VILLAGE SEVEN COMPREHENSIVE AFFORDABLE HOUSING PROGRAM

A COMPREHENSIVE PLAN
FOR
THE PROVISION OF
AFFORDABLE HOUSING

Approved by the Chula Vista City Council
Resolution No. 2004-329
Date: October 12, 2004

TABLE OF CONTENTS

II.6.1 INTRODUCTION 1

II.6.2 DEFINITIONS 2

II.6.3 NEEDS ASSESSMENT 3

II.6.4 VILLAGE SEVEN AFFORDABLE HOUSING PROGRAM 4

II.6.4.1 LOW INCOME HOUSING 5

Requirements 5
Site Selection Criteria 6
Design 6
Unit Mix by Bedroom Count 6
Low Income Housing Sites 7
Phasing 8
Implementation Schedule 8

II.6.4.2 MODERATE INCOME HOUSING 11

Moderate Income Housing Requirements 11
Moderate Income Housing Sites 11
Phasing 11
Implementation Schedule 12

II.6.4.3 AFFORDABLE HOUSING RESTRICTIONS 13

Income Eligibility 13
Affordable Monthly Rents 14
Affordable Housing Costs for Owner Occupied Housing 14
Underwriting Requirements 14
Resale Provisions of Owner Occupied Housing 15
Term of Affordability Restrictions 15

II.6.4.4 SUBSIDIES, INCENTIVES AND FINANCING MECHANISMS 16

II.6.4.5 COMPLIANCE REPORTING 17

Rental Units' Compliance Packet and Audit....17
Home Ownership Units' Compliance Packet....18

II.6.4.6 AFFIRMATIVE MARKETING PLAN....19

II.6.4.7 IMPLEMENTING AGREEMENTS AND CONDITIONS....19

II.6.5 EXHIBITS....21

Exhibit 1 Low and Moderate Income Sites....21
Exhibit 2 Maximum Income & Housing Expense....22
Exhibit 3 Supplemental Rental Application....23
Exhibit 4 Semi-annual Report....26
Exhibit 5 Annual Moderate Income Affordable Housing Report....29
Exhibit 6 Homebuyer's Qualifying Form....31
Exhibit 7 Affirmative Marketing Plan....32

II.6.1 INTRODUCTION

The City of Chula Vista ("City"), along with all other cities in California, is required by state law to have a Housing Element as a component of its General Plan. The Housing Element describes the housing needs of the community and the responses necessary to fulfill them.

The City of Chula Vista Housing Element of 1991 contains numerous objectives, policies and related action programs to accomplish these objectives. Key among these policies is the affordable housing policy which requires that residential development with fifty (50) or more dwelling units provide a minimum of 10% of the total dwelling units for low and moderate income households, one-half of these units (5% of the total project) being designated to low income and the remaining five percent (5%) to moderate income households.

In order to guarantee the provision of Affordable Housing opportunities, the City requires that a specific Affordable Housing Program ("AHP") and agreement be consistent with the Housing Element of the Chula Vista General Plan and be prepared and signed by the Developer. This Affordable Housing Program is intended to delineate how, when and where the units would be provided, intended subsidies, income rent restrictions and methods to verify compliance. The program may be implemented through various mechanisms including development agreements, tentative map conditions, and specific housing project agreements which may impose additional terms and conditions consistent herewith.

The Village Seven Comprehensive Affordable Housing Program, as used herein, applies to all neighborhoods owned by the applicants, McMillin Otay Ranch LLC and Otay Project LP, within the Village Seven SPA in the Otay Ranch General Development Plan. The other property owners will be required to submit amendments or supplemental programs to address affordable housing provision for their property, consistent with the "segmenting" provisions of the Otay Ranch General Development Plan.

The Village Seven Comprehensive Affordable Housing Program is consistent with the City's affordable housing policies. Within the McMillin portion, 39 low income and 40 moderate income units are required. That low-income obligation may be satisfied by providing qualifying units in Neighborhoods R-5, R-6 and/or R7, "granny flat" units within neighborhood R-1, or the requirement may be deferred to a future village wherein McMillin has sufficient multi-family units (Planning Area 12/EUC). The moderate-income units will also be provided within neighborhoods R-5, R-6 and/or R-7, and may be planned as market rate condominium units. Within the Otay Project (Otay Ranch Company) portion, 21 low income and 20 moderate income housing units are required. The low and moderate income obligation may be satisfied at the Otay Ranch Company's discretion by either the use of available existing or future credits from other affordable housing projects in Otay Ranch, and/or the provision of low and/or moderate income housing units on neighborhood R-2 in

Village Seven. The Otay Ranch Company may also use "granny flats" in single family neighborhoods to satisfy the obligation or pay fees in-lieu.

Overall, the initial approval for Village Seven is planned to include a total of 1,204 housing units. The location of candidate low and moderate income housing sites is shown on Exhibit 1, Low and Moderate Income Housing Sites. To the extent that the property owner satisfies its, low and/or moderate housing obligations on one or more of these candidate sites, the selection of which site or sites to use shall be entirely on the property owner's discretion. In the event that the provision of low and/or moderate income housing units in Village Seven results in the provision of more units than required herein, the property owner or its successors or assigns shall be permitted to use such excess credits elsewhere within the boundaries of the Otay Ranch General Development Plan or to meet affordable housing obligations from projects located elsewhere in the city of Chula Vista. Village Seven affordable housing obligations may also be met through provision of sufficient acceptable units outside the boundaries of the Otay Ranch General Development Plan, with specific approval by the City of Chula Vista. The owners also retain the right to determine whether affordable units are provided as rental or market rate units, as long as the affordability criteria are met.

II.6.2 DEFINITIONS

Affirmative Marketing Plan:

An outline that details actions the developer will take to provide information and otherwise attract eligible persons in the housing market area to the available housing without regard to race, sex, sexual orientation, marital status, familiar status, color, religion, national origin, ancestry, handicap, age, or any other category which may be defined by law now or in the future.

Low Income Household:

A household of persons who claim primary residency at the same unit with combined incomes that do not exceed 80% of the Area Median Income for the San Diego area (adjusted annually) based on household size., as established by and amended from time to time pursuant to Section 8 of the United States Housing Act of 1937 and as also published in the California Administrative Code. See Exhibit 2 for the annual income limits as published by the United States Department of Housing and Urban Development (HUD). Household size is calculated by the number of persons residing at the same unit as their primary residency.

Moderate Income Household:

A household of persons who claim primary residency at the same unit with combined incomes between 80% to 120% of the Area Median Income for the San Diego area (adjusted annually) based on household size, as established by and amended from time to time pursuant to Section 8 of the United States Housing Act of 1937 and as also published in the California Administrative Code. See Exhibit 2 for the annual income limits as published by the United States Department of Housing and Urban Development (HUD). Household size is calculated by the number of persons residing at the same unit as their primary residency.

San Diego Area Median Income:

The San Diego County area median income level as determined from time to time by the Department of Housing and Urban Development, United States Government, based on household size.

Subsidized Financing:

Any financing provided by any public agency specifically for the development and construction of low or moderate income housing units, including but not limited to the following:

- Low Income Housing Tax Credits (LIHTC) – statewide competition;
- Housing Bonds – State;
- Housing Bonds – City;
- Redevelopment Low and Moderate-income Housing fund – Redevelopment Agency;
- HOME – City and County;
- CDBG – City; and,
- Other Public Financing – State and Federal

II.6.3 NEEDS ASSESSMENT

According to SANDAG's Preliminary 2020 Cities/County Forecast, Chula Vista is expected to gain 91,984 new residents and 21,428 new households. The characteristics of the City's population, housing, and employment that affect its housing goals, policies, and programs include:

- Chula Vista residents have household income and age characteristics that nearly match the regional median.

- According to SANDAG (2000), the population has more diversity in race/ethnicity than the region, in that 32 percent of the population is white (non-Hispanic) and 50 percent is Hispanic (all races), this compares to 55 percent and 27 percent respectively for the San Diego Region.

- Household size is slightly larger than the region, at 2.95 persons per household for Chula Vista, compared to 2.77 persons per household for the region.

- A large supply of vacant developable land is planned for communities with a wide variety of densities and land use types.

- The well established neighborhoods and master planned neighborhoods create different opportunities and require a different set of policies and programs to address housing needs.

- The City's diverse employment base will grow by more than 84 percent between 2000 and 2030, with the majority of growth in the retail, service, and government sectors.

- A high rate of new home construction is anticipated due to the many approved master planned communities in the City.

- Reinvestment in the well-established neighborhoods of Western Chula Vista continues to be needed.

- Approximately 13,000 units will be 50 years or older by 2004.

- A home ownership rate of 57 percent is nearly the same as the region's rate of 55 percent.

- The low rental vacancy rate of 3.0 percent indicates likely increased housing costs and greater likelihood of over-crowding.

- The median housing cost (resale) of $_____ is $_____ less than the region's median cost of $_____. *(to be updated with current statistics.)*

- Average rents are __ percent to __ percent lower than the region wide average rents.

The City has two sets of numerical housing goals established by SANDAG, which are also addressed in the Housing Element; the City's share of the region's future housing needs (regional share goals) and the affordable housing goal for self-certification. The total regional share goal is 10,401 new housing units of which 1,889 are very low-income units and 1,535 are low-income units. The estimated affordable housing goal for self-certification in 2004 is 1,029 housing opportunities for low-income households.

II.6.4 VILLAGE SEVEN AFFORDABLE HOUSING PROGRAM

II.6.4.1 LOW INCOME HOUSING

- Requirements

The Village Seven development is required to provide a minimum of 10% of the number of permitted dwelling units as affordable housing, of which one-half shall be provided as low income housing and one- half will be provided as moderate income housing

Based on the total number of permitted dwelling units, a total of 120 low and moderate-income housing units are required to be provided, of which 60 will be provided for low-income households, and 60 will be provided for moderate-income households. The McMillin obligation is to provide 39 low-income and 40 moderate income units. The Otay Ranch Company obligation is to provide 21 low-income and 20 moderate income units.

- Types of Affordable Housing

The housing policies and programs established in the City of Chula Vista General Plan Housing Element advocate a broad variety and diversity of housing types. The affordable housing obligations of Village Seven development will be met through a combination of housing types that may include rental housing, "for-sale" housing, second dwelling units or other forms of housing. In general, low income housing needs will be satisfied through the provision of rental units and "for-sale" housing. It is anticipated that housing opportunities to meet the need of moderate-income households will be primarily provided by "for-sale" housing, but rental units shall not be precluded or discouraged. In addition, property owners will be entitled to use credits available from excess units built in prior projects in Otay Ranch.

- Site Selection Criteria

The location of affordable housing developments shall take into consideration proximity and availability of the following:

a. Existing or proposed public transit facilities, including bus routes along arterial highways, or transportation routes;

b. Existing or proposed community facilities and services, such as retail, commercial and support services, public facilities and schools; and,

c. Existing or future employment opportunities.

Every effort will be made to ensure compatibility with adjacent residential units (i.e., densities, design, etc.).

- Design

Affordable housing shall be compatible with the design and use of the market rate units, in terms of appearance, materials, and finish quality. The developer shall have the option of reducing the interior amenities, levels, and square footage of the affordable units.

- Unit Mix By Bedroom Count

The affordable units shall have an overall unit mix by bedroom count which reflects the appropriate community need. Given that 14 percent of the households in Chula Vista (according to the 1990 Census) are large families of five persons or more and a desire on the part of the City to have housing opportunities for these families throughout the City, proposed affordable housing developments shall provide a minimum number of three or more bedrooms. A minimum of fifteen (15) percent of the required affordable units shall have three or more bedrooms to meet the needs of larger families. Affordable housing to be sold and occupied by income eligible households (for sale units) shall also provide a minimum of two bedrooms.

Should the developer satisfy the affordable housing obligation through the provision of housing for senior citizens as defined by Section 51.3 of the California Civil Code, the developer does not need to provide three bedroom units. However, the developer may only satisfy such obligation through the provision of housing for senior citizens if the City considers such housing to be a high priority need and/or it provides advantages as to location, diversity of housing types, and/or affordability levels and/or other factors deemed to be of significant concern by the City.

- Affordable Housing Credits For Large Units

Given that 14 percent of the households in Chula Vista, according to the 2000 Census, are large families of five persons or more and a lack of large units to accommodate these households, the city desires to encourage the development of large family units of three or more bedrooms. The City will provide an additional 0.5 unit credit for those three bedroom units created and a 1 unit credit for those four bedroom units.

- Low Income Housing Sites

Sites have been selected as potential sites for low income housing units within Village Seven (See Exhibit 1). To the extent a property owner is required to satisfy its obligations herein within Village Seven, the selection of which of the potential sites within the property owner's ownership is to be used, shall be solely within the property owner's discretion.

- Phasing

Low income housing units have been provided in prior phases of Otay Ranch Development. The 79 units required of the McMillin Company will be provided either by providing rental or market rate units or utilizing "granny-flat" units in the Village Seven ownership, or by transferring the remaining obligation to a future Village. The additional 41 units required of the Otay Ranch Company will be provided, at the Otay Ranch Company's discretion, either by use of its available existing or future credits from other affordable housing projects in Otay Ranch, and/or the provision of low and/or moderate income housing units on Neighborhood R-2. The Otay Ranch Company may also use "granny flats" in single-family neighborhoods to satisfy the obligation or pay fees in lieu.

- Implementation Schedule

Low Income Housing Village Seven Comprehensive Affordable Housing Program	
Timing	**Items to be Completed**
McMillin: Prior to "B" Map for Neighborhoods R-5, R-6 and R-7	In order to respond to the unique conditions of each development, McMillin and Otay Ranch Company may, at the sole descretion of City Council, enter into an Agreement to satisfy their respective low income affordable housing obligation through the following options: 1. Provisions of affordable for-sale or rental housing units at those identified candidate sites; 2. Second Dwelling units; 3. Utilizing available affordable housing credits; 4. Defer obligation to a future Village or location 5. Payment of in-lieu fees
Otay Ranch Company: Prior to "B" Map for Neighborhood R-2	

- Contingency Plan

Developer shall diligently pursue completion of the construction of the low-income housing units as per the above implementation schedule. However, if the performance obligations are not achieved as per the implementation schedule, in addition to any and all other rights and remedies the City may have to enforce Developer's affordable housing obligations, the City shall have the right to require that the surplus low-income units be automatically used to satisfy the low-income housing obligation of Village Seven. In any event, each owner within Village Seven shall only be obligated to perform according to their respective Affordable Housing Agreement.

II.6.4.2 MODERATE INCOME HOUSING

- Moderate Income Housing Requirements

The initial approval of Village Seven includes 1,204 housing units of which five percent (5%), or 60, must be moderate income housing units. The moderate income housing obligation may be met through a combination of housing types including rental and "for sale" housing.

- Moderate Income Housing Sites

Various neighborhoods have been selected as the sites for moderate income housing units within Village Seven. The location of these neighborhoods are distributed

throughout the project (refer to Village Seven SPA Plan).

- Phasing

The moderate income housing for McMillin, 39 units, would be completed as part of the development of their ownership in Neighborhoods R-5, R-6 and/or R-7, which contain 448 market rate units.

- Implementation Schedule

Moderate Income Housing Village Seven Comprehensive Affordable Housing Program	
Timing	**Items to be Completed**
McMillin: Prior to "B" Map for R-5, R-6 and R-7	Enter into an Affordable Housing Agreement that specifies the timing of provision of 40 moderate-income units.
Otay Ranch Company: Prior to "B" Map for R-2	Enter into an Affordable Housing Agreement that specifies the timing of provision of 20 moderate-income units.

II.6.4.3 AFFORDABLE HOUSING RESTRICTIONS

- Income Eligibility

To determine the eligibility of a household for the low income housing unit, the household purchasing or renting the affordable unit must qualify as a low income household, as established by and amended from time to time pursuant to Section 8 of the United States Housing Act of 1937 and as also published in the California Administrative Code. See Exhibit 2 for the annual income limits as published by the United States Department of Housing and Urban Development (HUD).

- Affordable Monthly Rents

For rental housing, compliance with the affordable housing requirements is determined by verifying that the total rent cost paid by the tenant is considered affordable as defined below.

To determine affordable rent costs, monthly "Affordable Rent" includes all

actual or projected monthly payments for the following:[1]

- Use and occupancy of a housing unit and the associated land and facilities;

- Any separately charged fees and service charges assessed by the lessor which are required by all tenants but is not to include security deposits;

- A reasonable allowance for utilities (including garbage collection, sewer, water, electricity, gas and other heating, cooking, and refrigeration fuels but not to include telephone service, cable TV, or high speed modem) as defined by the Federal Regulations for the Tenant Based Rental Assistance Program; and,

- Possessory interest taxes or other fees and charges assessed for use of the associated land and facilities by a public or private entity other than the lessor.

Affordable monthly rent is not to exceed the following calculations:

- Very Low Income: 50 percent of the Area Median Income (AMI) for San Diego County, adjusted for household size appropriate for the unit, multiplied by 33 percent and divided by 12.

- Low Income: 80 percent of the Area Median Income (AMI) for San Diego County, adjusted for household size appropriate for the unit, multiplied by 33 percent and divided by 12.

- Moderate-income: 120 percent of the Area Median Income (AMI) for San Diego County, adjusted for household size appropriate for the unit, multiplied by 33 but not more that 35 percent and divided by 12.

Should subsidized financing and other incentives from a public agency be proposed and obtained, the affordable monthly rent shall be dictated by such program or granting Agency. If no affordable rent is specified, affordable monthly rents shall be established in accordance with Section 50053 of the

1 25 California Code of Regulations Section 6918

California Health and Safety Code.

- Affordable Housing Costs for Owner Occupied Housing

For ownership housing (for sale units), compliance with the affordable housing requirements is determined by verifying that the sales price paid by the buyer equates to a total housing cost that is considered affordable as defined below.

To determine affordable housing costs, monthly "Housing Payments" includes all actual or projected monthly payments for the following:

- Principal and interest on a mortgage loan, including rehabilitation loans, at the time of initial purchase by the home buyer;
- Allowances for property and mortgage insurance;
- Property taxes and assessments; and
- Homeowner association fees.

Affordable monthly housing payments are not to exceed the following calculations:

- Very Low Income: 50 percent of the Area Median Income (AMI) for San Diego County, adjusted for household size appropriate for the unit, multiplied by 33 percent and divided by 12.
- Low Income: 80 percent of the Area Median Income (AMI) for San Diego County, adjusted for household size appropriate for the unit, multiplied by 33 percent and divided by 12.
- Moderate-income: 120 percent of the Area Median Income (AMI) for San Diego County, adjusted for household size appropriate for the unit, multiplied by 33 but not more that 35 percent and divided by 12.

Should subsidized financing and other incentives from a public agency be proposed and obtained, the affordable monthly housing payment shall be dictated by such program or granting Agency. If no affordable monthly housing payment is specified, the affordable monthly housing payment shall be established in accordance with Section 50052.5 of the California Health

and Safety Code.

- Underwriting Requirements

  To ensure the preservation of affordability of proposed low and moderate-income housing and the financial viability of program participants, the City shall encourage the following policies:

  - Mortgage rates fixed for a minimal five years. No adjustable rate mortgages with initial terms less than five years;

  - Affordable monthly housing payments not to exceed 33 percent of household income ("Front End Ratio"). Total debt payments not to exceed 45 percent of household income ("Back End Ratio");

  - No "teaser" rates; and,

  - No non-occupant co-borrowers.

- Resale Provisions of Owner Occupied Housing

  In order to ensure the continued affordability of the units, resale of the units must be restricted for the required term of thirty (30) years. After initial sale of the affordable units to a low-income household, all subsequent buyers of such units must also be income eligible and the unit must be sold at an affordable price. A developer may opt to have no income or sales price restriction for subsequent buyers, provided however that restrictions to the satisfaction of the City are in place that would result in the recapture by the City or its designee of a financial interest in the units equal to a proportionate share of any equity, to be determined and specified within the Affordable Housing Agreement executed for the proposed affordable housing development. Funds recaptured by the City shall be used to provide assistance to other identified affordable housing production or contributions to a special needs housing project or program. To the extent possible, projects using for-sale units to satisfy the obligations of developers under the City's Affordable Housing Program shall be designed to be compatible with conventional mortgage financing programs including secondary market requirements.

- Term of Affordability Restrictions

Should subsidized financing be proposed and obtained, income and rent restrictions for an affordable rental project shall be implemented for the remaining life of the project, which is presumed to be a minimum of fifty-five (55) years from the date of completion of the final inspection for each structure. In the event that no subsidized financing is obtained, such affordability restrictions shall remain in effect for thirty (30) years from the date of completion of the final inspection for each structure. The term of affordability and resale restrictions for affordable for-sale units is more appropriately described above, "Resale Provisions of Owner Occupied Housing".

- Priority For Occupancy or Sale of Units

  Priority for the occupancy or sale of income or rent restricted units shall be given to individuals who have been residents of or employed within the City of Chula Vista for a minimum of one year prior to application.

II.6.4.3 SUBSIDIES, INCENTIVES AND FINANCING MECHANISMS

The City agrees to use its reasonable best efforts to assist the developer in pursuing the benefit of certain financing mechanisms, subsidies, and other incentives to facilitate the provision of affordable housing for low and moderate income households to the extent such resources and programs for this purpose are available. These mechanisms, subsidies, and incentives, which could reduce the cost of providing affordable housing, include, but are not limited to, local, state and federal subsidies, City density bonuses, planning and design and development techniques and standards, and City fee subsidies, deferrals or waivers (collectively, the "Cost Reducing Mechanisms").

Potential subsidies, incentives, and financing mechanisms that may be used to facilitate the provision of affordable housing include the following:

- Low Income Housing Tax Credits (LIHTC) - statewide competition;
- Housing Bonds - State;
- Housing Bonds - City;
- Redevelopment Low and Moderate-income Housing fund - Redevelopment Agency;
- HOME - City and County;
- CBDG - City; and
- Other Public Financing - State and Federal.

This list is not intended to limit the use of other subsidies, incentives, or other financing mechanisms that are now available or may become available in the future.

The parties acknowledge that the City is not hereby committing and cannot guarantee the availability of any Cost Reducing Mechanisms to the Developers for Village Seven. The City reserves the right to approve or disapprove, in its sole discretion, any developer request for substantial financing.

- Density Bonus

  Projects which meet the applicable requirements of State Law (Government Code Section 65915) as a result of the affordable housing units are entitled to a density bonus or other additional incentives in accordance with the provisions of such law.

II.6.4.4 COMPLIANCE REPORTING

All Compliance Reports shall be submitted to the City of Chula Vista Community Development Department and an independent trustee hired by the Developer to monitor the Developer's compliance. The requirements imposed by providers of subsidized financing or other Cost Reducing mechanisms may replace the terms described below if City so approves.

- Rental Units' Compliance Packet and Audit

  a. Should a Developer seek approval by the City to credit a tenant toward its low income housing obligation, the Developer must give the City, at a minimum, a compliance packet including the following:

     - Supplemental Rental Application - Exhibit 3
     - Semi-Annual Report - Exhibit 4-A, 3-B, 3-C
     - Authorization to Release Information by Purchaser
     - Acknowledgment that the Information is for City's Reporting and Administration Use Only

     Developer shall not be required to perform any extraordinary investigation or verification regarding such information other than Developer's usual and customary means of income verification. Developer shall retain the Supplemental Rental Application and any supporting documents for a period of at least three (3) years after the applicant ceases to occupy a low income housing unit.

b. Should a Developer seek approval by the City to credit a dwelling unit towards its moderate income housing obligation, the Developer must give the City, at a minimum, a report verifying compliance with the terms of this document and/or the subsidized financing program:

- Annual Moderate Income Affordable Rental Housing Monitoring Report (Exhibit 4A).

Developer/builder shall retain any supporting documents for a period of at least three (3) years after the initial occupancy of the unit to verify the accuracy of the monitoring report.

Developer shall not be required to perform any investigation or verification of income for purposes of qualifying the household for moderate income eligibility.

c. A household occupying a designated low income unit whose annual income increases subsequent to occupying said unit (referred to as "over income household") and thus exceeds the 80% of area median income, need not vacate the apartment. However, at the Developer's discretion, this over income household's monthly rent (including utilities) may be increased to the market rate. Regardless of a rent increase, the Developer can no longer credit this over income household toward its 5% low income requirement and is obligated to replace this unit by renting the next comparable unit to a low income household as per the paragraph below. Thus, the Developer shall ensure appropriate language is included in the lease requiring tenant to provide income information biannually and acknowledge that should its income increase, the household may be subject to a higher rent. Adjusted monthly incomes can be calculated using rules according to the HUD Handbook 4350/3 Occupancy Requirements for HUD Subsidized Multifamily Housing.

The location of the designated units may change over time (to be referred to as "floating units") as long as the total number of affordable units remains constant and that substituted units are comparable in terms of size, features, and the number of bedrooms, as determined by the Director of the Community Development Department. If the over income household does not vacate the unit, the Developer must assure that when the next comparable apartment

becomes vacant, the newly available unit must be rented to a low and/or moderate income household, as a floating unit, to replace the previously designated unit no longer housing a low income household. If the over income household chooses to leave, the vacated unit retains its low income unit designation.

If a residential apartment complex is designated as 100% low income, the over income household will not be required to vacate, if it pays the increased rent, and the unit will not be replaced with a "floating unit." When the over income household vacates the unit, the unit retains its low income unit designation.

d. If the city determines that an outside audit is necessary to verify the accuracy of the submitted rent roll, then on a basis no more frequently than once a year, it may require such an audit at the expense of Developer. In such event, within ten (10) days after delivery of the City's written request for such outside audit, Developer shall deliver to the City the names of three (3) certified public accountants doing business in the Metropolitan San Diego area. City will promptly deliver to Developer notice of approval by the City of one or more of said names.

The audit shall be completed by an approved certified public accountant, at Developer's sole cost and expense, within sixty (60) days after the delivery to Developer of City's approval. The certified public accountant shall promptly deliver a copy of the written audit to the City. Such audit shall be an audit of Developer's records, including the information supplied to Developer by the low income tenants. The auditor shall not be required to verify the accuracy of the information provided by the low income tenants.

- <u>Home Ownership Units' Compliance Packet</u>

Should Developer seek approval by the City to credit a home purchase toward its low income housing obligation, the Developer must give the City at a minimum a compliance packet including the following:

- Copy of Settlement Sheet
- Final 1003 Uniform Underwriting Transmittal Summary Settlement Statement and Good Faith Estimate
- Verification of low income buyer completed by developer under or on

behalf of the City

Developer shall not be required to perform any extraordinary investigation or verification regarding such information other than Developer's usual and customary means of income verification.

Developer may contact the City's Community Development Housing Division's Housing Coordinator to confirm the City's acceptance of the applicant as credit toward Developer's low income housing unit obligation. Developer may contact the City prior to the sale of the unit for consultation purposes if desired; however, approval will be given in writing only after required documents are reviewed and accepted by the City.

Should Developer seek approval by the City to credit a home purchase toward its moderate income housing obligation, the Developer must give the City at a minimum a compliance packet including the following:

- Homebuyer's Qualifying Form (Exhibit 6).

Developer shall retain any supporting documents, such as copies of settlement sheets, the Final 1003 or other appropriate documents, for a period of at least three (3) years after the initial sale of the unit to verify the accuracy of the monitoring report.

Developer shall not be required to perform any investigation or verification of income for purposes of qualifying the household for moderate income eligibility.

II.6.4.5 AFFIRMATIVE MARKETING PLAN

Developer shall provide a marketing plan acceptable to the City, in the City's reasonable discretion, for proactively marketing the low and moderate income housing units to low and moderate income tenants and purchasers, respectively, at the time specified in the Implementation Schedules in Sections A5 and B4 above. Developer shall use good faith and reasonable best efforts to market the low and moderate income housing units to low and moderate income tenants and purchasers according to the affirmative marketing plan. See Exhibit 7, attached hereto, which sets forth the plan requirements.

