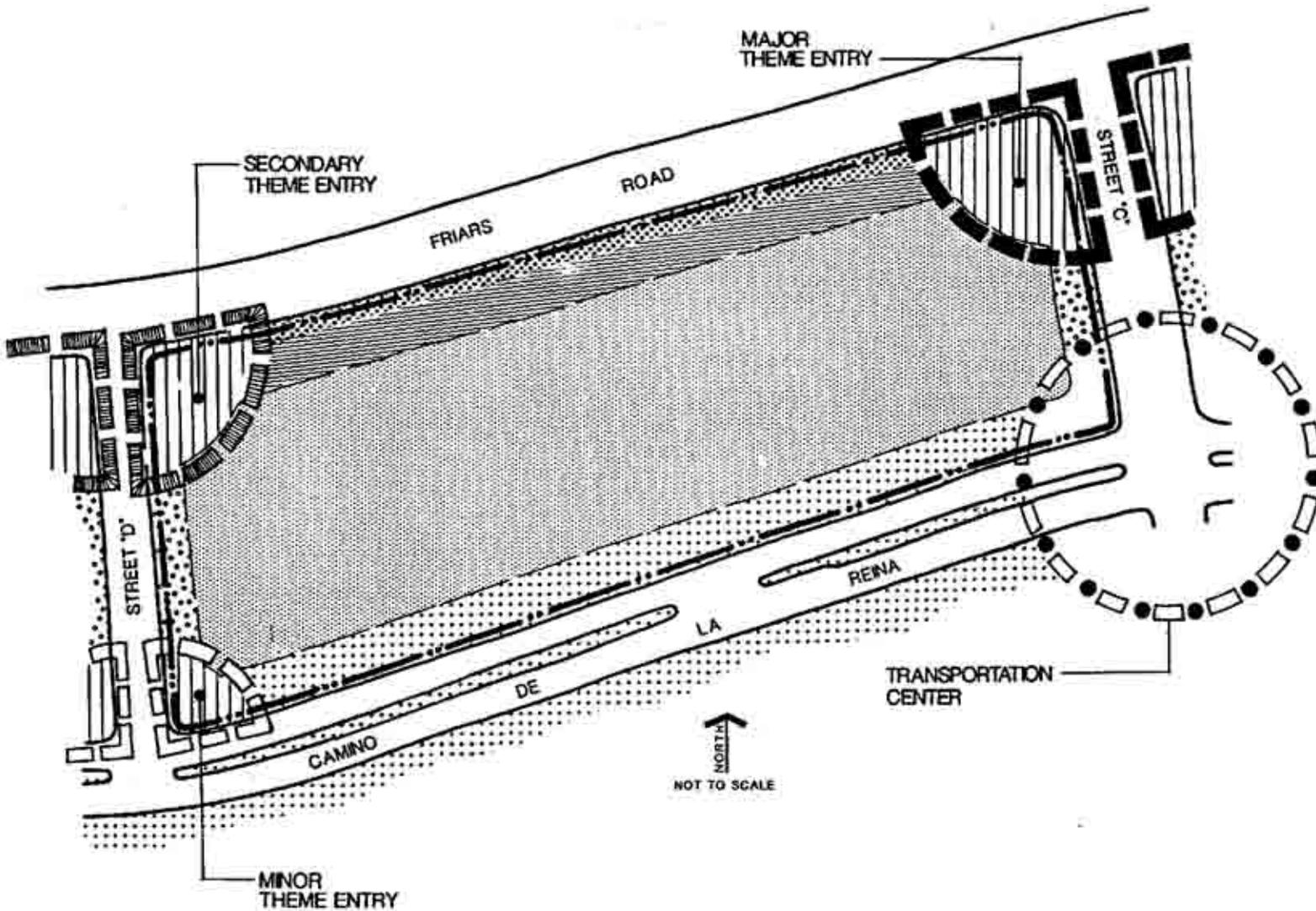
Two through-parcel view corridors are required from Friars Road via Parcels L and K, and then through Parcels O, E, or F to the river.

HEIGHT ENVELOPE ISOMETRIC



LEVI - CUSHMAN SPECIFIC PLAN

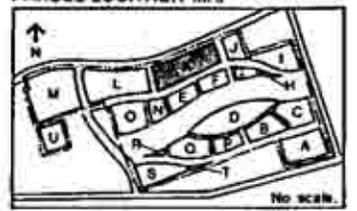
PARCEL K SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

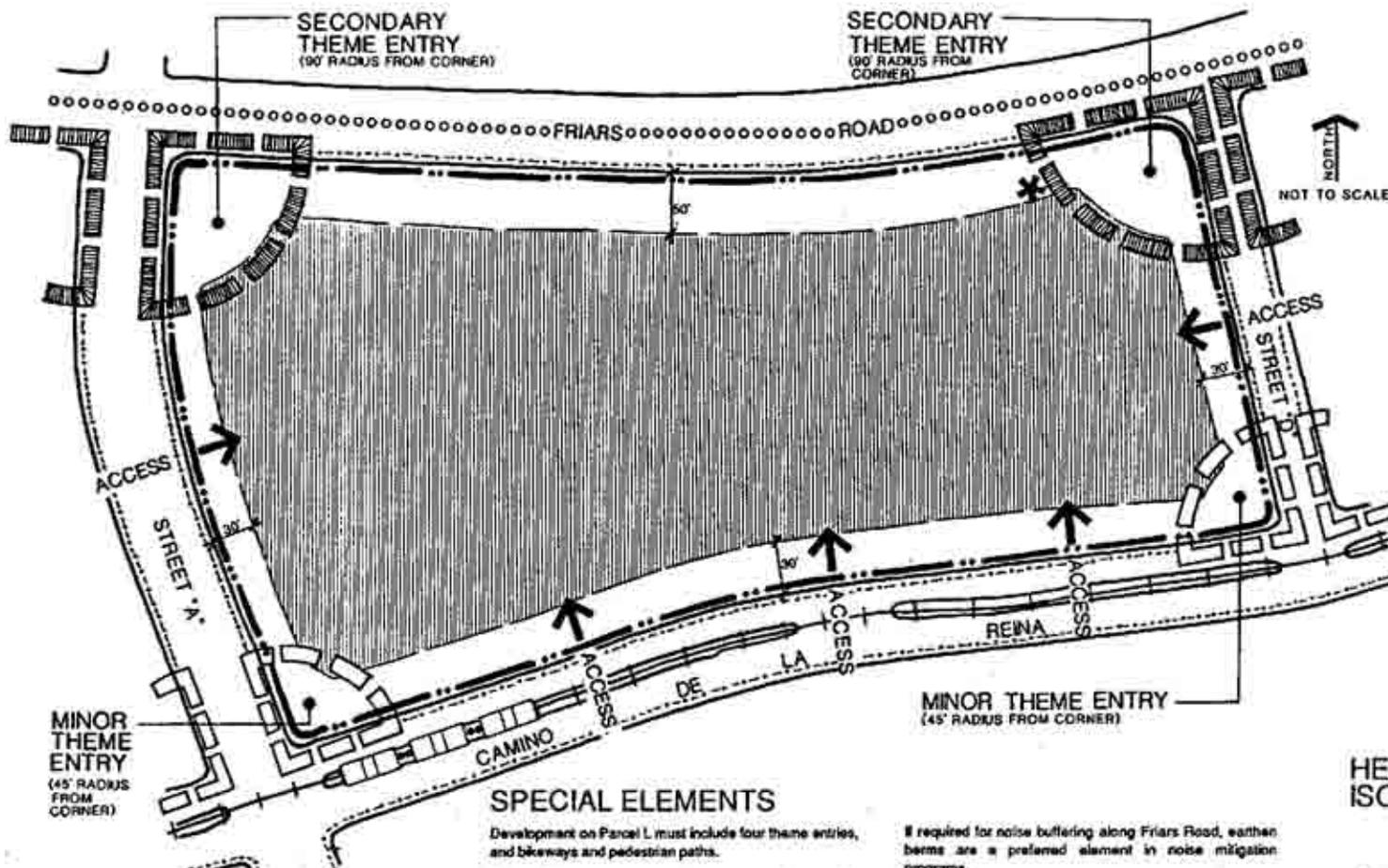
PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 60 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

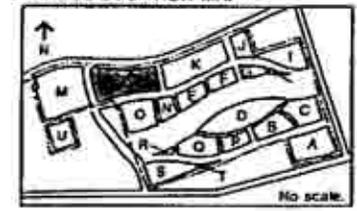
**PARCEL K
LANDSCAPE
SCHEMATIC**



LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- + LRT ROUTE
- BICYCLE PATH
- .-.-.- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP



USE CONSIDERATIONS

Parcel L represents approximately 21 percent of Development Area 3.

PARCEL SIZE: 15 ACRES
 HEIGHT MAXIMUM: 250 FEET
 USE EMPHASIS: RESIDENTIAL
 MAXIMUM COVERAGE: 40 PERCENT
 ADT ALLOCATION FOR DA 3: 31,669

**LEVI - CUSHMAN
 SPECIFIC PLAN**

SPECIAL ELEMENTS

Development on Parcel L must include four theme entries, and bikeways and pedestrian paths.

Design of the major and secondary theme entries must be coordinated with the secondary theme entries on Parcels M and K, and the minor theme entries with the minor theme entries on Parcels M and K.

View corridors are to be provided adjacent to Streets A and D. A major view corridor runs along the east end of the parcel along Street D which directs views into the park setting of Parcel N and, ultimately, to the river channel. This view corridor along Street D is the most important in the western portion of the project and all development along Street D must be designed to support and enhance the corridor. The other view corridor is along Street A. Its view terminus will be at the river in an area outside the project boundaries.

If required for noise buffering along Friars Road, earthen berms are a preferred element in noise mitigation programs.

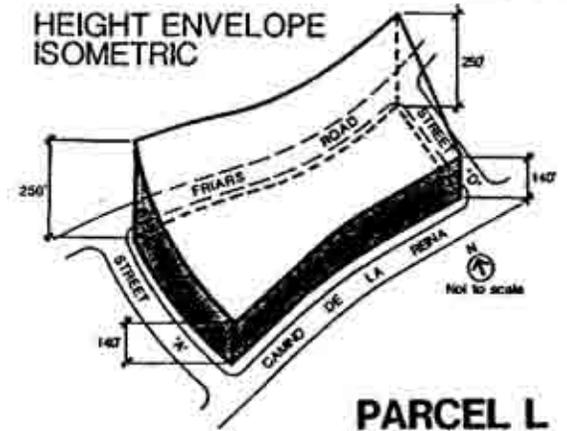
An important element in the development of Parcel M, L, and/or K will be to provide neighborhood commercial uses to serve local residential development.

Attention must be given to the southwest project "edge" to assure that a suitable transition is made to adjacent off-site areas.

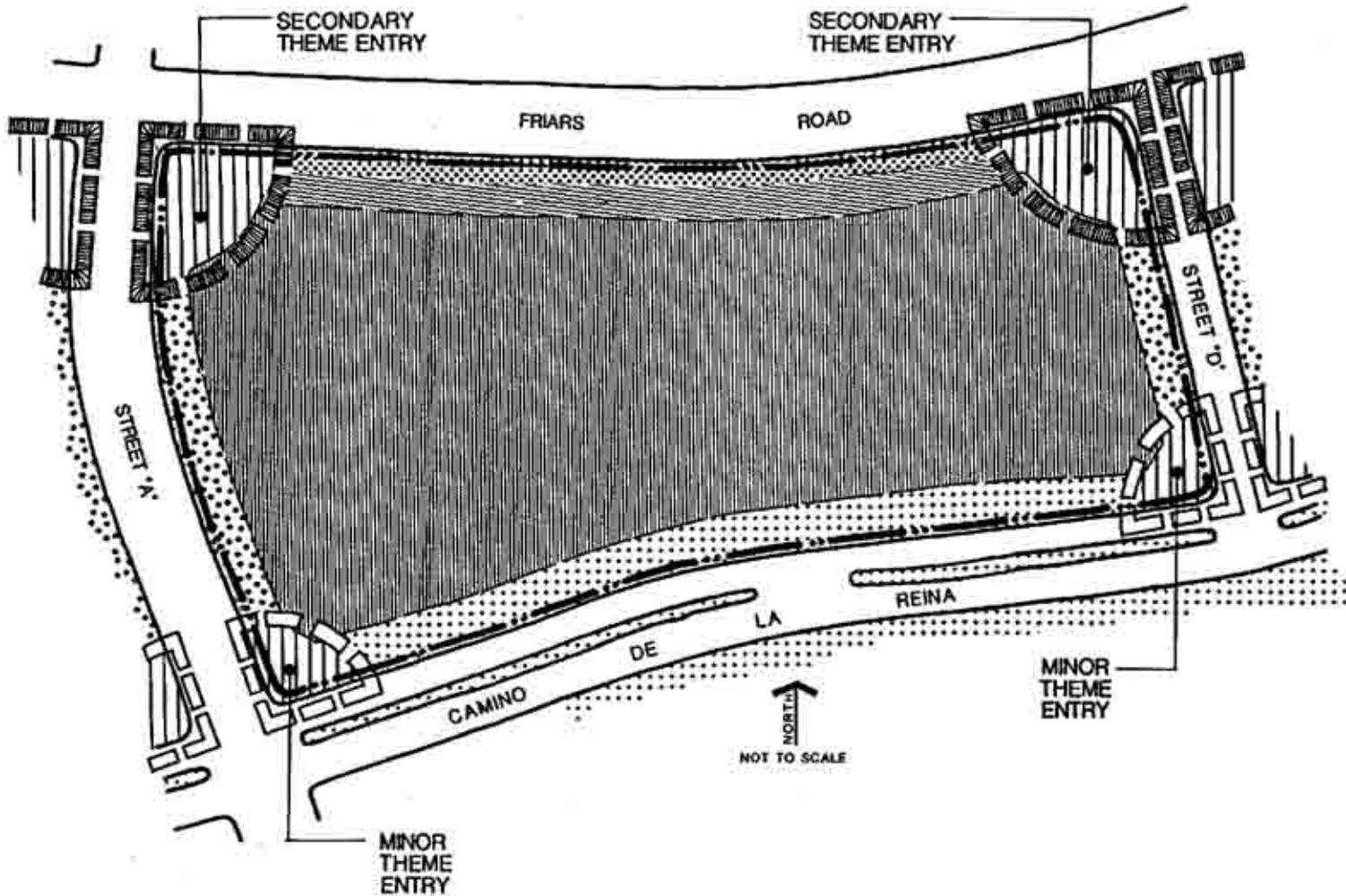
Development along Friars Road shall not create a wall effect that prohibits views into the project.

Two through-parcel view corridors are required from Friars Road via Parcels L and K, and then through Parcels O, E, or F to the river.

HEIGHT ENVELOPE ISOMETRIC



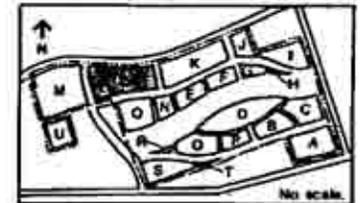
**PARCEL L
 SUMMARY MAP**



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 60 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL L
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel M represents approximately 23 percent of Development Area 3.

PARCEL SIZE: 17 ACRES
 HEIGHT MAXIMUM: 140-250 FEET
 USE EMPHASIS: RESIDENTIAL
 MAXIMUM COVERAGE: 40 PERCENT
 ADT ALLOCATION FOR DA 3: 31,669

SPECIAL ELEMENTS

Development on Parcel M must be compatible with existing residential development to the west.

Development on Parcel M must include theme entries, bikeways, and pedestrian paths. A bus stop is proposed on Friars Road near the intersection with Street A. Coordination with Parcels L and U is necessary to assure pedestrian and bike system continuity.

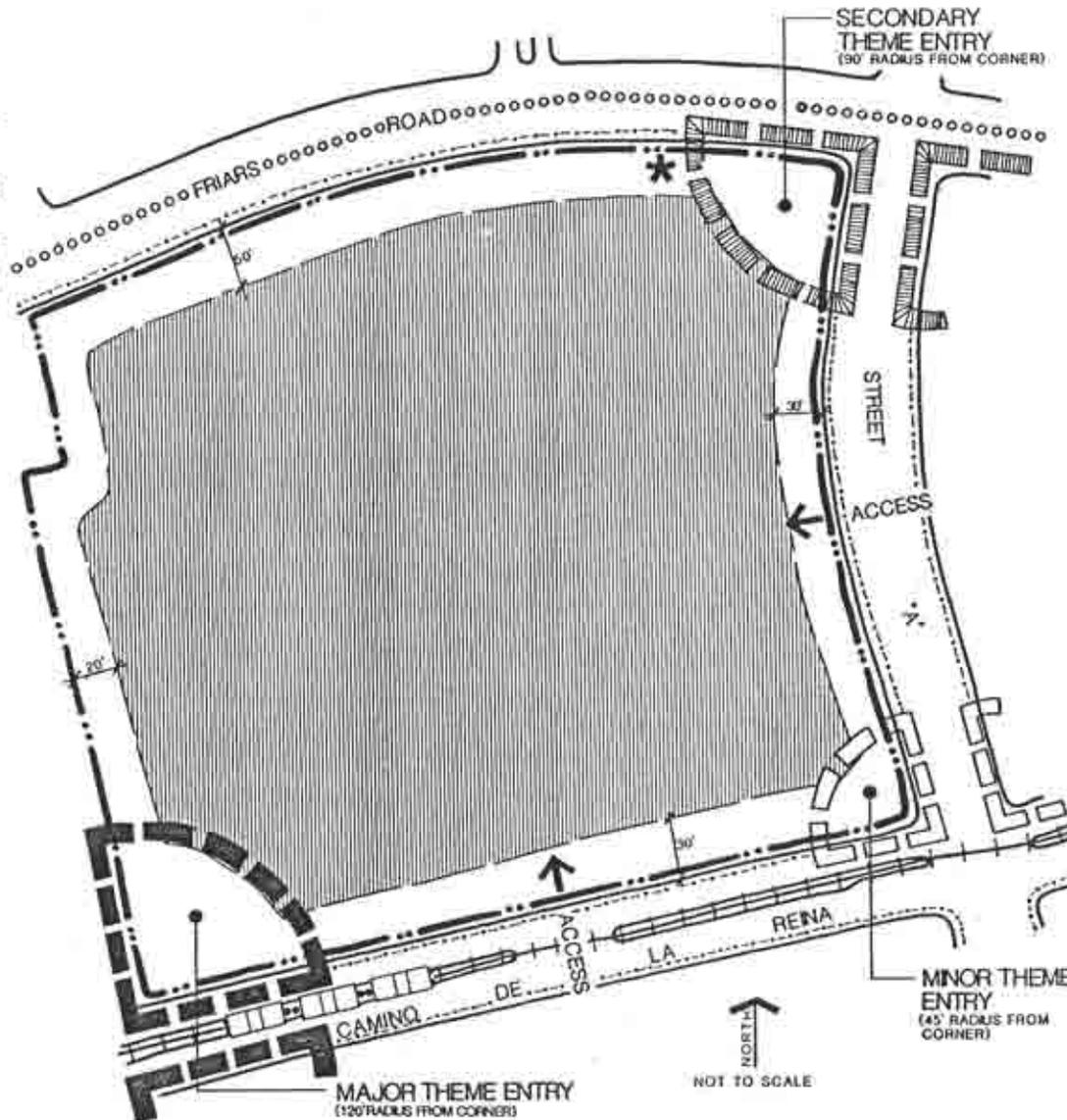
Design of the major theme entry must be coordinated with the major theme entry on Parcel U, the secondary theme entry with the secondary theme entry on Parcel L, and the minor theme entry with the minor theme entry on Parcel L.

If required for noise buffering along Friars Road, earthen berms are a preferred element in noise mitigation programs.

A view corridor along Street A terminates at the river in an area outside the project boundaries.

An important element in the development of Parcel M, L, and/or K will be to provide neighborhood commercial uses to serve local residential development.

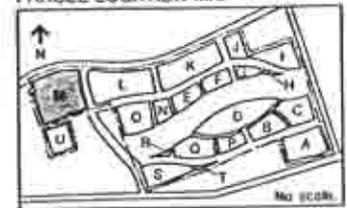
Attention must be given to the project "edges" to assure that a suitable transition is made to adjacent off-site areas. Development along Friars Road shall not create a wall effect that prohibits views into the project.