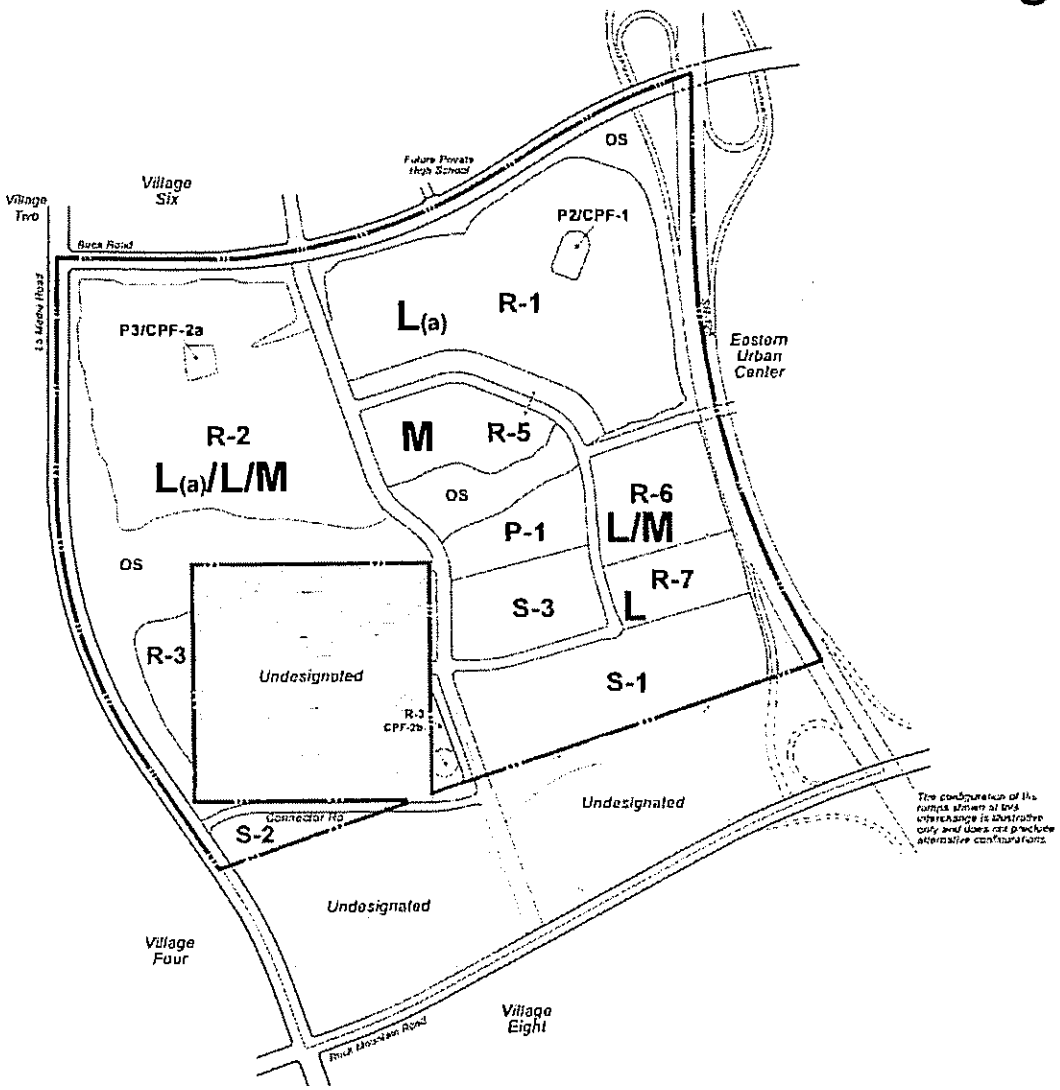
The City will in its discretion use good faith and reasonable best efforts to assist Developer in marketing low and moderate income housing units to low and moderate

income tenants and purchasers, obtaining the services of a third-party organization in connection with such marketing efforts, processing the applications of prospective tenants and purchasers of low and moderate income housing units, and complying with the reporting requirements as required herein.

II.6.4.6 IMPLEMENTING AGREEMENTS AND CONDITIONS

This AHP may be implemented through various mechanisms including development agreements, tentative map conditions, and specific housing project agreements which may impose additional terms and conditions consistent herewith.

Potential Affordable Housing Sites



L(a)	Potential Location of Low Income "Accessory Second Units"
L	Potential Location of Low Income Units
M	Potential Location of Moderate Income Units

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning

6/28/04

Exhibit 1

(Village Seven)

CITY OF CHULA VISTA

INCOME AND MAXIMUM HOUSING EXPENSES FOR LOWER AND MODERATE-INCOME HOUSEHOLDS

(Based upon 2001 HUD Median Income Data Effective April 6, 2001)

HOUSEHOLD SIZE	30% VERY LOW INCOME				40% VERY LOW INCOME				50% VERY LOW INCOME			
	ANNUAL INCOME	MONTHLY INCOME	25%	30%	ANNUAL INCOME	MONTHLY INCOME	25%	30%	ANNUAL INCOME	MONTHLY INCOME	25%	30%
ONE	$11,950	$996	$249	$299	$15,950	$1,329	$332	$399	$19,900	$1,658	$415	$498
TWO	$13,650	$1,138	$284	$341	$18,200	$1,517	$379	$455	$22,750	$1,896	$474	$569
THREE	$15,350	$1,279	$320	$384	$20,500	$1,708	$427	$513	$25,600	$2,133	$533	$640
FOUR	$17,050	$1,421	$355	$426	$22,750	$1,896	$474	$569	$28,450	$2,371	$593	$711
FIVE	$18,450	$1,538	$384	$461	$24,600	$2,050	$513	$615	$30,750	$2,563	$641	$769
SIX	$19,800	$1,650	$413	$495	$26,400	$2,200	$550	$660	$33,000	$2,750	$688	$825
SEVEN	$21,150	$1,763	$441	$529	$28,200	$2,350	$588	$705	$35,300	$2,942	$735	$883
EIGHT	$22,550	$1,879	$470	$564	$30,050	$2,504	$626	$751	$37,550	$3,129	$782	$939

HOUSEHOLD SIZE	60% LOW INCOME				70% LOW INCOME				80% LOW INCOME			
	ANNUAL INCOME	MONTHLY INCOME	25%	30%	ANNUAL INCOME	MONTHLY INCOME	25%	30%	ANNUAL INCOME	MONTHLY INCOME	25%	30%
ONE	$23,900	$1,992	$498	$598	$27,900	$2,325	$581	$698	$31,850	$2,654	$664	$796
TWO	$27,300	$2,275	$569	$683	$31,850	$2,654	$664	$796	$36,400	$3,033	$758	$910
THREE	$30,750	$2,563	$641	$769	$35,850	$2,988	$747	$896	$40,950	$3,413	$853	$1,024
FOUR	$34,150	$2,846	$711	$854	$39,850	$3,321	$830	$996	$45,500	$3,792	$948	$1,138
FIVE	$36,850	$3,071	$768	$921	$43,000	$3,583	$896	$1,075	$49,150	$4,096	$1,024	$1,229
SIX	$39,600	$3,300	$825	$990	$46,200	$3,850	$963	$1,155	$52,800	$4,400	$1,100	$1,320
SEVEN	$42,350	$3,529	$882	$1,059	$49,400	$4,117	$1,029	$1,235	$56,450	$4,704	$1,176	$1,411
EIGHT	$45,050	$3,754	$939	$1,126	$52,600	$4,383	$1,096	$1,315	$60,100	$5,008	$1,252	$1,503

HOUSEHOLD SIZE	90% MODERATE INCOME				100% MODERATE INCOME				110% MODERATE INCOME				120% MODERATE INCOME			
	ANNUAL INCOME	MONTHLY INCOME	25%	30%	ANNUAL INCOME	MONTHLY INCOME	25%	30%	ANNUAL INCOME	MONTHLY INCOME	25%	30%	ANNUAL INCOME	MONTHLY INCOME	25%	30%
ONE	$35,850	$2,988	$747	$896	$39,850	$3,321	$830	$996	$43,800	$3,650	$913	$1,095	$47,800	$3,983	$996	$1,195
TWO	$40,950	$3,413	$853	$1,024	$45,500	$3,792	$948	$1,138	$50,050	$4,171	$1,043	$1,251	$54,600	$4,550	$1,138	$1,365
THREE	$46,100	$3,842	$960	$1,153	$51,200	$4,267	$1,067	$1,280	$56,350	$4,696	$1,174	$1,409	$61,450	$5,121	$1,280	$1,536
FOUR	$51,200	$4,267	$1,067	$1,280	$56,900	$4,742	$1,185	$1,423	$62,600	$5,217	$1,304	$1,565	$68,300	$5,692	$1,423	$1,708
FIVE	$55,300	$4,608	$1,152	$1,383	$61,450	$5,121	$1,280	$1,536	$67,600	$5,633	$1,408	$1,690	$73,750	$6,146	$1,536	$1,844
SIX	$59,400	$4,950	$1,238	$1,485	$66,000	$5,500	$1,375	$1,650	$72,600	$6,050	$1,513	$1,815	$79,200	$6,600	$1,650	$1,980
SEVEN	$63,500	$5,292	$1,323	$1,588	$70,550	$5,879	$1,470	$1,764	$77,600	$6,467	$1,617	$1,940	$84,650	$7,054	$1,764	$2,116
EIGHT	$67,600	$5,633	$1,408	$1,690	$75,100	$6,258	$1,565	$1,878	$82,600	$6,883	$1,721	$2,065	$90,150	$7,513	$1,878	$2,254

1. Annual Income = Gross annual income adjusted by household size.
2. Monthly Income = The annual income adjusted by household size divided by 12 months.
3. 25% = The monthly amount of household income used for total housing expenses (i.e., Monthly Income times .25).
4. 30% = The monthly amount of household income used for total housing expenses (i.e., Monthly Income times .30).

Specific program requirements may vary. Please contact the City of Chula Vista Community Development Department Housing Division for specific program information.

EXHIBIT 3A

SUPPLEMENTAL RENTAL APPLICATION

The rental unit for which you are applying has received governmental assistance under programs to encourage more affordable housing. As a result, the unit carries a rent level restriction and is restricted to occupancy by low and moderate income households.

The information required on this form is necessary to determine you income eligibility to occupy the unit. You must report all household income. Information provided will be confidential and not subject to public disclosure pursuant to State Government Code Section 6254(h).

---

1. Rental Unit Address _____

2. Applicant Name _____

3. Other Household Members _____

4. Total Current Annual Household Income from all Sources:
   TOTAL $_____

   Detail:

Household Member	Income	Source

5. Total Gross Annual Household Income shown on most recent Federal Tax return (attach copies of most recent Federal Tax returns for all household members receiving income. Include other verification of income not appearing on tax forms.)
   TOTAL $_____

APPLICANT'S STATEMENT

I certify, under penalty of perjury, that the foregoing information is true and correct to the best of my knowledge. I understand that any misrepresentation of the information contained herein may be cause for eviction.

Signature _____ Date _____
Applicant

EXHIBIT 3B

OWNER'S STATEMENT

Based on the foregoing information, I certify, under penalty of perjury, that the applicant is eligible to occupy this restricted affordable unit. Eligibility is based on finding that the applicant household's current annual income is $_____ and does not exceed the current maximum household income of $_____ allowed under the terms of a Development Agreement with the City of Chula Vista regarding this residential development.

Name _____

Title _____

Signature _____ Date _____

EXHIBIT 4A

Owner's Certification

I am the owner or owner's representative for an affordable housing development in the City of Chula Vista, which is bound by a Housing Agreement with the City.

I certify under penalty or perjury that the attached rent roll for affordable units at my project is true and correct to the best of my knowledge and complies with the terms and conditions stipulated in the Affordable Housing Agreement, or any agreement that implements the same, with the City of Chula Vista.

Name _____

Title _____

Signature _____ Date _____

CITY OF CHULA VISTA

SEMI-ANNUAL AFFORDABLE HOUSING MONITORING REPORT

EXHIBIT 4B

Project Name: _____

Project Address: _____

Contact Person: _____ Title: _____

Telephone No.: _____ Fax No.: _____

As of (Date): ❒ June 30, _____ ❒ December 31, _____

Reviewed By: _____ Date: _____

Bdrm Size	Restricted - Affordable	Non-Restricted		TOTAL
	No. of Units	No. of Units	Avg Monthly Rent	
Studio				
1 Bedroom				
2 Bedrooms				
3+Bedrooms				
TOTAL				

	Unit No.	Bdrm Size	Monthly Rent $	Name of Household	No. of Occupants	Total Monthly Household Income $	Percent Median Income	Seniors – One Occupant 60 Yrs+ (Y/N)	Date of Last Income Re-Examination	FOR CITY USE ONLY Unit in Compliance (Y/N)
	Example	2	$695	Doe, John	2	$2,800	%	N/A	1/99	
1.			$			$	%			
2.			$			$	%			
3.			$			$	%			

CITY OF CHULA VISTA

SEMI-ANNUAL AFFORDABLE HOUSING MONITORING REPORT

Project Name: _____

As of (Date): ❒ June 30, _____ ❒ December 31, _____

	Unit No.	Bdrm Size	Monthly Rent $	Name of Household	No. of Occupants	Total Monthly Household Income $	Percent Median Income	Seniors – One Occupant 60 Yrs+ (Y/N)	Date of Last Income Re-Examination	FOR CITY USE ONLY Unit in Compliance (Y/N)
4.			$			$	%			
5.			$			$	%			
6.			$			$	%			
7.			$			$	%			
8.			$			$	%			
9.			$			$	%			
10.			$			$	%			
11.			$			$	%			
12.			$			$	%			
13.			$			$	%			
14.			$			$	%			
15.			$			$	%			
16.			$			$	%			
17.			$			$	%			
18.			$			$	%			
19.			$			$	%			
20.			$			$	%			

Deadline for Submittal: January 15th and July 15th of each year.

Revised: January 2001

EXHIBIT 4C

SEMI-ANNUAL REPORT

(insert memo from City)

Exhibit 5

CITY OF
CHULA VISTA

ANNUAL MODERATE INCOME AFFORDABLE HOUSING MONITORING REPORT

Project Name (*include Master Plan Community if applicable*): _____

Project Address: _____

Contact Person: _____ Title: _____

Telephone No.: _____ Fax No.: _____

As of (Date): ❒ June 30, _____ ❒ December 31, _____

Reviewed By: _____ Date: _____

Bdrm Size	Affordable-Moderate Income		Non-Restricted/Market Rate		TOTAL UNITS
	No. of Units	Monthly Rent	No. of Units	Avg Monthly Rent	
Studio					
1 Bedroom					
2 Bedrooms					
3 Bedrooms					
4 Bedrooms					
TOTAL					

Exhibit 5

CITY OF
CHULA VISTA

ANNUAL MODERATE INCOME AFFORDABLE HOUSING MONITORING REPORT

Owner's Certification

I am the owner or owner's representative for an affordable housing development in the City of Chula Vista, which is bound by a Housing Agreement with the City.

I certify under penalty or perjury that the attached rent roll for affordable units at my project is true and correct to the best of my knowledge and complies with the terms and conditions stipulated in the Affordable Housing Agreement, or any agreement that implements the same, with the City of Chula Vista.

Name _____

Title _____

Signature _____ Date _____

EXHIBIT 6

CITY OF
CHULA VISTA

HOMEBUYER'S QUALIFYING FORM

BUYER'S INFORMATION

Buyer's Name: _____

Current Address: _____

Current Household Income: $ _____ Household Size: _____

NEW HOME INFORMATION

Master Plan Community: _____

Name of Residential Development: _____

Tract: _____ Lot No.: _____

Lot Address: _____

No. of Bedrooms: _____

Purchase Price2: _____

Monthly PITI Payment: $ _____ % of Income: _____ %

Year of Purchase: _____

Sales Representative: _____

_____ _____

Signature of Homebuyer Authorizing Release to City — Date

2 The sales price of any unit being sold in partial satisfaction of Developer's obligation to provide moderate income housing shall not exceed the affordable housing costs for owner occupied housing as defined within the Affordable Housing Program for the master plan community.

EXHIBIT 6

CITY OF
CHULA VISTA

HOMEBUYER'S QUALIFYING FORM

This information is for the City's Reporting and Administrative Use Only.

EXHIBIT 7

City of Chula Vista Equal Housing Opportunity Requirements For The Low/Moderate Income Housing Affirmative Marketing Plan

Every Developer complying with the City of Chula Vista's Housing Element's "Affordable Housing Plan" shall submit to the City an Affirmative Marketing Plan for City Review and Approval which details actions the Developer will take to provide information and otherwise attract eligible persons in the housing market area to the available housing without regard to race, sex, sexual orientation, marital status , family status, color, religion, national origin, ancestry, or handicap, age or any other category which may be defined by law now or in the future.

I. The City of Chula Vista Affirmative Marketing Requirements are as follows. Please note, however, the Plan is not limited to these Requirements.

(i) Detail methods for informing the public, buyers and potential tenants about Federal fair housing laws and the City of Chula Vista's affirmative marketing policy;

(ii) Publicize to minority persons the availability of housing opportunities through the type of media customarily utilized by the applicant, including minority outlets which are available in the housing market area;

(iii) Identify by language and by number any significant number of persons in a community within the housing market area who have limited fluency in the English language:

(iv) Where there is a significant number of person in a community within the housing market area who have limited fluency in the English language, the Plan shall:

(a) Identify the media most likely to reach such persons.

(b) Advertise for the housing development in the native language of such persons, in addition to the English language, and

(c) Describe the provisions which the housing sponsor will make for handling inquiries by and negotiations with such persons for the rental or sale of units in the development.

(v) Detail procedures to be used by the Developer and/or property manager to inform and solicit applications from persons in the housing market area who are not likely to apply for the housing without special outreach (e.g., use of community organizations, places of worship, employment centers, fair housing groups, or housing counseling agencies).

II. Records must be kept describing actions taken by the Developer and/or property managers to affirmatively market units and records to assess the results of these actions:

EXHIBIT 6

HOMEBUYER'S QUALIFYING FORM

(i) The records shall include a copy or transcript of the advertisement copy, the identity of the media in which it was disseminated, and the date(s) of each appearance. The housing sponsor shall also keep a record of the dates and places of any meetings or communications between the housing sponsor and any individual or group referred to the housing sponsor by the agency or organizations representing any of the groups within the community acting on behalf of any classification of minority persons described above. Such records shall be retained for a period of five years;

(ii) A description of how the Developer and/or property managers will annually assess the success of affirmative marketing actions and what corrective actions will be taken where affirmative marketing requirements are not met; and

(iii) The Developer/property manager shall furnish all information and reports required hereunder and will permit access to its books, records and accounts by the City of Chula Vista, HUD or its agent, or other authorized Federal and State officials for purposes of investigation to ascertain compliance with the rules, regulations and provisions stated herein.

III. The City of Chula Vista may from time to time review the Plan and the Developer's and property manager's activities pursuant to the Plan and may require amendments to the Plan if it does not fully comply with the requirements of this section.

IV. An affirmative marketing program shall be in effect for the duration of the Qualified Term defined in the Affordable Housing Agreement.

V. If a source of funding used in a low/moderate income housing development, such as federal or state funds, has affirmative marketing requirements more restrictive than the City of Chula Vista's affirmative marketing requirements, then the more restrictive applies.

EXHIBIT 6

HOMEBUYER'S QUALIFYING FORM

This information is for the Citys Reporting and Administrative Use Only.

EXHIBIT 7

City of Chula Vista Equal Housing Opportunity Requirements

For The Low/Moderate Income Housing Affirmative Marketing Plan

Every Developer complying with the City of Chula Vista's Housing Element's "Affordable Housing Plan" shall submit to the City an Affirmative Marketing Plan for City Review and Approval which details actions the Developer will take to provide information and otherwise attract eligible persons in the housing market area to the available housing without regard to race, sex, sexual orientation, marital status , family status, color, religion, national origin, ancestry, or handicap, age or any other category which may be defined by law now or in the future.

I. The City of Chula Vista Affirmative Marketing Requirements are as follows. Please note, however, the Plan is not limited to these Requirements.

(i) Detail methods for informing the public, buyers and potential tenants about Federal fair housing laws and the City of Chula Vista's affirmative marketing policy;

(ii) Publicize to minority persons the availability of housing opportunities through the type of media customarily utilized by the applicant, including minority outlets which are

available in the housing market area;

(iii) Identify by language and by number any significant number of persons in a community within the housing market area who have limited fluency in the English language:

(iv) Where there is a significant number of person in a community within the housing market area who have limited fluency in the English language, the Plan shall:

(a) Identify the media most likely to reach such persons.

(b) Advertise for the housing development in the native language of such persons, in addition to the English language, and

(c) Describe the provisions which the housing sponsor will make for handling inquiries by and negotiations with such persons for the rental or sale of units in the development.

(v) Detail procedures to be used by the Developer and/or property manager to inform and solicit applications from persons in the housing market area who are not likely to apply for the housing without special outreach (e.g., use of community organizations, places

of worship, employment centers, fair housing groups, or housing counseling agencies).

II. Records must be kept describing actions taken by the Developer and/or property managers to affirmatively market units and records to assess the results of these actions:

(i) The records shall include a copy or transcript of the advertisement copy, the identity of the media in which it was disseminated, and the date(s) of each appearance. The housing sponsor shall also keep a record of the dates and places of any meetings or communications between the housing sponsor and any individual or group referred to the housing sponsor by the agency or organizations representing any of the groups within the community acting on behalf of any classification of minority persons described above. Such records shall be retained for a period of five years;

(ii) A description of how the Developer and/or property managers will annually assess the success of affirmative marketing actions and what corrective actions will be taken where affirmative marketing requirements are not met; and

(iii) The Developer/property manager shall furnish all information and reports required hereunder and will permit access to its books, records and accounts by the City of Chula Vista, HUD or its agent, or other authorized Federal and State officials for purposes of investigation to ascertain compliance with the rules, regulations and provisions stated herein.

III. The City of Chula Vista may from time to time review the Plan and the Developer's and property manager's activities pursuant to the Plan and may require amendments to the Plan if it does not fully comply with the requirements of this section.

IV. An affirmative marketing program shall be in effect for the duration of the Qualified Term defined in the Affordable Housing Agreement.

V. If a source of funding used in a low/moderate income housing development, such as federal or state funds, has affirmative marketing requirements more restrictive than the City of Chula Vista's affirmative marketing requirements, then the more restrictive applies.

AIR QUALITY IMPROVEMENT PLAN

Village Seven Sectional Planning Area (SPA)
Otay Ranch GDP

Adopted October 12, 2004

by Resolution No. 2004-329

Project Sponsor

McMillin Otay Ranch, LLC
2727 Hoover Avenue
National City, CA 91950
Contact: Todd Galarneau
(619) 336-3959

Prepared by

Cinti Land Planning
2932 Poinsettia Drive
San Diego, CA 92106
Contact: Gary P. Cinti
(619) 223-7408

OTAY RANCH VILLAGE SEVEN SPA
AIR QUALITY IMPROVEMENT PLAN

The City of Chula Vista Growth Management Ordinance, Municipal Code Section 19.09.050B, requires an Air Quality Improvement Plan (AQIP) to be submitted with all Sectional Planning Area (SPA) Plans, or if a SPA plan is not required, Tentative Maps. The Growth Management Program further requires an Air Quality Improvement Plan for all major development projects (50 dwelling units or greater, or commercial or industrial projects with equivalent air quality impacts to a residential project of 50 or more dwelling units).

Per recently adopted guidelines, two options are available to meet the AQIP requirement. The Developer may choose to participate in the Chula Vista GreenStar Building Efficiency Program or evaluate the project using the Chula Vista CO_2 INDEX model including any necessary site plan modifications. The Village Seven SPA project sponsor has chosen to participate in the Chula Vista GreenStar Building Efficiency Program and has prepared this AQIP consistent with that selection. However, other landowners within Village Seven may choose another compliance method. Should that occur, a supplemental AQIP(s) shall be prepared concurrent with the Supplemental SPA Plan or SPA Plan amendment for each ownership. The area included in this AQIP is shown on Exhibit AQ-1 while the proposed development on these sites is shown on the Site Utilization Plan included as Exhibit AQ-2.

The project sponsor agrees to exceed the California 2001 Title 24, Part 6, Energy Efficiency Standards (CA 2001 Title 24, effective 6/1/01) by 15% in the majority (50% or greater) of residential dwelling units through participation in a building efficiency program such as ComfortWise or CA Energy Star, or develop a custom building efficiency program using construction methods that exceed CA 2001 Title 24 requirements by 15%.

The two project sponsors own the land comprising parcels R-1, R-2, R-5, R-6 and R-7 (see Exhibit AQ-1), totaling 1,204 residential units. All other private development sites in Village Seven are owned by others, hence the project sponsors' commitment includes only those parcels. The project sponsors' commitment is to construct 50% of their respective ownership, 602 units, within those parcels to the Chula Vista GreenStar Building Efficiency Program standard, as described above.

Because energy conservation technology and programs are constantly maturing, the specific program will not be identified until approval of the Village Seven Tentative map (or final map if the SPA Plan and Tentative Map are concurrently processed). At that time, this AQIP shall be updated to identify the specific building efficiency program to be used, or the project sponsor will design a custom building program that exceeds CA 2001 Title 24 requirements by 15%. If a custom building program is submitted, it shall be accompanied by data confirming that it exceeds CA 2001 Title 24 to the satisfaction of the Director of Planning and Building or his/her designee. The lot numbers of the homes participating in the selected building efficiency program will also be identified at the Tentative Map (or final map) submittal/approval stage.

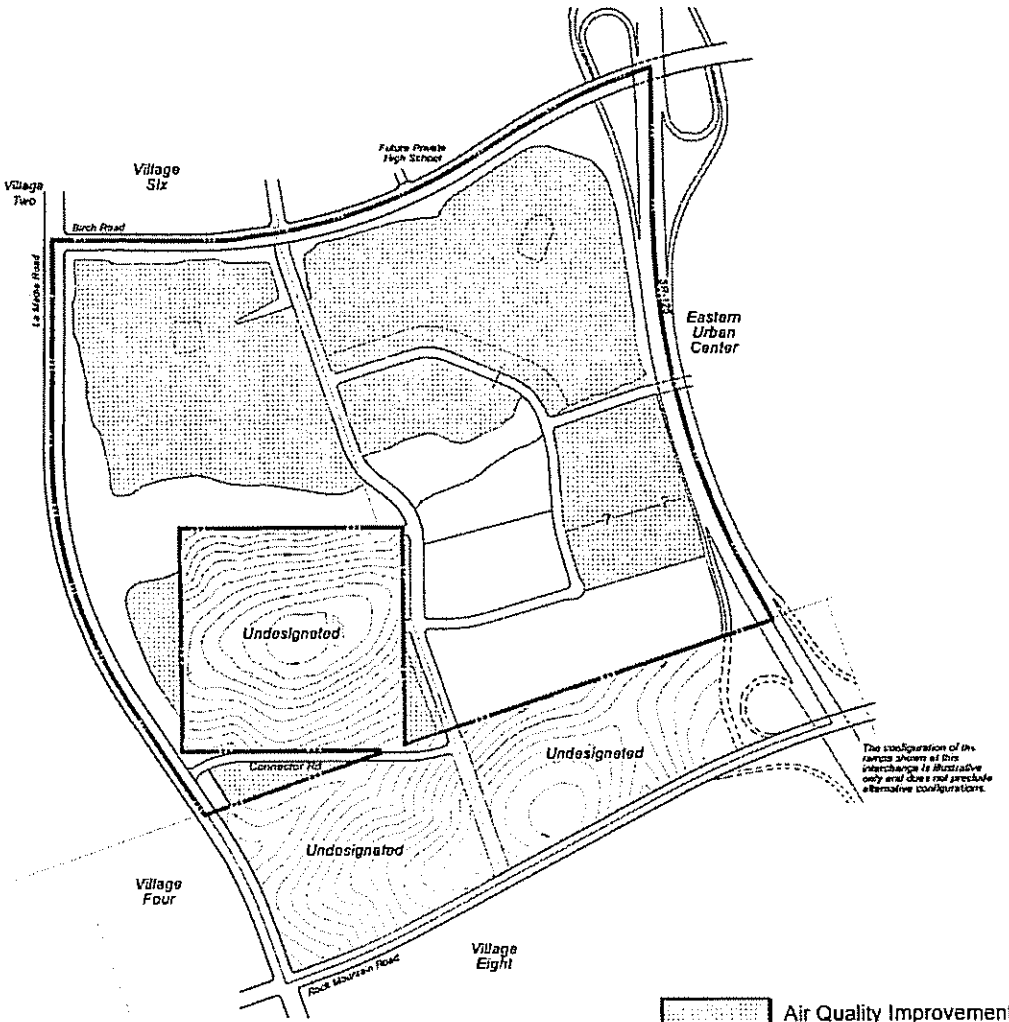
In addition to the GreenStar Building Commitment above, the Village Seven SPA also includes the following land use and design features which promote efficiency and energy conservation:

- Transit Oriented Development - Although this village is not located along a primary transit line, a transit stop will be located in the village core providing access to public mass transit for commuting and other trips. The compact design and integrated street/path circulation system places daily need within easy walking or biking distance. The greenbelt connection which bisects the village is an integral design element of the village core, connecting open space, trails, recreational amenities, civic uses and schools.

- Housing Efficiency - In addition to the transit benefits associated with increased density near transit centers, there are building related energy benefits. Smaller, and more compact single-family, attached single-family and multi-family homes use less energy for space heating and cooling than typical single-family detached homes.

- Street Widths, Pavement and Street Trees - Reducing street widths can reduce heat build-up and consequently energy demand for air conditioning. In addition to reduced pavement width, the inclusion of street trees which shade the pavement will reduce temperatures. Village Seven streets have reduced widths consistent with the standards in the Otay Ranch GDP; residential streets have a 32 foot paved section compared to a 36-40 foot section typical of suburban development patterns.

Air Quality Improvement Planning Areas



Air Quality Improvement Plan in SPA

Undesignated — Air Quality Improvement Plan not included in SPA Plan.

Public Ownership Parcels *(Schools & Park)*

CITY OF CHULA VISTA

Vista Verde

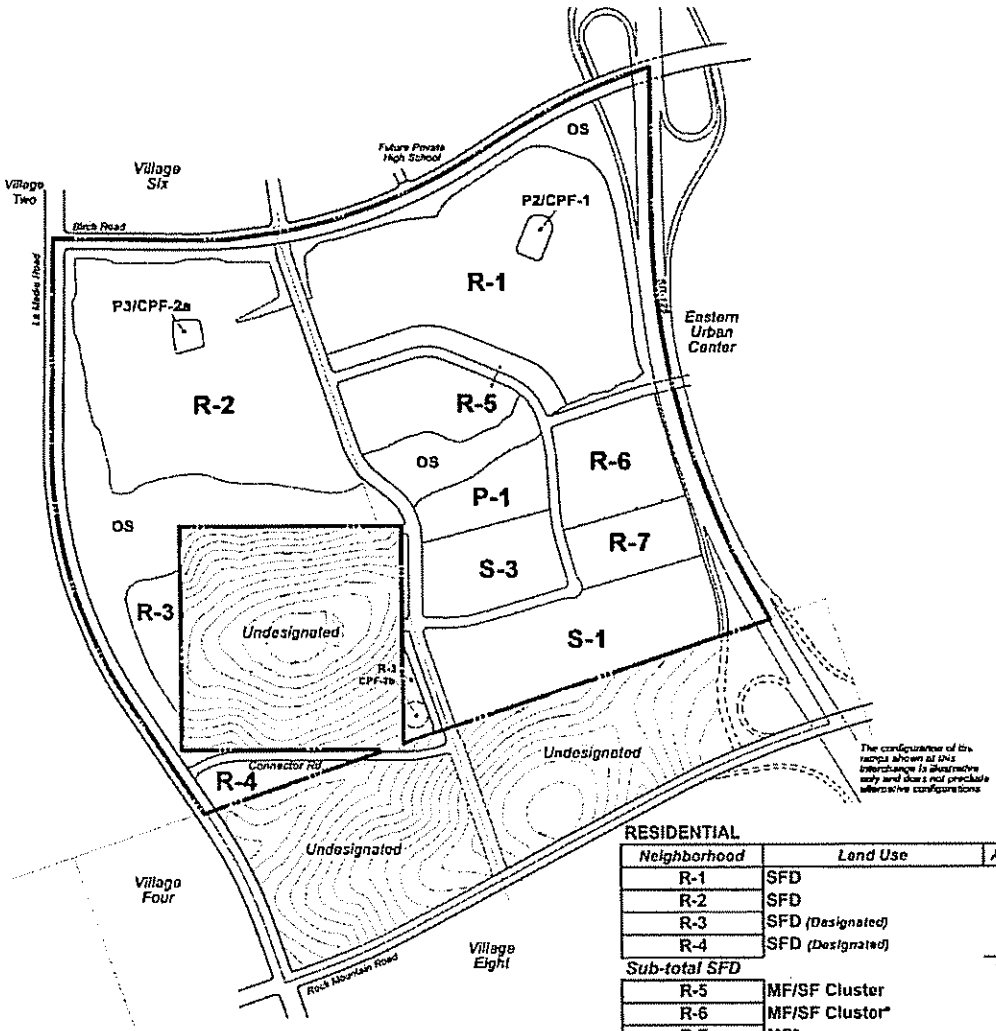
Village Seven - Otay Ranch

Civil Land Planning

6/14/04

AQ-1

Site Utilization Plan



RESIDENTIAL

Neighborhood	Land Use	Acres	du/ac	DU
R-1	SFD	50.7	6.8	346
R-2	SFD	50.5	7.4	375
R-3	SFD *(Designated)*	5.3	4.2	22
R-4	SFD *(Designated)*	3.1	4.2	13
Sub-total SFD		*109.6*	*6.9*	*756*
R-5	MF/SF Cluster	17.4	7.6	132
R-6	MF/SF Cluster*	12.5	15.4	193
R-7	MF*	8.0	15.4	123
Sub-total MF		*37.9*	*11.8*	*448*
Total Residential		147.5	8.2	1,204

NON-RESIDENTIAL

Neighborhood	Land Use	Acres
P-1	Public Park	7.6 *(7.0 ac net req'd)*
P2/CPF-1	CPF *(Common OS)*	1.1
P3/CPF-2a	CPF *(Common OS)*	0.7
CPF-2b	CPF	1.0
S-1	High School *(Designated)*	23.4
S-3	Elem. School	11.1
OS	Open Space *(Designated)*	47.8
Undesignated	Undesignated Uses	121.3
Cir.	Circulation	62.9
Total Non-Residential		278.9
VILLAGE TOTAL		424.4

** Refer to SPA Text for provisions to blend these two parcels.*

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning

8/24/04

Exhibit AQ-2

NON-RENEWABLE ENERGY CONSERVATION PLAN

Village Seven Sectional Planning Area (SPA)
Otay Ranch GDP

Adopted October 12, 2004

by Resolution No. 2004-329

Project Sponsor

McMillin Otay Ranch, LLC
2727 Hoover Avenue
National City, CA 91950
Contact: Todd Galarneau
(619) 336-3959

Prepared by

Cinti Land Planning
2932 Poinsettia Drive
San Diego, CA 92106
Contact: Gary P. Cinti
(619) 223-7408

OTAY RANCH VILLAGE SEVEN SPA
NON-RENEWABLE ENERGY CONSERVATION PLAN

Recognizing the importance of energy conservation, the Otay Ranch General Development Plan includes goals, objectives and policies that provide for the long range increase in energy conservation and reduction of energy consumption. The General Development Plan requires the preparation of a Non-Renewable Energy Conservation Plan to identify feasible methods to reduce the consumption of nonrenewable energy resources, including transportation, building design and use, lighting, recycling, alternative energy sources and land use.

Fossil fuels, which are non-renewable energy sources, provide the majority of energy utilized in the San Diego region. These fuels are directly consumed in the form of gasoline, diesel fuel, and natural gas, and indirectly as electricity generated from these fuels.

On November 14, 2000, the Chula Vista City Council adopted the Carbon Dioxide (CO_2) Reduction Plan which included implementing measures regarding transportation and energy efficient land use planning and building construction measures for new development. In this plan, it was recognized that the City's efforts to reduce carbon dioxide emissions from a new development are directly related to energy conservation and air quality efforts. Subsequently, the City adopted guidelines for the preparation of Air Quality Improvement Plans (AQIPs), which are required of all SPA Plans, to implement specific CO_2 reduction strategies. As detailed in the Village Seven AQIP, the project sponsor has committed to participate in the Chula Vista GreenStar Building Efficiency Program which will result in air quality improvement as well as energy conservation.

Opportunities for energy conservation in new development fall into three general categories: 1) the arrangement and intensity of land uses; 2) mass transit and alternative transportation modes; and, 3) building siting, design and construction. The greatest opportunities for significant conservation are transportation related. The Village Seven SPA maximizes these opportunities by implementing a land use plan which concentrates land use intensity around new transit facilities, provides for eventual extension of transit service into the project area and encourages alternative transportation modes such as walking, bicycle and use of electric carts.

A. Land Use & Community Design

Energy conservation features or components of the Otay Ranch Village Seven land use plan and community design features include:

- Transit Oriented Development: The Village Seven project area is an Urban Village and is planned for transit oriented development. Housing, shops, services, schools, parks and civic facilities are conveniently located. The compact design and integrated street/path circulation system places daily need within easy walking or biking distance. The central transit facility at the Village Core will provide ready access to public mass transit for commuting trips. The city

will provide bus service to this village which will connect to the regional MTDB system. Bus stops will be conveniently located in the Village Core, along the transit village entry street and on the secondary entry streets connecting to Villages Two, Five and Seven.

- Housing Efficiency: In addition to the transit benefits associated with increased density near transit centers, there are building related energy benefits. Smaller single-family, attached single-family and multi-family homes use less energy for space heating and cooling than typical single-family detached homes. Village Seven includes a high proportion of multi-family dwelling units (30% of total units planned for entire village).

- Street Widths, Pavement and Street Trees: Reducing street widths can reduce heat build-up and consequently energy demand for air conditioning. In addition to reduced pavement width, the inclusion of street trees and parking lot trees, which shade the pavement will reduce temperatures. Village Seven streets have reduced widths consistent with the standards in the Otay Ranch General Development Plan; residential streets have a 32 foot paved section compared to a 36–40 foot section typical of suburban development patterns.

- House Design: Homes in Village Seven are required include porches and verandas per the PC District Regulations. These features shade some windows reducing solar heating of interior spaces and also provide comfortable outdoor sitting areas, reducing the need to expend energy to cool interiors.

B. Transit Facilities

In addition to the transit facilities and transit oriented design, the Otay Ranch Village Seven project includes specific design measures to accommodate additional transportation modes (see SPA Plan Section II.2.3 Circulation):

- Bus Service: Village Seven will also include facilities based on the Green Car and Blue Car service concepts using buses described in the recently adopted *TransitWorks* Strategic Plan by MTDB. The Green Car represents local routes using mini to mid-size buses. The Green Car would act as a collector and provide feeder to Blue or Red Car concepts. Green Car service is to be provided on residential and major streets. The Blue Car will provide short distance trips (1–5 miles) with frequent stops along major streets and arterials.

- Electric Cart: The provision of circulation routes which can accommodate electric cart use provides another alternative mode of transportation, in addition to bicycles and walking for short trips. Within Village Seven, separate paths provide the opportunity for cart travel from residential areas to the village core. At this time, the viability of electric cart use is unknown since it depends on market, price, consumer acceptance and access to adjacent activity centers/destinations.

C. Building Siting & Construction

Energy conservation features for building siting and construction include the following:

- Improved Building Construction Standards: Buildings constructed today use approximately 50% less energy than buildings constructed prior to 1978, before energy efficiency standards went into effect in the mid-1970s. These Building Energy Efficiency Standards appear in Title 24 of the California Code of Regulations and have recently been updated (by AB970).

  The Village Seven SPA project sponsors have agreed to exceed the California 2001 Title 24, Part 6, Energy Efficiency Standards (CA 2001 Title 24, effective 6/1/01) by 15% in the majority (50% or greater) of residential dwelling units through participation in a building efficiency program such as ComfortWise or CA Energy Star, or develop a custom building efficiency program using construction methods that exceed CA 2001 Title 24 requirements by 15%.

  The project sponsors owns the land comprising parcels R-1, R-2, R-3, R-4, R-5, R-6 and R-7, totaling 1,204 residential units, as shown on the Site Utilization Plan. All future private development sites (within "undesignated" areas on the Site Utilization Plan) in Village Seven are owned by others, hence the project sponsor's commitment includes only those parcels. The project sponsor's commitment is to construct 50% of the units, 602 units, within those parcels to the Chula Vista GreenStar Building Efficiency Program standard.

- Solar Access: Passive solar design and building orientation can take advantage of the sun in the winter for heating and reduce heat gain and cooling needs during the summer. The land use plan for Village Seven depicts a street system with the many single family lots oriented in a north-south direction, maximizing southern exposure through the front or rear yard.

- Commercial Lighting: Interior lighting consumes approximately 30% of the energy used in commercial buildings. The large component in commercial energy use makes it a good target for the application of conservation measures. By encouraging commercial builders to include energy efficient lighting, a reduction in commercial electrical demand could be expected.

- Energy Efficient Appliances: New homes in Village Seven will be equipped with new appliances which are significantly more energy efficient than earlier models. According to the U.S. Department of Energy, new appliances included in new homes such as ranges, ovens and dishwasher save 30 to 50% compared with appliances manufactured 20 years old. Homes in Village Seven will require significantly less energy than those in older areas of the region due to increased building and appliance energy efficiency.

- Public Area Lighting: Lighting for public areas such as streets, parks and other public spaces will utilize energy efficient fixtures, consistent with City standards and requirements.

As identified above, the Village Seven project is proposed to incorporate energy saving features which respond to the energy conservation provisions of the Otay Ranch General Development Plan.

GENERAL DEVELOPMENT PLAN EXCERPT

Village Seven Sectional Planning Area (SPA)

June 30, 2004

Project Sponsor

McMillin Otay Ranch, LLC
2727 Hoover Avenue
National City, CA 91950
Contact: Todd Galarneau
(619) 336-3959

Prepared by

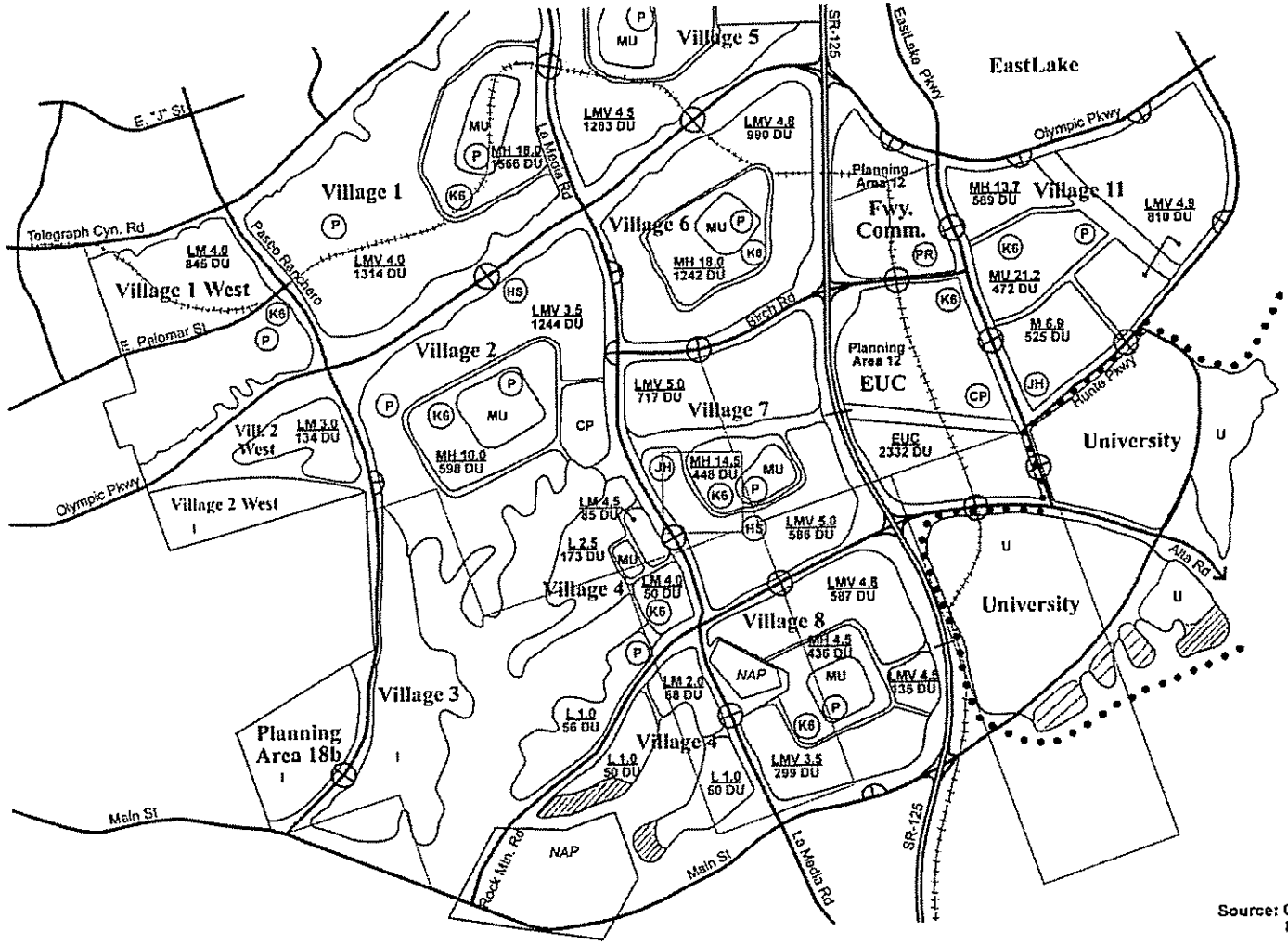
Cinti Land Planning
2932 Poinsettia Drive
San Diego, CA 92106
Contact: Gary P. Cinti
(619) 223-7408

General Development Plan

The General Development Plan was adopted in 1993 as a joint planning effort of the City of Chula Vista and the County of San Diego, known as the Otay Ranch GDP/SRP. The entire plan is too large and consists of too many related documents to be inserted in this Village Seven binder, but an excerpt of those pages, specifically addressing Village Seven, have been inserted on the following pages for reference. The entire General Development Plan and all its related component documents should be consulted for thorough comprehension.

Since its adoption in 1993, the Village even GDP has not been amended except the high school was moved to Village Two, and then later, the High School from Village Eleven was moved into Village Seven. Exhibits 1 & 2 are from the currently adopted General Development Plan exhibit. The excerpted page 153 is from the 1993 document and provides notes on various issues.

General Development Plan



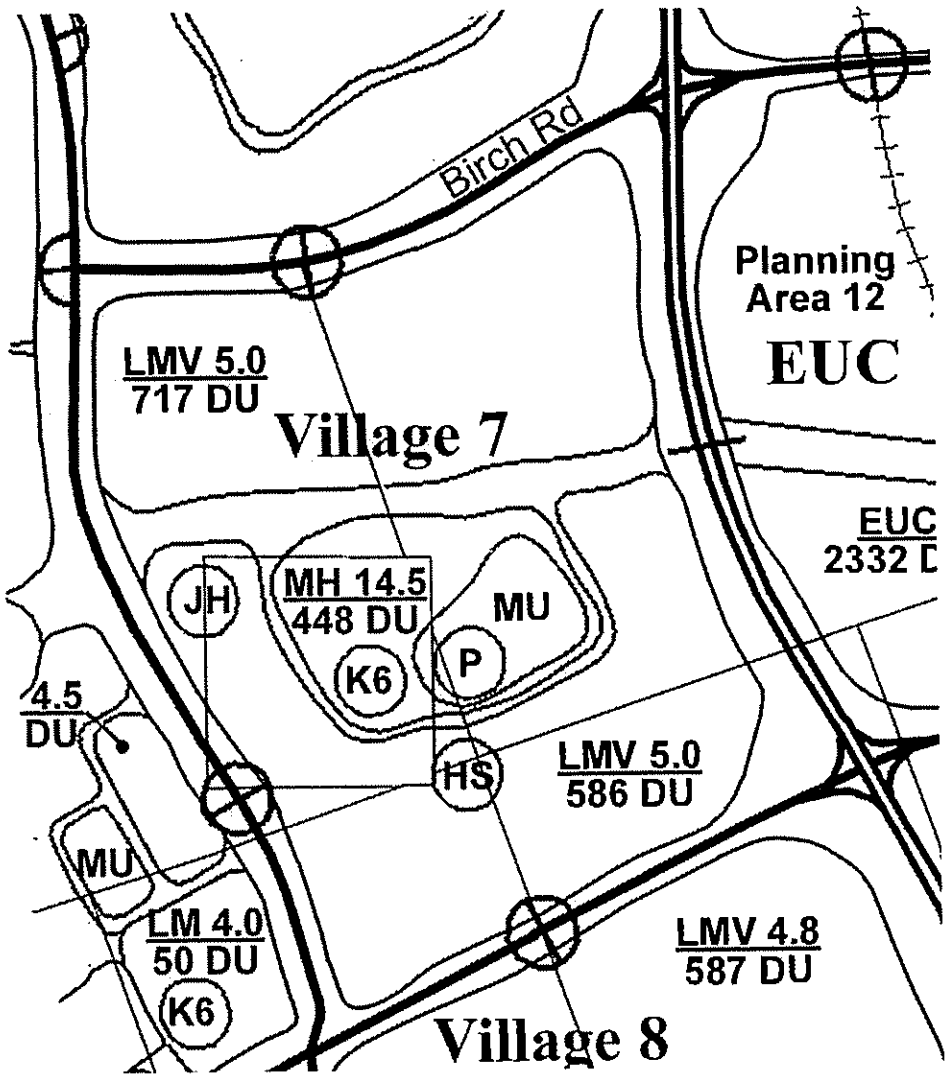
Source: City of Chula Vista
From plot dated: 10/02

Chula Land Planning
7/31/03

Exhibit 1

Otay Ranch

Adopted GDP - Village Seven



Source: City of Chula Plot 10/31/02

Cinti Land Planning
San Diego, CA (619) 223-7408

0 500 1000 1500

7/31/03

CITY OF CHULA VISTA

OTAY RANCH

Exhibit 2

7. *Village Seven*

a. *Village Seven Setting*

Village Seven is comprised of approximately 412 acres located east of Wolf Canyon and north of Rock Mountain Road.

Open Space and Habitat: The Village Seven site has historically been used for agricultural purposes and does not contain significant environmental resources. The upper reaches of Wolf Canyon extend into the village, although this area has no sensitive resources.

Land Use: Village Seven is located in the interior of the Otay Valley Parcel, surrounded by land historically used for agricultural activities. The village is surrounded by Villages Six, Eight, Four, and the Eastern Urban Center (EUC) to the east, across SR-125. Village Seven is located immediately to the west of the planned SR-125. A 100 acre Vortac facility (an aviation navigational facility) is located within the village site.

Visual: Village Seven contains views into the upper reaches of Wolf Canyon, and more distant views to the mountains to the east and northeast. The Vortak facility provides potentially negative near views within the village.

Relationship to Other Otay Ranch Villages: Village Seven has a direct access to the Eastern Urban Center (EUC), and a close relationship with Villages Two and Four, the lower density villages on the edges of Wolf Canyon to the west. Village Seven is located between these lower intensity villages and the urban uses planned for the Eastern Urban Center. Thus, Village Seven will provide a transition from the lower densities, open space, and recreational opportunities near Wolf Canyon to the more intense neighborhoods in the EUC.

b. *Village Seven Description*

Village Seven is an Urban Village. Urban Villages are adjacent to existing urban development and are planned for transit oriented development with higher densities and mixed uses in the village cores. Village Seven includes:

- A maximum of 1,053 single family residential units
- A maximum of 448 multi-family residential units
- Build-out population of approximately 4,512
- A middle school
- A high school
- A trail connection through the village connecting Wolf Canyon to the west to the Eastern Urban Center to the east
- A village core area containing:
  - Commercial uses in a mixed use setting

- Public and community purpose facilities
- A transit stop
- An elementary school
- Multi-family residential
- A Town Square/Village Green/Main Street
- Affordable Housing
- Neighborhood Park

Village Seven													
USE	Sf Units	Mf Units	Total Units	Res. Ac.	Dens	Park Ac*	CPF Ac.	Sch Ac.	C'ml. Ac.	Open Sp.	Art. Ac.	Total Ac.	Approx. Pop.
LMV	1,053	0	1,053	210.8	5.0			75.0				285.8	3,370
MU	0	0	0	0.0	0.0	9.3	6.3		7.2			22.8	0
MH	0	448	448	30.9	14.5			10.0				40.9	1,142
OTHER	0	0	0	0.0	0.0					45.3	17.1	62.4	0
TOTAL	1,053	448	1,501	241.5		9.3	6.3	85.0	7.2	45.3	17.1	411.7	4,512

*Part of park acreage requirements have been allocated to community parks. Actual park size to be determined by Parks Master Plan at the SPA level.

Exhibit 51 Village Seven Land Use Table

c. *Village Seven Policies*

Village Character Policies:

- The village character shall be guided by the following qualities:
  - The greenbelt corridor connecting the village with Wolf Canyon, the Eastern Urban Center and Salt Creek shall be a unifying feature of the village.
  - Compatibility with the Eastern Urban Center.
  - Views into Wolf Canyon and distant views to the mountains to the east and northeast.
  - Complementary relationship with Village Four.
- Higher densities shall be strategically located to provide a transition from the more intense urban uses of the Eastern Urban Center and SR-125, to the lower intensity uses near Wolf Canyon.

Village Core Policies:

- The greenbelt connection which winds through the village shall be an integral design element of the village core, potentially connecting open space, trails, recreational amenities, civic uses and schools. This greenbelt may be located within or adjacent to the core area.

Parks and Open Space Policies:

Application of the 3 acres per 1,000 residents standard would result in the development of 13.5 acres of local parks in Village Seven. To satisfy this requirement, 9.3 acres of neighborhood parks/town square are planned. The remaining obligation is satisfied through the provision of community parks in Villages Two, Ten and the EUC.

The following policies shall guide the design of parks and open spaces in Village Seven:

- A regional pedestrian and open space link will be provided through the village connecting Wolf Canyon on the west to the Eastern Urban Center and Salt Creek on the east. This greenbelt connection may take several forms, including a greenbelt, parks, trails, and the pedestrian portion of promenade streets. The average width and continuous character of the greenbelt shall be defined in the Overall Ranch Design Plan. The greenbelt shall average 200 feet in width (excluding street ROW) over the entire length of any village (requirements set forth in Section E, Implementation) to provide a direct connection between the village core, Wolf Canyon, and the intense uses of the Eastern Urban Center (see GDP/SRP Land Use Map).

- The average width of the pedestrian open space/trail corridor shall be calculated from one edge of the village to the other.

- Buffering shall be provided to screen the Vortac facility (aviation navigation facility) from adjacent land uses, if this use is not relocated.

Other Village Seven Policies:

- Three schools are planned in Village Seven. These shall be appropriately separated with intervening land uses. The high school and middle school shall abut the regional open space, providing for non-vehicular access.

- A transit stop shall be reserved at the SPA level and irrevocably offered for dedication at the Tentative Map level.

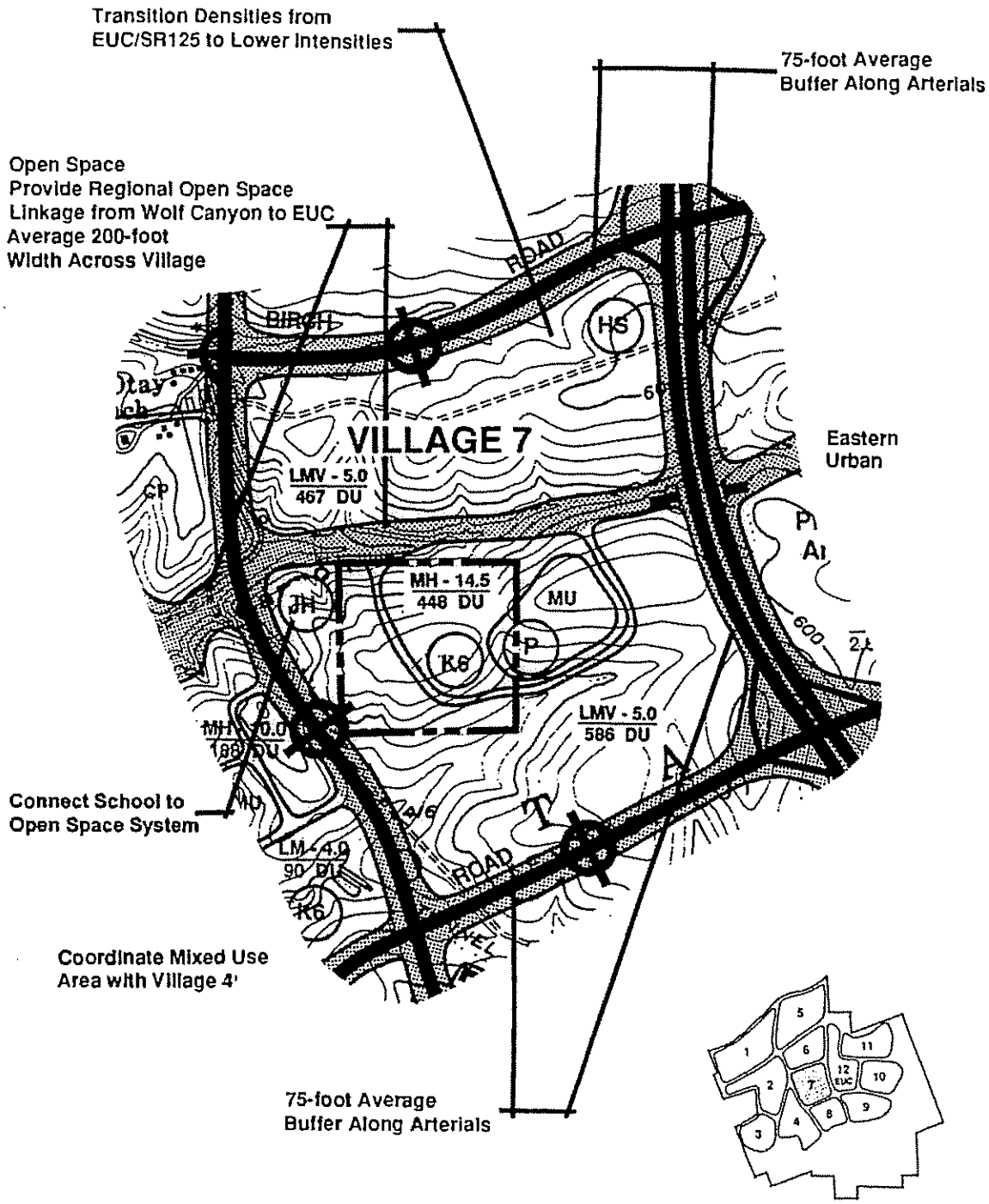


Exhibit 52 Village Seven Land Use Map

PARKS, RECREATION, OPEN SPACE & TRAILS PLAN

Village Seven Sectional Planning Area (SPA)
Otay Ranch GDP

Adopted October 12, 2004

by Resolution No. 2004-329

Project Sponsor

McMillin Otay Ranch, LLC
2727 Hoover Avenue
National City, CA 91950
Contact: Todd Galarneau
(619) 336-3959

Prepared by

Cinti Land Planning
2932 Poinsettia Drive
San Diego, CA 92106
Contact: Gary P. Cinti
(619) 223-7408

OTAY RANCH VILLAGE SEVEN
PARKS, RECREATION, OPEN SPACE & TRAILS PLAN

TABLE OF CONTENTS

PAGE

I. Introduction
- A. Purpose I-1
- B. Regulatory Framework I-1
- C. Otay Ranch GDP Goals & Policies I-4
- D. Village Seven Parks Requirement I-5

II. Village Park & Recreation Program
- A. Recreation II-1
- B. Parks II-5
- C. Village Trails II-8
- D. Open Space II-11
- E. Water Conservation II-11
- F. Brush Management II-12

III. Village Contribution to Otay Ranch Community Parks & Open Space
- A. Community Parks III-1
- B. Open Space III-1

IV. Ownership & Maintenance Options
- A. Maintenance District & Community Facilities District IV-1
- B. Public Agency Maintenance IV-1
- C. Chula Vista Public Works Department IV-1

V. Phasing
- A. Neighborhood Park V-1
- B. Open Space V-1
- C. Trails V-1

I. Introduction

A. Purpose

This Master Facility Plan identifies and describes park, recreation, open space and trail facilities and implementation processes for Otay Ranch Village Seven. This plan complies with the Otay Ranch Parks, Recreation and Open Space goals, objectives, policies and implementation measures identified in the Otay Ranch General Development Plan (GDP) to assure provision of adequate parks, recreation and open space amenities in the development of the Otay Ranch community. The overall GDP goal is to enhance the quality of life for residents and visitors by providing a variety of active and passive recreational opportunities. The goal is to be achieved through specific actions and/or requirements to be implemented at the village level planning and subdivision stages of the project design and approval process. This plan includes the Sectional Planning Area (SPA) level requirements. The Tentative Map (TM) level outline additional requirements for planning parks, recreation facilities, open space and trails provisions associated with the development of Village Seven.