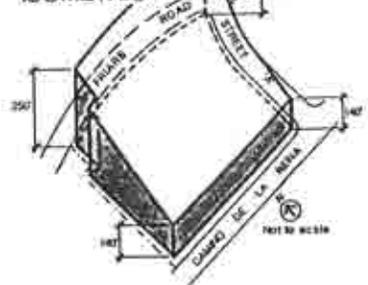
LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- ○ ○ ○ BUS ROUTES
- +—+— LRT ROUTE
- ⋯ BICYCLE PATH
- - - BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP

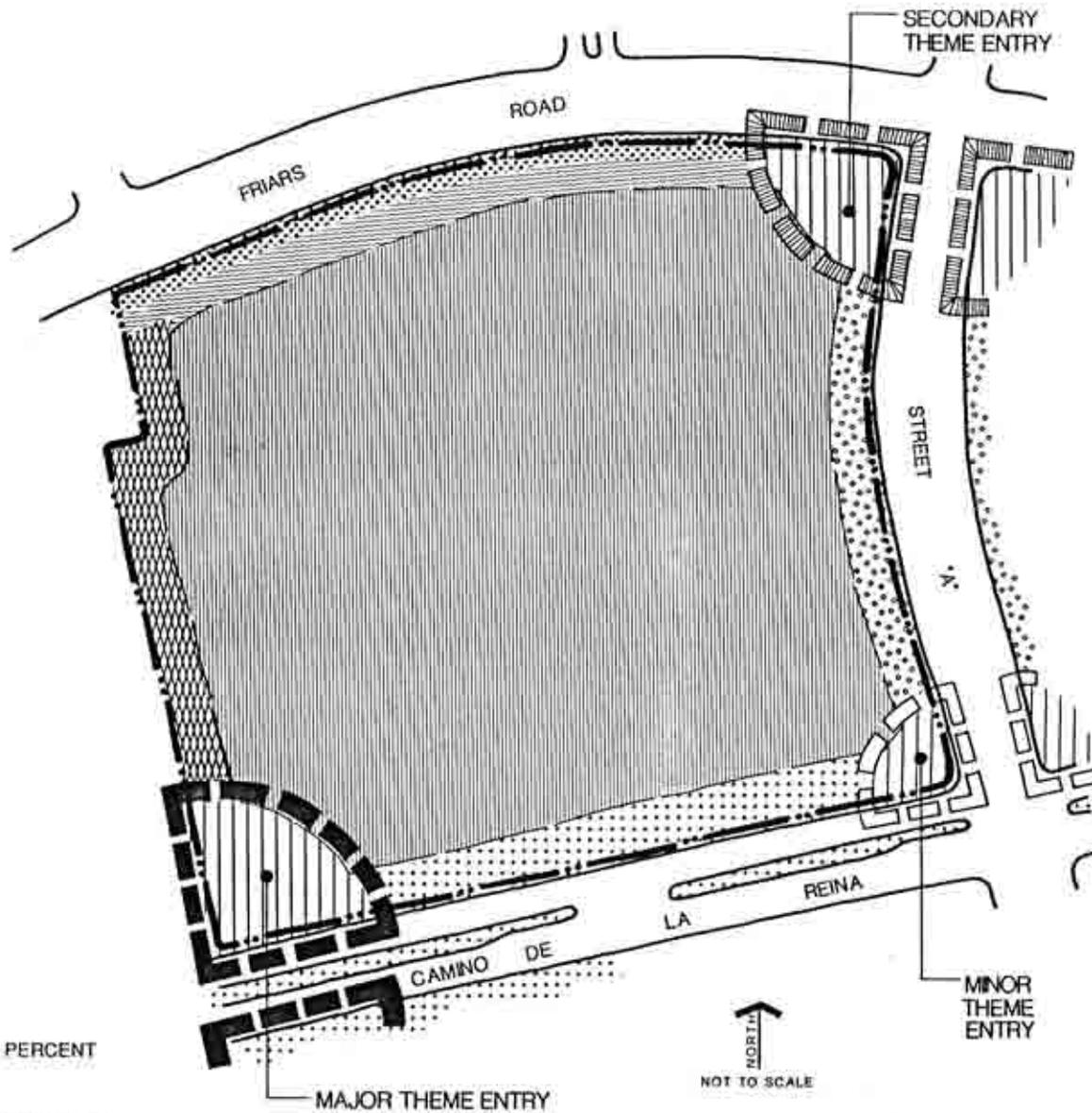


HEIGHT ENVELOPE ISOMETRIC



LEVI - CUSHMAN
 SPECIFIC PLAN

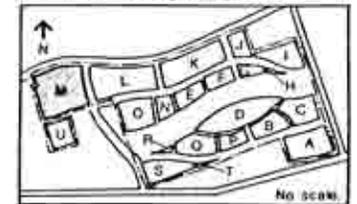
PARCEL M
 SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 60 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**



**PARCEL M
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel N is part of Development Area 3.

PARCEL: 3 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: PARK/OPEN AREA
 ADT ALLOCATION FOR DA 3: 31,669

SPECIAL ELEMENTS

Parcel N is the largest area devoted exclusively to park/open use within the entire project. Views from Friars Road along Street D will lead into Parcel N and the vegetative character established here will influence vegetative choices and development opportunities on bordering Parcels K, L, O, and E.

Development on Parcel N must include the river buffer, bikeways, and pedestrian paths.

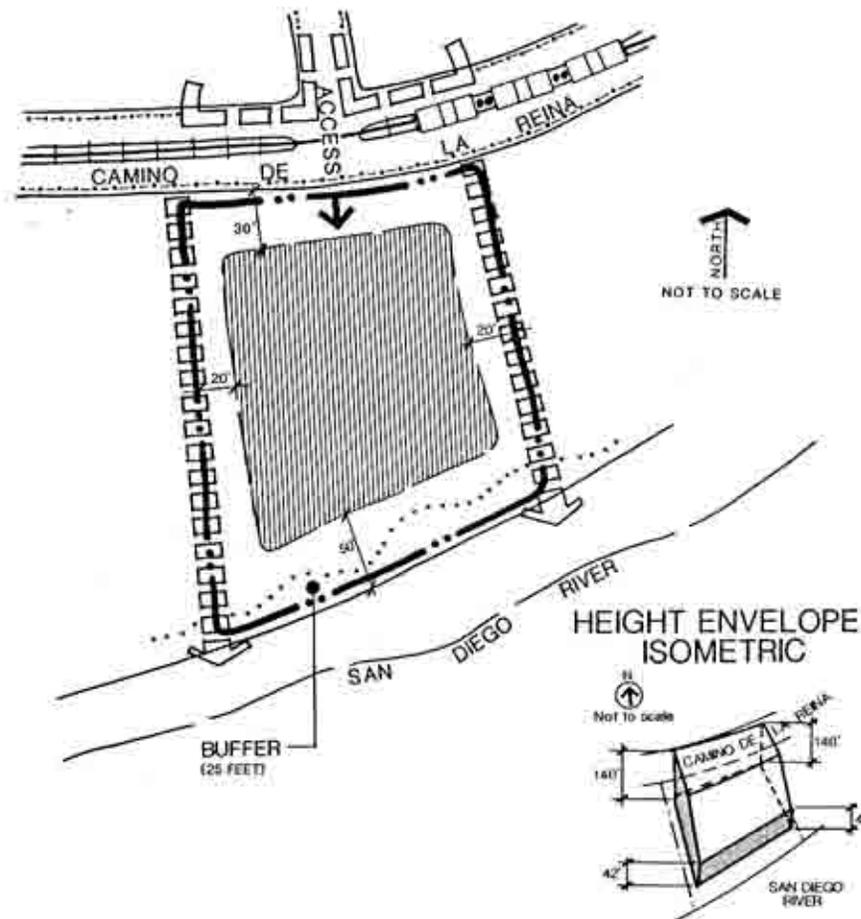
Coordination with Parcels K, L, O, and E is necessary to assure river buffer, pedestrian, and bike system design continuity.

View corridors are to be provided along both east and west borders of the parcel, both of which will terminate in the river channel.

As a designated special treatment area where riparian vegetation will merge with ornamental plantings, Parcel N is especially suitable for meandering bike and pedestrian paths.

Both active and passive recreational opportunities may be provided within the parcel, with views into the river channel emphasized.

Development must meet or exceed Park Department standards.



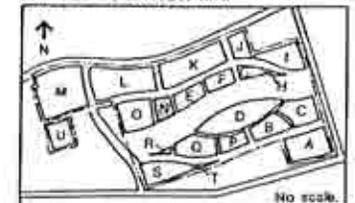
HEIGHT ENVELOPE ISOMETRIC

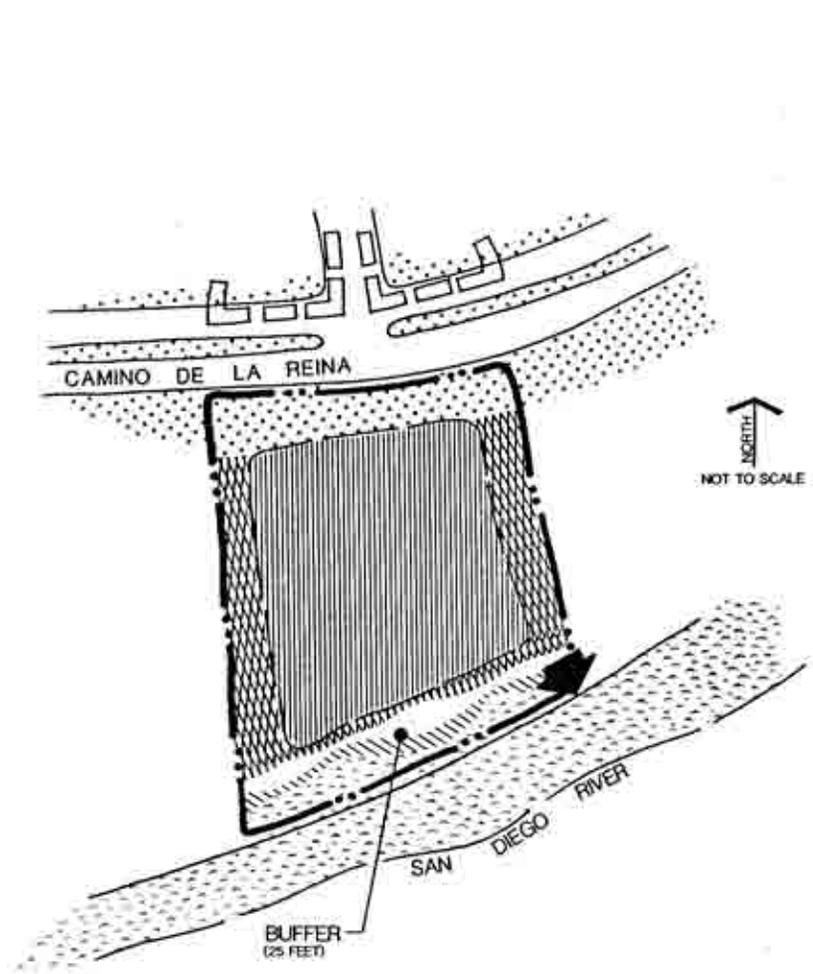


LEGEND

- PARCEL BOUNDARY
- [Hatched Box] PARK/OPEN AREA
- [Arrow pointing up] VIEW CORRIDOR
- [Arrow pointing up] ACCESS POINTS
- [Star] RECOMMENDED BUS STOPS
- o o o o BUS ROUTES
- +--- LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP

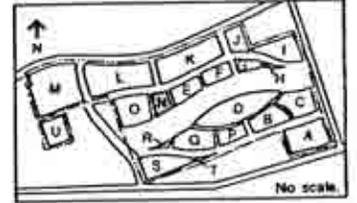




LEGEND

- PARCEL BOUNDARY
- PARK/OPEN AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 50 PERCENT

**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL N
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel O represents approximately 13 percent of Development Area 3.

PARCEL SIZE: 9 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: RESIDENTIAL
 MAXIMUM COVERAGE: 50 PERCENT
 ADT ALLOCATION FOR DA 3: 31,669

SPECIAL ELEMENTS

Development on Parcel O must include a river buffer, bikeways and pedestrian paths.

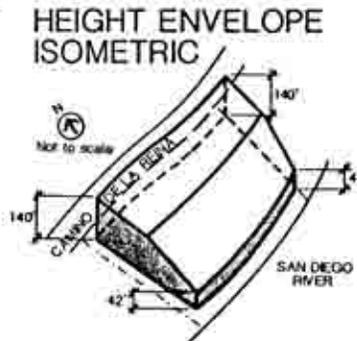
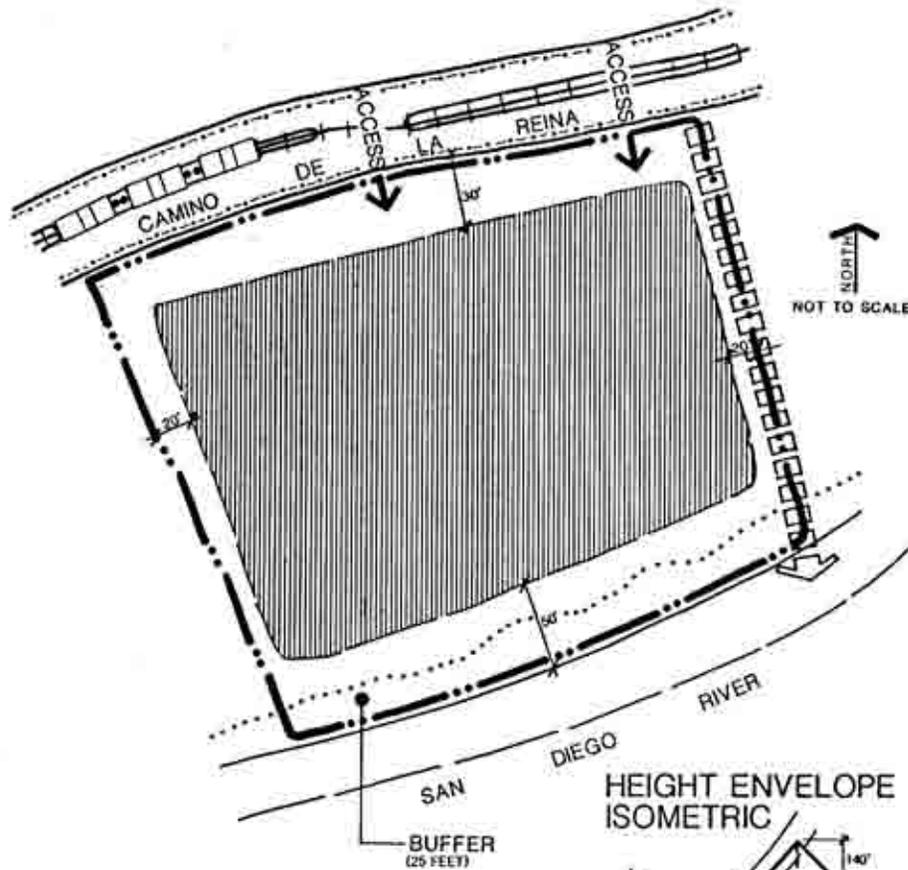
A view corridor is to be provided along the eastern border of the parcel which will terminate at the river channel.

Special use and design opportunities are available since the adjacent Parcel N is dedicated to park and open use. Compatibility and continuity in planting and design is necessary between Parcel O and N.

Coordination with Parcel L and N is necessary to assure river buffer, pedestrian, and bike system design continuity.

Attention must be given to the project "edges" to assure that a suitable transition is made to adjacent off-site areas.

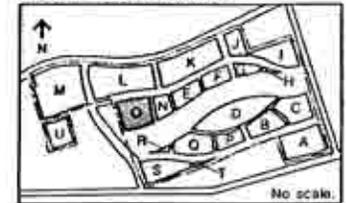
Two through-parcel view corridors are required from Friars Road via Parcels L and K, and then through Parcels O, E, or F to the river.



LEGEND

- PARCEL BOUNDARY
- [Hatched Box] DEVELOPMENT AREA
- [View Corridor Icon] VIEW CORRIDOR
- [Up Arrow Icon] ACCESS POINTS
- [Star Icon] RECOMMENDED BUS STOPS
- [Circle Icon] BUS ROUTES
- [Cross-Tick Icon] LRT ROUTE
- [Dotted Line Icon] BICYCLE PATH
- [Dashed Line Icon] BICYCLE LANE
- [Solid Line Icon] BICYCLE ROUTE

PARCEL LOCATION MAP



USE CONSIDERATIONS

Parcel P represents approximately 5 percent of Development Area 3.

PARCEL SIZE: 4 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: OFFICE/RETAIL
 MAXIMUM COVERAGE: 50 PERCENT
 ADT ALLOCATION FOR DA 3: 31,669

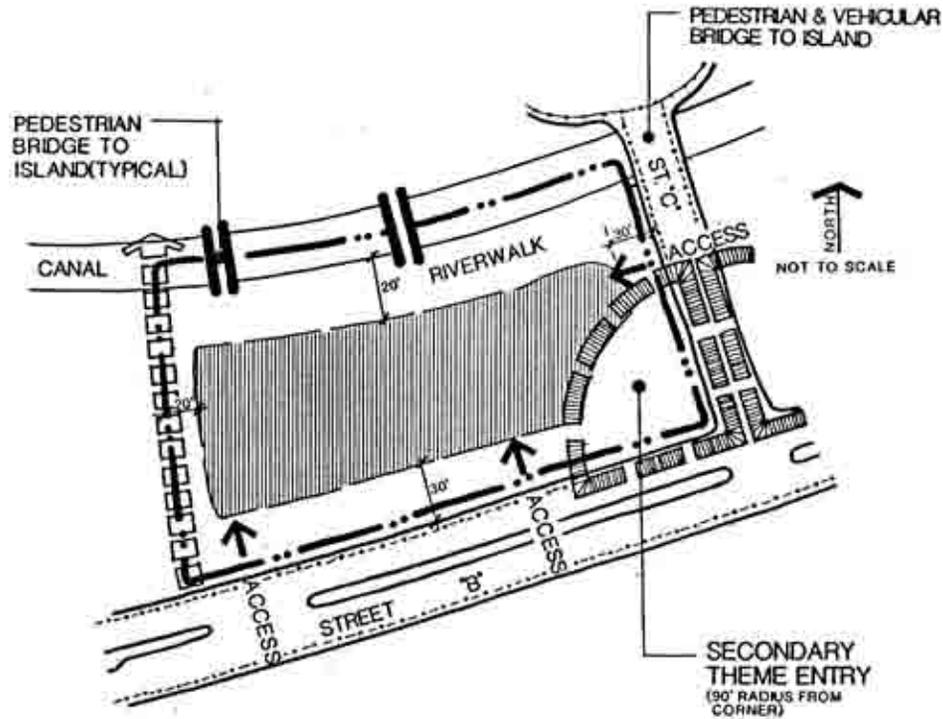
SPECIAL ELEMENTS

Development on Parcel P must include a riverwalk along the canal, pedestrian bridge(s) to the island, pedestrian and vehicular access via Street C to the island, and parking garages to accommodate vehicles destined for the island.

Coordination with Parcels B, D, and Q is necessary to assure bridge, riverwalk, pedestrian, and bike system design continuity.

Design of the secondary theme entry must be coordinated with the theme entry design on Parcel B.

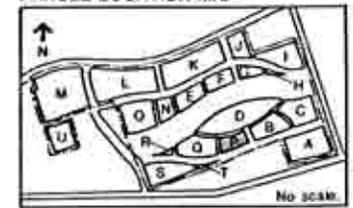
Views corridors to the island must be established along both Street C and the western parcel boundary. Views are to have specific terminations such as the theme tower, a park, or outdoor sculpture.