B. Regulatory Framework

The provision and implementation of parks and open space in Village Seven will occur within the following regulatory framework:

Chula Vista Municipal Code - Planned Community (P-C) Zoning

Otay Ranch is zoned P-C which requires adoption of a general development plan which describes the overall development program and sectional planning area (SPA) plans which detail the development in integrated sub-areas. Section 19.48.090 of the Chula Vista Municipal Code establishes the required content for SPA plans. Subsection C.1.j requires the following information to be contained in a SPA site utilization plan:

Show land uses (including acreage for each), including:

- Parks
- Open Space

Chula Vista Municipal Code - Parklands & Public Facilities

Chapter 17.10 of the Chula Vista Municipal Codes establishes the requirements for dedication of land, development of improvements, parkland criteria, in-lieu fees for land dedication and development improvements, commencement of park development, and collections and distribution of park fees.

Otay Ranch General Development Plan (GDP)

The adopted Otay Ranch GDP requires specific identification of park, recreation and open space provisions at the SPA Plan level. The SPA requirements are:

- Provide a Parks Master Plan
- Identify specific sites
- Identify equipment needs
- Identify alternative financing methods
- Identify alternative maintenance entities and funding
- Identify phasing
- Identify plans for the use of reclaimed water, as appropriate
- Review need for special purpose parks

Chula Vista Landscape Manual

The Chula Vista Landscape Manual outlines the park and open space development process and specific submittal requirements. City staff direction will also determine deliverables at each stage of the process. Subsequent to final map approval, the following process will be initiated:

1. Parks

The Landscape Manual requires the preparation of a Park Concept Plan, Master Plan, Design Development and Construction Documents as described below:

a. Concept Plan: The Concept Plan is the initial phase in the park design process. Work product relative to this phase includes, but is not limited to meeting with staff to discuss the project and the desired uses, site analysis, program development of site features and components; development of various schematic alternatives to evaluate site planning options; determination by staff of the preferred alternatives; and preparation and submittal of the refined concept plan.

b. Master Plan: The Master Plan phase is the refinement of the Concept Plan to bring the park design to a detail and graphic level acceptable for presentation to and approval from the Parks & Recreation Commission and City Council. The plan(s) are to be colored renderings, including, but not limited to, exhibits mounted on foam-core board. All Master Plans will be retained by the General Services Department for presentation purposes and archival data.

c. Design Development: This phase focuses on the refinement of the Master Plan, to a level of detail sufficient to move into the Construction Document phase. The determination of materials, finishes, colors, plants, quantities, *etc.*, are to be analyzed and determined.

d. Construction Documents: The Construction Document phase consists of the preparation, review and approval of all plans necessary for utilization by the contractor for the installation of the project. Typical sheets may include: planting, irrigation, construction, grading, layout and related construction details.

2. Public Open Space

Public open space is one component of the project landscape master plan. The Chula Vista Landscape Manual requires the preparation of an Open Space Concept and Analysis Plan, Master Plan and Construction Documents as described below:

a. Open Space Concept and Analysis Plan: The Concept Plan for an open space project shall serve as a comprehensive plan identifying the following aspects: analysis of the existing conditions, and the mitigation of any impacts generated by the proposed project; existing features on site and any sensitive plant, habitat or wildlife existing on-site that might be impacted; identification of the various open space lots being proposed for turnover to the City by letter designation; the level of modifications or improvements to be installed relative to the "code" system utilized by the City; gross area of each lot and the total area of all open space lots, proposed or existing adjacent land uses; and other proposed improvements such as trails, kiosks, signage, walls, *etc.*

b. Master Plan: The focus of this submittal is to graphically indicate the location of the project, the types and locations of improvements, relationships to the adjacent land uses and the benefits that will be derived from the project by the City and its citizens. The plan shall be at an appropriate scale to allow for accurate analysis. This plan shall include, but not be limited to a rendered plan, mounted on foam-core board and will be retained by the Parks and Recreation Department for presentation purposes and archival data.

c. Construction Documents: The Construction Document phase consists of the preparation, review and approval of all plans and documents necessary for utilization by the developer and contractor for the installation of the project. Typical sheets may include: planting, irrigation, construction, grading, layout and related construction details.

Based upon the scope and type of project, staff will identify the quantity and sets to be submitted for review. Four sets of plans will typically be required for routing to other City Departments.

3. Streetscape (Medians & Parkways)

Streetscapes are another component of the project specific landscape master plan. The Chula Vista Landscape Manual requires the preparation of a Master Plan and Construction Documents for Streetscapes (Medians and Parkways) as described below:

a. Streetscape Master Plan: The focus of this submittal is to graphically indicate the location of the project, the types and locations of improvements, relationships to the adjacent land uses and the benefits that will be derived from the project by the City and its citizens. The plan shall also indicate tree spacing, plant palette, irrigation concept and maintenance responsibilities. Four copies of this plan is the minimum submittal for routing, however additional copies are frequently required.

b. Construction Documents: The Construction Document phase consists of the preparation, review and approval of all plans and documents necessary for utilization by the developer and contractor for the installation of the project. Typical sheets may include: planting, irrigation, construction, grading, layout and related construction details.

Based upon the scope and type of project, staff will identify the quantity and sets to be submitted for review. Four sets of plans will typically be required for routing to other City Departments.

Village Seven Public Facilities Financing Plan

The Municipal Code establishes, as a condition of SPA approval, the preparation of a Public Facilities Financing Plan (PFFP). The PFFP must show how and when facilities and services necessary to accommodate the development will be installed and financed, including a phasing schedule to ensure that facilities are provided in a timely manner and that one area will not utilize more than the area's fair share of facility or service capacity.

Entitlement Documents

Park, recreation and open space provisions are further defined as development entitlements are processed as follows:

- Tentative Map requirements:
  - Include local park sites in Conditions of Approval
  - Identify funding for local parks and method of construction
  - Review City of Chula Vista Greenbelt Master Plan for existing or proposed trails on adjacent properties to ensure linkages
  - Review of proposed bicycle trails to ensure linkages as shown on the City of Chula Vista Bikeway Master Plan, dated August 1996.

- Subdivision Landscape Master Plan requirements:
  - Include all principal landscape design concepts (same size/scale as Tentative Map)
  - Include all park, recreation, open space and trails
  - Include irrigation concept, wall/fence plan, and signage/entry monuments.
  - Identify ownership and maintenance responsibilities

- Final Map requirements:
  - Dedicate local park sites
  - Assure funding for local parks
  - Implement design guidelines

- Building Permit Requirements:
  - Pay impact fee (if established)

C. Otay Ranch Goals and Policies

The Otay Ranch GDP parks and recreation goals, objectives and policies provide for a variety of parks and recreation amenities. The Otay Ranch community will provide the opportunity for a full range of passive and active recreational opportunities both locally and on a regional basis. Otay Ranch GDP goals, objectives and policies related to park and recreation facilities include the following:

Goal: Provide diverse park and recreational opportunities within Otay Ranch which meet the recreational, conservation, preservation, cultural and aesthetic needs of project, residents of all ages and physical abilities.

Objective: Identify park, recreational and open space opportunities, where appropriate, to serve the South County region and San Diego County as a whole.

Policy: Encourage joint use of utility easements with appropriate and compatible uses, including, but not limited to, open space, agriculture, parking and trails.

Objective: Maximize conservation, joint uses and access and consider safety in the design of recreational facilities.

Policy: Commercial recreation opportunities may be permitted within town square, community and regional parks to generate revenue to defray park operational expenses.

Policy: Utilize conservation measures including reclaimed water, efficient irrigation systems and drought tolerant plant material in the development of public and private parks where allowed.

Policy: Minimize park operation and maintenance costs and identify funding sources for continued operation and maintenance of all Otay Ranch park and open space land.

Objective: Provide neighborhood and community park and recreational facilities to serve the recreational needs of local residents.

Policy: Provide a minimum of 3 acres of neighborhood and community park land (as governed by the Quimby Act) and 12 acres per 1,000 Otay Ranch residents of other active or passive recreation and open space area.

Policy: Encourage the design of park sites adjacent to public schools and other public lands where co-location of facilities is feasible. Joint use agreements with school districts are encouraged.

D. Village Seven Parks Requirements

Parks requirements for Village Seven are described and determined by the Otay Ranch GDP, Chula Vista Municipal Code, Chula Vista Landscape Manual and Village Seven SPA Plan as described below.

Otay Ranch GDP

In order to serve the recreational needs of Otay Ranch residents, a standard of three acres of land per 1,000 residents (as calculated applying the Park Dedication Ordinance provisions) shall be provided in the form of local parks. The city-wide Parks Master Plan specifies that a minimum of 7 acres of public neighborhood park be provided in the village and that the remaining acreage requirement be satisfied through contributions toward community parks located elsewhere in Otay Ranch. The ultimate park acreage requirement will be determined by the number and type of dwelling units approved on the Village Seven Tentative Map(s), in accordance with the Chula Vista Municipal Code.

The Village Seven SPA Plan provides a 7.6-acre neighborhood park in the village core and adjacent to the elementary school as required by the draft city-wide Parks Master Plan (see Site Utilization Plan, Exhibit 1).

Within the village secondary area, playgrounds and field areas on the high school and middle school sites will provide additional public recreation opportunities. Although providing recreational facilities and activity areas, these areas are not proposed to receive any credit towards park requirements. Small park/common open space areas (parcels P2/CPF-1 and P3/CPF-2a) are designated within residential neighborhoods R-1 and R-2. These areas are also not proposed to receive any credit towards park requirements, but may be eligible as a credit towards the CPF requirement.

Chula Vista Municipal Code

The City of Chula Vista Municipal Code, Chapter 17.10, Parklands and Public Facilities (Park Dedication Ordinance), establishes the method by which actual required park acreage is to be calculated, based on the number and type of residential units determined at the Tentative Map level. In accordance with Chapter 17.10, each single family dwelling unit typically generates a need for 460.0 square feet of developed parkland and each multi-family dwelling unit typically generates a need for 341.1 square feet of developed parkland. Based on the proposed mix of residential unit types shown on the Site Utilization Plan, the Code establishes a parkland obligation of approximately 11.49 acres for Village Seven (see Table A below). The actual park acres required will be based on dwelling units and dwelling unit types approved at the subdivision and Design Review stages.

Table A
Improved Park Land Dedication Required

Dwelling Unit Type	Target Unit Count	Park Area/DU	Total (AC)
Single Family Detached	756	460.0 SQ FT/DU	7.98
Multiple Family/ Apartments	448	341.1 SQ FT/DU	3.51
TOTALS	**1,204**		**11.49***
* Actual park acres required shall be based on dwelling units approved in the Subdivision/Design Review process.			

The Municipal Code also describes the requirements for provision of parks as land or in-lieu fees, as well as elements that may be required within neighborhood and community parks. The Village Seven park obligation is met through the provision of 7.6 net acres of neighborhood park land within the village and a fee contribution and/or dedication of land towards community parks elsewhere in Otay Ranch which will be provided per the City of Chula Vista Parks & Recreation Master Plan.

City of Chula Vista Landscape Manual

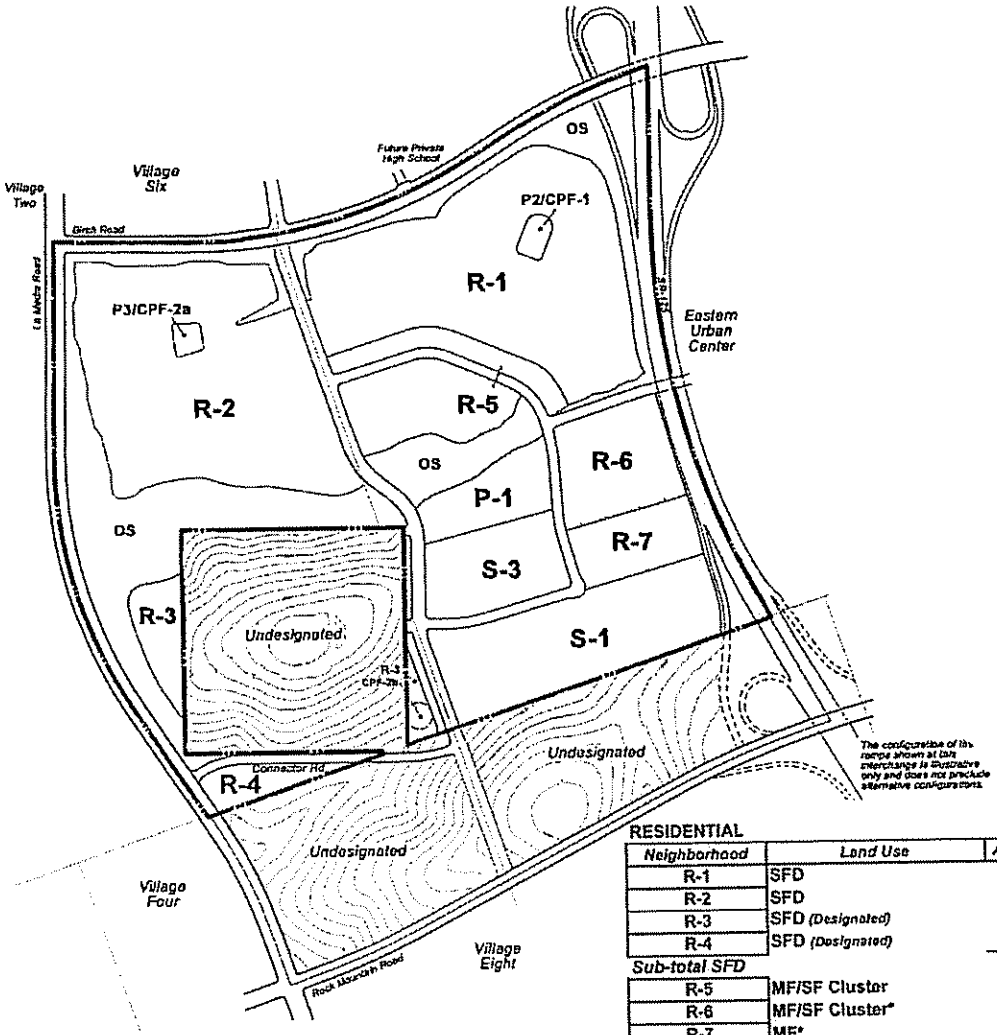
Part Three of the City Landscape Manual addresses the requirements and criteria for public projects, including parks, open space and streetscapes. The Manual provides the requirements for submittals, graphics and standards, design standards and criteria, landscaping, irrigation and trails, which shall be used with staff guidance provided at the time of plan preparation.

Village Seven SPA Plan

The Otay Ranch GDP requires that the SPA-level planning to include definition of the location, acreage and boundaries of neighborhood and community parks and open space. These components are included on the Site Utilization Plan (Exhibit 1). The Public Facilities Financing Plan (PFFP) SPA Plan component includes additional analysis of the phasing and financing of required parkland in Village Seven.

The proposed Village Seven parks, recreation, open space and trails facilities, as identified in the Village Seven SPA Plan, are described in the following chapter of this plan.

Site Utilization Plan



RESIDENTIAL

Neighborhood	Land Use	Acres	du/ac	DU
R-1	SFD	50.7	6.8	346
R-2	SFD	50.5	7.4	375
R-3	SFD *(Designated)*	5.3	4.2	22
R-4	SFD *(Designated)*	3.1	4.2	13
Sub-total SFD		*109.6*	*6.9*	*756*
R-5	MF/SF Cluster	17.4	7.6	132
R-6	MF/SF Cluster*	12.5	15.4	193
R-7	MF*	8.0	15.4	123
Sub-total MF		*37.9*	*11.8*	*448*
Total Residential		147.5	8.2	1,204

NON-RESIDENTIAL

Neighborhood	Land Use	Acres
P-1	Public Park	7.6 *(7.0 ac not req'd)*
P2/CPF-1	CPF *(Common OS)*	1.1
P3/CPF-2a	CPF *(Common OS)*	0.7
CPF-2b	CPF	1.0
S-1	High School *(Designated)*	23.4
S-3	Elem. School	11.1
OS	Open Space *(Designated)*	47.8
Undesignated	Undesignated Uses	121.3
Cir.	Circulation	62.9
Total Non-Residential		276.9
VILLAGE TOTAL		424.4

** Refer to SPA Text for provisions to blend these two parcels.*

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning

8/24/04

Exhibit 1

II. Village Park & Recreation Program

This chapter describes the park, recreation, open space and trails facilities provided within Otay Ranch Village Seven. A neighborhood park will be provided within Village Seven while provisions will be made for the balance of required park acreage towards a community park. The community park obligation is planned to be met with contribution to a park constructed in Village Four, just to the west of Village Seven.

The Otay Ranch Parks and Recreation Facility Implementation Plan (adopted by the City Council on October 28, 1993) identifies the park facility improvement standards for Otay Ranch. The City of Chula Vista Park and Recreation Department has conducted subsequent facilities needs assessments and proposed some modifications to the adopted Otay Ranch Plan. This Village Seven Master Plan strives for consistency with the Otay Ranch Plan and the current and proposed plans and policies of the Parks and Recreation Department. This Master Plan identifies the types, quantities and location of the facilities provided at the Village Seven park site. In addition to identifying specific facility needs and requirements, the goal of the Master Plan is to describe the elements necessary to ensure a rich variety of recreational opportunities, while satisfying identified recreation needs. A Community Park planned for Village Seven is now being considered in Village Four as a preferable alternative.

A. Recreation

The village concept is to organize land uses to produce a cohesive, pedestrian friendly community, encourage non-vehicular trips and foster interaction between residents. The Village Seven SPA Plan provides a variety of recreational opportunities to support the village concept. The recreational plan is based on the following principles:

- Recreation standards such as total parks and recreation acreage, minimum park size, and facility design shall conform to the City Parks and Recreation Master Plan.
- Progressive parks and recreation concepts shall be employed with programs tailored to people rather than people to programs.
- Standards for size and design of activity areas and facilities shall be reviewed periodically and adapted to the changing needs of the population served.
- Logical site selection criteria to distinguish between "community" and "neighborhood" parks. Recreational considerations such as active versus passive, big-muscle versus small motor muscle, family-oriented versus adult-oriented shall be considered in the context of overall land planning.
- Ownership and maintenance responsibilities for parks and recreation facilities within the villages shall be analyzed to appropriately reflect areas of benefit, public funding limitations and fiscal impact.
- Major parks and recreation facilities shall be linked by a trail system for pedestrians and bicycles.
- To the extent practical, community and neighborhood parks shall be located near school sites to increase the potential for shared use of facilities. Joint planning and design of adjacent school/park facilities is encouraged.

Parks & Recreational Activity Categories and Accommodations

A variety of recreation opportunities contribute to the quality of life of residents of Village Seven and the Otay Ranch community. The following is a list of recreational activity categories that will be provided through recreational programming in Village Seven and throughout the Otay Ranch community via the parks and recreation system:

- Big muscle (playground equipment, sports fields, recreation building facilities and sports courts).
- Quiet games (shuffleboard, croquet, horseshoes, archery)
- Nature learning (hiking, bird watching, environmental education)
- Hand-intellect (art/crafts and scientific activities, vocational/special interest classes)
- Informal play (open space play areas)
- Creative play (adventure playgrounds for multiple ages, specially equipped parks)
- Informal social activities (conversation areas, informal seating arrangements)
- Relaxation (hobby-oriented such as fishing, gardening and picnicking)
- Rhythm and music (indoor and outdoor facilities for live music and dancing/classes)
- Drama (performance facilities/classes)
- Social activities (neighborhood group, social dance, club meeting facilities)
- Service (volunteer program, club, committee meeting facilities)

Accommodations for recreational activity for Otay Ranch residents will be provided though the following parks and recreational facilities:

1. *Special Recreation Facilities* - Special recreation facility areas provide for recreational needs not fulfilled by conventional public park facilities. Such facilities are privately owned and operated through commercial enterprise, community association or maintenance district and may or may not be provided within Village Seven.

2. *Regional Park* - Regional parks may include recreational activities such as riding and hiking trails, picnic areas, golf course, active and informal play areas and natural open areas. A regional park is planned for the Otay Valley, south of Village Seven.

3. *Community Park* - Recreational facilities in community parks include lighted ball fields and courts, recreation complexes (buildings and swimming pools), and areas for children's play, informal play and picnicking. A community park is planned for Village Four, just to the west of Village Seven.

4. *Neighborhood Park* - Recreational facilities may include ball fields and courts, children's play equipment/tot lots, informal play and picnic areas. A neighborhood park is provided within Village Seven, see Exhibit 2.

5. *Pedestrian Parks* - Pedestrian parks (also known as common usable open space) emphasize informal social and recreational activities. Facilities may include informal play

areas, tot lots and seating areas. The location of these facilities, if any, within Village Seven will be determined through the subdivision process.

6. *Town Squares* - Town squares are the focal points of some village cores and provide the opportunity to create a social center in the village. Facilities may include plazas or open areas for village events and performances, seating areas, tot lots and play areas. A town square may be included in the Village Seven core when it is developed.

7. *Public Schools* - Public school buildings and outdoor play areas provide an opportunity for recreational activities within a village. The location of schools adjacent to parks enhance both uses and may allow for shared use of facilities. Sites for an elementary school and a high school are designated within Village Seven. A middle school may be developed on undesignated property, per the Otay Ranch GDP.

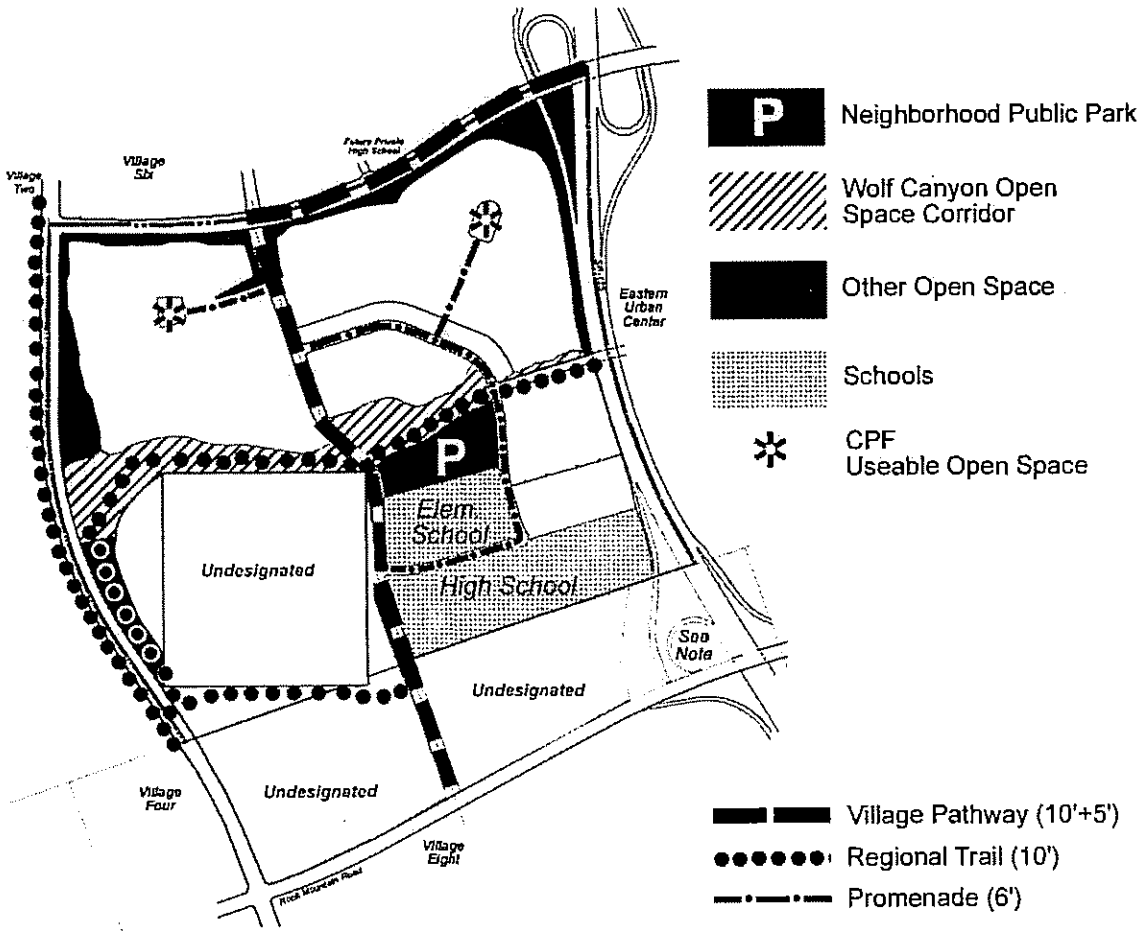
8. *Commercial Centers* - Commercial areas within a village can provide recreational opportunities in the form of outdoor seating and eating areas. Businesses such as cafes, bookstores and bike shops promote leisure and recreational activities.

9. *Community Purpose Facilities (CPF)* - Recreational activities that serve the village may be provided by a community purpose facility such as a church, Boys and Girls Club or similar non-profit entity. Facilities may include swimming pools, senior or teen centers and meeting rooms. Two such sites are shown within Village Seven, CPF-1 and CPF-2a, see Exhibit 2 for locations.

10. *Village Pathway, Paseos and Trails* - Special pedestrian and bicycle routes provide an opportunity for expanded recreation and for conveniently traveling to parks or other recreational sites within a village. See Exhibit 2 for the location of these facilities within Village Seven.

As noted above, a range of recreational activity sites/facilities will be provided in Village Seven. These are depicted on Exhibit 2, Parks & Open Space. A neighborhood park is located between the proposed elementary school and upper Wolf Canyon open space in the village core. The village greenway (east/west connection from the village core), village pathway (north/south connection from the village core) and other trails connect to adjacent villages in all directions, as well as the regional routes paralleling the arterial roads along the village edges. The elementary and high school will definitely provide, and two CPF/park sites may also provide, additional recreational activity sites. Some recreational activities may also be provided in conjunction with commercial uses in the village core, when it is developed.

Parks & Open Space



Note:
The configuration of the interchange ramps shown on this exhibit is illustrative only and does not preclude alternative configurations.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Orth Land Planning
8/24/04

Exhibit 2

B. Parks

Park Development Standards

The Village Seven park, open space and trails design and development will adhere to the standards and requirements set forth in the City of Chula Vista Landscape Manual and Parks and Recreation Master Plan. General standards include the following for determining net useable park acreage:

- Areas for ball fields or built facilities (tennis and basketball courts, *etc.*) shall be graded to a 2% slope to provide for proper drainage
- Slopes steeper than 4:1 may not be considered for lawn areas
- Perimeter and interior slopes steeper than 4:1 are not credited towards park acreage
- Graded slopes are to be constructed in conformance with the City's landform grading policies
- All park areas shall be accessible per the American Disabilities Act (ADA) requirements

Park Description

The Village Seven park is a 7.6-acre (net) neighborhood park located adjacent to the elementary school site in the village core. The park is located near the center of the village to conveniently serve all residents. The location of the park next to the elementary school and Wolf Canyon open space maximizes "green space," vistas and a feeling of spaciousness in the village core. This setting also minimizes the negative affects of play field lights, noise and traffic on nearby sensitive single family residential neighborhoods.

The facilities and improvements within the park will be consistent with the proposed City of Chula Vista Parks & Recreation Master Plan, which is currently being considered for an amendment to the Community Park location. Exhibit 3 depicts a conceptual design of the Village Seven neighborhood park which provides for the following park facilities:

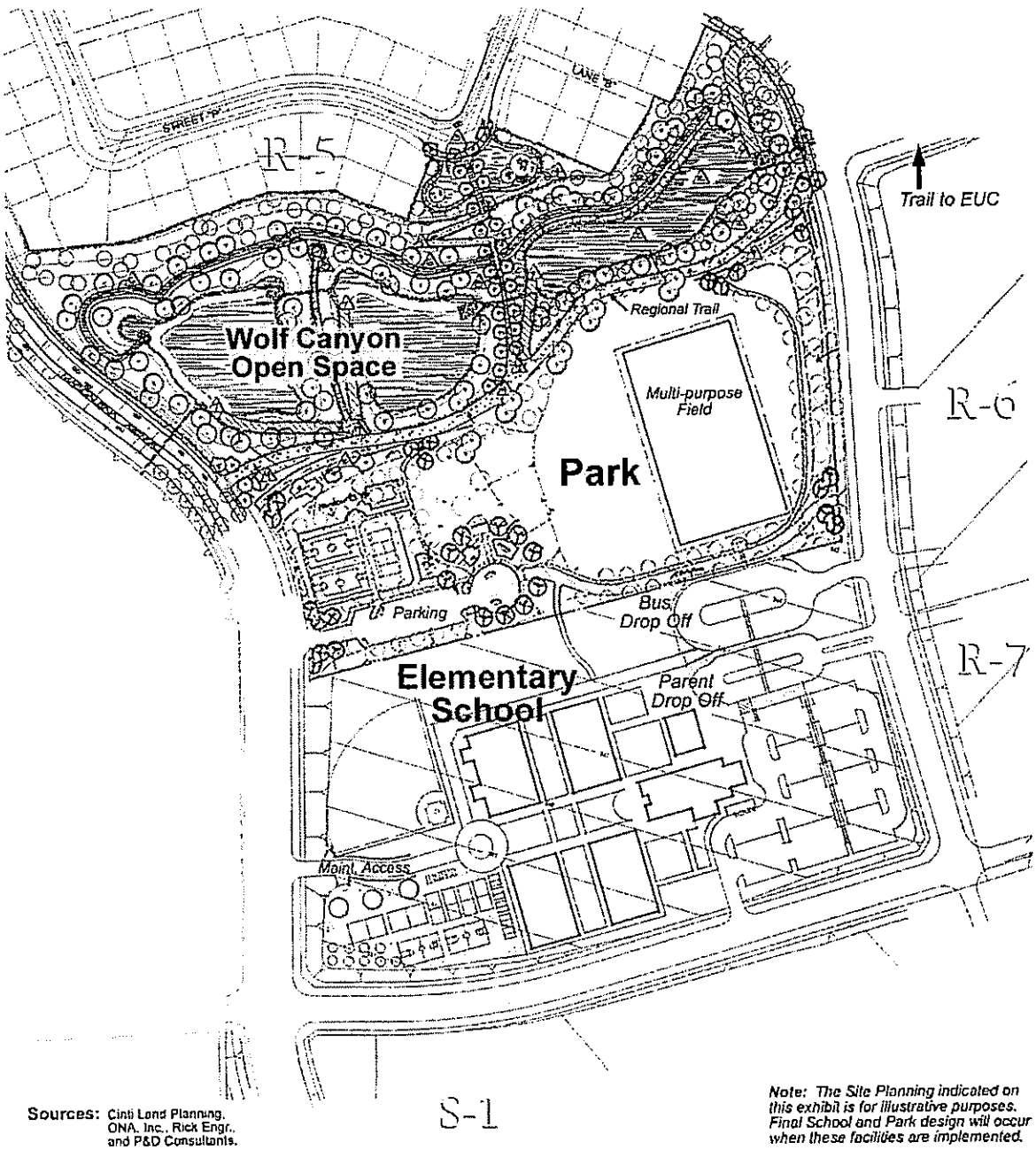
- Open lawn areas and paved walkways (potentially lighted walkways)
- Restrooms/maintenance building
- 1 tennis court
- 1 multipurpose field
- 2 basketball courts (potentially lighted)
- 2 children's play areas (one for 2-5 year-olds and the other for 5-12 year-olds)
- 1 skateboard practice area
- Picnic benches, tables and shelters
- Space for design elements/planting, etc.
- Parking lot with 25-30 spaces

Listed program elements and the conceptual design shown in Exhibit 3 are subject to modification and refinement as the Village Seven project design process progresses.

Ownership, Funding & Maintenance

The neighborhood park site will be dedicated by landowner/master developer to the City of Chula Vista. The park will be owned and maintained by the City of Chula Vista. Funding for park improvements is governed by the Chula Vista Park Dedication Ordinance. Included as part of the regulations are Park Acquisition and Development (PAD) fees established for the purpose of providing neighborhood and community parks and improvements. The Ordinance provides that fees are paid to the City prior to approval of a final subdivision map. The Village Seven Public Facilities and Finance Plan (PFFP) provides a detailed description of the financing and phasing of the public park.

Conceptual Design for Elementary School & Park



Sources: Cinti Land Planning, ONA, Inc., Rick Engr., and P&D Consultants.

Note: The Site Planning indicated on this exhibit is for illustrative purposes. Final School and Park design will occur when these facilities are implemented.

Exhibit 3

C. Village Trails

Village Seven has been designed to accommodate the trails program established by the Otay Ranch Overall Design Plan and GDP (see Exhibit 4, Trails Plan). The plan recognizes that provision of bicycle, cart and pedestrian circulation is fundamental to creating a pedestrian-oriented village. All circulation elements within the village have been located and designed to be as accessible as possible, however, some off-street trails traverse steep topography that may limit bicycle use. All village streets and sidewalks have been designed at gradients to facilitate pedestrian, bicycle and cart travel. The plan proposes 25 mile per hour travel speeds on all internal village streets to allow bicycles and carts to travel on village streets without separately designated travel lanes. The landscape treatment and design elements of village trails are illustrated and described in more detail in the Village Design Plan. Additional trail location and dimension details may also be found in the Village Seven SPA Plan, Chapter 3 Circulation.

Regional Trails

One component of the Regional Trail system identified in the Otay Ranch Overall Design Plan, and the City's Greenbelt Master Plan, occurs within Village Seven. It is the "Village Greenway" located within the open space corridor defined within Wolf Canyon. The greenway includes a regional trail that provides east-west regional circulation through Village Seven and connects to neighborhood trails within the interior of the village. The village greenway will be constructed with the landscaping and drainage improvements within Wolf Canyon which will be dedicated open space. Maintenance is expected to be provided by a maintenance district, homeowner's association or Community Facilities District (CFD).

Surrounding Pathways/Scenic Corridors

Community-serving paths are located within the 75-foot landscaped parkways along Rock Mountain Road, La Media Road and Birch Road. La Media Road includes a 10-foot off-street (Class I) trail for pedestrian and bicycle use within its ROW. Birch Road and Rock Mountain Road include bike lanes (Class II) adjacent to the curb and a five-foot wide pedestrian path behind the curb on both sides of the street. Village Seven residents can access these routes via village pathways and trails.

The trails will be constructed in conjunction with street construction. Maintenance of all facilities within the public right-of-way will be the responsibility of the City of Chula Vista. Landscape maintenance adjacent to the public ROW is expected to be provided by a maintenance district, homeowner's association or Community Facilities District (CFD).

Village Pathway

Village pathways are inter-village cart and pedestrian paths that link the Otay Ranch villages and specifically, provide access to the planned regional transit stations. In Village Seven, a public transit station is planned for the village core. Regional fixed route transit stations are to be located in the Village Six Core, to the north, and the Eastern Urban Center, to the east.

From Village Seven, access to the Village Six Core will be via the village pathway extending along the village entry street from Birch Road, while access to the EUC will be via the village greenway described above. Village pathways are proposed along each of the village entries to the village core.

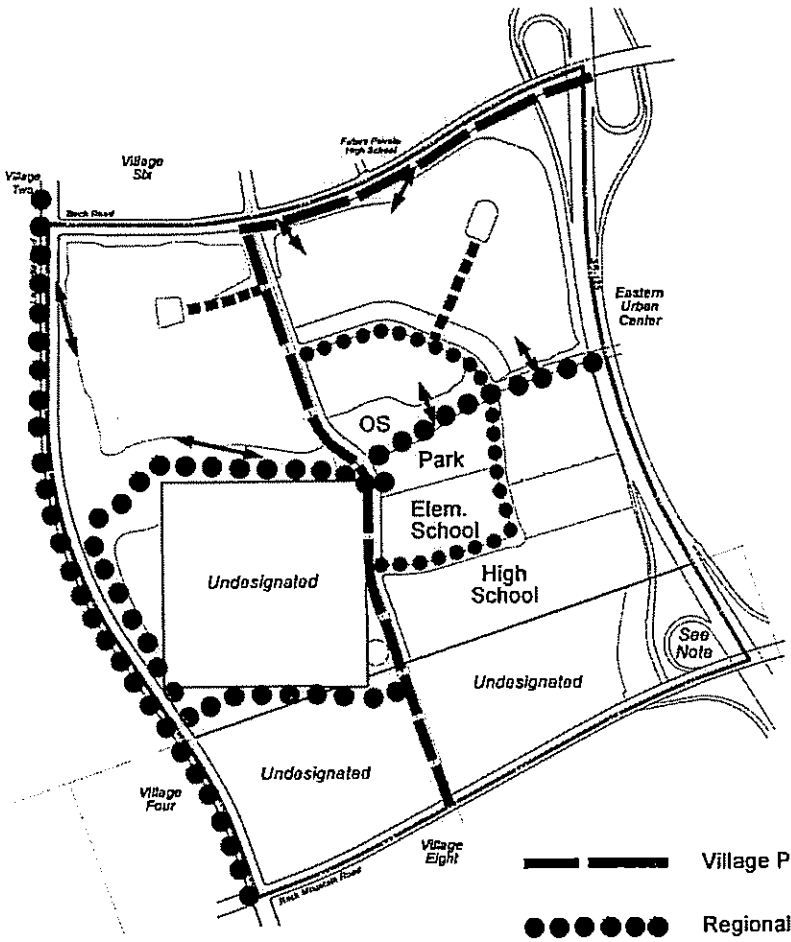
Segments of the village pathway will be constructed concurrent with construction of the adjacent streets. Village path improvements will be within the public ROW and maintained by the City of Chula Vista.

Village Streets

All village residential streets include sidewalks, landscaped parkways and lighting. The preferred design provides for five-foot wide sidewalks separated from the roadway by a landscaped parkway. The streets have homes on one or both sides. Parking is provided along the sides of the streets. Bike travel is permitted in the roadway without specially designated lanes due to low speed limits. Cart travel is permitted on streets with 25 mph posted speed limits. In the village core areas, wider sidewalks are provided on the non-residential side to allow for window shopping and amenities such as seating and outdoor dining.

All sidewalks and parkways within the public right-of-way will be owned by the City of Chula Vista and maintained by the City, maintenance district or CFD. All landscaped parkways and medians will be maintained through a maintenance district, homeowners association or CFD.

Trails



Village Pathway *(10' + 5')*

Regional Trail *(10' - D.G. in Wolf Canyon)*

Village Core Promenade *(6')*

Residential Promenade *(6')*

Potential Trail Connector to Residential
(To be established at Tentative Map level)

Trail Connection Notes:

1. The Village Pathway is intended to connect the existing Village Pathway in Village 6 to a future Village Pathway in Village 8.
2. The Regional Trail is intended to connect the trail in the EUC to the north-south Regional Trail along La Media Road to access Villages 1, 2, 4, 5, 6 & 8. It is also intended to provide access to the planned Community Park west of La Media Road.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Land Planning
8/24/04

Exhibit 4

D. Open Space

Open space within Village Seven is comprised of common open spaces including manufactured slopes, the 75-foot (average) parkways adjacent to surrounding major streets, village street parkways, and the Wolf Canyon Open Space/Greenbelt. These open spaces provide pedestrian connections within the village, passive recreational opportunities and view opportunities. Open space lands will be established and maintained through the dedication of open space easements and/or lots to the City, CFD or other appropriate entity.

Manufactured Slopes

Slopes within the village are located between development areas within the village and along the surrounding major streets.

All manufactured slopes will be constructed and landscaped to City standards and guidelines provided in the Village Design Plan. All slopes (over 3 feet in height) will be permanently irrigated, with the exception of the temporary slopes. Slopes within the public ROW will be maintained by the City. All slopes outside of the public right-of-way will be owned and maintained through a maintenance district or CFD. Irrigation is required on temporary slopes with the exception of hydroseed applications during the rainy season and with sufficient rainfall occurring to establish the plant material.

Community Gardens

The Otay Ranch GDP requires that policies and guidelines be developed at the SPA level for community gardens. Community garden guidelines regarding size, location, facilities and operations were prepared and adopted in conjunction with the Otay Ranch SPA One project. However, no community gardens are proposed within the Village Seven SPA.

E. Water Conservation

Based on current Otay Water District (OWD) policies regarding new subdivision development, landscaped areas for parks, schools, greenbelts, road medians and multifamily residential are required to utilize recycled water where available. Consistent with the Otay Ranch GDP, it is anticipated that recycled water will irrigate street parkway landscaping, parks and manufactured slopes along open space areas.

The project is located in the OWD Central Service Area which currently receives recycled water from the District's 1.3 million gallons per day (mgd) capacity Ralph W. Chapman Recycling Facility. The recycled water system consists of a series of pump stations, transmission piping and storage reservoirs that will provide recycled water to portions of Otay Ranch, including the Village Seven SPA project area. The existing recycled water distribution system serves Villages One and Five, is being extended to Village Six and connections to the system to serve Village Seven are planned, as described in the Recycled Water discussion in Chapter 7 of the Village Seven SPA Plan.

The recycled water consumption factor for all irrigated areas is 2,230 gallons per day per acre (gpd/ac). Potential demand within Village Seven is estimated in the Recycled Water discussion in Village Seven SPA Plan. Recycled water requirements for the project will be coordinated by the OWD and the City. Phased construction of recycled water facilities, based on the District approved master plan, will be incorporated into the PFFP and/or subdivision map conditions to assure timely provision of required facilities.

The Otay Ranch GDP and the Chula Vista Growth Management Program require the approval of a water conservation master plan concurrent with SPA approval. The City of Chula Vista has developed guidelines for the preparation and implementation of Water Conservation Plans. These guidelines require a project to commit to a specific menu of water conservation measures beyond those currently mandated. Some conservation measures may affect the source of irrigation water or the irrigation system implemented for landscaping and/or parks and recreation facilities. Specific commitments for the Village Seven SPA are detailed in the Water Conservation Plan.

F. Brush Management

Brush Management occurs in all areas where development abuts native area. Even though this condition does not exist in Village Seven a brush management report will be required for this project by a qualified brush management expert. Fire Department standards will be applied to the design of planting at the tops of slopes adjacent to housing.

III. Contributions to Otay Ranch Community Parks & Open Space

A. Community Parks

The development of Village Seven will generate a total demand for approximately 11.49 acres of neighborhood and community park land. This demand is to be met through the provision of the 7.6 acre neighborhood park within the village and equivalent financial contributions or land dedication to acquire and improve parkland in other locations within Otay Ranch.

Consistent with the Otay Ranch GDP, the community park acreage for Village Seven is to be met at one of the GDP defined community park sites. Village Seven will meet its obligation towards community parks through the payment of PAD fees and/or dedication of land.

Community park facilities will be determined by the plans and policies of the General Services Department, as well as the Chula Vista Parks & Recreation Master Plan (November 2002), which identifies the types and quantities of facilities, and development standards for community parks.

Community park sites are dedicated to the City of Chula Vista. The City of Chula Vista will own and maintain these parks. Chapter 17.10 of the Chula Vista Municipal Code governs funding for the park improvements. The Code identifies Park Acquisition and Development (PAD) fees and establishes fee rates which will be used to provide community parks and improvements. The ordinance provides that fees are paid to the City prior to approval of a final subdivision map.

B. Open Space

The largest component of open space in the Otay Ranch is the Resource Management Plan (RMP) Preserve. As prescribed by the RMP, the development of each Otay Ranch Village requires a contribution to the Otay Valley preserve. The required contribution is 1.188 acres of open space conveyance per one acre of development less the acreage of "common use lands," (local parks, schools, arterial roads and other land designated as public use areas). The 424.4-acre Village Seven SPA less 276.9 acres of common use and undesignated land yields a net development area of 147.5 acres which requires a conveyance of 175.23 acres.

IV. Ownership & Maintenance Options

The following are options for ownership and maintenance of park, open space and trail facilities in Village Seven. A summary of ownership and maintenance options is provided in Table B at the end of this chapter.

A. Maintenance District & Community Facilities District

Facilities not maintained by private property owners or directly by a public agency will be maintained through a Maintenance District and/or Community Facilities District (CFD). Such areas may include public common areas, common slope areas, common open space, entry landscaping, walls facing the public right-of-way and trails. Certain public facility areas may also be included, as determined by the Director of Public Works, such as detention basins and enhanced median and parkway landscaping in the public right-of-way.

B. Public Agency Maintenance

Public agencies will be responsible for maintaining the facilities on publicly owned land. These areas include landscaping within street and highway rights-of-way (unless maintained by a maintenance district or a community facilities district), public parks, schools, any utility easements and other similar public lands.

C. Chula Vista Public Works Department

Public streets, walks, parkways and trails which are located on public land and drainage structures other than those designed as swales or brow ditches will be the maintenance responsibility of the City of Chula Vista Public Works Department (unless maintained by a homeowners association or a community facilities district).

Table B
Ownership and Maintenance Options

Land Use or Condition	Ownership		Maintenance				
	Public	Private	General Fund	CFD	Other Public	HOA	Private
Parkways in public R.O.W.	★			★		★	★
Slopes within Open Space lot	★			★		★	
Slopes within Residential lot		★				★	★
Public Park	★		★				
Private Recreation		★				★	
Common Useable OS (public)	★			★			
Common Useable OS (private)		★				★	
Public School	★				★		
Utilities	★		★		★		

★ = Available Ownership and Maintenance Option (more than one option exists for some conditions)

V. Phasing

A. Neighborhood Park

The neighborhood park is within the second development phase of Village Seven. The phasing requirements for the park are described in the Village Seven PFFP.

B. Open Space

Open spaces adjacent to the major surrounding streets will be phased with street construction. All slopes and other open spaces will be implemented in conjunction with adjacent development.

Conveyance of the RMP land or payment of in-lieu fees will comply with the Phase 2 RMP policies requiring conveyance of 1.188 acres of preserve land for every acre of development area. This conveyance or payment will occur on a phased basis concurrent with the phasing of development activity.

C. Trails

Trails will be phased in conjunction with adjacent development, including regional and village streets, and slope construction.

PC DISTRICT REGULATIONS

Village Seven Sectional Planning Area (SPA)
Otay Ranch GDP

Adopted October 19, 2004

by Resolution No. 2004-329
by Ordinance No. 2981

Project Sponsor

McMillin Otay Ranch, LLC
2727 Hoover Avenue
National City, CA 91950
Contact: Todd Galarneau
(619) 336-3959

Prepared by

Cinti Land Planning
2932 Poinsettia Drive
San Diego, CA 92106
Contact: Gary P. Cinti
(619) 223-7408

SECTION II.3
PLANNED COMMUNITY DISTRICT REGULATIONS

TABLE OF CONTENTS

SECTION PAGE

II.3.1 General Provisions
- II.3.1.1 Purpose & Scope II.3-1
- II.3.1.2 Private Agreements II.3-1
- II.3.1.3 Conflicting Ordinances II.3-1
- II.3.1.4 Establishment of Land Use Districts II.3-2
  - Adoption of Land Use Districts Map II.3-2
  - Amendments to the Land Use Districts Map II.3-2
- II.3.1.5 Clarification of Ambiguity II.3-3
- II.3.1.6 Effect of Regulations II.3-3
- II.3.1.7 Enforcement II.3-3
- II.3.1.8 Definitions of Terms II.3-3

II.3.2 Land Use Districts Map
- II.3.2.1 District Boundaries II.3-5

II.3.3 Residential Districts
- II.3.3.1 Purpose II.3-7
- II.3.3.2 Residential District Categories/Intent II.3-7
- II.3.3.3 Permitted & Conditional Uses II.3-8
- II.3.3.4 Property Development Standards II.3-10
- II.3.3.5 Accessory Buildings, Structures and Uses II.3-19
- II.3.3.6 Walls & Fences II.3-19
- II.3.3.7 Residential Sign Regulations II.3-20
- II.3.3.8 Vehicle Parking II.3-20
- II.3.3.9 Performance Standards II.3-21

II.3.4 Community Purpose Facility District
- II.3.4.1 Purpose II.3-24
- II.3.4.2 Permitted & Conditional Uses II.3-24
- II.3.4.3 Accessory Uses & Buildings II.3-26
- II.3.4.4 Community Purpose Facility Sign Regulations II.3-26
- II.3.4.5 Property Development Standards II.3-26
- II.3.4.6 Parking & Loading Facilities II.3-26
  - Size & Access Requirements II.3-26
  - Number of Spaces Required for Designated Land Use II.3-28
  - General Provisions II.3-29

SECTION PAGE

Parking Screening Requirements II.3-30
Parking Area Landscaping II.3-31
Parking Area Lighting II.3-31
Parking Area Front Setback II.3-31
II.3.4.7 Outdoor Storage II.3-31
II.3.4.8 Trash Storage II.3-31
II.3.4.9 Wall Requirements II.3-32
II.3.4.10 Landscaping II.3-32
II.3.4.11 Performance Standards II.3-32

II.3.5 Open Space & Parks District
II.3.5.1 Purpose II.3-34
II.3.5.2 Permitted & Conditional Uses II.3-34
II.3.5.3 Property Development Standards II.3-35
II.3.5.4 Accessory Uses & Buildings II.3-35
II.3.5.5 Performance Standards II.3-36

II.3.6 Special Uses & Conditions
II.3.6.1 Purpose II.3-37
II.3.6.2 Temporary Uses & Special Events II.3-37
II.3.6.3 Home Occupations II.3-39
II.3.6.4 Recreational Facilities II.3-40

II.3.7 Community Purpose Facility Sites
II.3.7.1 Acreage Provided II.3-41
II.3.7.2 CPF Uses II.3-41

II.3.8 Comprehensive Sign Regulations
II.3.8.1 Purpose II.3-42
II.3.8.2 Sign Permit Requirements & Review Procedures II.3-42
II.3.8.3 Enforcement, Legal Procedures & Penalties II.3-49
II.3.8.4 Construction & Maintenance II.3-50
II.3.8.5 Design Standards II.3-50

II.3.9 Legislative Procedures
II.3.9.1 Purpose II.3-52
II.3.9.2 Adoption of Planned Community District Regulations II.3-52
II.3.9.3 Amendments II.3-53

II.3.10 Administrative Procedures, Conditional Uses & Variances
II.3.10.1 Purpose & Intent II.3-54
II.3.10.2 Zoning Administrator - Authority II.3-54
II.3.10.3 Zoning Administrator - Required Findings II.3-58

SECTION PAGE

II.3.10.4 Design Review Committee II.3-58
II.3.10.5 Design Review Committee – Appeals Procedure II.3-58
II.3.10.6 Site Plan & Architectural Approval II.3-59
II.3.10.7 Site Plan & Architectural - Appeals II.3-60
II.3.10.8 Conditional Use Permit II.3-61
II.3.10.9 Conditional Use Permit - Appeals II.3-62
II.3.10.10 Variance II.3-62
II.3.10.11 Variance - Appeals II.3-63

II.3.11 Exceptions & Modifications
II.3.11.1 Height Limitation Exceptions II.3-64
II.3.11.2 Projections into Required Yard Permitted II.3-64

II.3.12 Enforcement
II.3.12.1 Enforcement by City Officials II.3-65
II.3.12.2 Actions Deemed Nuisance II.3-65
II.3.12.3 Remedies II.3-65
II.3.12.4 Penalties II.3-65

EXHIBITS

PC-1 Land Use Districts II.3-6
PC-2 Sky Exposure Setback Plane II.3-14

SECTION II.3
PLANNED COMMUNITY DISTRICT REGULATIONS

II.3.1 General Provisions

II.3.1.1 Purpose & Scope

The Otay Ranch Village Seven SPA Planned Community District Regulations are intended to:

- Promote and protect the public health, safety and welfare of the people of the City of Chula Vista.
- To safeguard and enhance the appearance and quality of development in the Village Seven Sectional Planning Area (SPA) of the Otay Ranch General Development Plan (GDP) area
- To provide the social, physical and economic advantages resulting from comprehensive and orderly planned use of land resources.
- Ensure that the SPA Plan is prepared and implemented in accordance with the provisions of the Otay Ranch GDP.
- Implement the Chula Vista General Plan for the Eastern Territories.
- Promote the orderly planning and long term phased development of the Village Seven portion of the Otay Ranch GDP area.
- Establish conditions which will enable the Village Seven SPA to exist in harmony within the larger community.

II.3.1.2 Private Agreements

The provisions of this ordinance are not intended to abrogate any easements, covenants, or other existing agreements which are more restrictive than the provisions contained within this ordinance.

II.3.1.3 Conflicting Ordinances

Whenever the provisions of this ordinance impose more, or less, restrictive regulations upon construction or use of buildings and structures, or the use of lands/premises than are imposed or required by other ordinances previously adopted, the provisions of this ordinance or regulations promulgated hereunder shall apply.

II.3.1.4 Establishment of Land Use Districts

In order to classify, regulate, restrict and separate the use of land, buildings and structures, and to regulate and limit the type, height and bulk of buildings and structures in the various districts, and to establish the areas of yards and other open space areas abutting and between buildings and structures, and to regulate the density of population, the Village Seven SPA is hereby divided into the following Land Use Districts:

VILLAGE SEVEN SPA LAND USE DISTRICTS DEFINITIONS

SYMBOL	GENERAL DESCRIPTION
SF3	Single Family Three: District which permits single family housing located on lots >5,000 square feet
SF4	Single Family Four: District which permits single family housing located on lots < 5,000 square feet.
RM1	Residential Multi-Family One: District which permits housing ranging from 8 units/acre up to 14.9 units/acre including small lot single family, alley, duplex, townhouse and stacked flats product types
RM2	Residential Multi-Family Two: District which permits housing at densities from 15+ units/acre.
CPF	Community Purpose Facility: District which permits uses established pursuant to the Community Purpose Facilities requirements of the P-C Planned Community Zone
OS/P1	Open Space/Park One: District which permits developed or usable open space and park uses, and may include naturalized open space

Adoption of Land Use Districts Map

Land Use Districts and boundaries are established and adopted as shown, delineated and designated on the Village Seven SPA Land Use Districts Map (see Exhibit PC-1) of the city of Chula Vista and San Diego County. This map, together with all notations, references, data, district boundaries and other information thereon, are made a part of the Village Seven SPA Plan and adopted concurrently herewith. The boundaries are intended to align with physical and legal features such as property boundaries, top or toe of slopes, or streets. Refinements to these boundaries are expected during the detail planning and design phases and will not require an amendment providing the refinement does not alter the intent of the map. Refer also to Section II.3.3.4.B for provisions for boundary adjustment for certain planning areas.

Amendments to the Land Use Districts Map

Changes to the boundaries of the land use districts shall be made by Ordinance and shall be reflected on the Village Seven SPA Official Land Use Districts Map, as provided in Section

II.3.9 herein. Minor changes resulting from the approval of a tentative or final map may be made to the Land Use Districts Map as an administrative matter.