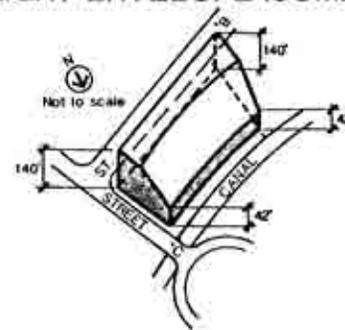
LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- ○ ○ ○ BUS ROUTES
- +— LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP

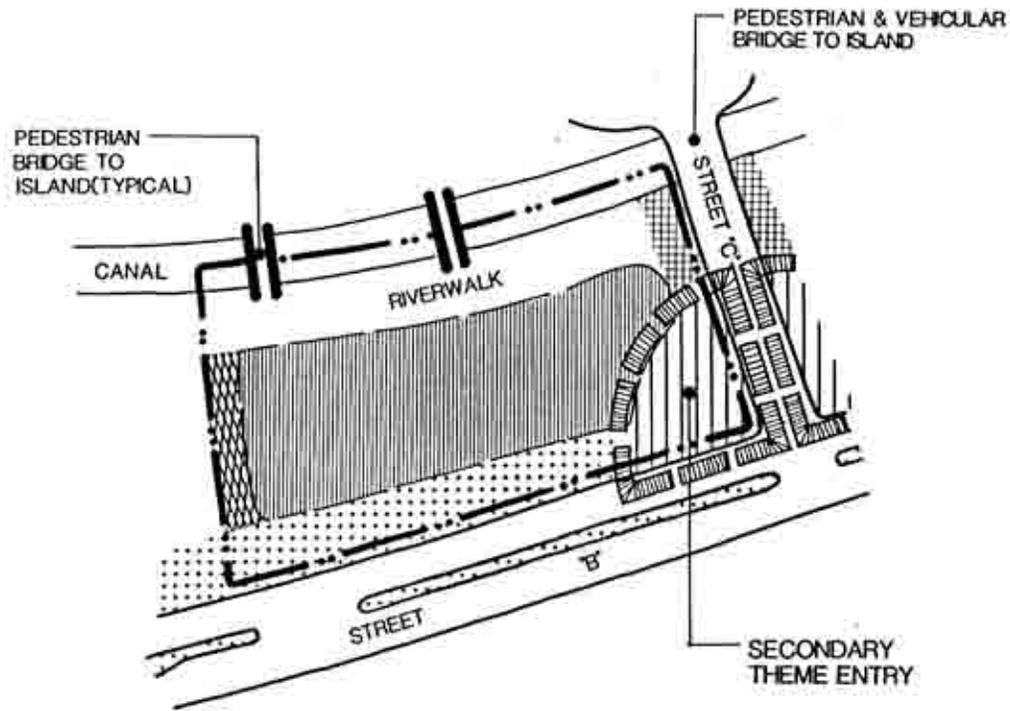


HEIGHT ENVELOPE ISOMETRIC



LEVI - CUSHMAN
 SPECIFIC PLAN

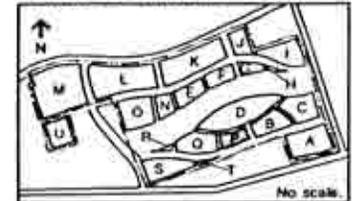
PARCEL P
 SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- [Vertical lines] DEVELOPMENT AREA
- [Horizontal lines] NOISE BUFFER
- [Cross-hatch] FRIARS ROAD THEME TREE
- [Dotted] EVERGREEN
- [Small circles] FLOWERING TREE
- [Vertical lines with dots] ORNAMENTAL ENTRANCE PLANTING
- [Grid] TALL PALM TREE
- [Wavy lines] RIPARIAN VEGETATION
- [Diagonal lines] SCREEN/SETBACK PLANTING
- [Diagonal lines with dots] BUFFER AREA PLANTING
- ▲ SCREEN BREAK FOR VIEWS

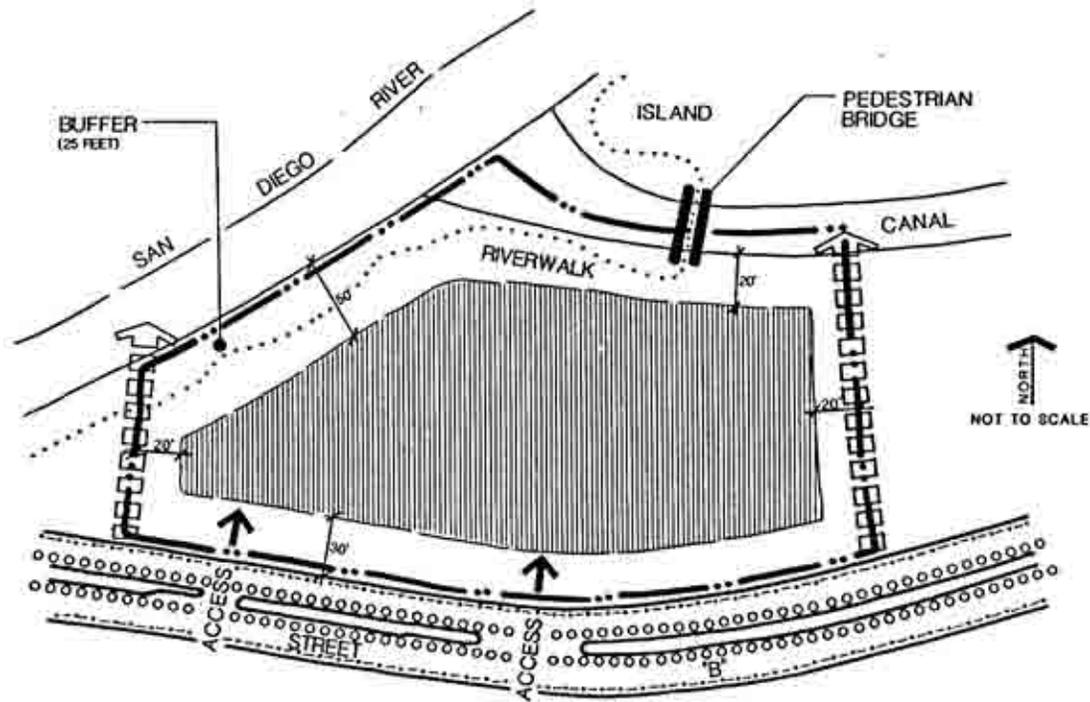
PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 50 PERCENT

**LEVI – CUSHMAN
SPECIFIC PLAN**

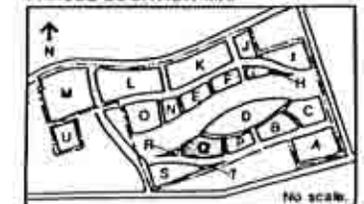
**PARCEL P
LANDSCAPE
SCHEMATIC**



LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- ○ ○ ○ BUS ROUTES
- +— LRT ROUTE
- ⋯ BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP



USE CONSIDERATIONS

Parcel Q represents approximately 8 percent of Development Area 3.

PARCEL SIZE: 6 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: RETAIL/HOTEL
 MAXIMUM COVERAGE: 50 PERCENT
 ADT ALLOCATION FOR DA 3: 31,669

SPECIAL ELEMENTS

Development on Parcel Q must include a riverwalk along the canal, pedestrian bridge(s) to the island, a buffer along the river channel, and bikeways and pedestrian paths.

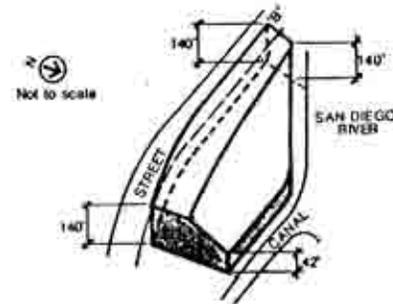
Coordination with Parcels D, P, and R is necessary to assure bridge, riverwalk, buffer, pedestrian, and bike system design continuity.

The open use area in the adjacent Parcel H provides opportunity for a meandering anbike/ped path and use of native and ornamental vegetation especially in the western part of Parcel Q.

Special design attention is necessary as the riverwalk merges with buffer at northeastern portion of parcel.

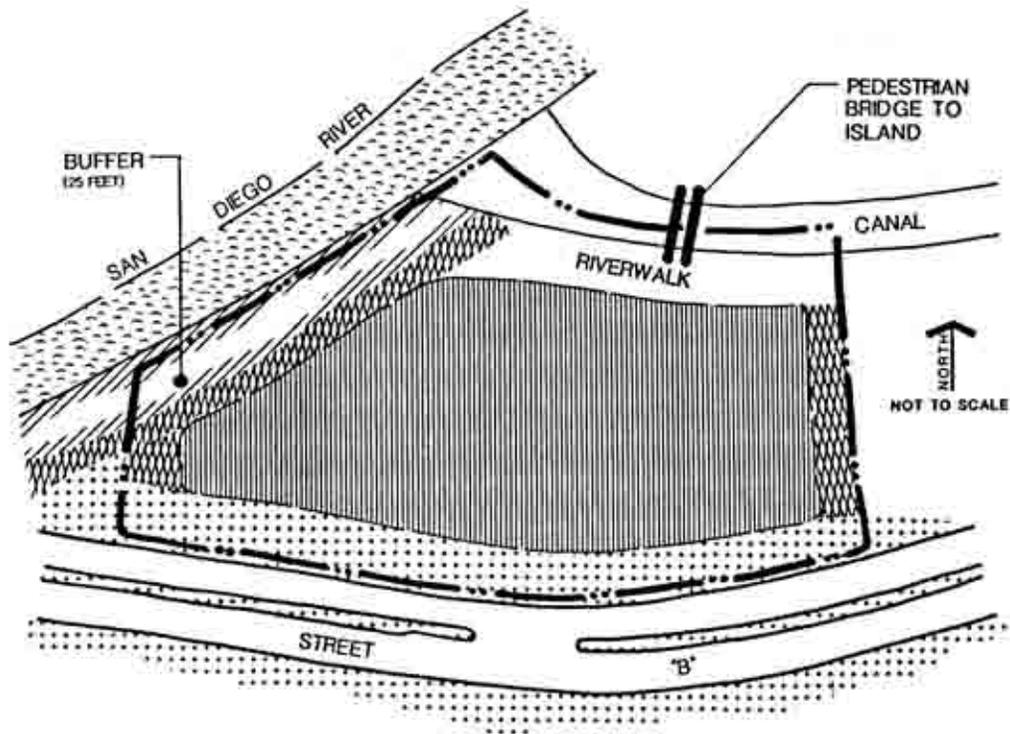
View corridors must be established along both the eastern and western borders of the parcel. The view corridor to the east should lead to a park, sculpture, or other visual focus on the island. The view corridor on the west will lead toward the river.

HEIGHT ENVELOPE ISOMETRIC



LEVI - CUSHMAN
 SPECIFIC PLAN

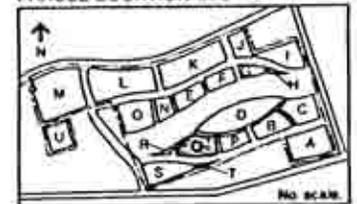
PARCEL Q
 SUMMARY MAP



LEGEND

- PARCEL BOUNDARY
- [Vertical Hatching] DEVELOPMENT AREA
- [Horizontal Hatching] NOISE BUFFER
- [Cross-hatch] FRIARS ROAD THEME TREE
- [Dotted] EVERGREEN
- [Small Dotted] FLOWERING TREE
- [Vertical Lines] ORNAMENTAL ENTRANCE PLANTING
- [Grid] TALL PALM TREE
- [Wavy Lines] RIPARIAN VEGETATION
- [Diagonal Hatching] SCREEN/SETBACK PLANTING
- [Diagonal Hatching] BUFFER AREA PLANTING
- [Arrow] SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 50 PERCENT

LEVI - CUSHMAN
SPECIFIC PLAN

PARCEL Q
LANDSCAPE
SCHEMATIC

USE CONSIDERATIONS

Parcel R is part of Development Area 3.

PARCEL SIZE: 1 ACRE
 USE EMPHASIS: PARK/OPEN AREA
 ADT ALLOCATION FOR DA 3: 31,669

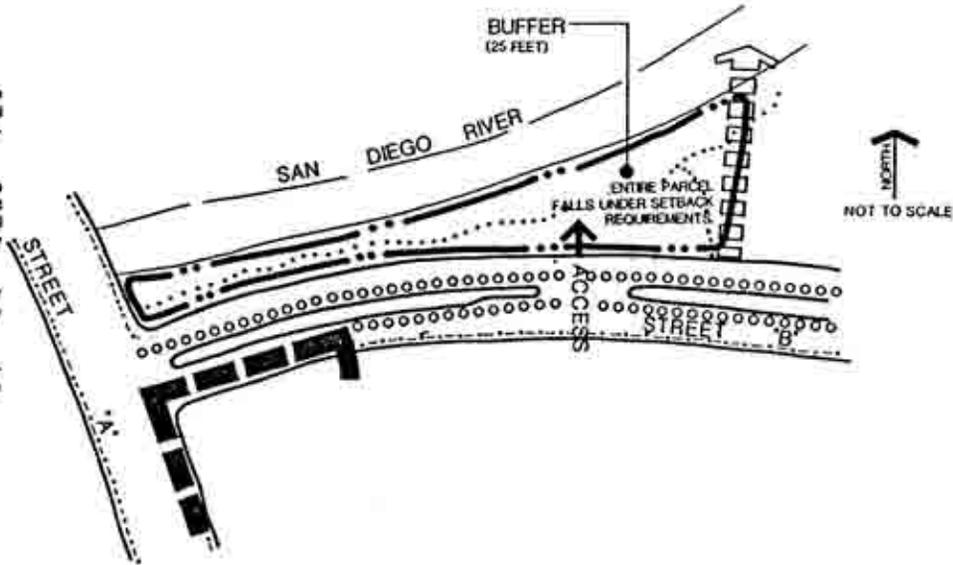
SPECIAL ELEMENTS

A location adjacent to the San Diego River at the western entrance of the project provides visual prominence to Parcel R. The theme entry on the adjacent Parcel S further emphasizes that prominence.

Development on Parcel R must include a buffer along the river channel and, since this site is a special treatment area where riparian vegetation will merge with ornamental plantings, use of a meandering bike/ped path is especially suitable.

While a view corridor is shown on the eastern border of the parcel, the entire site actually functions as a view corridor terminating at the river channel.

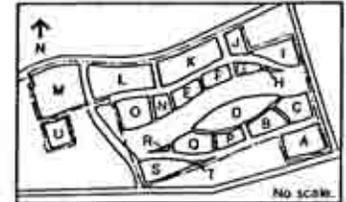
Coordination with Parcel Q is necessary to assure continuity regarding the buffer and pedestrian and bike paths.



LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- ++ LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

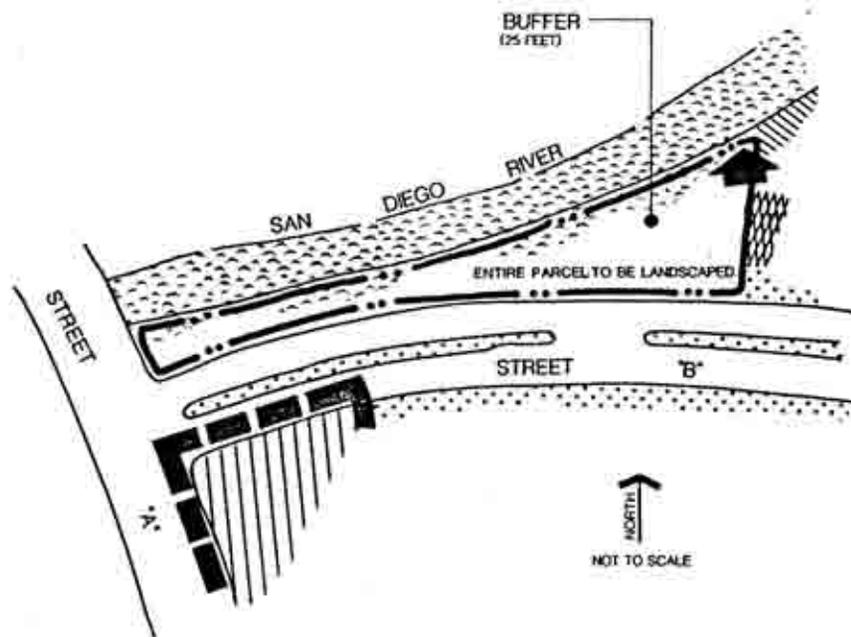
PARCEL LOCATION MAP



LEVI - CUSHMAN
 SPECIFIC PLAN

PARCEL R
 SUMMARY MAP

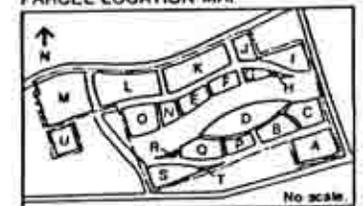
**LEVI - CUSHMAN
SPECIFIC PLAN**



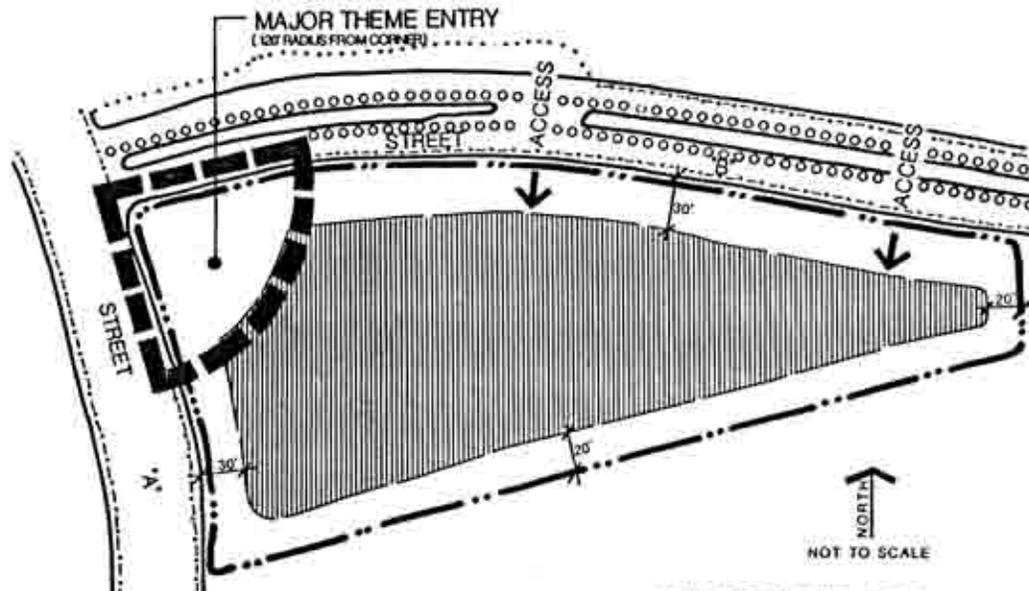
LEGEND

- PARCEL BOUNDARY
- [Vertical lines] DEVELOPMENT AREA
- [Horizontal lines] NOISE BUFFER
- [Dotted pattern] FRIARS ROAD THEME TREE
- [Stippled pattern] EVERGREEN
- [Cross-hatch pattern] FLOWERING TREE
- [Vertical lines with dots] ORNAMENTAL ENTRANCE PLANTING
- [Grid pattern] TALL PALM TREE
- [Wavy lines] RIPARIAN VEGETATION
- [Diagonal lines] SCREEN/SETBACK PLANTING
- [Diagonal lines with dots] BUFFER AREA PLANTING
- [Arrow] SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



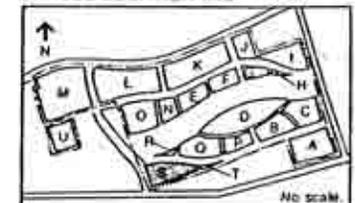
**PARCEL R
LANDSCAPE
SCHEMATIC**



LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- +— LRT ROUTE
- BICYCLE PATH
- BICYCLE LAWE
- BICYCLE ROUTE

PARCEL LOCATION MAP



USE CONSIDERATIONS

Parcel S represents approximately 9 percent of Development Area 3.

PARCEL SIZE: 7 ACRES
 HEIGHT MAXIMUM: 250 FEET
 USE EMPHASIS: OFFICE
 MAXIMUM COVERAGE: 40 PERCENT
 ADT ALLOCATION FOR DA 3: 31,669

SPECIAL ELEMENTS

Development of Parcel S will be contingent on adoption of a final design for the I-8/Street A interchange and the parcel will not develop until that design is adopted.

A location adjacent to the freeway interchange and a 250' height maximum give development on Parcel S high visibility and special prominence. Development on this site influences the perception of the entire project and must therefore clearly express LCSP themes.

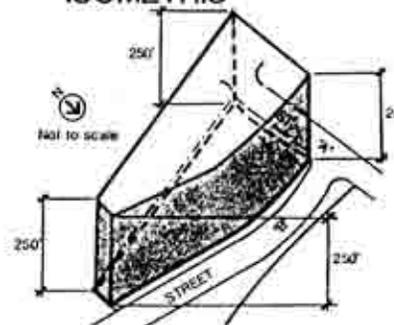
Since Parcel A is located on the outside edge of the central LCSP area, connections with the rest of the project must be emphasized, especially via pedestrian, bikeway, streetscape, and open space linkages and architectural continuity.

Design of development of Parcel S must provide a gradual height transition from the open area of Parcel R.

Sloping height requirements do not apply to Parcel S since the area required by the I-8 interchange has not been determined and a reasonable development envelope must be preserved.