II.3.1.5 Clarification of Ambiguity

If ambiguity arises concerning the proper classification of a particular land use within the meaning and intent of this Ordinance, or if ambiguity exists with respect to height, yard requirements, area requirements or land use district boundaries as set forth herein, it shall be the duty of the Zoning Administrator to ascertain all pertinent facts concerning such ambiguity and forward said findings and recommendations to the Planning Commission, or on appeal, to the City Council. If approved by the Commission, or on appeal, by the City Council, the established interpretation shall govern thereafter.

Should any provision of these regulations conflict with the requirements of the Municipal Code, the provisions herein shall apply.

II.3.1.6 Effect of Regulations

The provisions of this Ordinance governing the use of land, buildings, structures, the size of yards abutting buildings and structures, the height and bulk of buildings, the density of population, the number of dwelling units per acre, standards of performance, and other provisions are hereby declared to be in effect upon all land included within the boundaries of each and every land use district established by this Ordinance.

II.3.1.7 Enforcement

See Section II.3.12 for the enforcement provisions of this Ordinance.

II.3.1.8 Definitions of Terms

For the purposes of this ordinance, certain words, phrases and terms used herein shall have the meaning, assigned to them by Title 19 of the City of Chula Vista Municipal Code.

The following additional definitions are provided specifically for the Village Seven SPA:

A. Accessory Second Unit: An independent residential living area is an accessory use to a primary single family residential use, with cooking facilities and bath, that occupies the same single family detached lot as the main residence, and is intended to provide affordable rental housing in single family detached neighborhoods.

B. Hollywood Drive: A driveway which leads to a garage located behind the front elevation of the main residence, often narrow and sometimes consisting of two paved driving strips with enhanced hardscape or turf in between.

C. Porch: A structure attached to the front and/or side of the main dwelling, has a minimum of two open sides, is covered by a roof and oriented towards the street.

D. Semi-private Courtyard: An outdoor seating area that may project into the front yard setback, oriented to the house entry; and surrounded on three sides by either the building or low walls/fences.

E. Veranda: A roofed open structure attached to the exterior of a residence creating a "wrap-around" style porch, typically orienting to both the front and side streets of a corner lot.

F Neighborhood: A Neighborhood is a land use area identified on the Site Utilization Plan in the Sectional Planning Area Plan (SPA) as a Parcel. References to Parcel or Neighborhood are interchangeable within the Village Seven SPA Plan and its component documents.

When consistent with the context, words used in the present tense include the future; words in the singular number include the plural; and those in the plural number include the singular. The word "shall" is mandatory; the word "may" is permissive.

Any aspect of land use regulation within Village Seven SPA not covered by these district regulations or subsequent plan approvals, shall be regulated by the applicable section of the Chula Vista Municipal Code (CVMC).

II.3.2 Land Use Districts Map

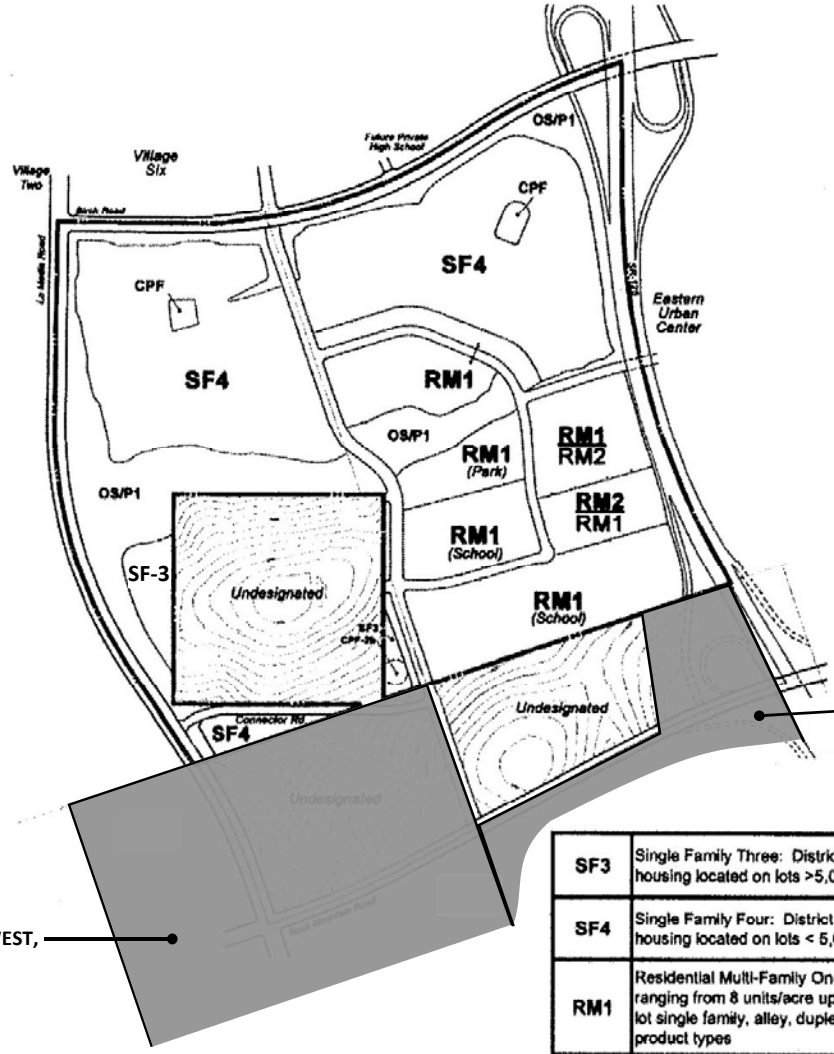
This chapter consists of the Land Use Districts (Zoning) Map for Village Seven SPA included in a reduced form as Exhibit PC-1. The original Village Seven SPA Official Land Use Districts Map shall be kept on file with the City Clerk and shall constitute the original record. A copy of said map shall also be filed with the City Planning Department.

The provisions of these Planned Community District Regulations shall be applicable only to that portion of the Village Seven SPA with land use district designations indicated on Exhibit PC-1. Expansion to include property within Village Seven shown as "undesignated" shall require a formal amendment per Section II.3.9.3 herein.

II.3.2.1 District Boundaries

The land use district boundaries shown on the map coincide with proposed streets, alleys or lot lines. Minor amendments to these boundaries resulting from the relocation of a boundary street, alley or lot line by the approval of a tentative or final subdivision map shall be incorporated in the Land Use Districts Map as an administrative matter.

Land Use Districts



SF3	Single Family Three: District which permits single family housing located on lots >5,000 square feet
SF4	Single Family Four: District which permits single family housing located on lots < 5,000 square feet.
RM1	Residential Multi-Family One: District which permits housing ranging from 8 units/acre up to 14.9 units/acre including small lot single family, alley, duplex, townhouse and stacked flats product types
RM2	Residential Multi-Family Two: District which permits housing at densities from 15+ units/acre.
CPF	Community Purpose Facility: District which permits uses established pursuant to the Community Purpose Facilities requirements of the P-C Planned Community Zone
OS/P1	Open Space/Park One: District which permits developed or usable open space and park uses, and may include naturalized open space

CITY OF CHULA VISTA **Vista Verde**
Village Seven - Otay Ranch

Cinti Land Planning
5/25/04

Exhibit PC-1

II.3.3 Residential Districts

II.3.3.1 Purpose

The purpose of the Village Seven SPA Residential Districts is to achieve the following:

- To implement the residential policies of the Otay Ranch General Development Plan.
- To reserve appropriately located areas for family living at a broad range of dwelling unit densities consistent with the Otay Ranch General Development Plan and with sound standards of public health, safety and welfare.
- To ensure adequate light, air, privacy and open space for each dwelling unit.
- To minimize the effects of traffic congestion and to avoid the overloading of public services and utilities by phasing construction of buildings in relation to the land area around them and available infrastructure.
- To protect residential properties from noise, illumination, unsightliness, odors, smoke and other objectionable influences.
- To facilitate the provision of utility service and other public facilities commensurate with anticipated population, dwelling unit densities and service requirements.

II.3.3.2 Residential District Categories/Intent

Two basic residential unit types are anticipated in the Village Seven SPA: single family detached homes and attached/multi-family units. Two single family land use districts, SF3 and SF4, are utilized to distinguish single family detached units in two density ranges (see lot size development criteria). Two attached or detached multi-family districts are also established, RM1 and RM2. The RM1 is intended to accommodate typical single family attached and multi-family units ranging from duplexes and alley products to townhouses, as well as innovative housing products, falling in the range of 8 to 14.9 dwelling units per acre (du/ac). The typical housing product in the RM2 district may have stacked units and group parking and/or be three stories in height, which would be expected at densities greater than 15 du/ac. The Otay Ranch General Development Plan also authorizes small lot single family detached in multi-family designations.

II.3.3.3 Permitted & Conditional Uses

The matrix of land uses on the following pages indicates the relative permissive status using the following symbols:

"P"	=	Permitted.
"C"	=	Permitted subject to Conditional Use Permit approved by the Planning Commission.
"ZA"	=	Permitted subject to Conditional Use Permit by the Zoning Administrator.
"a"	=	Permitted Accessory Use to a Permitted or Conditional Use.
"N"	=	Use Not Permitted.

PERMITTED USE MATRIX – RESIDENTIAL DISTRICTS

LAND USE	LAND USE DISTRICT			
	SF3	SF4	RM1	RM2
Residential Uses:				
Single-family dwelling, detached	P	P	P	ZA
Single-family dwelling, attached	N	ZA	P	P
Mobile home which is certified under the National Mobile Home Construction and Safety Standards Act of 1974 on individual lots	P	P	P	P
Group residence or residential dwelling, operated by an organization, association or individual with a paid professional staff, uses may include, but are not limited to, boarding or rooming homes, dormitories and retirement homes	N	N	C	C
Multiple dwellings (3 units and above)	N	N	P	P
Townhouse dwellings	N	N	P	P
Accessory Second Unit (see Section II.3.1.8A & II.3.3.5)	a	a	a	N
Agricultural Uses:				
All types of horticulture	P	P	P	P
Agricultural crops	ZA	ZA	ZA	ZA
Community garden	ZA	ZA	ZA	ZA
Public and Semi-public Uses:				
Day nurseries, daycare schools and nursery schools	N	N	C	C
Essential public services, including but not limited to: school, library, museum, park, public works facility and other civic uses.	C	C	C	C
Family daycare home, large (subject to Section 19.58 CVMC)	ZA	ZA	C	C
Public safety facility such as police or fire station	C	C	C	C
Public utility and public service sub-stations, reservoirs, pumping plants and similar installations, except those regulated by the State of California	C	C	C	C
Recreation facility less than 2 acres in size	ZA	ZA	ZA	ZA
Recreation facility over 2 acres in size	C	C	C	C

PERMITTED USE MATRIX – RESIDENTIAL DISTRICTS (cont'd)

LAND USE	LAND USE DISTRICT			
	SF3	SF4	RM1	RM2
Home Occupations:				
Home occupations (subject to Section II.3.6.3)	ZA	ZA	ZA	ZA
Other Uses:				
Keeping of up to three (3) dogs and/or three (3) cats (over the age of four months)	P	P	P	P
Model homes (subject to Section II.3.6.2, Temporary Uses)	ZA	ZA	ZA	ZA
Other accessory uses and accessory buildings customarily appurtenant to a permitted use (subject to Section 19.58 CVMC)	P	P	P	P
Other temporary uses as prescribed in Section II.3.6.2	ZA	ZA	ZA	ZA
Temporary tract offices and tract signs (subject to Section II.3.6.2, Temporary Uses)	ZA	ZA	ZA	ZA
Unclassified uses (subject to Section 19.54 CVMC)	C	C	C	C

II.3.3.4 Property Development Standards

A. General Standards

The general standards found in this section are based on the Otay Ranch General Development Plan/Subregional Plan. Where the Specific Standards listed below are silent on an issue, the Zoning Administrator is authorized to define a standard based on the Otay Ranch General Development Plan/Subregional Plan, the Chula Vista General Plan, Zoning Ordinance, Design Manual and/or Landscape Manual, as may be appropriate.

B. Specific Standards

The following Property Development Standards shall apply to all land and buildings, other than accessory buildings, permitted in their respective residential land use district. The use of the symbol "DR" indicates that the standard is established by the approval of by Zoning Administrator (ZA) Design Review application and/or Tentative Tract Map.

Dimensions and standards are minimums, and minor variations may be permitted subject to ZA Design Review or tract map approval, providing that the minimums specified herein are maintained as average minimums. Lot widths and depths are typical minimums but may vary slightly with irregularly shaped lots and site specific conditions. Refer to Section II.3.10 Administrative Procedures, for further information regarding processing requirements.

The first Design Review submittal for either neighborhood R-6 or R-7, as depicted on the Site Utilization Plan, shall include a conceptual coordinated site plan for both neighborhoods. The boundary between these two parcels shall then be established by the first Design Review approval. Dwelling units may be transferred between the two neighborhoods, providing it does not exceed the combined total units permitted shown on the Site Utilization Plan.

PROPERTY DEVELOPMENT STANDARDS FOR RESIDENTIAL DISTRICTS
LOT CRITERIA

DEVELOPMENT STANDARD	LAND USE DISTRICT				NOTES
	SF3	SF4	RM1	RM2	
Average Lot Area (Square Feet)	5,000	4,000	DR	DR	As calculated for an entire SPA Neighborhood. May be reduced with Design Review approval. Average lot area is the sum of all lot areas within a SPA Neighborhood, divided by the number of lots in that Neighborhood.
Minimum Lot Area (Square Feet)	4,000	3,000*	DR	DR	*May be reduced with Design Review and/or Tentative Map approval.
Maximum Lot Coverage	55%	60%	DR	DR	
Minimum Lot Depth (Feet)	90	60	DR	DR	
Minimum Lot Width (Feet)					
measured at setback line	45	40	DR	DR	Lot width may be reduced by 20% for alley products
flag lot street frontage	20	20	DR	DR	
knuckle or cul-de-sac street frontage	30	20	DR	DR	

BUILDING HEIGHTS & PARKING REQUIREMENTS

DEVELOPMENT STANDARD	LAND USE DISTRICT				NOTES
	SF3	SF4	RM1	RM2	
Maximum Building Height (feet)	28'	35' 2-story max. at top plate.	45' 3-story max.	45' 3-story max.	Maximum building height for two story single family homes is 35 feet subject to approval of Zoning Administrator in the SF3 Districts.
On-Site Parking Requirements (Parking Spaces):					
Single Family Dwellings	2	2	2	2*	3 Car garages are Subject to II.4.4.1 in the Village Design Plan. * May be reduced to 1.5 space for 1 bedroom and 1.0 space for studio units.
Multi-family Dwellings:					
per studio unit	NA	NA	1.0	1.0	RM requirements include 0.25 guest spaces per unit, including on-street parking. Parking may be reduced with Design Review approval for affordable or seniors housing
per 1 bedroom unit	NA	NA	1.5	1.5	
per 2 bedroom unit	NA	NA	2.0	2.0	
per 3+ bedroom unit	NA	NA	2.25	2.25	

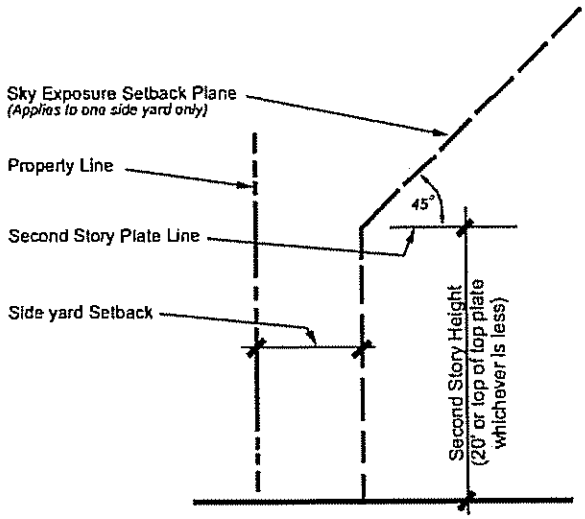
PROPERTY DEVELOPMENT STANDARDS FOR RESIDENTIAL DISTRICTS
YARDS & SETBACKS

DEVELOPMENT STANDARD	LAND USE DISTRICT				NOTES
	SF3	SF4	RM1	RM2	
Minimum Front Yard Setback (Feet):					
to direct entry garage	19.5	19.5	DR	DR	Measured from back of sidewalk. At least one model, within any SF3 and SF4 neighborhood (SPA Neighborhood), shall have the garage setback 5 feet further than face of main residence. Maximum driveway width shall be 16 feet. Variations to driveway width in order to accommodate turning movements for certain garage configurations may be approved, subject to Design Review.
To side entry (swing in) garage with or without residential above.	10	10	DR	DR	Maximum driveway approach width shall be 16 feet.
to main residence	15	15	DR	DR	May be reduced to 10 feet for alley product.
to porch, entry feature, or veranda	8	8	DR	DR	
To semi-private courtyard	6	6	DR	DR	
Minimum Side Yard Setback (Feet):					
to adjacent residential lot	5	5	DR	DR	May be reduced for "Zero Lot Line" concepts
distance between detached residences	10	10	DR	DR	May be reduced to zero for certain building types. Refer to Village Design Plan.
to porch or veranda on corner lot	4	4	4/DR	DR	Measured from back of sidewalk. Fixed setback for RM1 applies only to Single Family Detached.
to property line of adjacent residential street	10	10	DR	DR	RM1 shall have 8 foot setback for featured side of promenade street.
to property line from second floor except side entry garage	see note	see note	DR	DR	Additional building separation is required for certain roof types as indicated in Sky Exposure Plane, Exhibit PC-2. Refer also to Village Design Plan for guidance.
to garage, including living space above, with minimum 30 foot driveway setback	0	0	0	0	
Minimum Rear Yard Setback (Feet):					
to main residence	15	10	DR	DR	Second story (and above) may project 3 feet into rear yard setback.
to garage with 30 foot front yard setback and with living area above	5	5	5	DR	Second story (and above) may project 3 feet into rear yard setback, subject to ZA Design Review.
to garage off an alley	5	5	5	5	Second story (and above) may project 3 feet into rear yard setback.

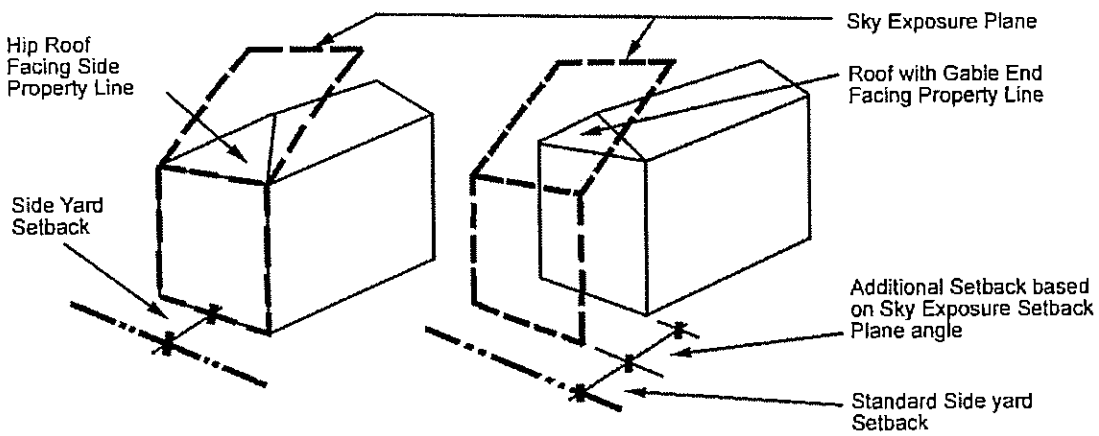
9/13/05

Sky Exposure Plane

Special Setback for Structural Elements above Second Story Top Plate for Single Family developments



Sky Exposure Plane Setback
(Applies to one side yard for first 35' of lot depth)



Diagramatic Examples

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning
9/28/01

Exhibit PC-2

C. Pedestrian Oriented Features: Porches/Verandas, Balconies & Semi-private Courtyards

Two of three or three of four houses, depending on the number of models, in all of all single-family detached neighborhoods (SF3 or SF4) shall have at least one of the following pedestrian oriented features: porch, veranda, porch/veranda combination, semi-private courtyard, and/or balcony. Additional models shall include at least one pedestrian oriented features, such as; gateways, trellises, porte-cocheres, featured windows, or any alternative pedestrian oriented feature of a similar character that is approved as a part of Design Review.

Each of the minimum porch/veranda sizes in the table outlined below shall be defined as "Sitting Area" and shall be free and clear of any structural supports or other building forms. Porch setbacks shall be measured to the clear area rather than the structural supports.

1. Porches

All porches shall be oriented towards the street. Porches shall not be enclosed. Porches shall be provided at the following schedule according to lot width measured at the front setback:

REQUIRED PORCH SIZE

MINIMUM NEIGHBORHOOD LOT (pad) WIDTH (ft.)	MINIMUM PORCH SIZE (sq. ft.)
<40	60 (6 foot minimum dimension)
40 - 60	60 (6 foot minimum dimension)
>60	66 (6 foot minimum dimension)

2. Verandas

On at least fifty percent (50%) of corner lots, "Veranda" wrap-around style porches are required where the elevation of the house pad is less than 3 feet from the adjacent pedestrian walk. Verandas shall have the same minimum dimensions as found in the above table for porches.

3. Balconies

Balconies shall have a minimum dimension of six feet by eight feet and shall be oriented to view and be viewed from the pedestrian circulation system whenever possible. Balconies less than six feet in depth may not be used to satisfy porch requirements.

4. Semi-Private Courtyards

A semi-private courtyard is an outdoor area in a single family detached home with usable seating area similar to a porch with no dimension less than six feet; oriented to the house entry; and surrounded on three sides by either the building, elevation change, or low walls/fences. Semi-private courtyards shall be designed such that they are an architecturally significant element of the front elevation of the house. It shall have an opening on the street side and incorporate strong architectural styling which emphasizes the pedestrian entry over the garage and driveway.

5. Featured Windows

Large picture windows, bay windows and glass paneled doors oriented towards the street provide a sense of openness and a visual connection between the interior living space and the street. This visual connection enhances neighborhood security and provides an indoor seating option to porches, verandas, and courtyards. The window/doors should be proportional in scale to the wall plane and no less than four feet in width.

6. Gateways, Trellises and Porte-cocheres

Gateways, trellises, porte-cocheres and similar architectural elements may be used to designate residential entries. Such features should be visually distinctive and may be free standing or attached to the residence.

D. Allowable Building Area - Floor Area Ratio

The allowable building area for each lot shall be as permitted in the table on the following page. The maximum building area for single-family detached and attached products shall be that permitted by percentage of floor area to lot area (Floor Area Ratio - FAR). Homeowner additions shall be permitted only where consistent with these standards. The following are excluded from FAR calculations:

1. The first 300 square feet of a covered rear yard patio (open on two sides). A patio of up to 300 square feet shall be permitted on each residential lot and is not subject to setbacks. Any square footage above 300 square feet shall count toward the FAR. Any portion of a covered patio over 300 square feet that exceeds the FAR shall not be permitted;

2. The first 400 square feet of the garage;

3. Porches, verandas, balconies and courtyards.

ALLOWABLE BUILDING AREA

LAND USE DISTRICT	MAXIMUM PERCENTAGE of LOT AREA (FAR)
SF3	65%
SF4	65%
RM1	70%/DR[1]
RM2	DR

[1] Fixed FAR applies to single family attached and detached except alley products and shared driveway; FAR for multifamily and alley products determined with design review approval.

F. Common Useable Open Space

Common usable open space shall be provided for all multi-family developments in accordance with the Chula Vista Design Manual and the table, which follows:

MULTIFAMILY COMMON USABLE OPEN SPACE

LAND USE DISTRICT CLASSIFICATION/DENSITY	MINIMUM USABLE OPEN SPACE per DU
RM1	300 sq. ft.
RM2	200 sq. ft.

Common usable open space in multi-family developments shall take the form of passive and active recreation areas such as swimming pools, picnic areas, ball courts, view points, etc. These areas shall not be fragmented or consist of "left over" land, driveways, parking areas or refuse storage areas, and must be pedestrian linked and/or easily accessible to the majority of residents in the development. Any portion of a lot which is less than five percent grade containing 60 square feet with no dimension less than six feet, is considered open space. Some facilities, such as swimming pools, ball courts or play areas must be centrally located.

G. Private Usable Open Space

Private usable open space shall be provided for all residential districts in accordance with the Chula Vista Design Manual and the table below:

PRIVATE USABLE OPEN SPACE

TYPE OF DWELLING UNIT	MINIMUM PRIVATE USABLE OPEN SPACE per DU[1]
Detached Single Family	Per Chula Vista Design Manual[2]
Duplex / Attached Single Family	Per Chula Vista Design Manual[2]
Multi-family w/ 1 bedroom	60 sq. ft.
Multi-family w/ 2 bedrooms	80 sq. ft.
Multi-family w/ 3 or more bedrooms	100 sq. ft.

[1] May be reduced subject to Zoning Administrator Design Review approval.

[2] As written as of the date these PC District Regulations were adopted.

H. Site Plan Review for Residential Districts

Not withstanding the property development standards listed herein, development within any land use district may be approved with specific site standards through the Site Plan and Design Review process. See Section II.3.10 Administration.

I. Model Home Complexes

Model homes, their garages, parking lots and private recreation facilities are temporary uses and may be used as offices for the first sale of homes within a recorded tract and subsequent similar tracts utilizing the same architectural designs, subject to the regulations of the City of Chula Vista governing said uses and activities. Unless otherwise determined by the Zoning Administrator, an administrative Conditional Use Permit and administrative Design Review shall be required for model home sites. Refer to Temporary Uses Section II.3.6.2 for specific requirements for subdivision sales offices. At the discretion of the Zoning Administrator, the Conditional Use Permit may be referred to the Planning Commission or the Design Review application to the Design Review Committee, respectively, for a decision. Otherwise, administrative procedures shall be used.

J. Building Elevations

A minimum of three front elevations shall be provided for each floor plan on all single family detached residential housing. Elevations for any accessory second units (granny flats) shall be submitted at the same time as elevations for the main structure for administrative Design Review.

K. Architectural Projections

Architectural features which constitute non-usable floor space such as fire places, media niches or book shelf areas on exterior walls, eaves, awnings, chimneys, balconies, stairways, bay

windows, wing walls, etc., shall not be included in building area calculations and may project into any required setback in accordance with Section II.3.11.2, herein.

II.3.3.5 Accessory Buildings, Structures and Uses

Accessory uses and accessory buildings customarily appurtenant to a permitted use are allowed subject to the requirements of Chapter 19.58.020 CVMC.

Accessory buildings and structures, except accessory second units, attached or detached, used either wholly or in part for living purposes, shall meet all of the requirements for location of the main structure as constructed or required by the district, whichever is less restrictive, except as herein provided:

A. Enclosed accessory buildings or open structures attached to the main building are subject to approval by the Zoning Administrator. Such accessory buildings shall not be allowed to encroach into required setbacks.

B. Detached accessory structures are subject to the approval of the Zoning Administrator and shall meet the setback requirements of the main building, for the front and street side yard areas. Detached accessory structures may be located within an interior side yard or rear yard, provided that such a structure is located no closer than five feet to an interior side or rear lot line and is at least six feet from the main structure, and does not exceed one-story (15-feet) in height.

C. "Accessory Second Units" as defined in Section II.3.1.8 herein are permitted subject to the requirements of Section 19.58.022 CVMC except that:

- Parking Requirement: One space available either on-site or at curbside. If at curbside, there must be one additional curbside guest space for main residence. If on-site, it need not be covered, but cannot block the access to the two minimum on-site covered spaces required for the main residence.

- FAR: Area of an Accessory Second Unit shall not be included in the FAR calculation for the lot.

II.3.3.6 Walls & Fences

In any required front yard adjacent to a street, the wall, fence, or hedge shall not exceed forty-two inches in height, except as provided herein:

A. Walls, fences, or hedges not more than six feet in height (measured from the top of the slope) may be maintained along, the interior side or rear lot lines, provided that such wall, fence, or hedge does not extend into a required front yard or side yard setbacks adjacent to a street, except as required by a site specific noise study or as shown on the Wall and Fencing Plan in the Village Design Plan. Corner cut-off shall be provided whenever necessary for line-of-sight

visibility and safety and may be adjusted to accommodate "veranda" porches required on corner lots.

B. Freestanding walls, fences or hedges adjacent to a driveway or street providing vehicular access to an abutting lot or street shall not exceed forty-two inches in height within the front yard setback area of the lot. Freestanding walls in the front yard setback shall be no closer than five feet to the back of front sidewalk. Corner cut-offs may be required to maintain a reduced height in special circumstances for safety and visibility as determined by the City Engineer.

C. Fiberglass, bamboo sheeting, chain link, chicken wire or similar temporary material shall not be permitted as a fencing material. Plexiglass is permitted for view purposes subject to approval of the Zoning Administrator.

D. Walls adjacent to corner lot side yards shall be constructed of masonry or stucco in accordance with community fencing standards. Wood fences are prohibited in this location.