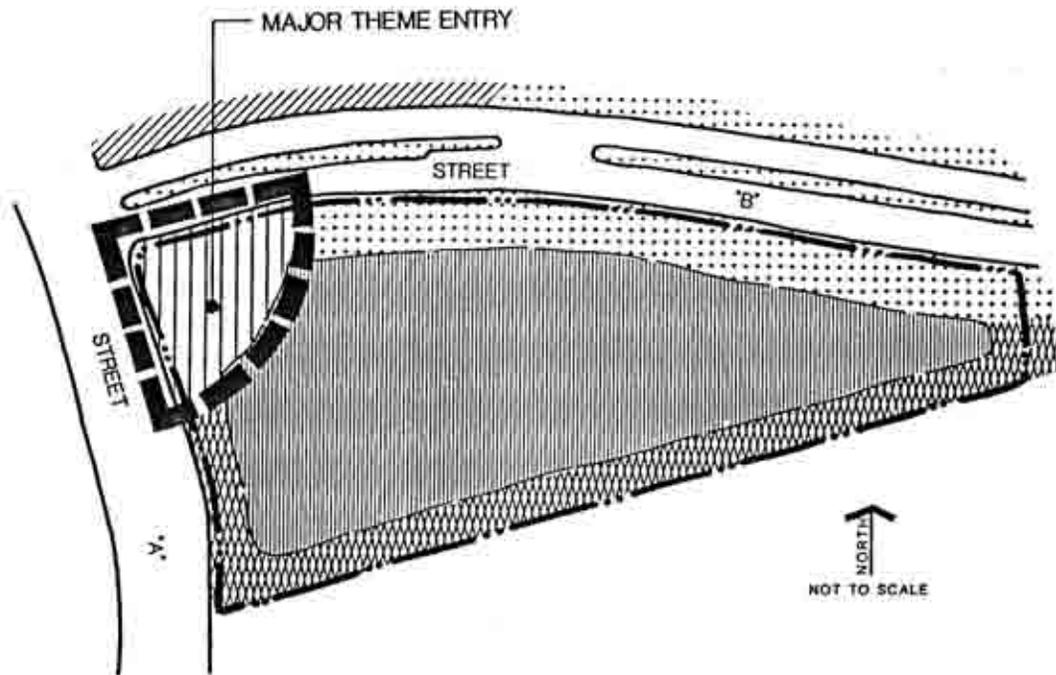
Attention must be given to the project "edges," especially to assure that a suitable transition is made to adjacent off-site areas.

HEIGHT ENVELOPE ISOMETRIC



**LEVI - CUSHMAN
 SPECIFIC PLAN**

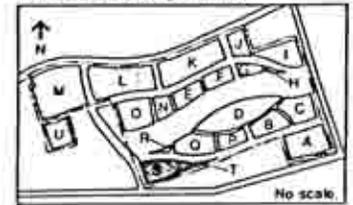
**PARCEL S
 SUMMARY MAP**



LEGEND

- PARCEL BOUNDARY
- [Vertical Hatching] DEVELOPMENT AREA
- [Horizontal Hatching] NOISE BUFFER
- [Cross-hatch] FRIARS ROAD THEME TREE
- [Dotted] EVERGREEN
- [Small Dotted] FLOWERING TREE
- [Vertical Lines] ORNAMENTAL ENTRANCE PLANTING
- [Grid] TALL PALM TREE
- [Wavy Lines] RIPARIAN VEGETATION
- [Cross-hatch] SCREEN/SETBACK PLANTING
- [Diagonal Hatching] BUFFER AREA PLANTING
- [Arrow] SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 60 PERCENT

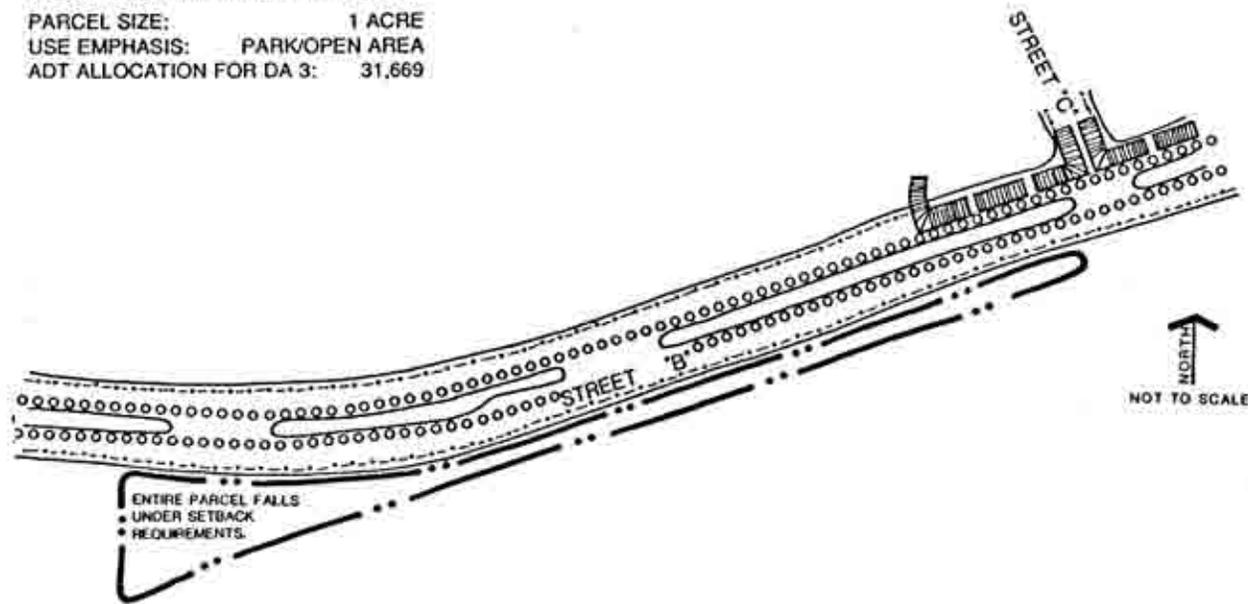
LEVI - CUSHMAN
SPECIFIC PLAN

PARCEL S
LANDSCAPE
SCHEMATIC

USE CONSIDERATIONS

Parcel T is part of Development Area 3.

PARCEL SIZE: 1 ACRE
 USE EMPHASIS: PARK/OPEN AREA
 ADT ALLOCATION FOR DA 3: 31,669



SPECIAL ELEMENTS

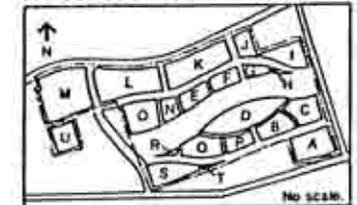
Functioning primarily as a landscape screen, Parcel T will separate the LCSP area from offsite uses and provide eastwest continuity of the streetscape treatment and pedestrian/bikeway linkages.

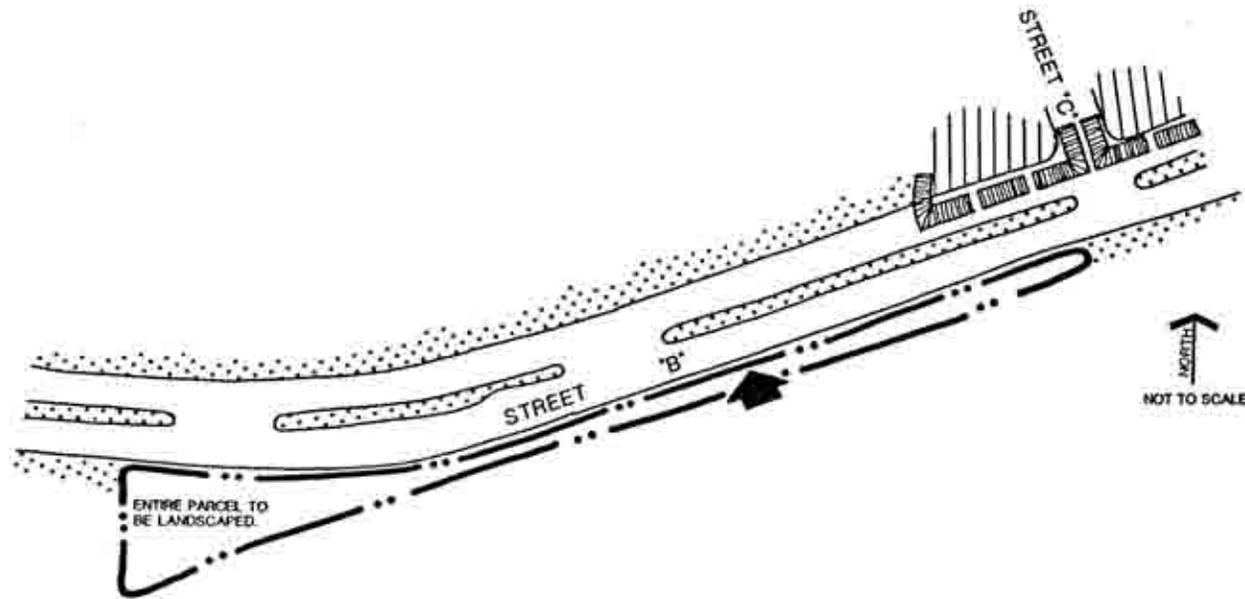
Coordination is necessary between landscape treatment on this parcel with that of the theme entry on Parcel Q.

LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- ++ LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP

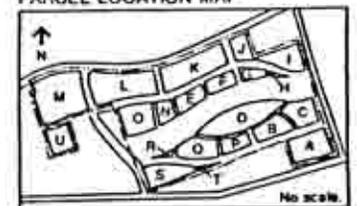




LEGEND

- PARCEL BOUNDARY
- [Vertical lines] DEVELOPMENT AREA
- [Horizontal lines] NOISE BUFFER
- [Cross-hatch] FRIARS ROAD THEME TREE
- [Dotted] EVERGREEN
- [Wavy] FLOWERING TREE
- [Vertical lines with dots] ORNAMENTAL ENTRANCE PLANTING
- [Grid] TALL PALM TREE
- [Wavy with dots] RIPARIAN VEGETATION
- [Diagonal lines] SCREEN/SETBACK PLANTING
- [Diagonal lines with dots] BUFFER AREA PLANTING
- ↑ SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



**LEVI - CUSHMAN
SPECIFIC PLAN**

**PARCEL T
LANDSCAPE
SCHEMATIC**

USE CONSIDERATIONS

Parcel U represents approximately 7 percent of Development Area 3.

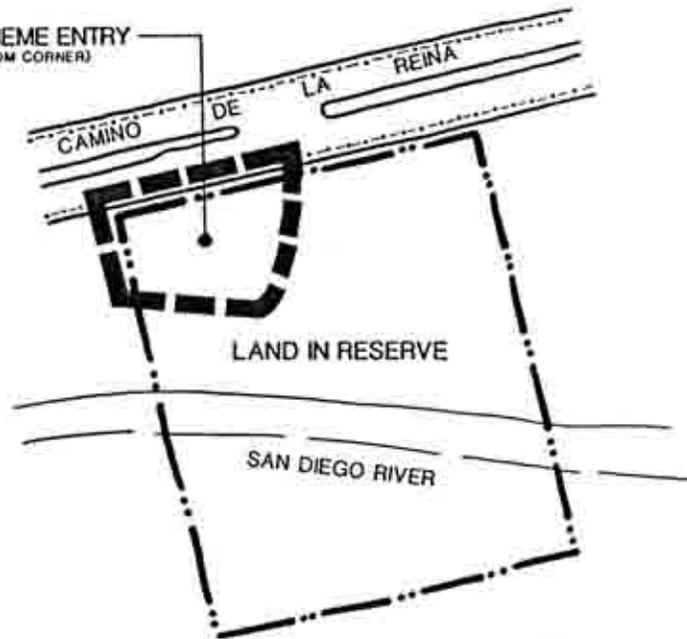
PARCEL SIZE: 5 ACRES
 HEIGHT MAXIMUM: 42-140 FEET
 USE EMPHASIS: NOT DETERMINED
 MAXIMUM COVERAGE: 50 PERCENT
 ADT ALLOCATION FOR DA 3: 31,669

SPECIAL ELEMENTS

Land is held in reserve on Parcel U in order to coordinate its ultimate use and development with surrounding land which lies outside the LCSP project area.

Buffer development will not be initiated until plans for the surrounding area are adopted and the river channel is constructed.

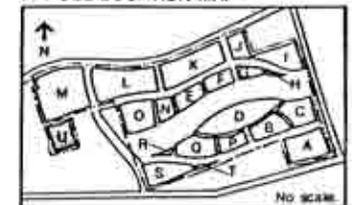
MAJOR THEME ENTRY
 (120' RADIUS FROM CORNER)



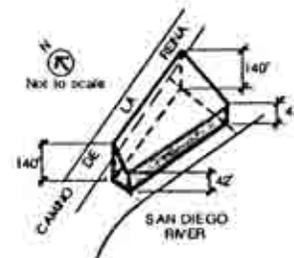
LEGEND

- PARCEL BOUNDARY
- ▨ DEVELOPMENT AREA
- ↑ VIEW CORRIDOR
- ↑ ACCESS POINTS
- * RECOMMENDED BUS STOPS
- BUS ROUTES
- +— LRT ROUTE
- BICYCLE PATH
- BICYCLE LANE
- BICYCLE ROUTE

PARCEL LOCATION MAP

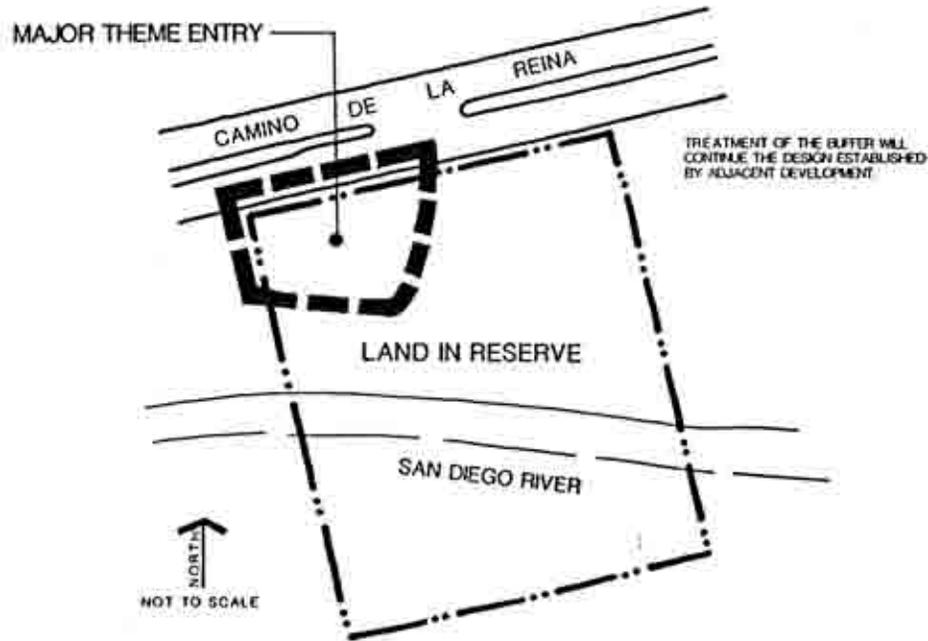


HEIGHT ENVELOPE ISOMETRIC



**LEVI - CUSHMAN
 SPECIFIC PLAN**

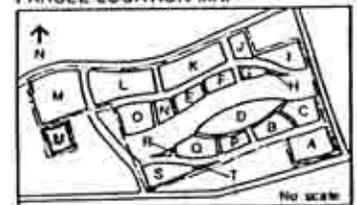
**PARCEL U
 SUMMARY MAP**



LEGEND

- PARCEL BOUNDARY
- DEVELOPMENT AREA
- NOISE BUFFER
- FRIARS ROAD THEME TREE
- EVERGREEN
- FLOWERING TREE
- ORNAMENTAL ENTRANCE PLANTING
- TALL PALM TREE
- RIPARIAN VEGETATION
- SCREEN/SETBACK PLANTING
- BUFFER AREA PLANTING
- SCREEN BREAK FOR VIEWS

PARCEL LOCATION MAP



MINIMUM LANDSCAPING: 50 PERCENT

**LEVI – CUSHMAN
SPECIFIC PLAN**

**PARCEL U
LANDSCAPE
SCHEMATIC**

IV. RIPARIAN REVEGETATION PROGRAM

Appendix C of the Levi-Cushman Specific Plan Environmental Impact Report

**RIPARIAN REVEGETATION PROGRAM
FOR THE LEVI-CUSHMAN SPECIFIC PLAN**

Prepared for

**CHEVRON LAND & DEVELOPMENT COMPANY
1660 HOTEL CIRCLE NORTH, SUITE 620
SAN DIEGO, CALIFORNIA 92108**

Prepared by

RECON

Regional Environmental Consultants
1276 Morena Boulevard, San Diego, CA 92110-3815 275-3732

**RECON NUMBER R-1312A
JANUARY 28, 1987**

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
A. PURPOSE	1
1. The San Diego River Wetlands Management Plan	1
2. The Levi-Cushman Riparian Revegetation Program	4
3. State and Federal Agency Concerns	6
B. EXISTING HABITATS ON THE SAN DIEGO RIVER	8
II. DESIGN CRITERIA	9
A. THE WETLANDS RESTORATION PLAN	9
B. PLANT MATERIALS AND INSTALLATION SPECIFICATIONS	25
C. FLOOD-CONTROL DESIGN	32
III. MANAGEMENT PLAN	34
A. PURPOSE	34
B. TECHNICAL ASSESSMENT	35
C. IMPLEMENTATION	37

Attachment 1: Rick Engineering HEC-2 run

TABLE OF CONTENTS

	<u>Page</u>
FIGURES	
1: County vicinity map	2
2: Location of the riparian revegetation study area	3
3: Impacts and mitigations associated with proposed project	7
4: Proposed revegetation plan	12
5: Topographic cross sections showing revegetation	13
6: Riparian Revegetation Program: east segment	16
7: Riparian Revegetation Program: west segment	17
8: Channel phasing plan	26
9: Channel design cross sections	33
TABLES	
1: Wetland Restoration Plan: Vegetation Categories, Stand Types, and Environmental Gradients	15
2: Stand-Type Definitions	18
3: Plant Material List	27

I. INTRODUCTION

A. PURPOSE

1. The San Diego River Wetlands Management Plan

The San Diego River Wetlands Management Plan was developed by the City of San Diego in cooperation with the resource agencies. The plan is intended to provide flood-control facilities along the increasingly urbanized corridor of the San Diego River through Mission Valley, while at the same time preserving and reestablishing a measure of the natural biological quality that once existed in this area.

This project, the Riparian Revegetation Program for the Levi-Cushman Specific Plan area (Figures 1 and 2), incorporates the principal goals of the San Diego River Wetlands Management Plan. The primary policy orientation of the city's plan is

. . . to define a means of maintaining and improving the overall quality of the wetlands associated with the San Diego River while allowing for development in Mission Valley. The intent of the plan is to establish a framework for accomplishing this goal by incorporating biological considerations into planning for development and flood management on the river (p. G-3).

The stated objectives of the Wetlands Management Plan are to establish a guide for natural and revegetated wetlands preservation and improvement in the valley, to clarify common goals for agencies and the private sector to allow incorporation of biological requirements within the scope of new development, and, therefore, to facilitate compliance with the processing requirements of state and federal agencies for projects which affect wetlands.

Reestablishment and management of wetlands within the existing floodway (FW) of the San Diego River is mandated by the Wetlands Management Plan:

The established FW zone boundary encompasses a sensitive resource area wherein no modifications shall be permitted unless mitigation is accomplished in agreement with the [San Diego River Wetland Management] plan (p. G-15).