E. Sound Walls shall not exceed eight and one-half feet in height. Refer to Village Design Plan for required barriers in excess of this maximum.

II.3.3.7 Residential Sign Regulations

No sign or outdoor advertising structure shall be permitted in any residential district except as provided in Section II.3.6 Special Uses and Conditions or Section II.3.8 Comprehensive Sign Regulations, herein.

II.3.3.8 Vehicle Parking

A. Parking Standards

The number of off-street parking spaces required in each land use district is listed in the Property Development Standards Matrix (Section II.3.3.4). Each space shall measure 10 feet by 20 feet when enclosed in a garage or carport, and 9 feet by 19 feet when uncovered. Group parking areas for multi-family residential developments shall comply with the applicable provisions of Section II.3.4.6.

Handicapped parking for residential uses shall be provided at the rate of one space for each dwelling unit that is designed for occupancy by the handicapped. All handicapped spaces shall be striped and marked according to the applicable State standards.

B. Group Parking Standards for RM Districts

Parking requirements for the RM districts include 0.3 space per unit for guest parking. If more than one space per dwelling unit is assigned to specific dwelling units, the required guest parking spaces shall be marked and clearly identified as guest parking. The guest parking spaces shall not be permitted to be assigned to the individual dwelling units.

C. Parking Standards for Affordable and Age-Restricted Housing

Parking standards may be reduced from that specified for the SF3, SF4, RM1 or RM2 Districts, for projects which are restricted to Affordable and Senior Citizens (age 62 and above) housing. Such a reduction shall be at the discretion of the City Council through the Conditional Use Permit procedure (CVMC 19.14.060 *et. seq.*). A parking study shall be prepared by a registered traffic engineer to ensure adequate parking will be provided.

D. Recreational Vehicle Parking

The parking or storage of recreational vehicles on streets or in areas visible from the street for purposes other than loading and unloading shall be prohibited.

II.3.3.9 Performance Standards

The following performance standards shall be met in all Residential Districts:

A. Equipment: air conditioners, antennas, satellite dishes, ham radio antennas, solar panels, heating, cooling, ventilating, equipment and all other mechanical lighting, or electrical devices shall be operated and located so that they do not disturb the peace, quiet and comfort of neighboring residents. The location of such equipment shall require the prior approval of the Zoning Administrator. This equipment shall be screened, shielded and/or sound buffered from surrounding properties and streets. All equipment shall be installed and operated in accordance with all other applicable ordinances. Heights of said equipment shall not exceed the maximum height of the zone in which they are located.

B. Landscaping: front and exterior side yards requiring landscaping shall consist predominantly of trees, plant materials, ground cover and decorative rocks, except for necessary walks, drives and fences. Drought tolerant landscaping is encouraged. All required landscaping shall be permanently maintained in a healthy and thriving condition, free from weeds, trash and debris. Landscaping requirements may be met by either builder or developer installation, or for single-family development, by requiring through CC&Rs or other restrictions that individual homeowners install their front yard landscaping within one year of occupancy.

C. Utilities: all utility connections shall be coordinated with the site's architectural elements so as not to be exposed, except where required by utility provider. Pad-mounted transformers and/or meter box locations shall be included in the site plan with any appropriate screening treatment as approved by each utility. Electric distribution lines (under 50 kv) and cables, except for temporary use, shall be installed underground.

D. Exterior Noise: the acceptable outdoor noise exposure level, measured at the property line, for each residential district shall be in accordance with the applicable provisions of the City of Chula Vista Municipal Code. (See Section 19.68.030 CVMC for definitions and additional details.)

E. Interior Noise: no person shall operate or cause to operate, any source of sound, or allow the creation of any noise which causes the noise level, when measured inside a neighboring receiving dwelling unit to exceed the limits as follows:

INTERIOR NOISE LIMITS

TIME INTERVAL	ANYTIME	1 Min. in 1 Hour	5 Min. in 1 Hour
7 a.m. – 10 p.m.	55 dBA	50 dBA	45 dBA
10 p.m. – 7 a.m.	45 dBA	40 dBA	35 dBA

F. Energy Conservation: buildings shall be located on the site to provide adjacent buildings adequate sunlight for solar access, when practical. Buildings should be designed to minimize energy consumption requirements, including, but not necessarily limited to, consideration of the following conservation considerations:

- Co-generation
- South facing windows
- Eave coverage for windows
- Double glazed windows
- Earth berming against exterior walls
- Greenhouses
- Deciduous shade trees on southerly and westerly exposures

G. In any residential zone, the parking of motorized and non-motorized vehicles shall be subject to the following requirements:

1. No motorized or non-motorized vehicle shall be parked, stored or kept in the front yard, except in the driveway or on a paved area adjacent to the driveway.

2. If motorized or non-motorized vehicles are parked, stored or kept on the lot, other than as permitted above, they must be for the resident's or a guest's personal use. No storage or display of vehicles for sale by a motor vehicle dealer is permitted in a residential driveway or on a residential street.

H. Special Standards - RM Districts

All multi-family projects in the RM districts are subject to the Design Review Process.

In the RM Districts, including the conversion of apartments to condominiums where permitted, the following performance standards shall be met:

1. Masonry walls or fences eight and one-half feet in height, from the highest finished grade, shall be permitted where needed for noise attenuation as shown on the Wall and Fencing Plan in the Village Design Plan or as required by a site specific noise study.

2. When single family detached residential districts are adjacent to the RM2 district, a minimum of fifteen feet of landscaped area shall be provided between such uses. No parking or common trash receptacles are permitted within this area. Sky-line type trees shall be provided in the amount of one 24-inch box tree per twenty-five linear feet of common lot line.

3. Conveniently located common laundry facilities shall be provided for units which do not have individual hook-ups.

4. Conveniently located and well-screened common enclosures for trash and recyclables shall be provided for all dwelling units, unless provided for each unit.

5. Recreational vehicle (including campers, boats and trailers) parking areas fully screened from view of the development, shall be provided in all multi-family developments or these developments shall prohibit all parking of recreational vehicles.

6. Lockable, enclosed storage shall be provided in the carport area; storage substitutions may be approved by the Zoning Administrator.

7. Mailbox kiosks shall be conveniently located and distributed throughout the complex

II.3.4 Community Purpose Facility District

II.3.4.1 Purpose

Commercial uses in Village Seven will be concentrated in the Village Core area which is intended to function as the social, commercial and activity center for the village as mandated in the Otay Ranch GDP. However, the village core site is within the "undesignated" area in Exhibit PC-1 and not within the initial approval area for Village Seven SPA. In order to appropriately designate sites adjacent to the Core for community purpose uses, the Community Purpose Facility (CPF) district will be used in appropriate locations.

The Community Purpose Facility District is included in the Planned Community District Regulations to achieve the following:

- To provide areas for specific community support facilities required by residents of the village or adjacent villages.
- To promote high standards of site planning, architectural and landscape design for community purpose facilities and sites within the city of Chula Vista.

II.3.4.2 Permitted & Conditional Uses

The matrix of land uses on the following pages indicates the relative permissive status using the following symbols:

"P"	=	Permitted.
"C"	=	Permitted s ubject to Conditional Use Permit approved by the Chula Vista Planning Commission.
"ZA"	=	Permitted subject to Conditional Use Permit by the Zoning Administrator.
"a"	=	Permitted Accessory Use to a Permitted or Conditional Use.
"N"	=	Use Not Permitted.

A use not listed shall be subject to a use determination via by the Zoning Administrator to determine substantial conformance with the purpose, intent and goals of this SPA Plan.

PERMITTED USE MATRIX – CPF DISTRICT

LAND USE	LAND USE DISTRICT
	CPF
General Commercial Uses:	
Recycling drop-off bins	a
Snack bar or refreshment stand contained within a building	a
Temporary uses as prescribed in Section II.3.6.2	P
Theater, movie or live	A
Public and Semi-Public Uses:	
Community Purpose Facility which serves the following types of uses: boy or girl scouts, social and human services, services for the homeless, services for military during holidays, senior care and recreation, worship, spiritual growth and development and teaching of traditional family values, ancillary daycare facilities or ancillary private schools	ZA
Day nursery, daycare school or nursery school (for profit)	C
Day nursery, daycare school or nursery school (non-profit)	ZA
Educational institution	ZA
Essential public services, including but not limited to: library, museum, park, public works facility, post office and other civic use as determined by the Zoning Administrator	C
Group care facility and/or residential retirement hotel	C
Public safety facility such as police or fire station	ZA
Public utility and/or public service sub-station, reservoir, pumping plant and similar installation, except those regulated by the State of California	ZA
Public or private recreational facilities, including but not limited to: tennis and swim clubs, basketball, racquetball and handball courts	a
Other Uses:	
Unclassified uses (subject to Section 19.54 CVMC)	ZA

II.3.4.3 Accessory Uses & Buildings

Accessory uses and accessory buildings customarily appurtenant to a permitted use are allowed subject to the requirements of Chapter 19.58 CVMC.

II.3.4.4 Community Purpose Facility Sign Regulations

No sign or outdoor advertising structure shall be permitted in any community purpose facility district except as provided in Section II.3.6 Special Uses and Conditions or Section II.3.8 Comprehensive Sign Regulations, herein.

II.3.4.5 Property Development Standards

The property development standards that shall apply to all land and buildings permitted in the Community Purpose Facility District shall be those indicated on an approved Design Review application pursuant to Section 19.14.420 *et. seq.* CVMC.

II.3.4.6 Parking & Loading Facilities

These regulations are for the purpose of providing convenient off-street parking space for vehicles. The parking requirements of this section are to be considered as the minimum necessary for such uses permitted by the respective zone.

The intent of these regulations is to provide adequately designed parking areas with sufficient capacity and adequate circulation to reduce traffic congestion, promote public safety and implement pedestrian-oriented development objectives. It shall be the responsibility of the developer, owner, or operator of the specific use to provide and maintain adequate off-street parking.

Size & Access Requirements

The following property development standards shall apply to all parking areas:

A. General Requirements

The following are minimums unless otherwise stated:

1. Automobile

Standard Space:	Covered in a garage or carport - 10 feet x 20 feet each space Uncovered - 9 feet x 19 feet each space
Compact Space:	8 feet x 18 feet each space

2. Motorcycle Space: 4 feet x 8 feet each space

3. Bicycle Space: 2 feet x 6 feet each space

4. Automobile, handicapped, motorcycle, and bicycle spaces: all parking stalls and maneuvering areas shall be paved and permanently maintained with asphalt, concrete or any other all-weather surfacing approved by the Zoning Administrator and subject to current City standards. All parking facilities shall be graded and drained to provide for the disposal of all surface water on the site.

   Off-street parking areas for more than three vehicles shall be provided with a concrete curb not less than six inches in height to confine vehicles to the parking area.

5. Striping and Identification

   a. Automobile: All parking stalls shall be clearly outlined with single or double lines on the surface of the parking facility.

   b. Handicapped: All handicapped spaces shall be striped and marked according to the applicable State standards.

   c. Motorcycle: All motorcycle spaces shall have bollards installed and appropriately spaced to prevent automobile usage of the motorcycle area. Motorcycle spaces shall be marked so that they can be clearly identified for motorcycle use.

   d. Bicycle: All bicycle spaces shall be clearly identified.

B. Access and Driveways

1. No parking area may be located so as to require or encourage the backing of automobiles or other vehicles across any street lot line, to effect egress from the places of parking.

2. Driveways shall be a minimum of fifteen feet wide for one-way traffic and twenty-four feet wide for two-way traffic. The minimum vertical clearance shall be ten feet to allow for the passage of emergency vehicles, based on minimum standards administered by the city traffic engineer.

3. All aisles and turning areas shall be adequate to provide safe and efficient access to and from parking spaces, based on minimum standards administered by the city traffic engineer.

C. Special Requirements

1. Shared parking may be permitted pursuant to the following criteria:

   a. The applicant shall show that there is no substantial conflict in the principal operating hours of the buildings or uses for which the shared parking is proposed.

b. Parties involved in the shared use of a parking facility or facilities shall evidence agreement for such shared use by a proper legal instrument approved by the City Attorney as to form and content.

c. Any shared parking facility shall be provided with adequate signs on the premises indicating the availability of that facility for patrons of the participating uses.

2. Priority parking stalls in preferred locations shall be provided for use by electric carts. The exact number and size shall be determined during the design review approval process.

3. Bike racks shall be provided.

Number of Spaces Required for Designated Land Use

A. The number of off-street parking spaces required shall be as set forth below:

OFF-STREET PARKING REQUIREMENTS

LAND USE	MINIMUM OFF-STREET PARKING REQUIRED[1]
Parks	
Park (public or private)	To be determined by the Zoning Administrator
Tennis, handball/racquetball court	To be determined by the Zoning Administrator
Public and Semi-public Uses	
Day nurseries, daycare schools, nursery schools	1 space/staff member plus 2 spaces/5 children or 1 space/10 children if adequate drop-off facilities are provided. Drop-off facilities must be designed to accommodate a continuous flow of passenger vehicles and buses to safety load and unload children. The adequacy of proposed drop-off facilities shall be determined by the Zoning Administrator.
Elementary or middle school	1 space/employee plus 5 spaces
High school	1 space/4 students
College or vocational school	1 space/2 faculty member or employee plus 1 space/3 students
Church, convent, monastery, religious institution or other place of public assembly	1 space/3½ seats within the main auditorium or 1 space/45 square feet of gross floor area within the main auditorium where there are no fixed seats
Public utilities, except those regulated by the State of California	To be determined by the Zoning Administrator

[1] Minimum off-street parking requirements may be modified upon a determination by the Zoning Administrator that the modified parking requirement protects public safety, promotes commerce, ensures adequate access to village core activity centers and facilitates implementation of the village concept as defined in the Otay Ranch General Development Plan.

B. Handicapped Parking Requirements

1. Handicapped parking for residential uses shall be provided at the rate of one space for each dwelling unit that is designed for occupancy be the handicapped.

2. Handicapped parking spaces shall be provided for all uses other than residential at the following rate:

NUMBER of AUTOMOBILE SPACES PROVIDED	NUMBER of HANDICAPPED SPACES REQUIRED
1 – 25	1
26 – 50	2
51 – 75	3
76 – 100	4
101 – 150	5
151 – 200	6
201 – 300	7
301 – 400	8
401 – 500	9
501 – 1000	2% of Total Spaces
Over 1000	20 plus 1 space for every 100 spaces (or fraction thereof) over 1001

3. Handicapped parking spaces required by this section shall count toward fulfilling off-street automobile parking requirements.

C. Bicycle Parking Requirements

Bicycle parking facilities shall be stationary storage racks or devices designed to secure the frame and wheel of the bicycle.

General Provisions

A. Off-street parking facilities, for both motor vehicles and bicycles, shall be provided for any new building constructed; for any new use established; for any addition or enlargement of an existing building or use; and for any change in the occupancy of an existing building.

B. For additions or enlargement of any existing building or use, or any change of occupancy or manner of operation that would increase the number of parking spaces required, the additional

parking spaces shall be required only for such addition, enlargement or change, not for the entire building or use, unless required as a condition of approval of a Conditional Use Permit.

C. The required parking facilities needed for any development shall be located on the same site or, if an irrevocable access and/or parking easement is obtained, the parking may be on an adjacent site. Property within the ultimate right-of-way of a street or highway may be used, to the extent available, to provide required guest parking or loading/unloading facilities so long as at least one stall is provided on site. Due to the pedestrian orientation of the community it is seen as desirable to encourage on-street parking on the promenade streets.

D. The requirements of this section shall apply to temporary as well as permanent uses.

E. All required off-street parking spaces shall be designed, located, constructed, and maintained to be fully usable during workday periods or as needed by the use of the premises.

F. Where the application of these schedules results in a fractional parking space, the fraction shall be rounded to the higher whole number.

G. The parking requirement for uses not specifically listed in the matrix shall be determined by the approval body with final precise plan approval for the proposed use on the basis of requirements for similar uses, and on any traffic engineering and planning data that is appropriate to the establishment of a minimum requirement.

H. In situations where a combination of uses are developed on a site, parking shall be provided for each of the uses on the site according to the schedule given in this section. Consideration may be given for hours of operation and other characteristics that reduce concurrent demand.

I. A maximum of twenty-five percent of the parking spaces required on any site may be provided as "compact" spaces for non-residential uses, subject to approval of the Zoning Administrator or Design Review Committee.

J. All parking facilities required by this section shall be maintained in good operating condition for the duration of the use requiring such facilities. Such facilities shall be used exclusively for the parking of vehicles. Parking facilities shall not be used for the storage of merchandise, or, for the storage or repair of vehicles or equipment. Parking facilities shall not be used for the sale of merchandise, except on a temporary basis, pursuant to Section II.3.6.2 Temporary Uses.

Parking Screening Requirements

Off-street parking areas for more than five vehicles shall be effectively screened by a ten-foot wide landscaped strip and a masonry wall or fence of acceptable design. Such wall or fence shall be not less than three and one-half feet or more than six feet in height and shall be maintained in good condition without any advertising thereon. The requirements specified herein may be eliminated in whole or in part where, in the opinion of the Zoning Administrator, such requirements are not

necessary for the proper protection of abutting property because of substantial grade differentials, the existence of adequate walls or other equally valid reasons.

Parking Area Landscaping

A. Parking areas shall be landscaped in accordance with the City's landscape manual, the Village Seven Design Plan and Village Seven Master Landscape Plan.

B. Any unused space resulting from the design of the parking area shall be used for landscaping purposes, if determined to be of appropriate size and location. Refer to the Village Seven Design Plan for additional guidelines relating to parking lot landscaping.

C. All landscaped parking lot islands shall have a minimum inside dimension of three feet and shall contain a twelve inch wide walk adjacent to the parking stall and be separated from vehicular areas by a six inch high by six inch wide concrete curb.

D. All landscaped areas shall be irrigated automatically and kept in a healthy and thriving condition free from weeds, debris and trash.

Parking Area Lighting

All parking facilities shall have lighting in accordance with City of Chula Vista standards. The lighting shall be designed and installed to confine direct rays to the site. Parking lot lights shall be a maximum height of eighteen feet from the finished grade of the parking surface and directed away from the property lines.

Parking Area Front Setback

No part of any front yard or exterior side yard (*i.e.*, street side of a corner lot) shall be used for off-street parking or access, except driveways, unless authorized by the Zoning Administrator, pursuant to an approved site plan.

II.3.4.7 Outdoor Storage

Except where otherwise approved on a site plan, outdoor storage and/or sales areas shall be entirely enclosed by solid walls not less than six feet in height to adequately screen outdoor storage areas. Stored materials shall not be visible above the required walls.

II.3.4.8 Trash Storage

A. All developments shall provide areas for trash storage, unless provided within the use. These areas shall be enclosed within a minimum five-foot high masonry wall, or higher if deemed necessary in site plan approval, to adequately screen the trash area, built to standards adopted by the City for a freestanding wall and shall be designed to accommodate the trash containers used by the trash service company contracted with the city.

B. The number of containers required shall be not less than required by the sanitary service operator on the site and a specified number by the zoning administrator for all mixed use or other uses as determined by the actual characteristics of the use.

C. Trash areas shall be kept neat and clean.

D. The precise location of any trash area(s) shall be approved on the site plan.

E. The trash enclosure shall be permanently maintained.

II.3.4.9 Wall Requirements

A six-foot high minimum solid masonry wall subject to the provisions of Section 19.58.150 CVMC shall be erected along the property line to separate any CPF district from adjacent residential districts unless it is determined that such a wall is not necessary or another design is more appropriate on an approved site plan.

II.3.4.10 Landscaping

Required front and street side yards shall be landscaped. Said landscaping shall consist predominantly of plant materials except for necessary walks and drives. All planting and irrigation shall be in accordance with the City Landscape Manual. All required landscaping shall be permanently maintained in a healthy and thriving condition, free from weeds, trash and debris.

II.3.4.11 Performance Standards

A. All uses shall comply with the provisions of Chapter 19.66 Performance Standards and Chapter 19.68 Performance Standards and Noise Control, CVMC.

B. All ground mounted mechanical equipment, including heating and air conditioning units shall be completely screened from public view and surrounding properties by use of a wall or fence, or shall be enclosed within a building. No material or equipment so screened shall have a height greater than that of the enclosing wall, fence or building. Structural and design plans for any screening required under the provisions of this section shall be approved by the Zoning Administrator.

C. All roof appurtenances including, but not limited to, air conditioning units, and mechanical equipment shall be shielded and architecturally screened from view from on-site parking areas, adjacent public streets and residential uses.

D. Reciprocal ingress and egress, circulation and parking arrangements shall be required to facilitate the ease of vehicular movement between adjoining properties.

E. All light sources shall be shielded in such a manner that the light is directed away from streets or adjoining properties. Illuminators should be integrated within the architecture of the building.

The intensity of light at the boundary of the district shall not exceed seventy-five foot-lamberts from a source of reflected light.

F. All utility connections shall be designed to coordinate with the architectural elements of the site so as not to be exposed to public view except where required by utility provider. Electric distribution lines (under 50 kv) shall be placed underground. Pad mounted transformers and/or meter box locations shall be included in the site plan with an appropriate screening treatment such as berms, walls and/or landscaping.

G. There shall be no emission on any site, for more than one minute in any hour, of air contaminants which, at the emission point or within a reasonable distance of the emission point, are as dark or darker in shade as that designated as No. 1 on the Ringelman Chart as published by the United States Bureau of Mines Information Circular #7718.

H. No use shall be permitted which creates odor in such quantities as to be readily detectable beyond the boundaries of the site.

I. Buildings should be located on the site to provide adjacent buildings adequate sunlight for solar access when practical. Buildings should be designed to minimize energy consumption, including but not necessarily limited to the following conservation measures:

- Co-generation
- South facing windows
- Eave coverage for windows
- Earth berming against exterior walls
- Deciduous shade trees on southerly or westerly orientations
- Refer to the Village Design Plan for additional design guidelines and criteria

II.3.5 Open Space & Parks District

II.3.5.1 Purpose

This district is intended for open space, landscaping, recreation and public uses. Only those additional uses which are complementary to, and can exist in harmony with open space, park and recreation uses are permitted. There is no lot size limitation and it is intended that this district may be applied to a portion of a lot, provided that the remainder of the lot meets the requirements for the district which it is designated.

Open Space/Park District is included in the Planned Community District Regulations to achieve the following purposes:

- Provide focal points for community and neighborhood activities.
- Provide for public/quasi-public and recreational uses.
- Promote natural community linkages among Otay Ranch villages.
- Preserve, enhance and manage natural resources.
- Preserve vistas and conserve viewpoint areas for the enjoyment of future generations.
- Establish edges to help define communities.
- Promote public health and safety.
- Provide recreation and public use opportunities, such as trails and pathways.

II.3.5.2 Permitted & Conditional Uses

Parks & Common Open Space

Parks and Common Useable Open Space (CUOS) sites will be developed for public and private recreational facilities respectively. Sites identified in the Village Seven SPA include a public Neighborhood Park and private CUOS sites.

Public facilities may include, but are not limited to, play areas, tot lots, sports fields and courts, activity rooms, restrooms, parking lots, picnic and seating areas and trails. The public Neighborhood Park may be subject to Administrative Review and approval by the Parks and Recreation Commission & City Council as well as the Directors of Recreation and General Services.

The specific uses and design of private recreation facilities within CUOS sites are to be identified on a Site Plan and are subject to Administrative Review and the approval of the Directors of Recreation and General Services.

II.3.5.3 Property Development Standards

A. Site Planning

Development standards for the public Neighborhood Park will be established by the Recreation Department and General Services Department.

Development standards for private CUOS will be reviewed on a case-by-case basis to determine appropriate buffering and setbacks. All permanent signs, including any required signs (such as monument and dedication signage, *etc.*), shall be included in the review and specifically approved. Neighborhood and community-level signs included in the Village Seven SPA Plan shall be permitted in areas designated in the SPA Plan.

B. Landscaping

All landscaping shall meet the requirements of the City of Chula Vista Landscape Manual.

II.3.5.4 Accessory Uses & Buildings

Accessory uses and accessory buildings customarily appurtenant to a permitted use are allowed subject to the requirements of Chapter 19.58 CVMC.

II.3.5.5 Performance Standards

All uses in the Open Space/Parks district shall conform to the performance standards provided in Chapter 19.66 and 19.68 CVMC.

II.3.6 Special Uses & Conditions

II.3.6.1 Purpose

This section provides additional regulation for special uses and conditions which require special review standards beyond those of the basic land use districts. Temporary uses, home occupations and private recreation/amusement facilities are addressed in this section. Where this section prescribes regulation which is more restrictive than that of the Land Use District, the provisions of this section shall apply.

II.3.6.2 Temporary Uses & Special Events

A. Purpose

The provisions of this section shall apply to uses allowed for a limited amount of time, as specified herein. Temporary uses are subject to administrative approval by the Zoning Administrator, except as noted.

B. Temporary Uses Listed

1. Circuses, rodeos, parades or similar outdoor entertainment or enterprises, subject to not more than five days of operation in any calendar year. Requests exceeding these time limitations will require the submittal and approval of a Conditional Use Permit.

2. Christmas tree sales, Halloween pumpkin sales and other holiday sales subject to not more than forty days of site occupation and operation in any calendar year.

3. Subdivision sales offices, sales information centers, sales pavilions, and model home complexes and signage located within the subdivision, subject to the following minimum requirements:

   a. Offices shall be no closer than one vacant lot to an existing dwelling unit not part of the subdivision. Trailers may be used for no more than 120 calendar days or until such time as the subdivision sales offices have been completed, whichever is less.

   b. Trailers used as sales offices for lot sales without model homes may be used for a period greater than 120 days, subject to site plan and architectural review approval and the maximum use period listed herein.

   c. An asphaltic or concrete paved parking lot shall provide sufficient parking spaces to accommodate said use.

   d. Faithful performance bonding, in an amount appropriate to guarantee removal and/or conversion of the sales office and attendant facilities shall be required.

e. Other conditions that the Zoning Administrator deems necessary to ensure that the sales office will not constitute or be objectionable to the residential uses in the neighborhood.

4. Outdoor art and craft shows and exhibits, subject to not more than three calendar days of operation or exhibition in any sixty calendar day period.

5. Contractors' offices and storage yards on the site of an active construction project.

6. Mobile home residences for security purposes on the site of an active construction project.

7. Seasonal retail sales of agricultural products (fruit and vegetable stands) for periods for less than ninety days, if said products are raised on the premises.

8. Temporary use of properly-designated mobile trailer units for classrooms, offices, banks, etc., for periods not to exceed ninety days subject to Administrative Review. Requests for such uses of more than ninety days in duration shall require the approval of a Conditional Use permit by the Planning Commission. Such units shall meet all necessary requirements of building, fire and health codes.

9. For any agricultural and animal husbandry activity or project (4H, FFA or similar) conducted for educational purposes or school districts, a permit may be granted in any district when the Zoning Administrator determines that such use will not cause a public nuisance relative to sanitation and health conditions.

10. Charitable or school sponsored drop-off bins for recycling of cans, newspapers, or similar items, or for drop-off of clothes and small items. Bins shall be located in the parking lots of businesses or other public or semi-public property on a temporary basis when written permission is granted by the property owner or business owner. Said bins shall be kept in a neat and orderly manner. Collection of bottles, cans and newspapers shall also be regulated by the "Bottle Ordinance."

11. Community gardens as developed and operated in accordance with the guidelines in the Village Seven Parks, Recreation Open Space and Trails Master Plan.

12. Temporary tract signs for marketing purposes.

13. Additional uses determined to be similar to the foregoing in the manner prescribed by these regulations.

C. Permits and Bonds

All temporary uses shall be subject to the issuance of a Temporary Use Permit by the Zoning Administrator and other necessary permits and licenses, including but not limited to, building permits, sign permits and solicitors or vending licenses. In the issuance of such a permit, the

Zoning Administrator shall indicate the permitted hours of operation and any other conditions, such as walls, fences or lighting, which are deemed necessary to reduce possible detrimental effects to surrounding developments and to protect the public health, safety and welfare. Prior to the issuance of a permit for a temporary use, a cash deposit may be required to be deposited with the City. This cash deposit shall be used to defray the costs of property cleanup by the City in the event the permittee fails to do same.

D. Extension or Modification of Limits

Upon written application, the Zo ning Administrator may extend the time within which temporary uses may be operated, or may modify the limitations under which such uses may be conducted if the Zoning Administrator determines that such extension or modification is in accord with the purposes of the zoning regulations.

E. Condition of Site Following Temporary Use

Each site occupied by a temporary use shall be left free of debris, litter or any other evidence of the temporary use upon completion or removal of the use, and shall thereafter be used only in accord with the provisions of the zoning regulations.

F. Fee

The application shall be accompanied by a fee established by the Master Fee Schedule to cover the cost of processing the application prescribed in this section.

II.3.6.3 Home Occupations

A. General Provisions

Home occupations may be permitted only when in compliance with the conditions listed herein. A permit must be issued by the Zoning Administrator prior to operation of such use. The fee shall be in accordance with the Master Fee Schedule.