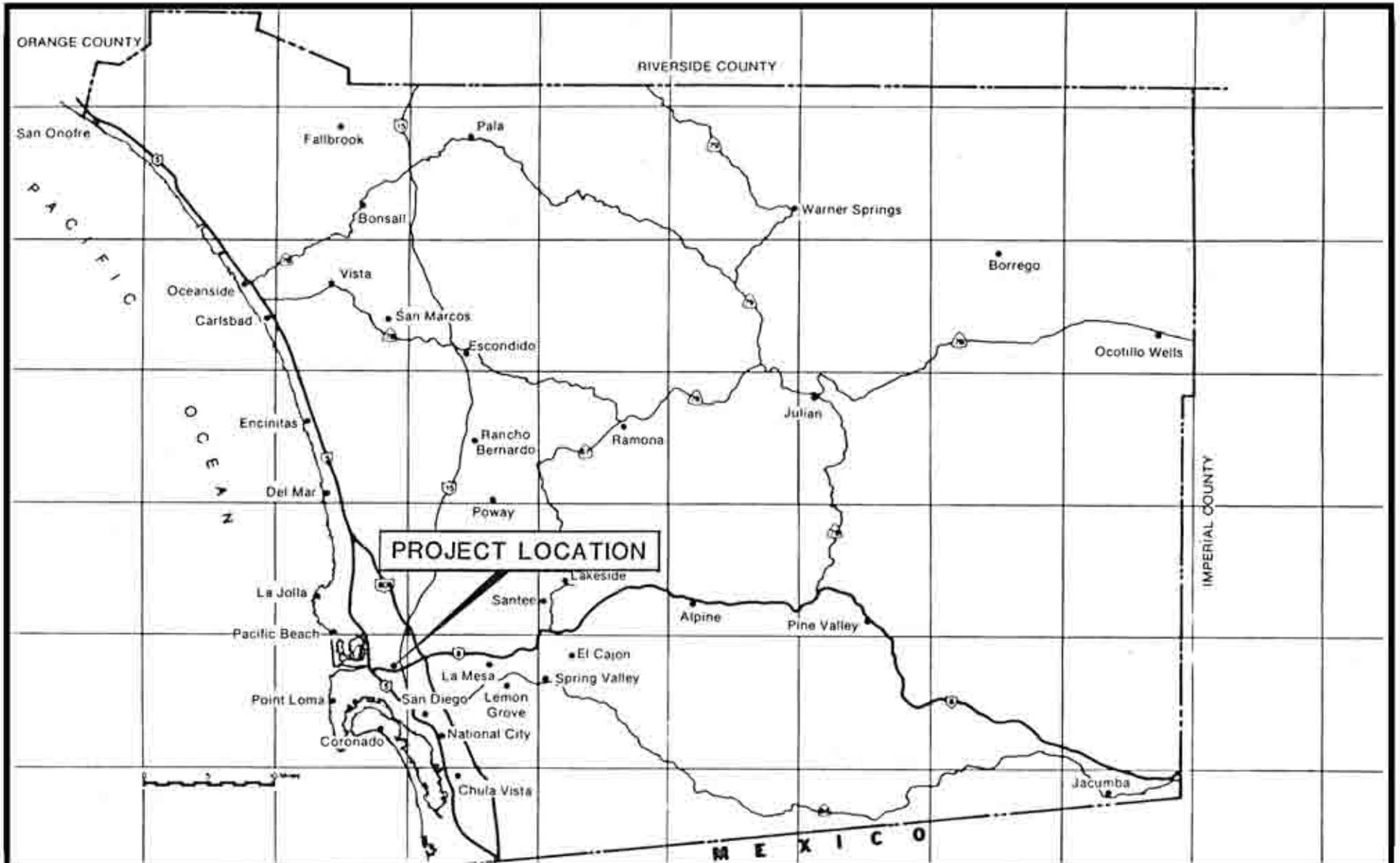


FIGURE 1. THE LOCATION OF THE PROPOSED PROJECT RELATIVE TO THE COUNTY OF SAN DIEGO.

The purpose of wetlands revegetation is defined and qualified as to intent and limitations:

The primary purpose of the [plan] is to protect, preserve and enhance wetlands it is recognized that the floodway is within an urban setting and must serve multiple uses, [not] solely serve as wildlife habitat (p. G-13).

Specific habitat reestablishment guidelines in the Wetlands Management Plan call for creation of a distribution of habitat types within the wetlands corridor of 35 to 45 percent riparian woodlands, 25 to 35 percent freshwater marsh, and 20 to 40 percent open water. Islands should also extend along 5 to 15 percent of the length of any river segment.

The Wetlands Management Plan also discusses specifically the segment of the river that includes the Levi-Cushman Specific Plan area (p. G-27). Some land that is presently within the floodway could be recovered for development if a flood-control channel capable of containing a 100-year flood and supporting a viable wetlands corridor is developed. Wetlands restoration must be incorporated into channel design. The revegetated channel could be considered compensation for loss of the small areas of existing riparian woodland and degraded wetlands (golf course), and the creation of a biologically valuable corridor would eliminate the need for compensating loss of floodway on an acre-for-acre basis.

2. The Levi-Cushman Riparian Revegetation Program

The primary purpose of the Riparian Revegetation Program for the Levi-Cushman property is threefold. First, implementation of the project will reduce the flood risk to both existing and proposed development, through channelizing the floodway of the San Diego River between Fashion Valley Road and the proposed crossing of Via las Cumbres. Second, the creation of a corridor of riparian habitat approximately 400 feet wide along the existing channel of the San Diego River through the property will mitigate the decrease in the width of the floodway resulting from project implementation and create new wildlife habitat. Third, the newly created habitat area will also serve to mitigate the loss of the visual open space currently provided by the green area of the golf courses.

The flood-control channel is designed to convey peak flood flows of 49,000 cfs (cubic feet per second), the peak flow during a 100-year flood event as estimated by the Army Corps of Engineers (COE), without raising the calculated surface of the existing 100-year flood level.

In accordance with the appropriate federal, state, and local policies, the proposed Riparian Revegetation Program includes provision for the establishment of a continuous riparian habitat corridor through the Levi-Cushman property. The riparian habitat has been designed to include riparian woodland, freshwater marsh, and open water habitats within the proposed flood-control channel, as delineated in the Wetlands Management Plan.

Although the reestablished riparian habitat will provide critical wild-life habitat in the valley, it will also be an important visual resource to the community, replacing the green open space of the golf course. Several provisions have been incorporated into the program design to enhance the value of the new floodway habitat as an aesthetic resource without significantly decreasing its biological value.

The specific goals of the Riparian Revegetation Program for the restructured floodway on the Levi-Cushman property are:

- a. Design and revegetation of both sides of the channel to provide 36.2 acres of continuous wetlands habitat on both sides of the river distributed as follows: 19.5 acres of open water habitat (+53.8 percent), 3.7 acres of freshwater marsh (+10.1 percent), and 13.1 acres of riparian vegetation (+36.1 percent). Riparian is subdivided into 8.1 acres of willow-dominated riparian habitat cover (+21.8 percent) and 4.9 acres of cottonwood/sycamore-dominated riparian (+13.3 percent).
- b. Maintenance of biological resources in accordance with the goals of the revegetation program, including development of riparian woodland, freshwater marsh, and open water habitats in the reconstructed floodway.
- c. Maintenance of the hydraulic characteristics of the channel to ensure adequate flood control (conveyance of 100-year flows of 49,000 cfs).

- d. Maintenance and management of the aesthetic and passive recreational resource represented by the revegetated river channel.
- e. Monitoring of the establishment and subsequent development of vegetation and habitat quality to serve as a basis for maintenance activities.

This document will also detail phasing of channel construction, the structure and function of buffers along the revegetated floodway, uses permitted in the buffers adjacent to wetlands, and land uses allowed in developed parcels adjacent to the channel in accordance with the Wetlands Management Plan and with the requirements for maintaining the biological and aesthetic quality of important habitat areas.

One off-site improvement to be implemented by the project, the extension of Street "A" would affect 2.8 acres of riparian habitat. Included in the program described below are measures recommended to mitigate this off-site wetlands habitat loss in accordance with the guidelines of the Wetlands Management Plan. The location and area of project and off-site impacts and mitigation measures are shown in Figure 3.

3. State and Federal Agency Concerns

Applicants for projects along the San Diego River must obtain a U.S. Army Corps of Engineers Section 404 permit. The concerns of the COE are mandated by the Clean Water Act of 1972 and the River and Harbors Act of 1899 to minimize the loss of wetlands and degradation of water quality. This has been broadly interpreted to include all actions that result in the filling or dredging of wetlands. Section 404(b)(1) of the Clean Water Act proscribes development which will have an unacceptable adverse effect on wildlife and other values. The COE, in consultation with the U.S. Fish and Wildlife Service (USFWS), and following appropriate guidelines, must make a determination that a project (including mitigation measures) subject to a 404 permit will have no adverse impacts and that there is no feasible alternative to the proposed action. Furthermore, any impacts that result from project implementation must provide appropriate mitigation, as outlined in the USFWS Mitigation Policy (Appendix C of the Wetlands Management Plan). Other applicable federal authority is summarized in Appendix B of the Wetlands Management Plan.

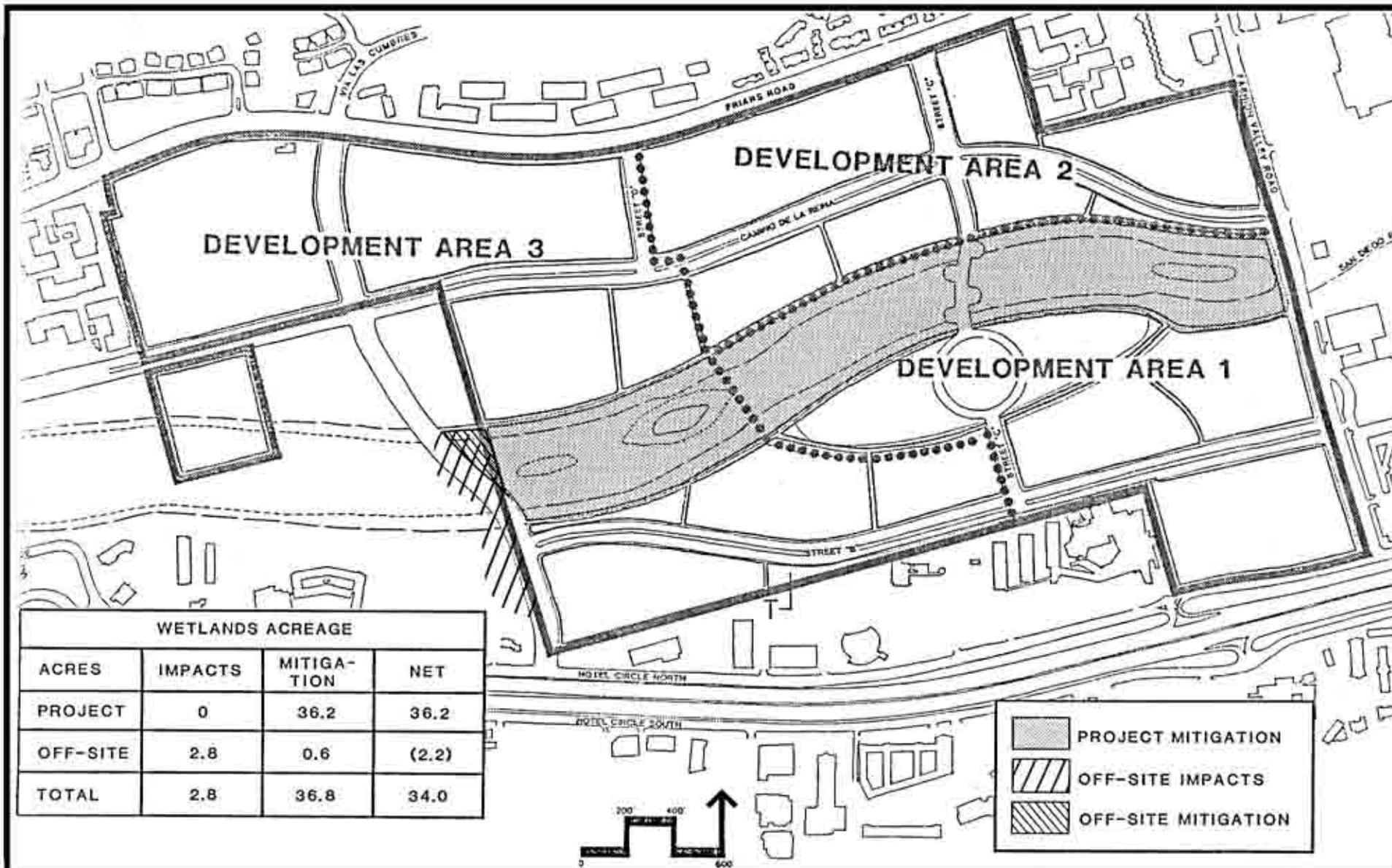


FIGURE 3. IMPACTS AND MITIGATIONS ASSOCIATED WITH THE PROPOSED PROJECT

Applicants must also process a California Department of Fish and Game (DFG) Section 1601/1603 Agreement for any alteration of the streambed of the San Diego River and meet the standards of the Regional Water Quality Control Board.

B. EXISTING HABITATS ON THE SAN DIEGO RIVER

As described in the Biological Resources Survey of the Levi-Cushman Properties, the project area supports wetlands habitat (primarily emergent aquatic vegetation) within the banks of the existing pilot channel of the San Diego River. The remainder of the property is currently the golf course and driving range of the Stardust Country Club.

Included in the existing landscaping of the golf course are a number of mature trees (approximately 500). Transplantable individuals of native riparian species will be used in the revegetation of the river channel. Nonnative trees that are transplantable will be incorporated into the landscaping of the specific plan area.

Approximately 4.43 acres of disturbed riparian woodland exists on the border between the Stardust Country Club Golf Course (Levi-Cushman property) and the River West Golf Course to the west. The valley to the west to the Morena Boulevard crossing is a mix of habitat types, predominantly transitional wetlands, shrub-dominated uplands, riparian woodlands, and disturbed open areas. From the Morena Boulevard crossing to the railroad crossing and Interstate 5 (I-5), the habitat is primarily shrub-dominated uplands and riparian woodland with areas of transition and emergent wetlands. To the west of I-5, the flood-control channel contains primarily wetlands which make a transition to salt water and tidal influence increases.

To the east of the specific plan between State Route 163 (SR 163) and Fashion Valley Road, the normal river flow volume is contained by a narrow, disturbed, soft-bottomed channel. The channel varies from approximately 300 feet across at SR 163 to 100 feet at Fashion Valley Road. The channel is disturbed but contains areas of riparian woodland and emergent wetlands on the eastern end. The majority of the channel is disturbed wetlands or open disturbed land. Immediately to the north of this segment of the channel is the parking lot of Fashion Valley Center, which is within the 100-year floodway. To the south of the channel are various office buildings, hotels, and their associated parking lots.

II. DESIGN CRITERIA

A. THE WETLANDS RESTORATION PLAN

1. Riparian Vegetation Ecology

Riparian vegetation along southern California coastal plain rivers such as the San Diego River is characterized by an overstory of trees such as willow, sycamore, cottonwood, and live oak. Understory species include shade-tolerant shrubs, herbs, and woody vines, ranging from chaparral shrubs such as holly-leaved cherry to riparian woodland taxa such as wild grape and California wild rose. The riparian vegetation community structure is determined by three principal factors: (a) vertical distance of the soil surface above the average dry-season groundwater elevation; (b) maximum flood-stage water velocity; and (c) random disturbance factors such as variations in weather patterns or channel erosion patterns. For any point on a transect across the river, the natural vegetation structure consists of plant populations adapted to associated drought-stress and flood-energy conditions. Random disturbance factors superimpose a patchwork pattern consisting of discrete areas in various stages of development following disturbance.

Prior to agricultural and urban development of much of Mission Valley, the natural vegetation consisted of three generalized zones: a channel area consisting of scoured sand and scattered pools formed by current irregularities, vegetated with sedges, bulrushes, and cattails; a zone of willows and cottonwoods increasing in age and size with distance from the channel; and further from the channel, a floodplain riparian woodland grading from mature black willows and cottonwoods to sycamores and live oaks on the edges of the valley floor. On the south-facing northern valley wall, native coastal sage scrub and perennial grasslands intergraded into the riparian forest. On the south wall, chaparral and live oaks formed the transition.

Current vegetation patterns along the river reflect both historical land use changes and disturbance/response abilities intrinsic to the vegetation. Along much of the present-day river, only the willow zone is present immediately adjacent to the channel. The channel itself has been straightened, deepened, and narrowed for flood control in many areas, and many bordering areas have been elevated above the natural floodplain. The prevalent willow zone vegetation is adapted to frequent

disturbance from scouring by high-energy floodwaters by its rapid growth and invasive abilities, explaining its presence in the absence of deliberate revegetation efforts.

2. Wetlands Restoration Goals

As described above, current vegetation on the project area is primarily turf grasses associated with the golf course, with no existing native riparian habitat. The primary goal of the wetlands restoration portion of the Riparian Revegetation Program is to reestablish native riparian habitat within the flood-control channel proposed for the project area. To the maximum extent possible within constraints imposed by the physical characteristics of the proposed flood-control channel, the goal of the restoration plan is to provide a level of habitat diversity and continuity within the restored area comparable to that of undisturbed systems.

The wetlands restoration plan will also implement mitigation for disturbance of riparian vegetation caused by the construction of one off-site road required as a condition of the project. Riparian vegetation will be planted along currently disturbed floodway areas in compensation for the paved floodplain areas created by the off-site roadways.

The wetlands restoration effort will result in the establishment of 3.67 acres of emergent aquatic vegetation, 8.11 acres of willow fringe thicket/woodland, and 4.94 acres of mixed riparian forest along the on-site portion of the river channel (see Figures 6 and 7). Approximately 0.6 acre within the floodway to the west of the project site will be restored to riparian vegetation in connection with the construction of Street "A."

The intention of the Riparian Revegetation Program is the creation of wetlands habitat through the reach of the San Diego River that crosses the specific plan area. This wetlands will be a natural lake during the dry season providing habitat for a variety of water-dependent wildlife species and a free-flowing river during the wet portion of the year. The shallow water of the dry season lake (depths of five to six feet) should be deep enough to inhibit filling in with vegetation yet shallow enough to allow adequate mixing to prevent degraded water quality.

3. Revegetation Habitat Categories

As shown on Figures 4 and 5, the riparian revegetation area has been divided into five generalized habitat types according to distance from and elevation above the river channel. The final design may require slight alterations to adjust for the grading design. These include open water, emergent aquatic, willow fringe, mixed riparian forest, and buffer plants. Each of these habitats is composed of one or more plant associations.

The open water category has been indicated for those areas of the channel which will be excavated to a depth exceeding 2 feet below the minimum ground-water elevation. The water level will be maintained (except during storm runoff conditions) at approximately 11 feet above mean sea level (MSL) along the entire on-site length of the river by a weir structure at the western boundary of the site.

Elevations for planting were determined by measuring elevations of established habitat along the San Diego River. Emergent aquatic vegetation is indicated for areas between 9 and 13 feet above MSL, these areas being characterized by shallow water and saturated soils with periodic high-energy flood velocities. Between about 13 and 21 feet MSL (up to 10 feet above the dry-season water level), willow fringe vegetation has been indicated. This vegetation is composed primarily of relatively small willow species adapted to annual flooding and rapid regeneration following disturbance by floodwaters. Channel areas higher than 21 feet above MSL will be established as a mixed riparian forest zone, to be planted with a variety of larger riparian tree species and native understory species.

A buffer area at least 25 feet in width will be implemented along the outer edge of the riparian restoration area. This area will be vegetated with native riparian tree species, with a 5-foot dense planting barrier of understory species such as blackberry and wild rose to discourage encroachment into the adjacent riparian habitat (see below).

Within each generalized habitat type, plantings will be implemented in plant associations of varying quantity and arrangement of the component species. These associations are intended to mimic the kinds of random aggregations of habitat stands which result from the natural development of riparian vegetation over time in unchanneled systems, and at the same time provide an interface to the project's aesthetic design by providing views to open water.

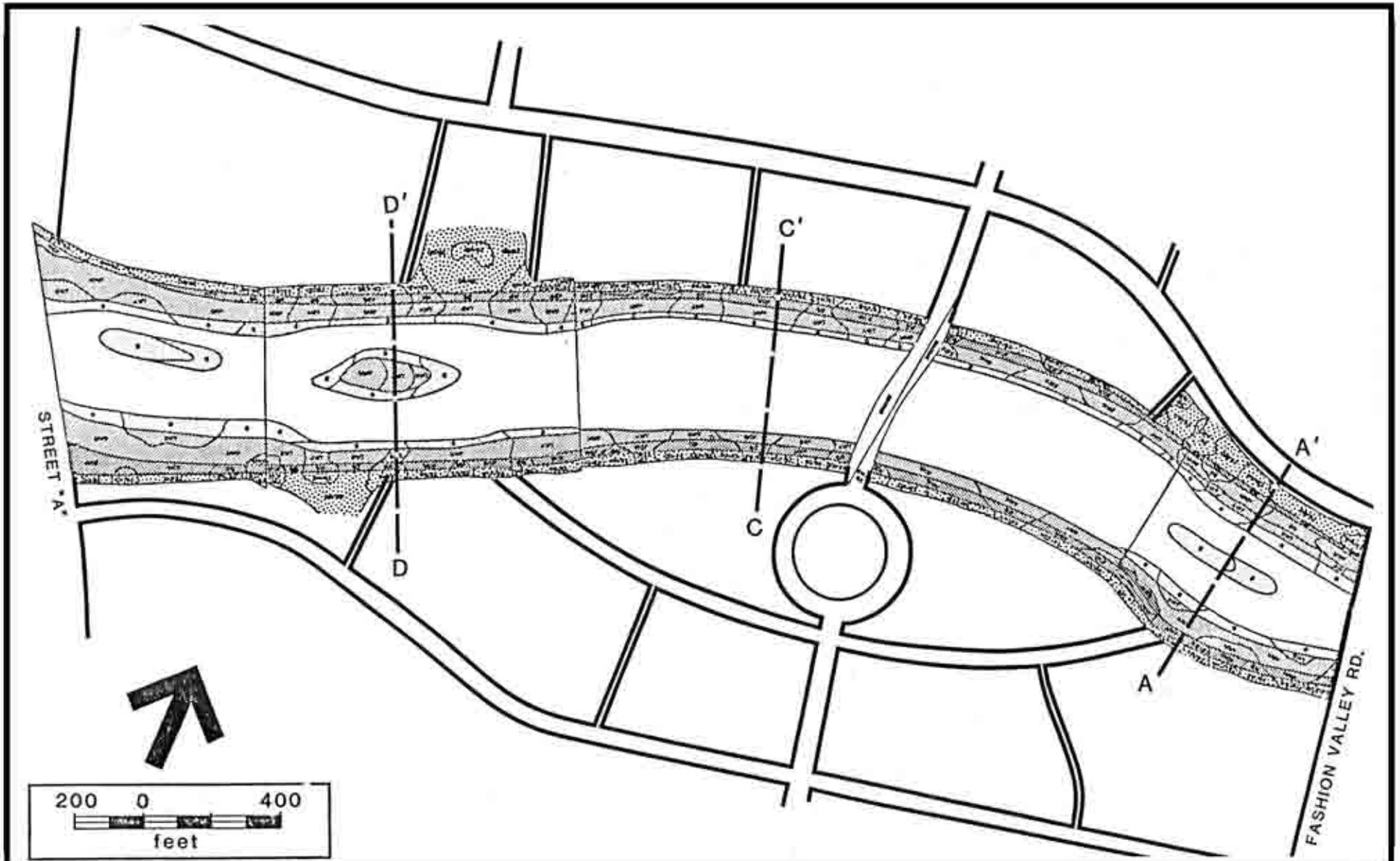


FIGURE 4. REVEGETATION PLAN FOR THE LEVI-CUSHMAN SPECIFIC PLAN RIPARIAN REVEGETATION PLAN

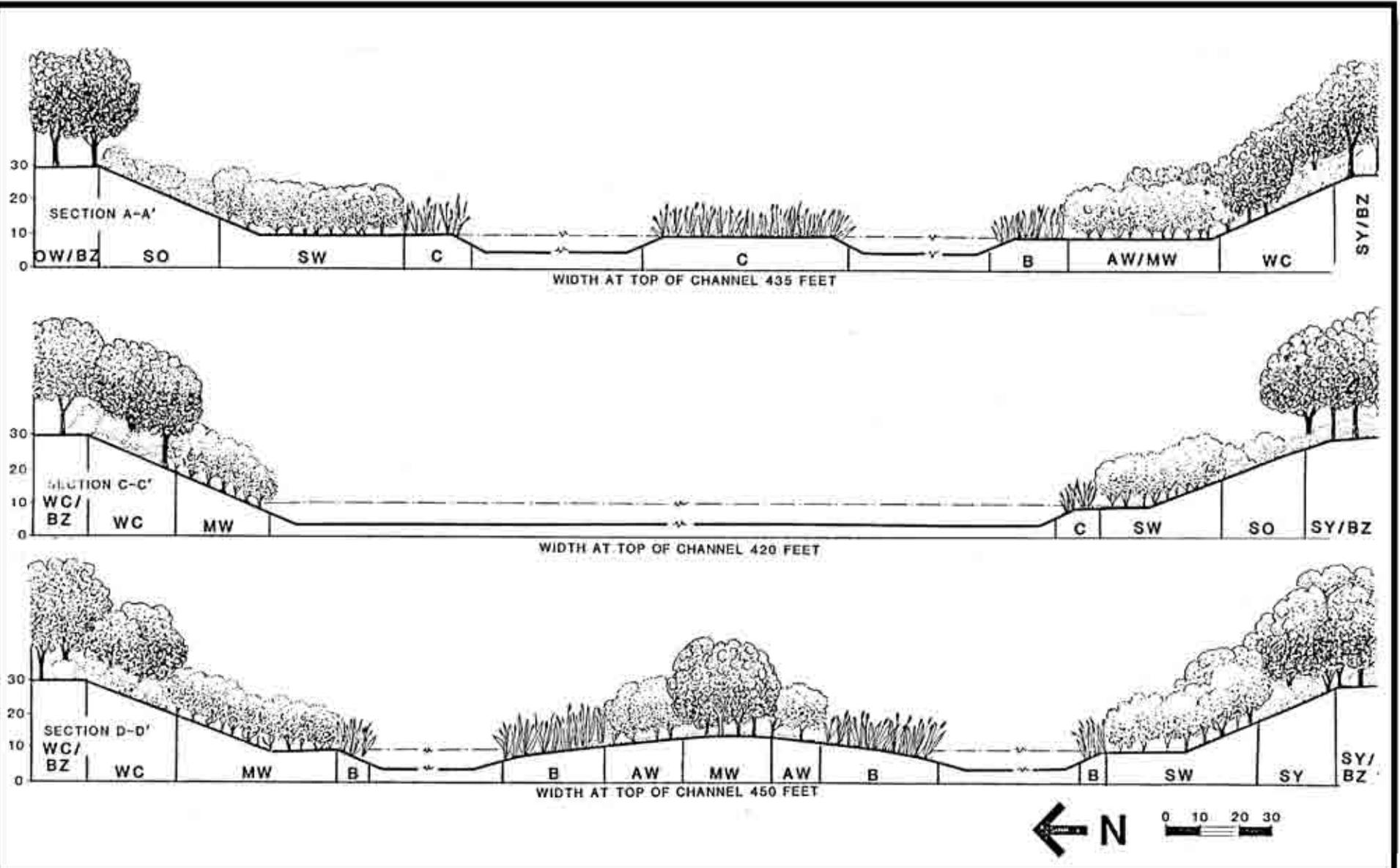


FIGURE 5. TOPOGRAPHIC CROSS SECTIONS SHOWING REVEGETATION

While natural riparian vegetation normally grows on virtually level substrate, much of the woodland to be implemented with the revegetation plan will be on the 2.5:1 channel containment slopes. This difference will create a need for an initial irrigation and maintenance program period to assure reasonable survival of the planted materials.

4. Plant Association Descriptions

Table 1 lists the plant species to be used for each plant association within the generalized categories. Also shown is how these vegetation units correspond to environmental gradients of groundwater availability and flood energy. Each plant association is given a map symbol (see key) which may be used to interpret the revegetation designs illustrated in Figures 5, 6, and 7. Table 2 lists species composition and planting densities for each plant association.

As described in Tables 1 and 2, the emergent aquatic zone will consist of two plant associations, Cattail (C) and Bulrush (B). Both of these associations will depend primarily upon natural successional processes to establish the emergent aquatic vegetation initiated by planting rhizomes of locally obtained Typha (cattail) and Scirpus (bulrush) species. Because these plants spread rapidly by vegetative reproduction when established on appropriate habitat, planting will be at low densities sufficient to establish species diversity.

Three plant associations are included in the willow fringe zone. Sandbar Willow Woodland (SW) will consist primarily of low-growing (to 15 feet) shrubby species. Arroyo Willow Woodland (AW) and Mixed Willow Woodland (MW) are progressively taller, ranging to 40 feet at maturity. These plant associations will be planted at densities specified in Table 2.

The four plant associations specified for the mixed riparian woodland zone include Willow-Cottonwood Woodland (WC), Sycamore Woodland (SY), Oak Woodland (OW), Mixed Willow Woodland (MW), and Shrub Openings (SO). These patches will be taller at maturity (to 80 feet), with gaps and openings of low shrubby growth providing structure diversity and visual access to the river. Three plantings will be aggregated into groves at an overall density of 150 trees per acre (average spacing of 17 feet) according to the definitions given in Table 2.

TABLE 1
WETLAND RESTORATION PLAN:
VEGETATION CATEGORIES, STAND TYPES, AND ENVIRONMENTAL GRADIENTS

Environmental Gradients		Generalized Vegetation Category	Plant Association Species Composition			Plant Association Name	Map Symbol	
Soil Water	Disturbance/ Flow Energy		Tree Species	Understory/Shrub Layer	Seed Mix/ Ground Cover			
Saturated Mesic	High	Emergent Aquatic	---	<u>Scirpus californica</u> <u>Scirpus acutus</u>	---	Bulrush	B	
			---	<u>Typha angustifolia</u> <u>Typha latifolia</u>	---	Cattail	C	
	Low	Willow Fringe	---	<u>Salix hindsiana</u> <u>Baccharis glutinosa</u>	Lowland Mix	Sandbar Willow Woodland	SW	
			<u>Salix lasiolepis</u>	<u>Salix hindsiana</u> <u>Baccharis glutinosa</u>	Lowland Mix	Arroyo Willow Woodland	AW	
			<u>Salix gooddingii</u> <u>Salix lasiandra</u> <u>Salix laevigata</u>	---	Lowland Mix	Mixed Willow Woodland	MW	
		Occasional Inundation	Mixed Riparian Woodland	---	<u>Baccharis glutinosa</u> <u>Cercocarpus minutiflorus</u> <u>Prunus ilicifolia</u> <u>Iva hayesiana</u> <u>Sambucus mexicanum</u> <u>Heteromeles arbutifolia</u> <u>Hymenoclea monogyra</u>	Lowland or Upland	Shrub Opening	SO
				<u>Populus fremontii</u> <u>Salix gooddingii</u> <u>Alnus rhombifolia</u>	<u>Rubus ursinus</u> <u>Rosa californica</u>	Upland	Willow/Cottonwood Woodland	WC
				<u>Platanus racemosa</u> <u>Alnus rhombifolia</u>	<u>Sambucus mexicanum</u> <u>Prunus ilicifolia</u> <u>Vitis girdiana</u> <u>Rosa californica</u>	Upland	Sycamore Woodland	SY
				<u>Quercus agrifolia</u>	<u>Prunus ilicifolia</u> <u>Rosa californica</u> <u>Rubus ursinus</u> <u>Vitis girdiana</u> <u>Rhus integrifolia</u>	Upland	Oak Woodland	OW
				Seasonally Dry	No Inundation	Buffer	Use tree cover from patch type indicated	<u>Cercocarpus minutiflorus</u> <u>Heteromeles arbutifolia</u> <u>Prunus ilicifolia</u> <u>Rhus integrifolia</u> <u>Rubus ursinus</u>

**TABLE 2
STAND-TYPE DEFINITIONS**

Species	Quantity	Planting Layout
<u>Bulrush (B)</u>		
<u>Scirpus californica</u> <u>Scirpus acutus</u>	100 rhizomes per acre of either or both species	Scattered planting near shoreline in late spring following last rains (no irrigation).
<u>Cattail (C)</u>		
<u>Typha angustifolia</u> <u>Typha latifolia</u> <u>Typha domingensis</u>	100 rhizomes per acre total; mixed species	Scattered planting near shoreline in late spring following last rains (no irrigation).
<u>Sandbar Willow Woodland (SW)</u>		
<u>Salix hindsiana</u>	300 plants/acre	Concentrate in 4,000-sq.ft. subunits within patch (6 per acre with 50 plants each).
<u>Baccharis glutinosa</u>	150 plants/acre	Distribute evenly over remainder of patch.
Lowland seed mix	---	Hydroseed entire patch (spray irrigate).

TABLE 2
STAND-TYPE DEFINITIONS
(continued)

Species	Quantity	Planting Layout
<u>Arroyo Willow Woodland (AW)</u>		
<u>Salix lasiolepis</u>	200 plants/acre	Distribute evenly at 15-foot intervals over entire patch.
<u>Salix hindsiana</u>	100 plants/acre	Plant adjacent to (C) or (B) patches. Concentrate in 1,000-sq.ft. subunits. Use 4 subunits per acre with 25 plants each.
<u>Baccharis glutinosa</u>	100 plants/acre	Distribute evenly at 21-foot intervals over entire patch.
Lowland seed mix	---	Hydroseed entire patch (spray irrigate).
<u>Mixed Willow Woodland (MW)</u>		
<u>Salix gooddingii</u>	100 plants/acre	Plant random mix of 3 species at ±15-foot intervals over entire patch (spray irrigate).
<u>Salix lasiandra</u>	50 plants/acre	
<u>Salix laevigata</u>	50 plants/acre	
Lowland seed mix	---	Hydroseed entire patch.

TABLE 2
STAND-TYPE DEFINITIONS
(continued)

Species	Quantity	Planting Layout
<u>Shrub Openings (SO)</u>		
<u>Iva hayesiana</u>	100 plants/acre	Plant in 25-50-plant patches, with 2-5-foot intervals between plants (spray irrigate).
<u>Baccharis glutinosa</u>	50 plants/acre	These six shrub species are listed in general order of increasing drought-tolerance. Plant at approx. 12-foot intervals over the (SO) patch, with the most drought-tolerant species in higher areas (spray irrigate or drip irrigate).
<u>Hymenoclea monogyra</u>	50 plants/acre	
<u>Sambucus mexicana</u>	50 plants/acre	
<u>Prunus ilicifolia</u>	50 plants/acre	
<u>Heteromeles arbutifolia</u>	50 plants/acre	
<u>Cercocarpus minutiflorus</u>	50 plants/acre	
Upland or lowland seed mix	---	Hydroseed entire patch. Use upland mix on higher slope areas.
<u>Willow/Cottonwood Woodland (WC)</u>		
<u>Populus fremontii</u>	100 plants/acre; 20% 5-gal. size	Plant in 10-15-tree groves with 10-foot intervals (drip irrigate).
<u>Salix gooddingii</u>	75 plants/acre	Plant spaced over remainder of patch (drip irrigate).
<u>Alnus rhombifolia</u>	25 plants/acre	Plant in 5-tree groves with 10-foot spacing (drip irrigate).

TABLE 2
STAND-TYPE DEFINITIONS
(continued)

Species	Quantity	Planting Layout
<u>Rubus ursinus</u> <u>Rosa californica</u>	100 plants/acre 50 plants/acre	Mixed at 17-foot spacing (no irrigation).
Upland seed mix	---	Hydroseed entire patch.
<u>Sycamore Woodland (SW)</u>		
<u>Platanus racemosa</u>	100 plants/acre; 20% 5-gal. size	Plant in 5-tree groups with 10-foot spacing (drip irrigate).
<u>Alnus rhombifolia</u>	50 plants/acre; 20% 5-gal. size	Plant in 5-tree groups with 10-foot spacing (drip irrigate).
<u>Sambucus mexicana</u> <u>Vitis girdiana</u> <u>Prunus ilicifolia</u> <u>Rosa californica</u>	50 plants/acre 50 plants/acre 50 plants/acre 50 plants/acre	Distribute over entire patch with <u>Vitus</u> and <u>Rosa</u> in the tree groups and the others outside (drip irrigate).
Upland seed mix	---	Hydroseed entire patch.
<u>Oak Woodland (OW)</u>		
<u>Quercus agrifolia</u>	100 plants/acre; 20% 5-gal. size	Plant evenly at 21-foot intervals.
<u>Platanus racemosa</u>	50 plants/acre; 20% 5-gal. size	Plant in 5-tree groups with 10-foot spacing (drip irrigate).

TABLE 2
STAND-TYPE DEFINITIONS
(continued)

Species	Quantity	Planting Layout
<u>Prunus ilicifolia</u>	50 plants/acre	Distribute over entire patch at 15-foot intervals, with <u>Rosa</u> , <u>Vitus</u> , and <u>Rubus</u> nearest to the trees (drip irrigate).
<u>Vitis girdiana</u>	25 plants/acre	
<u>Rosa californica</u>	50 plants/acre	
<u>Rubus ursinus</u>	50 plants/acre	
<u>Rhus integrifolia</u>	25 plants/acre	
Upland seed mix	---	Hydroseed entire patch.
<u>Buffer Zone (BZ)</u>		
Trees	Use species and density from indicated patch-type	Plant according to layout given for indicated patch-type.
<u>Cercocarpus minutiflorus</u>	50 plants/acre	Distribute evenly at about 15-foot intervals.
<u>Heteromeles arbutifolia</u>	50 plants/acre	
<u>Prunus ilicifolia</u>	50 plants/acre	
<u>Rhus integrifolia</u>	50 plants/acre	
<u>Rosa californica</u>	100 plants/acre	Plant in tree groups at about 10-foot intervals.
<u>Rubus ursinus</u>	100 plants/acre	
Upland seed mix	---	Hydroseed entire buffer zone.

5. Buffers

To create and maintain a viable wildlife corridor within the floodway, habitat areas must be protected from excessive human disturbance--the same factors that also degrade aesthetic values on the river corridor. For these reasons, buffers will restrict activities within and adjacent to the floodway. Buffers will consist of a vegetated habitat area of variable width within the 100-year floodplain and adjacent native species oriented landscaping that extends the habitat area and provides opportunities for passive recreation. The width of the proposed buffer (see Figures 4 and 5) is a minimum of 25 feet, including a 5-foot planting barrier. Project passive open space is incorporated in the design to effectively increase the vegetated scope of the buffer.

The buffer design forms a restricted area adjacent to the floodway 25 feet in width in which limited uses are permitted. A 5-foot barrier planting of thorny shrubs (e.g., wild rose and blackberry), signs, berms, low walls, and fencing will discourage entry into the buffer. Some passive uses will be permitted within the buffer. These activities will include hiking trails, bicycle trails, and picnic tables in specified locations.

6. Design Interface of Biological and Aesthetic Goals

In accordance with the San Diego River Wetlands Management Plan, no uses will be permitted within the floodway of the river across the property. Entry into the habitats will be inhibited by a combination of appropriate plantings in the habitat buffer area, signage, view opportunities, and focusing of activities through placement of trails and passive use areas. One of the major features of the Levi-Cushman Specific Plan is the creation of an artificial waterway--the Riverwalk--to the south of the developed "island." This feature will direct human activity away from the habitat areas, while satisfying the planning goal of using the river as the thematic and aesthetic focus of the project. Also incorporated into the specific plan are three public open space areas adjacent to the river and a narrow pedestrian-oriented bridge across the river that are designed to focus attention toward the river without allowing direct access to the riparian habitat in the floodway.

To meet the aesthetic goals of the Riparian Revegetation Program, planting adjacent to the river will be carried out in a manner which preserves important

view corridors. Shading in Figures 6 and 7 illustrate the location of view corridors into the river area which will be created and maintained by design and selective pruning. Much effort has been expended to create a river environment which will be unique in scope and character in Mission Valley. Therefore, the revegetated habitat along the upper slopes of certain portions of the floodway and buffer have been designated for habitat types that are relatively low growing (e.g., Shrub Openings) or open groves of taller trees (e.g., Sycamore Woodland) allowing views under the canopy, in order to preserve view corridors onto open water from strategic locations within the project.

Habitat patches have been located in the revegetation plan so that maintenance activities for preserving view corridors to open water (pruning shrub and thicket growth to specified height limits) will enhance biological values through the maintenance of structural diversity.

7. Permitted Land Uses Adjacent to the Floodway Area

The Levi-Cushman Specific Plan presents general guidelines for development adjacent to the revegetated floodway which emphasize the intention that buildings be designed to maintain a comfortable scale relationship with adjacent open space area and to terrace down to the river, with building heights lower adjacent to the river corridor. In addition, the plan proposes that public recreation facilities be located adjacent to the floodway buffer and include picnic tables, benches, viewing areas, pathways, and jogging trails.

Specific development criteria for the areas adjacent to the river channel are proposed to ensure that the intent of these guidelines is met. These criteria include the following:

- a. No buildings shall be located less than 20 feet from the floodway. The majority of buildings along the river should be 50 feet or more from the floodway.
- b. Reflective glass will not be used on the facades of buildings that face the wetlands area and area adjacent to it. This will reduce the incidence of bird mortality that reflective glass can cause (the glass can disorient flying birds and result in collisions with structures).

- c. Buildings located adjacent to the river corridor should not have direct pedestrian access to the adjacent buffer, although visual access should be encouraged.

8. Phasing

Appropriate construction phasing and revegetation under the Riparian Revegetation Program are critical to attaining the objectives of the Levi-Cushman Specific Plan. To this end, the flood-control channel will be developed in two phases (Figure 8). In addition to conforming with overall development phasing, channel construction phasing will allow for refining the revegetation strategy for the entire channel area based on success of the initial revegetation phase. The project biologist will be an independent consultant charged with the responsibility for implementing a monitoring program to assure satisfactory completion of various tasks and phases and to provide data to the technical management committee. Construction and revegetation of the first phase of the channel will be incorporated into the first development phase. Implementation of channel construction and revegetation through the remainder of the project area will be triggered by any development to the west of the first-phase channel.

B. PLANT MATERIALS AND INSTALLATION SPECIFICATIONS

1. Implementation

Implementation of the revegetation plan will require close coordination of the project engineer, landscape architect, grading contractor, landscape contractor, and plant material contractor. The basic mechanism for implementation of the revegetation plan will be via the landscape plans for the overall project. Landscape drawings must be prepared by a licensed landscape architect which implement the guidelines and specifications of this document. The contracting nursery will require at least one year's lead time prior to initiation of the project for proper preparation of plant materials.

2. Plant Materials

Table 3 lists all plant species specified by the revegetation plan, showing container sizes, material sources, and seed mixes. The Salix hindsiana, S. lasiolepis, S. laevigata var. araquipa, and S. lasiandra (sandbar, arroyo, red,

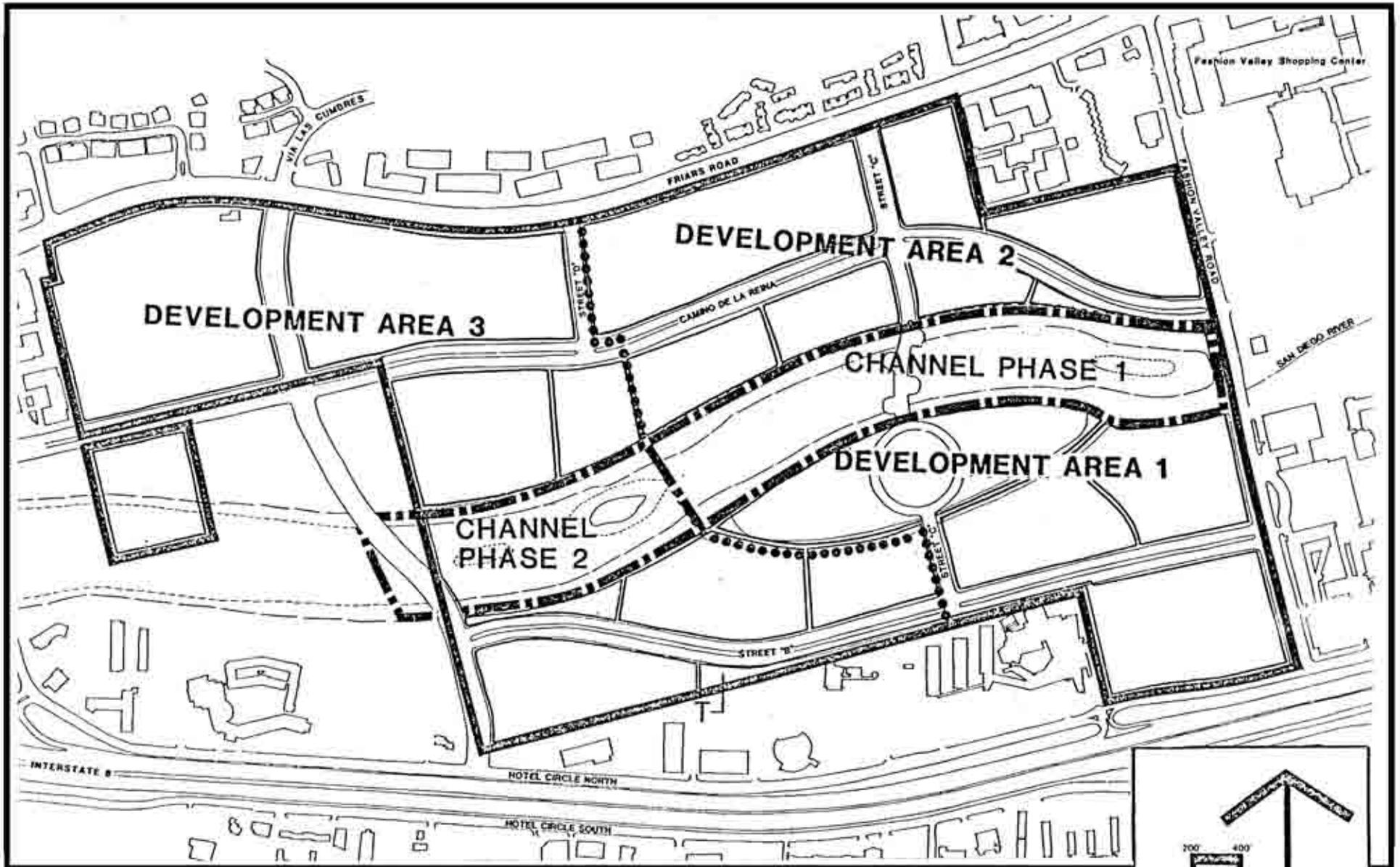


FIGURE 8. PROPOSED CHANNEL CONSTRUCTION AND REVEGETATION PHASE ON THE LEVI-CUSHMAN SPECIFIC PLAN

TABLE 3
PLANT MATERIAL LIST

Category	Container Size	Source
<u>Trees</u>		
<u>Alnus rhombifolia</u> white alder	1g, 5g	2
<u>Platanus racemosa</u> western sycamore	1g, 5g	2
<u>Populus fremontii</u> Fremont cottonwood	1g, 5g	1,2
<u>Quercus agrifolia</u> coast live oak	1g, 5g	2
<u>Salix gooddingii</u> var. <u>variabilis</u> black willow	1g	1
<u>Salix laevigata</u> var. <u>araquipa</u> red willow	1g	1
<u>Salix lasiandra</u> lance-leaf pacific willow	1g	1
<u>Salix lasiolepis</u> arroyo willow	1g	1
<u>Shrubs</u>		
<u>Baccharis glutinosa</u> mule fat	1g	1
<u>Cercocarpus minutiflorus</u> mountain mahogany	1g	2
<u>Heteromeles arbutifolia</u> toyon	1g	2
<u>Hymenoclea monogyra</u> burrow bush	1g	1
<u>Iva hayesiana</u> San Diego poverty weed	1g	2
<u>Prunus ilicifolia</u> holly-leaved cherry	1g	2
<u>Rhus integrifolia</u> lemonade berry	1g	2
<u>Rosa californica</u> California wild rose	1g	2
<u>Rubus ursinus</u> California blackberry	1g	2
<u>Sambucus mexicana</u> Mexican elderberry	1g	2
<u>Vitis girdiana</u> wild grape	1g	2
<u>Emergent Aquatics</u>		
<u>Scirpus acutus</u> hard-stem bulrush	T	3
<u>Scirpus californicus</u> California bulrush	T	3
<u>Typha angustifolia</u> narrow-leaved cattail	T	3
<u>Typha latifolia</u> cattail	T	3

TABLE 3
PLANT MATERIAL LIST
(continued)

KEY:	1g	one-gallon size	SOURCE:	1:	contract grown from local cuttings
	5g	five-gallon size		2:	contract grown from nursery stock or seed
	T	transplant		3:	locally collected rootstock

LOWLAND SEED MIX

Artemisia douglasiana western mugwort
Cotula coronopifolia brass buttons
Mimulus cardinalis scarlet monkeyflower
Oenothera hookeri tall yellow evening primrose
Salix hindsiana sandbar willow
Scirpus sp. bulrush
Typha sp. cattail
Zaucheneria californica California fuchsia

UPLAND SEED MIX

Artemisia californica California sagebrush
Artemisia palmeri Palmer's sagebrush
Clematis pauciflora southern California clematis
Eschscholzia californica California poppy
Keckiella cordifolia heartleaf penstemon
Lonicera subspicata southern honeysuckle
Solanum douglasii nightshade
Zaucheneria californica California fuchsia

and yellow willows) and the Baccharis glutinosa (mulefat) should be planted as rooted cuttings. These willows can be planted unrooted if done during the winter after leaves have fallen and the buds have begun to swell. The Salix gooddingii (black willow) should be planted from one-gallon pots and be initially larger than the other willow species. Container plants will be primarily contract-grown from local stock, but several species such as Quercus agrifolia (coast live oak), Alnus rhombifolia (white alder), and some native shrubs may be available "off the shelf."

To increase the size diversity of the upper area woodlands, a variety of sizes of trees (one-gallon, five-gallon, and transplanted mature trees) will be used. Currently, native cottonwoods and sycamores are growing on the on-site golf course. Many of these could be transplanted into the revegetation site or possibly used in place with other species planted around them. This would depend on the final contouring and design.

Willow cuttings should be at least 18 inches long and at least 0.25 inch in diameter. Larger-diameter cuttings increase survival rates. Cuttings should be cut flat across the top end to reduce water loss and diagonally at the bottom to increase water uptake. The cuttings should be inserted at least five inches into the rooting medium. Rooting hormone may or may not be used. Rooted cuttings should be inspected by the project biologist prior to installation. Other specifications as required would be available from the project biologist.

Plant materials should be as listed unless changes are approved by the project biologist. The project biologist should also approve the condition of all the plants prior to installation, especially the rooted cuttings.

Contract supervision for the supply of plant materials for the project will be the responsibility of the project landscape architect. Tree of Life Nursery in San Juan Capistrano is currently the only nursery (known to the authors of this report) with sufficient experience and ability with local native riparian species to assure successful delivery of the proper materials for a project of this magnitude.

3. Site Preparation

Grading plans for the project will specify a low degree of soil compaction for the channel slopes to allow proper root growth of planted trees and avoid a requirement for augering planting holes. Pre-planting soils testing should be

conducted by the project landscape architect to assess requirements for planting specifications. High-quality topsoil present on the site will be stockpiled prior to grading and used for landscape and riparian revegetation plantings.

Following initial grading and construction of the channel and just prior to planting and seeding, the site should be treated to reduce the chances of invasion by weeds. The channel slopes should be spray irrigated for a period of two weeks to initiate weed seed germination, then treated with Roundup (a herbicide) to kill the young weeds. If time permits, a second sequence of watering and Roundup application would assure even greater weed suppression. Planting of revegetation species should be done two weeks later, after the Roundup has broken down. This procedure should be done only during non-flooding seasons.

4. Rock Erosion Protection

Rock erosion protection will be used at the leading edge of islands, on the downstream side of bridge abutment, and below weir-drop structure where necessary for hydraulics. The rock erosion protection along the sides of the channel will be vegetated using a method based on live staking described by Gray and Leiser in Biotechnical Slope Protection (1982). Rooted cuttings will be planted prior to applying the rock erosion protection. On the higher areas, species of the Mixed Willow Woodland (MW) will be used, and on the lower areas, species of the Arroyo Willow Woodland (AW). Planting before rock is applied assures the roots will be in the soil below the rock. This also avoids the need to remove small areas of rock in which to plant. As rock is applied, plants may be bent or slightly damaged, but the species used (Salix and Baccharis) are resilient and will readily resprout shoots and roots.

Topsoil should be applied over the rock erosion protection if done at a time of year so that plants can become established, especially root systems, before winter rains and floods. Plantings on the rock erosion protection should be irrigated by the method used on adjacent plantings. Seeds can be applied to the topsoil on the rock erosion protection as on other areas.

Plastic erosion-control netting will be used in some locations on the channel slopes where water velocities approach seven feet per second. Vegetation can be planted through the netting; the combination of roots and enmeshed netting buried below the soil surface will enhance both soil and vegetation erosion resistance.

5. Timing of Plant and Seed Installation

Hydroseed application and container stock installation on the channel slopes should be installed during the period between October 1 and December 30. Hydroseed application and container planting in the channel bed and on lower slopes affected by flooding during the rainy season should be deferred until April 1 and accomplished prior to May 15 to minimize the probability of flood damage prior to establishment. Temporary spray irrigation may be required on the channel slopes to initiate and maintain growth of the hydroseed application if significant drought conditions occur in the period following application.

6. Irrigation Requirements

A temporary irrigation system for the revegetation area will be required. A drip irrigation system is required on the higher areas of the revegetation area in order to prevent the weed problem which would result from year-round spray irrigation. The higher areas with drip irrigation will be Willow-Cottonwood Woodland (WC), Sycamore Woodland (SY), Oak Woodland (OW), and Shrub Openings (SO). Spray irrigation will be required on lower areas of Sandbar Willow Woodland (SW), Arroyo Willow Woodland (AW), and Mixed Willow Woodland (MW). Spray irrigation on the higher areas may be required the first spring and summer if the winter is abnormally dry or if the seeded plants have not become well enough established to survive the summer drought. The buffer zone shrubs not designated to be irrigated would be more likely to survive if they are deep-watered (1 to 1.5 gallons per plant) one time each month during the first spring and summer.

Irrigation is expected to be required for the first one or two dry seasons on lower areas and longer on upper areas. To some extent, permanent landscape irrigation associated with adjacent project landscaping will provide water to the riparian plantings. The temporary irrigation systems will be turned off as soon as the associated plantings are capable of independent growth, in order to assure adequate growth of root systems. Prior to shutting down irrigation systems, testing will be conducted on representative subsections to determine ability to survive without irrigation.

C. FLOOD-CONTROL DESIGN

The fundamental purpose of the proposed channel is to provide flood control for the surrounding property which will be developed to commercial and residential uses. The proposed facility has been designed to meet the hydraulic requirements and design guidelines specified by the Mission Valley Community Plan in that it will contain the projected peak discharge for a 100-year (probability of 0.01 for any particular year) flood event of 49,000 cfs without raising the water surface elevation more than one foot (Figure 9). The channel design has been configured to maintain the designed hydraulic performance in a low-maintenance system where riparian vegetation is allowed to develop. Modeling studies of channel performance utilizing conservation resistance factors for vegetated islands and banks were used to create a channel design which optimized flood-control performance within the constraints imposed by revegetation requirements (Bowling, Rick Engineering, 4/3/86).

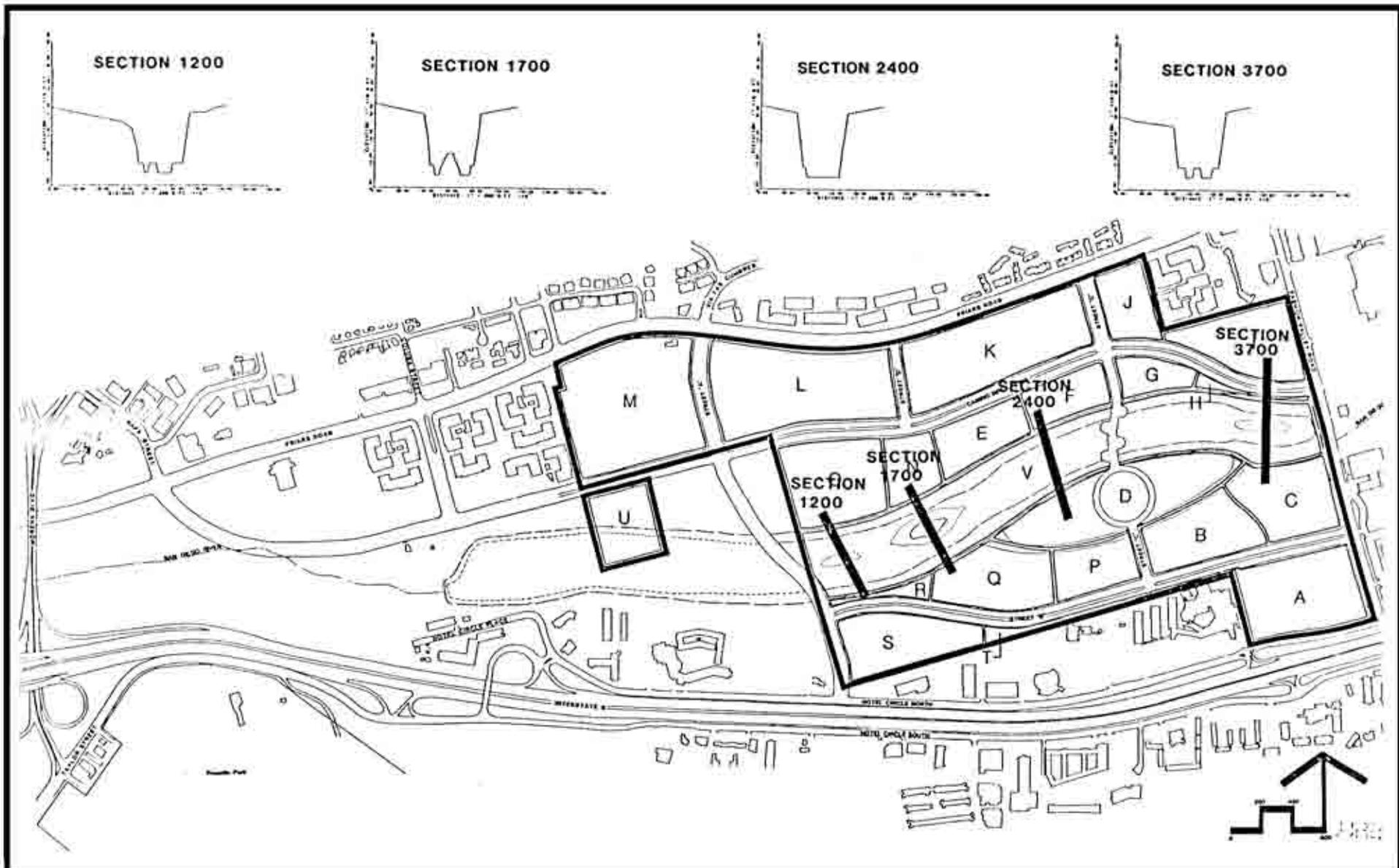


FIGURE 9. CHANNEL DESIGN CROSS SECTIONS

III. MANAGEMENT PLAN

A. PURPOSE

The purpose of this management plan is to ensure that the goals of the Riparian Revegetation Program are met, resulting in the creation and maintenance of riparian habitat, maintenance of adequate flood control, and maintenance of the river as an aesthetic amenity to the community. The success of the program in achieving these goals depends upon adequate monitoring of the progress and status of these aspects of the river channel and correct maintenance responses to remedy any problems which may occur. In addition, monitoring and maintenance activities must integrate these goals in a consistent manner and in accordance with the guidelines agreed upon by the developer, the City of San Diego, COE, DFG, and USFWS.

The success of the revegetation effort will be primarily a function of the survival of initial and replacement plant materials and subsequent maturation of the created habitats through natural processes. It is to be expected that natural factors will remold the initial design to some extent, but the reestablished vegetation will be similar to that which is proposed. The primary measure of success of the revegetation effort will be the survival of individual plants after initial planting, during the first rainy season, and then in competition with adventitious species that will inevitably populate the site. A secondary, but immediate, goal will be the establishment of an adequate cover to minimize the extent of erosion after the new channel has been graded. After initial establishment of the vegetation, successional processes in response to ecological conditions will influence the ultimate composition and structure of habitat in the channel.

Management decisions may have to be made if successional processes lead toward habitat structure or composition in conflict with either flood-control or aesthetic goals of the channel. As a general policy, flood control should have priority where public safety is involved. Biological productivity should be maintained to the extent possible, without jeopardizing public safety. Aesthetic quality of the wetland habitat should also be maintained while not degrading biological productivity and values. Vegetation that is lost during the first three years after establishment will be replaced.

B. TECHNICAL ASSESSMENT

The degree to which the actual implementation of the project satisfies the stated goals of the Riparian Revegetation Program will be determined by periodic inspection by the project hydraulic engineer, landscape architect, and biologist, as described in Section C below. These inspections will assess the attainment of the performance criteria listed below.

1. Hydraulic Performance

Evaluation by the project hydraulic engineer will consist of periodic inspection of the channel to determine whether topographic changes (such as sediment deposits causing a decrease in channel depth) or biotic changes (such as growth of woody vegetation in channel areas planned for soft vegetation) have occurred which require remedial action.

Corrective action will be recommended in accordance with the implementation procedures discussed below if the evaluation indicates existence of conditions which might result in a failure of the flood-control system to perform as designed.

2. Aesthetic Performance

Evaluation by the project landscape architect will consist of periodic inspection of the channel plantings to assess whether vegetation development, particularly in the buffer areas and view corridors, is consistent with the visual aesthetic goals of the Riparian Revegetation Program. The proper function of the irrigation system will be assessed, and landscape maintenance procedures will be reviewed during each periodic inspection.

Corrective action will be recommended if the evaluation indicates that maintenance activities within the buffer or channel plantings (such as pruning or weeding) are required in order to maintain view corridors or visual aesthetic standards specified by the Riparian Revegetation Program and the Specific Plan.

3. Biological Performance

Evaluation by the project biologist will consist of periodic surveys in the channel area to assess survival and development of the revegetation plantings

and to assess change in quality of wildlife habitat. Vegetation and habitat mapping will be produced during each inspection that documents mortality in tree and shrub plantings, immigration of native riparian plant species, invasion by nonnative weedy plant species, general distribution of wildlife species, and habitat quality. The level of disturbance (if any) originating from adjacent development will be assessed, and a comparison of actual versus planned physical-environmental conditions (e.g., water surface elevation, soil moisture) will be made.

The creation of high-quality wildlife habitat is one of the major goals of the revegetation program. While assessment of the success of vegetative reestablishment is the most easily quantifiable measure of the success of the project, it is only an indirect measure of wildlife use. Breeding bird surveys and wintering bird surveys will be conducted during the first five years after project implementation, in order to estimate habitat utilization as a measure of wildlife habitat quality. For comparison with later data, breeding and wintering bird surveys will also be conducted prior to project implementation and during the construction phase.

Corrective action will be recommended in accordance with the implementation procedures described below if the assessment indicates that one or more of the following conditions exist:

- a. Mortality occurs in the tree and shrub plantings of any particular segment of the revegetation area, indicating a need to assess the cause of the mortality. Make corrections and replant where necessary. All trees and shrubs which are lost during the first five years due to disease, overwatering, irrigation failure, or vandalism will be replaced. Vegetation will be replaced during the first three years of the program if lost due to flooding.
- b. Invasion by nonnative nuisance species which reduce habitat quality (such as castor bean or giant reed grass) has occurred, indicating a need for weeding and physical removal. Invasive nonnative species will be removed biannually during the five-year maintenance period.
- c. Disturbance associated with human activity in the surrounding development is occurring, indicating a need to assess buffer function and formulate recommendations to reduce disturbance.

- d. Actual physical-environmental conditions are significantly different from predicted conditions in some portion of the revegetation area, indicating a need for corrective action.
- e. Conditions related to development or maintenance activities on areas surrounding the channel are having a detrimental effect on the habitat quality, indicating a need for corrective action.

C. IMPLEMENTATION

It is anticipated that with financing through an LCSP maintenance district, the City of San Diego will be responsible for implementation of the Riparian Revegetation Program. Actual terms of the implementation arrangement will be defined in a Development Agreement negotiated between the City and the project developer.

Basic components of the Development Agreement will include the following:

1. Ownership of the improved flood-control facility will be maintained by the developer.
2. A flood-control easement to ensure conveyance of floodwaters and an open space easement will be established on the property within the floodway.
3. The developer will be responsible for maintenance of the flood conveyance capacity, the biological quality, and the aesthetic quality of the revegetated channel and buffer areas for a period of five years after the initial establishment of the vegetation.
4. The developer will contract the assistance of a management team consisting of a hydraulic engineer, a biologist, and a landscape architect to direct activities related to monitoring and maintenance of the Riparian Revegetation Program.
5. Monitoring will continue for five years after completion of the revegetation plan implementation.

The scope of work for the management team will include preparation of periodic reports addressing the performance criteria described in the previous section. The biological assessment should be semiannual for the first three years after implementation and annual for the next two years. The final biological assessment should review the results of the implementation program and describe modifications and remedial actions implemented during the monitoring period, to make these data available for use in the design of other such projects. The hydraulic and landscape reports are to be prepared annually over the five-year monitoring period. All three final reports will contain management recommendations to the City of San Diego concerning long-term resource and engineering management of the facility.

These reports, and periodic field visits by representatives of the City of San Diego, DFG, and USFWS, will allow adequate assessment of the project success. Reports will be sent to DFG and USFWS for review and comment. The city may require remedial action within the scope of the Development Agreement between the city and the developer.

Routine maintenance activities on the project site that could affect the biological structure or function of the revegetated wetlands in the flood-control channel must be made so that they balance the three principal goals of the Riparian Revegetation Program. To ensure this, all such activities (other than emergency measures) should be reviewed by a competent ecologist or conservation biologist who is familiar with the restoration program, prior to initiation. The biologist should determine that the proposed actions are either (1) minor in nature (minor in their effects or in the area affected) and require no further review before implementation or (2) of large enough significance to warrant modification to decrease impacts to biological resources. If recommended modifications to the proposed action are not acceptable to the responsible party, the proposed action and recommended modification will be reviewed by the City of San Diego for determination and DFG, COE, and USFWS for comment.

ATTACHMENT 1



RICK ENGINEERING COMPANY | PLANNING CONSULTANTS
AND CIVIL ENGINEERS
5620 FRIARS ROAD • SAN DIEGO, CALIF. 92110-2596
TELEPHONE 619-591-0707 • AREA CODE 619 • 291-0707

3 APRIL 1986

TO: PLANNING DEPARTMENT, CITY OF SAN DIEGO

FROM: DENNIS BOWLING, HEAD, WATER RESOURCES DIVISION, RICK
ENGINEERING

RE: HEC-2 RUN, WEST OF FASHION VALLEY ROAD

METHODOLOGY

A U. S. Army Corps of Engineers HEC-2 computer output has been prepared as part of the Levi-Cushman Specific Plan. Staff of the Water Resources Division are available to review the detailed computer output with City engineering personnel on request.

This HEC II computer run covers the portion of the San Diego River west of Fashion Valley Road, and includes both the 10-year storm (4,600 c.f.s.) and the 100-year storm (49,000 c.f.s.) events. The output results from combining three different HEC-2 input decks:

For sections 19008 through 21618, the City of San Diego's latest input deck (6/22/83) was used. This area, from approximately Colusa Street to the ocean, is west of proposed improvements within the Levi-Cushman property and covers land owned by Warner Ranch and the City of San Diego.

For sections 30 through 3900, a new input deck was digitized incorporating the channel improvements proposed within the project boundary of the Levi-Cushman Specific Plan dated March 1986. The area covered by sections 30 through 3900 runs from approximately Colusa Street to Fashion Valley Road.

For section 276.7 through 30483, input was from the latest Boyle Engineering run dated 9/05/85 which models a portion of the San Diego River upstream of Fashion Valley Road. This area adjoins the proposed LCSP improvements to the east and is owned by Fashion Valley Associates, which is comprised of Atlas Hotels and the Fashion Valley Shopping Center.

Two 100-year crossings and two weir sections have been included in this run. The 100-year crossings are incorporated at sections 800.1 through 800.4 (Street "A"), and sections 2701 through 2704 (Street "C"). The weirs were placed at sections 30 (Colusa Street) and 800.4 (Street "A"). The weir at Colusa Street has a minimum elevation of 11.0 feet while the weir at Street "A" has a minimum elevation of 13.0 feet and a maximum elevation of 17.5 feet. These two weir sections will provide a minimum water surface elevation upstream of each weir of 11.0 feet and 13.0 feet respectively. This constant water surface elevation provides natural habitat for plants and animals indigenous to the region.

Three islands are also included in the reach of the San Diego River between Street "A" and Fashion Valley Road and were included in the computer analysis. Two of these islands lie between Street "A" and Street "C", and the third is located between Street "C" and Fashion Valley Road.

The attached chart compares channel velocities ("Vel.") and calculated water surface elevations ("CWSEL") for the 100-year storm between the existing City of San Diego HEC-2 computer run and the LCSP proposed channel HEC-2 computer run. Along the bottom of the chart is a comparison of the water surface elevation at Fashion Valley Road for the proposed improvements and those of the Boyle Engineering run.

FINDINGS

1. Hydraulics necessary to establish channel geometry to accommodate Corps of Engineers flow requirements have been developed.
2. Channel design works for phased development of channel.
3. Area west of Street A river crossing is not protected in a 100 year storm, but it's a simple matter to do so. Preliminary assessment shows that protection can be made available at the time the parcels adjoining the channel are developed if pad elevation is raised. For example, a road constructed on the south side of the channel could serve as a dike.
4. A pilot channel is assumed in the area west of the project, at the point where Colusa Street, if extended, would cut across the River. The pilot channel is necessary only because of the construction of Camino de la Reina. If Camino de la Reina is not built west of Colusa, the pilot channel would not be necessary.

COMPARISON OF EXISTING AND PROPOSED WATER SURFACE ELEVATIONS
SAN DIEGO RIVER, WEST OF FASHION VALLEY ROAD
100-YEAR STORM

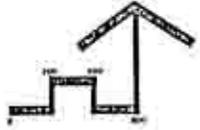
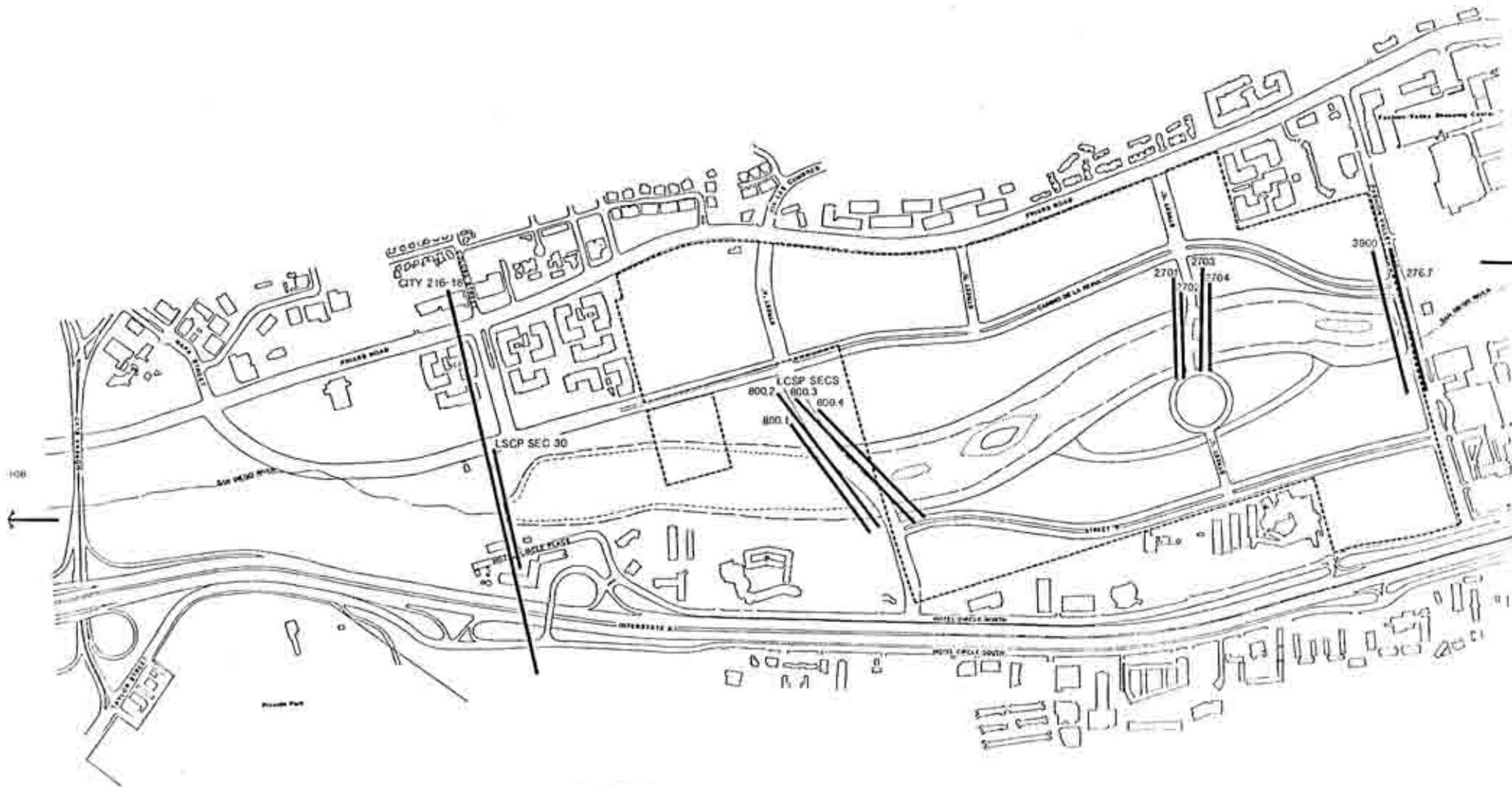
1) EXISTING CITY OF SAN DIEGO HEC-2 COMPUTER RUN DATED 6/22/83			PROPOSED CONDITION 3/20/86		
SECTION (Colusa Street)	VELOCITY	CWSEL	SECTION	VELOCITY	CWSEL
216+18	14.10	19.37	216+18	15.09	18.81
WEIR AT SECTION 30 SET AT ELEVATION 11.0 (Colusa Street)			30	14.76	20.10
			40	7.11	21.53
			50	6.43	21.73
223+03	12.61	21.57	---	---	---
			60	6.41	21.78
			70	6.55	21.80
			80	6.76	21.83
227+03	8.74	23.25	---	---	---
			90	7.13	21.83
			100	7.11	21.91
			200	6.93	22.01
230+93	8.77	23.80	---	---	---
			300	6.94	22.08
			400	6.90	22.15
234+03	7.07	24.62	500	7.20	22.16
			600	7.07	22.26
			700	7.04	22.32
100 YEAR CROSSING SECTIONS 800.1-800.4 (Street "A" Bridge)			800.1	7.00	22.38
			800.2	10.71	21.87
			800.3	10.61	22.00
WEIR AT ELEVATION 17.5 WITH NOTCH TO ELEV 13.0			800.4	15.90	24.89

2) FASHION VALLEY ROAD

EXISTING CITY RUN JUNE 22, 1983			EXISTING BOYLE RUN SEPTEMBER 5, 1985			PROPOSED RUN MARCH 20, 1986		
SEC.	VEL.	CWSEL	SEC.	VEL.	CWSEL	SEC.	VEL.	CWSEL
280+43	2.50	36.37	276.7	7.98	30.26	276.7	4.99	30.02

3) COMPARISON OF THE 10-YEAR STORM AT FASHION VALLEY ROAD

EXISTING BOYLE RUN			PROPOSED RUN		
SEC.	VEL.	CWSEL	SEC.	VEL.	CWSEL
276.7	3.15	23.26	276.7	9.31	19.21



* NOTE:
 SECTIONS 19008 AND 30483 ARE OFF OF THE MAP
 19008 IS NEAR OCEAN
 30483 IS NEAR HIGHWAY 163

V. DEFINITIONS

ACCESS - Potential locations for entry roads into a parcel as shown on the Parcel Summary Maps, IG Section III. The actual entry location will be determined at the PCD/PRD stage.

ADT - Average Daily Trips. In the LCSP, ADT are used to a) define the volume of traffic generated by particular land uses, and b) indicate the capacity of a street or street system to handle traffic.

BARRIER (VEGETATIVE BARRIER) - Within the RIVER BUFFER adjacent to the San Diego River, a physical barrier of vegetation must be maintained. See IG Section II F3. The barrier will incorporate native riparian species including thorny shrubs such as wild rose and blackberry to restrict access into the RIVER CHANNEL. The barrier will be no less than 5 feet wide and have an understory height no greater than 4 feet to allow visual access to the river. Trees planted within the barrier shall be located and maintained to permit a break in the plant overstory along at least 20 percent of the barrier. These breaks, intended to provide panoramic view areas, should occur at the terminus of view corridors and no individual break shall be greater than 50 linear feet. See SCREEN BREAK.

BIKEWAYS -

Bicycle Paths - Bicycle paths are two-way facilities separate from roadways. When designed exclusively for bicycles, paths shall have a width of eight feet with a two-foot shoulder on either side. A minimum eight-foot vertical clearance to obstructions shall be provided at the outside edge of the bike path. When a bicycle path is combined with a pedestrian path, it shall be ten feet wide with the two-foot horizontal and eight-foot vertical clearance required only on one side of the path. See Typical Designs Adjacent to the Buffer, LCSP Figure 3.4.

Bicycle Lanes - Bicycle lanes are striped or marked lanes in the roadway designated for preferential one-way use. Bicycle lanes shall be six feet wide.

Bicycle Routes - Bicycle routes are signed bikeways shared with pedestrian or motor vehicles with no specially marked lane. Widths of routes vary based on vehicular traffic and road conditions.

BUFFER/RIVER BUFFER - A minimum 25-foot wide area adjacent to both sides of the San Diego River will act to buffer the river from adjacent development. The buffer will always contain a 5-foot plant BARRIER to prevent direct access into the river and may contain a pedestrian and/or bike path.

landscaping, and passive recreational areas. Paved paths within the buffer may not be any wider than 10 feet.

CANAL - The CANAL is a waterway approximately 40 feet wide located on the south side of the island. The CANAL will be an artificial lake that visually connects but is physically separated from the river channel. Pedestrian bridges will connect Parcels B, C, P, and Q to the island. Pedestrian walkways (the RIVERWALK), retail stores, and restaurants will line either side of the canal.

DEVELOPMENT AREA - 1) One of three major divisions of the LCSP project area and the minimum unit for which discretionary development applications can be submitted. 2) That portion of a site on which structural development may occur. It is measured as the area within the gross parcel boundary less setbacks and rights-of-way.

FLOODWAY - The floodway includes those areas subject to flooding during a 100-year storm.

FLOODWAY TRANSITION AREA - A river overflow area where no permanent structural development is permitted unless mitigation is accomplished in compliance with the San Diego River Wetlands Management Plan. Floodway Transition Areas occur on Parcels C, H, and I.

HEIGHT ENVELOPE - Isometric drawings of height limits/requirements as provided on each Parcel Summary Maps in IG Section III. The effect of building heights sloping toward

the river is to visually maintain the valley character within the project and maximize views of the river from all parcels.

PEDESTRIAN NODES -

Major - Sites of large-scale, major pedestrian-oriented activity; locations where pedestrians gather, group and rest such as plazas, courtyards, etc. (See Figure LCSP 3.5).

Minor - Sites of small scale, minor pedestrian-oriented activity; locations where pedestrians gather, group and rest such as small parks, mini-plazas, etc. (See LCSP Figure 3.5).

PEDESTRIAN PATHS -

Primary - The principal element in the pedestrian network; to be 10 feet wide and located as illustrated in LCSP Figure 3.5. When combined with a bikeway in the BUFFER, the pedestrian/bike path shall be 10 feet wide with a two foot clear shoulder along the side used by cyclists.

Minor - The smallest link in the pedestrian path system which connects the least traveled areas into the pedestrian network. Minor pedestrian paths are to be 6 feet wide.

RIVER BUFFER - See BUFFER

RIVER CHANNEL/CORRIDOR - The river channel or river corridor is the water surface and the sides of the channel, including the slopes and areas of wetland habitat extending to

the top of the river banks. It does not include any portion of the buffer.

RIVERWALK - Public promenade located on both sides of the CANAL.

SCREEN BREAK - A visual break in the BUFFER vegetation adjacent to the river or in the perimeter screen plantings where an absence of overstory material permits expanded views into the river corridor. Occurs on no less than 20 percent of the river frontage at the terminus of view corridors and in no case is an individual break greater than 50 linear feet.

STEP-BACK - An architectural design in which upper floors of a building recede from lower floors, resulting in a step-like profile.

THEME ENTRIES -

Major - Wedge-shaped landscaped entries into the project that announce and enunciate the dominant themes and images of the development with fountains or pools as elements. It includes monumentation and is measured as a 120' radius from the corner where the entry is located.

Secondary - An intermediate size theme entry node that is landscaped and incorporates some water or monument features. Measured as a 90' radius from the corner where the entry is located.

Minor - The smallest of the theme entries into the project; it is landscaped and includes monumentation. Dimensions are measured as a radius of 45' from the corner where the entry is located.

THEME TOWER - Proposed for the center of the island, the theme tower would provide a focal point for the entire project.

TRANSITION ZONE - See FLOODWAY TRANSITION AREA.

TRANSPORTATION CENTER - The transportation center will be located at the intersections of Parcels F, G, J and K. Stops for the LRT, buses, intra-valley transit or shuttles, taxis, etc., are proposed, as are traveler-oriented services such as hotels, restaurants, ticket booths, etc.

VIEW CORRIDOR - Important sight lines which must be preserved to and from the RIVER CHANNEL and the island from pedestrian and vehicular levels (See LCSP Figure 3.7).