1. There shall be no stock in trade or exterior storage of materials in the conduct of home occupation.

2. A home occupation shall be conducted entirely within a dwelling; if in an attached or a detached garage, it shall not impede the use of said garage for vehicle storage.

3. Electrical or mechanical equipment which creates visible or audible interference in radio or television receivers, or causes fluctuations in line voltage outside the dwelling unit, shall be prohibited.

4. No one other than the residents of the dwelling unit may be engaged in the conduct of the home occupation.

5. There shall be no sale of goods on the premises.

6. The establishment and conduct of a home occupation shall not change the principal character or use of the dwelling unit involved.

7. There shall be no signs other than those permitted by these regulations.

8. The required residential off-street parking shall be maintained.

9. A home occupation shall not create vehicular or pedestrian traffic in excess of that which is normal for the land use district in which it is located.

10. No vehicles or trailers (including pick-up trucks and vans) or construction and other equipment, except those normally incidental to residential use, shall be kept on the site.

II.3.6.4 Private Recreational Facilities

Construction of recreation courts, including necessary fencing and lighting, may be permitted subject to administrative review and a finding that adjacent properties will not be unduly affected.

Recreation courts shall meet the following minimum standards:

A. A maximum 20-foot high fence (measured from the finished grade of the court) shall be allowed. Fences shall include a screening material which screens the court activity from off-site view and which improves the appearance of the fence.

B. Setbacks for the court shall be: Side yard: 10 feet
Rear yard: 10 feet

C. Maximum of eight lights permitted, mounted at a height not to exceed twenty-two feet. All lights and light fixtures shall be certified by a qualified lighting engineer to:

   1. Be designed, constructed, mounted and maintained such that, the light source is cut off when viewed from any point five feet above the ground measured at the lot line.

   2. Be designed, constructed, mounted and maintained such that the maximum illumination intensity measured at the wall of any residential building on abutting property shall not exceed ½ foot candle above ambient levels.

   3. Be used between 7:00 a.m. and 10:00 p.m.

D. The surface area of any recreational court shall be designed, painted, colored and/or textured to reduce the reflection from any light incident thereon.

E. Landscaping shall be installed as required between the fence and the property line.

II.3.7 Community Purpose Facility Sites

II.3.7.1 Acreage Provided

Section 19.48.025 CVMC requires 1.39 acres per 1,000 population for Community Purpose Facility (CPF) Sites. A calculation of the required CPF acreage is provided in the Village Seven SPA Plan text. The required area is designated for CPF use on both the Site Utilization Plan (in the SPA Plan) and on the Land Use Districts Map, herein. The final CPF requirement will be based on lot count at the Tentative Map stage.

II.3.7.2 CPF Uses

Notwithstanding the regulations restricting land uses on CPF designated sites provided in Section II.3.4 Community Purpose Facility District, any additional uses permitted by Section 19.48.025 CVMC are similarly allowed on CPF sites within the Village Seven SPA.

II.3.8 Comprehensive Sign Regulations

II.3.8.1 Purpose

The provisions of this section shall establish the Comprehensive Sign Regulations for the Village Seven SPA. The purpose of these regulations is to establish a comprehensive system for the regulation of on-site and off-site signs. These regulations are intended to achieve the following:

- Protect the public health, safety and welfare of the people of the City of Chula Vista by reducing possible safety and traffic hazards through good signage.
- Provide signs that direct and inform residents and visitors of the uses and amenities within the Village Seven SPA.
- Provide a reasonable system of regulations to ensure the development of a high quality visual environment.
- Encourage signs which are well designed and pleasing in appearance.
- Encourage a desirable visual character which has a minimum of clutter and is compatible with the desired community.
- Enhance the economic value of the community and each neighborhood through a comprehensive sign regulation program.
- Encourage signs which are well located and compatible with the function and use of adjacent areas.

These comprehensive sign regulations are intended to supplement the provisions of Section 19.60 of the Chula Vista Municipal Code. Signs which are permitted by the CVMC which are not expressly prohibited by these regulations, shall be allowed. Similarly, signs prohibited by CVMC but permitted by these regulations shall be allowed.

II.3.8.2 Sign Permit Requirements & Review Procedures

No person, except a public officer or employee in performance of a public duty, shall post, paint, erect, place or otherwise fasten any sign, pennant or notice of any kind, visible from a public street except as provided herein. To ensure compliance with this section, a sign permit shall be required for any sign, pursuant to Section 19.60.030 of the Chula Vista Municipal Code, except as provided by the following.

A. Sign Permit Exceptions

The following signs shall be exempt from the sign permit requirements, however an electrical and/or building permit may be required. Any sign in excess of the specific exemptions listed below is prohibited:

1. Real Estate Signs for Residential Sales: one sign placed along the street frontage not exceeding four square feet in area and four and one-half feet in height provided that it is unlit and is removed within fifteen days after the close of escrow. Lots shall be permitted one sign only. Signs placed on the rear of home or rear street frontage are prohibited. Freestanding signs shall maintain a seven foot setback from all property lines. No more than one "Open House" sign per required turning movement, not exceeding four square feet in area and five feet in height, are permitted for directing prospective buyers to property for sale and open for viewing. Such signs shall be located a minimum of three feet from the sidewalk or ten feet from the curb or edge of pavement where no sidewalk exists. No more than one sign per house may be located on an arterial, entry, or promenade street. Open house signs must be removed on the same day as placed.

2. Real Estate Kiosk Signs: signs installed consistent with Council Policy number 465-02, adopted by Resolution 2003-372 on August 19, 2003.

3. Political Signs: signs having to do with any issue, ballot measure, political statements and expressions, or candidate in any municipal, County, State or Federal election shall be permitted, subject to the following provisions and any other applicable provisions within this section:

   - All political signs shall be placed, erected, constructed, painted or assembled no earlier than thirty calendar days prior to the election and shall be removed no later than ten calendar days following the date of the election.

   - A political sign shall not exceed five square feet in total area for one side in a residential district, and twelve square feet in a mixed use district. Double-faced signs shall not exceed five square feet per side in residential districts and twelve square feet per side in mixed use districts. No signs shall be placed in a manner that would obstruct the visibility of, or impede pedestrian or vehicular traffic, or endanger the health, safety, or welfare of the community.

   - All political signs shall not exceed an overall height of six feet from the finished grade immediately around the sign.

   - No political signs shall be lighted either directly or indirectly unless said sign is erected, painted, or constructed on an authorized structure already providing illumination.

   - No political sign shall be placed or affixed to a traffic signal, street light, tree, fence, utility pole or existing sign, nor shall it be posted on any public property or in the right-of-way if, in the opinion of the Zoning Administrator, said sign impedes or renders dangerous public access to any public improvement, including but not limited to, utility poles and fire hydrants; or obstructs the vision of any sign designed to regulate, control or assist public or private transportation or obstructs the vision of any user of a public right-of-way.

- No political sign shall be posted in violation of any provisions of this section. Further, the Zoning Administrator or his designated representative shall have the right to remove all signs placed contrary to the provisions of this section. Any political sign placed on private property without the consent of the owner may be removed by said owner or representative of said owner.

4. Temporary Construction Sign: two directory signs shall be permitted on the construction site for all contractors (may include financial institutions, real estate agents, subcontractors, *etc.*) not exceeding thirty-two square feet each, unless legally required by government contracts to be larger. No sign shall exceed eight feet in overall height and shall be located no closer than ten feet to any property line. Such sign shall be removed upon the granting of occupancy by the City. For all other projects, a total of two signs per development site may be installed with a maximum of four square feet in area and five feet in height for each sign. Such sign(s) shall be removed upon finalization of building permits.

5. Residential Identification Signs: permanent residential identification signs designating the name of the residential neighborhood or subdivision may be located at an entrance to the residential area provided that a homeowners' association or maintenance district is formed to ensure the maintenance of said signs. The copy area of the sign structure shall not exceed fifteen square feet and shall be architecturally harmonious with the adjoining residential area.

6. Interior Signs: signs within a structure or building when not visible or readable, nor intended to be read from off-site or from outside of the structure or building.

7. Memorial Tablets, Plaques or Directional Signs: signs for community historical resources, installed by a City-recognized Historical Society or civic organization.

8. Convenience and Secondary Directional Signs: signs not to exceed four square feet in area or ten feet in height.

9. Building Identification Signs: signs used to identify individual buildings and not exceeding four square feet in area.

10. Name Plates: one plate per Neighborhood not to exceed four square feet in area for single family residential uses and agricultural uses.

11. Official and Legal Notices: notices issued by any court, public body, person, or officer or in furtherance of any nonjudicial process approved by State or local law.

12. Signs Providing Direction, Warning or Information: signs or structures required or authorized by law or by Federal, State, County or City authority.

13. A Single Official Flag: the flag of the United States of America and/or two flags of either the State of California, or other states of the United States, counties, municipalities or official flags for nations, and flags of internationally or nationally recognized organizations or the company flag. Flags shall be a maximum of five feet by eight feet, unless otherwise specifically approved on a site plan.

14. Signs of Public Utility Companies: signs indicating danger or which serve as an aid to public safety, or which show locations of underground facilities or public telephones.

15. Safety Signs: signs on construction sites.

16. "No Trespassing": "no dumping" and similar warning signs not exceeding four square feet.

17. Signs on Public Transportation Vehicles: signs regulated by a political subdivision, including but not limited to buses and taxicabs.

18. Signs on Licensed Commercial Use Vehicles: provided such vehicles are not used or intended for use as portable signs or as may be prohibited in Section II.3.8.2.B.

19. A Change of Copy: copy conforming to an approved Comprehensive Sign Program. All other changes of copy shall comply with this section.

20. Agricultural Signs: either wall mounted or freestanding types, non-illuminated and not exceeding four square feet for lots two acres or less in area, and sixteen square feet for lots greater than two acres, identifying only the agricultural products and company owning on the premises. The number of such signs shall be one per street frontage or a maximum of two, with all signs to be located below the roof line and freestanding signs to be no higher than eight feet.

B. Prohibited Signs and Lighting

All signs and lighting not expressly permitted are prohibited including, but not limited to those prohibited by CVMC Section 19.60.300, and the following:

1. Roof signs.

2. Flashing lights or signs.

3. Animated signs or lights that convey the illusion of motion.

4. Revolving or rotating signs.

5. Vehicle signs (when parked or stored on property to identify a business or advertise a product).

6. Portable signs (except where permitted in by these regulations).

7. Off-site signs (except temporary subdivision or real estate signs, and political signs).

8. Signs within the public right-of-way (except those required by a governmental agency). No sign shall be placed, erected or constructed on a utility pole, traffic device, traffic sign, warning sign, or so as to impede access to any public improvement.

9. Signs located on public property except as may be permitted by Section II.3.8.2.A or required by a governmental agency.

10. Signs within the pubic right-of-way prohibited by the Streets and Highway Code (Sec. 101 *et. seq.* and Sec. 1460 *et. seq.*), the Vehicle Code (Sec. 21400 *et. seq.*) and the Public Utilities Code (Sec. 7538 *et. seq.*).

11. Signs blocking doors or fire escapes.

12. External light bulb strings and exposed neon tubing outside of buildings (except for temporary uses such as Christmas tree lots, carnivals and similar events having prior approval of the City). Temporary homeowner Christmas or similar holiday decorations are excluded.

13. Inflatable advertising devices of a temporary nature, including hot air balloons (except for special events as provided for in Section II.3.6.2).

14. Advertising structures (except as otherwise permitted in this section).

15. Statuary (statutes or sculptures) advertising products or logos of the business located outside of the structure that houses the business.

16. The use of decals, stick-on or transfer letters, or tape on the walls or parapets of buildings, fences, walls and other structures.

17. Signs displayed as, which purport to be, are an imitation of, or resemble official traffic warning devices or signs, that by color, location or lighting may confuse or disorient vehicular or pedestrian traffic. This does not include traffic or directional signs installed on private property to control on-site traffic.

C. Signs with Sign Permit

The following signs may be placed in any land use district with approval of a sign permit provided it is in compliance with all other applicable laws and ordinances. These signs are in addition to those signs expressly exempt and are subject to the following provisions:

1. Convenience Signs: on-site signs no greater than six square feet necessary for public convenience or safety may be approved by the Zoning Administrator. Signs containing information such as "entrance," "exit," or directional arrows shall be designed to be viewed from an area adjacent to the site by pedestrians or motorists. Signs that convey advertising or products shall not be considered a convenience sign.

2. Public and Quasi-public Signs: churches, schools, community centers and any other public or institutional building, on any community purpose, institutional or residential zone, shall be allowed the following signs:

   - Churches are allowed one wall sign, not to exceed thirty square feet in area and one bulletin board, announcement or monument sign, not to exceed twenty-four square feet in area and ten feet in height. Any bulletin board or announcement sign not attached flat against the building shall maintain a ten-foot setback from all streets.

   - Other public and quasi-public uses are permitted one wall or monument sign, not to exceed thirty square feet in area and a bulletin board or announcement sign not to exceed fifty square feet in area and twelve feet in height. Any bulletin board or announcement sign not attached flat against the building shall maintain a ten-foot setback from the streets.

   - Churches and other public and quasi-public uses may request a permit allowing for temporary use of a sign announcing a special event. Either wall mounted or freestanding signs of paper, cardboard, plastic or fabric are permitted; provided that the Zoning Administrator finds that the copy, color and design of the sign will not adversely affect the order, amenity, or residential enjoyment of the neighborhood in which it is located.

   - Special event signs shall be located on the premises of the institution or organization having the special event, and shall not exceed five feet in height, nor contain more than twenty-five square feet of sign area. Freestanding signs shall maintain a minimum ten-foot setback from any property line abutting a street right-of-way. Only one sign shall be allowed for each street frontage.

   - Upon application for a permit, the applicant shall submit a statement and diagram noting the nature of the special event, indicating the occasion, size, copy and colors of the proposed sign. No less than one permit for a special event sign shall be issued to any one institution or organization in one calendar year subject to Section 19.60.290 CVMC.

3. Community Special Event Signs: special event signs may be approved for a limited period of time as a means of publicizing special events such as grand openings, Christmas tree lots, parades, rodeos and fairs that are to take place within Village Seven, the Otay Ranch Community or nearby areas. Community special events such as a rodeo or community fair may be permitted the following signs:

- No more than four off-site signs up to thirty-two square feet in size and eight feet in height to publicize the event.

- Temporary advertising signing consistent with the requirements set forth in Section II.3.6.2.

4. On-Site Subdivision Signs:

- Temporary, on-site subdivision sign not to exceed two-hundred square feet total area shall be permitted for each major developer at the primary subdivision entrance. Additional temporary subdivision signs for neighborhoods are permitted, not to exceed two signs (maximum sixty-four square feet total and twelve feet in height) per street for each neighborhood at any one time. Flags and banners shall be permitted subject to Zoning Administrator approval.

- Such sign shall be for the identification of a subdivision, price information and the developer's name, address and telephone number, and logo or product image.

- Such signs shall be removed after 36 months. Twelve month extension requests may be submitted by the developer for consideration by the Zoning Administrator prior to the expiration date.

- Such sign shall be removed within ten calendar days from the date of sale of the final lot or home within the project.

- A cash deposit of three hundred dollars per sign shall be deposited with the sign applications to ensure compliance with this section and removal of such sign. Said deposit shall be refunded to the applicant upon sign removal by the applicant. If the City is forced to remove any signs, then the cost of removal shall be deducted from the deposit.

- Signs shall be maintained in good repair at all times by the permittee.

5. Off-Site Subdivision Directional Signs:

The only off-site subdivision signs allowed are those approved per Council Policy number 465-02, adopted by Resolution 2003-372 on August 19, 2003.

Prior to construction and installation of directional signs on kiosk structures, the designated sign program administrator shall receive Planning Director approval of directional signs to ensure compliance with the Sign Kiosk Plan and the following provisions:

- Community directional signs are exempt from the sign permitting process otherwise required when such structures are processed in accordance with this section and are in compliance with the Sign Kiosk Plan.

- All community directional signs shall be located on an approved community directional kiosk.

- Users eligible to display community directional signage on approved kiosk structures shall be limited to master planned communities and residential subdivisions exceeding 20 lots.

- No approval shall be given for directional signs on any kiosk structure if the applicant has any prohibited off-site signs advertising the subdivision or master planned community anywhere within the City. If any advertising signs are erected and not promptly removed upon demand by the City, the City may direct the administrator to remove all kiosk panels for that subdivision and may require that any agreement between the administrator and developer be canceled.

- Approved directional signs for residential subdivisions shall be permitted until all lots or units within the subdivision or master planned community are sold or two years from the date of installation of the panel, whichever occurs first.

- The location, number of signs, number of panels, design, color, copy, lettering, spacing, area and dimension of the signs and panels shall be specified within the Sign Kiosk Plan.

f. Any sign approved as a part of a Comprehensive Sign Program.

D. Signs Relating to Inoperative Activities

Signs pertaining to activities or businesses which are no longer in operation, except for temporary closures for repairs, alteration or similar situations, shall be removed from the premises or the sign copy shall be removed within thirty days after the premises have been vacated. Any such sign not removed within the specified time shall constitute a nuisance and shall be subject to removal under the provisions of this section and local ordinance.

II.3.8.3 Enforcement, Legal Procedures & Penalties

Enforcement, legal procedures and penalties shall be in accordance with the enforcement procedures established by Chapter 19.60 CVMC. Unauthorized illegal signs may be abated by the City in accordance with local ordinance. If said sign is stored by the City, the owner may recover said sign from the City upon payment to the City of any storage and/or removal charges incurred by the City. The minimum charge shall be as specified in the CVMC. All signs removed by the City may be destroyed thirty calendar days following removal. If any sign, in the opinion of the Zoning Administrator, is an immediate threat to the public health and safety, said sign shall be immediately and summarily removed with the cost of removal charged to the property owner in accordance with local ordinances.

II.3.8.4 Construction & Maintenance

A. Construction

Every sign and all parts, portions and materials shall be manufactured, assembled and erected in compliance with all applicable State, Federal and City regulations and the Uniform Building Code.

B. Maintenance

Every sign and all parts, portions and materials shall be maintained and kept in proper repair and safe structural condition at all times. The display surface of all signs shall be kept clean, neatly painted and free from rust and corrosion. Any cracked or broken surfaces, and malfunctioning or damaged portions of a sign shall be repaired or replaced. Noncompliance with such a request shall constitute a nuisance and will be replaced within thirty calendar days following notification of the business by the City and will be abated at owner's expense.

II.3.8.5 Design Standards

Each sign shall be designed with the intent and purpose of complementing the architectural style of the main building or buildings, or landscape/hardscape on the site. Signs located on institutional or community purpose sites, but in a predominantly residential area, shall take into consideration compatibility with the residential area to the extent possible.

A. Relationship to Buildings

Signs located upon a lot with only one main building housing the use which the sign identifies shall be designed to be compatible with the predominant visual elements of the building such as construction materials, color, or other design details. Each sign located upon a lot with more than one main building shall be designed to be compatible with the predominant visual design elements common or similar in all such buildings or the buildings occupied by the "main tenants" or principal uses.

The Zoning Administrator may place conditions of approval on any sign permit to require incorporation of such visual elements into the design of the sign where such elements are necessary to achieve a significant visual relationship between the sign and building or buildings.

B. Relationship to Other Signs

Where there is more than one freestanding sign located upon a lot, all such signs shall have designs which are complementary to each other by either similar treatment or incorporation of one or more of the following five design elements:

- Type of construction material (such as cabinet, sign copy or supports).
- Letter style of sign copy.

- Type or method used for support, uprights or structure on which sign is supported.
- Sign cabinet or other configuration of sign area.
- Shape of the entire sign and its several components.

C. Landscaping

Each permanent freestanding sign shall be located in a landscaped area which is of a shape, design and size (equal to at least the maximum allowable sign area) that will provide a compatible setting and ground definition to the sign. The landscape area shall be maintained in a neat, healthy and thriving condition.

D. Illumination and Motion

Signs shall be stationary structures (in all components) and illumination, if any, shall be maintained by artificial light which is stationary and constant in intensity and color at all times (non-flashing).

E. Sign Copy

The name of the business, use, service and/or identifying logo shall be the dominant message on the sign. The inclusion of advertising information such as lists of products (more than one product), is prohibited.

F. Relationship to Streets

Signs shall be designed so as not to obstruct any pedestrian, bicyclist, or driver's view of the street right-of-way.

G. Design Review and Approval

A signage plan including sign locations, size, style, materials, lettering size and style, any other information necessary to adequately review the proposal shall be prepared and submitted for review and approval by the Zoning Administrator prior to construction.

II.3.9 Legislative Procedures

II.3.9.1 Purpose

Zoning is a legislative act involving police power asserted in the interests of the public health, safety and general welfare. The zoning process includes the creation and modification of the comprehensive zoning law which establishes designated zones with permitted uses and regulations, as well as the comprehensive and uniform application of said zoning regulations by the classification and reclassification of property into designated zones. It is the purpose of the council to provide a zoning procedure which will offer a clear and definite guide to property owners seeking zoning adjustments. It is intended that these procedures will protect the public welfare and sound community planning and to assure the maximum degree of protection for individual property rights.

Whenever the public necessity, convenience, general welfare or good zoning practice justifies such action and in substantial conformance with the General Plan of the city of Chula Vista, and after due consideration and report on same by the Planning Commission, the City Council may, by ordinance, create, amend, supplement or change the uses and regulations of the comprehensive zoning law or include or place any property within the city into any zone as created and defined in Title 19 CVMC. The procedure for adopting such ordinances may be notices by a resolution of intention of the Planning Commission, or of the Council, or by an affirmed application of one or more of the owners or parties having a legal interest in the property to be affected by the proposed action.

II.3.9.2 Adoption of Planned Community District Regulations

These Planned Community (PC) District Regulations are adopted pursuant to Title 19, Zoning, of the Chula Vista Municipal Code and are intended to implement and integrate the Chula Vista General Plan, the Otay Ranch General Development Plan (GDP), and the Village Seven Sectional Planning Area (SPA) Plan. The Village Seven Specific Planning Area is zoned P-C Planned Community pursuant to the adoption of the Otay Ranch GDP and Chapter 19.48 CVMC. These regulations provide for the implementation of the GDP and P-C zone by setting forth the development and use standards for all property within Otay Ranch Village Seven Specific Planning Area Planned Community District by establishing:

- Setbacks;
- Building heights;
- Parking requirements;
- Landscape requirements;
- Use restrictions;
- Animal regulations;
- Density of development limitations;
- Lot size, width and depth standards;
- Fencing requirements; and,
- Signing regulations.

These PC District Regulations, along with the Village Seven Sectional Planning Area Plan, delineate precisely the allowable use of the property.

II.3.9.3 Amendments

Application for any change in district boundaries, use listing, property development standard or any other provision of these regulations shall be considered a zone change and be processed in accordance with the provisions of Chapter 19.12 CVMC. Approval of a zone change requires affirmative action following a public hearing by both the Planning Commission and City Council.

Inclusion of property within the Village Seven SPA but not included within the "adopted SPA" due to separate ownership shall require a formal amendment of these Planned Community District Regulations and included Land Use Districts Map.

II.3.10 Administrative Procedures, Conditional Uses & Variances

II.3.10.1 Purpose & Intent

The purpose of this section is to define certain administrative procedures and requirements to provide clear instructions and notice to property owners and developers within Village Seven Sectional Planning Area (SPA) regarding permit and plan approvals. The general intent of these regulations is to use the standard procedures provided in Chapter 19.14 CVMC except where special procedures are required or defined herein.

For matters relevant to the proper development and use of property within Village Seven Sectional Planning Area and not addressed herein, the provisions of Title 19 CVMC (Zoning Ordinance) shall apply. In the event of conflicting standards, these Planned Community District Regulations shall apply.

II.3.10.2 Zoning Administrator - Authority

The Zoning Administrator is authorized to consider and to approve, disapprove or modify applications on the following subjects and/or issue the following required permits without setting the matter for a public hearing:

A. Conditional Use Permit

The Zoning Administrator shall be empowered to issue Conditional Use Permits, as defined herein, in the following circumstances:

1. Where the use to be permitted is designated for Zoning Administrator ("ZA") Conditional Use Permit.

2. Where the use requiring the permit would make use of an existing building and does not involve substantial exterior remodeling thereof.

3. For signs, as defined herein, and temporary tract houses, as limited herein.

4. The Zoning Administrator is authorized to consider and to approve, deny or modify applications for Conditional Use Permits for carnivals and circuses. The Zoning Administrator shall set the matter for public hearing in the manner provided herein.

5. Churches.

6. Establishments that include the sale of alcoholic beverages for off-site use or consumption. The Zoning Administrator shall hold a public hearing in accordance with Section 19.14.060-19.14.090 of the CVMC upon giving notice thereof in accordance with Sections 19.12.070-19.12.080. A Conditional Use Permit shall not be granted unless the Zoning Administrator or other issuing authority finds in his/her sole discretion, and based on substantial evidence in view of the entire record, that all of the facts required by Section 19.14.080 of the CVMC exist, and that approval of the permit will not result in an over

concentration of such facilities. Over concentration may be found to exist based on: 1) the number and location of existing facilities; 2) compliance with State Alcohol Beverage Control over concentration standards in effect at the time of project consideration; 3) the impact of the proposed facility on crime; 4) the relationship to schools or day care facilities; and, 5) the impact of the proposed facility on traffic volume and traffic flow. The Police Department or other appropriate City departments may provide evidence at the hearing. A permit to operate may be restricted by any reasonable conditions including but not limited to limitations on hours of operation.

The City Clerk shall inform the City Council of the decision on each such permit when the decision is filed in accordance with Section 19.14.090 of the CVMC. The decision of the Zoning Administrator may be appealed.

Such appeal shall be directed to the City Council, rather than the Planning Commission, and must be filed within 10 days after the decision if filed with the City Clerk, as provided in Section 19.14.100. If appealed within the time limit, said appeal shall be considered in a public hearing conducted by the City Council, in the same manner as other appeals pursuant to Sections 19.14.120 and 19.14.130 of the CVMC, except that the Council must make the same written findings required of the Zoning Administrator herein, in order to grant the permit.

B. Variances: The Zoning Administrator shall be authorized to grant variances for limited relief in the case of:

1. Modification of distance or area regulations.

1. Modifications to parking requirements;

3. Additions to structures, which are nonconforming as to side yard, rear yard or lot coverage, providing the additions meet the requirements of the zoning ordinance affecting the property.

4. Walls or fences to exceed heights permitted by ordinances. Modifications requested in said applications for relief to be administered with the requirement for a public hearing shall be limited to deviations not to exceed 25% of the requirements imposed by ordinances.

C. Site, Architectural and Landscape Plan Approvals

The Zoning Administrator shall be empowered to grant site plan, architectural plan and landscape plan approval as provided herein.

D. Performance Standard Procedure

The Zoning Administrator shall be authorized to issue a zoning permit for uses subject to performance standards procedures, as provided herein.

E. Home Occupations: The Zoning Administrator shall be authorized to grant permits for home occupations, as defined and regulated in Section 19.14.490 of the CVMC.

F. Design Review

The Zoning Administrator has the discretion, with the concurrence of the applicant, to act in the place of the Design Review Committee in the case of minor projects, including signs, commercial or institutional additions which constitute less than a 50% increase in floor area or 20,000 square feet, wherever is less, any single family detached residential project, and multi-family residential projects of four units or less. The Zoning Administrator may also act in the place of the Design Review Committee in the case of new community purpose facilities, commercial, or institutional projects. A decision of the Zoning Administrator may be appealed to the Design Review Committee in the same manner as set forth in Section 19.14.583 of the CVMC.

Zoning Administrator Design Review for Residential: For development with lots averaging less than 5,000 the required elements are as follows. For development with lots averaging 5,000 square feet, or greater, the Tentative Map shall satisfy all requirements, except that three typical front elevations and typical enhanced side and rear elevations shall be used to satisfy item number seven below. For the first phase of a development within a Site Utilization Plan Neighborhood, with lots averaging 5,000 square feet, or greater, a complete building plotting plan is required.

1. Legal description, legend, scale, north arrow, vicinity map and identification of designer.

2. The boundary lines of subject property fully dimensioned together with the name and dimensions of adjoining streets.

3. Existing topography and proposed grading plan showing, slope, retaining walls, pad elevations and percent of slope on streets, driveways and other graded areas.

4. Exiting and proposed streets, utilities and easements

5. Access: Pedestrian, vehicular and services, points of ingress and egress, with driveway locations and dimensions.

6. Loading and trash areas, walls and/or fences (including height).

7. Proposed location, height and dimensions of buildings, including color and materials on all elevations. The floor area, number of stories, number of units and bedrooms (when applicable) shall be given. Proposed uses shall be indicated including floor area devoted to each use.

8. Parking layout, including dimensions, number of stalls and circulation flow.

9. Location, height and size of signs proposed on the property.

10. All Landscape Areas: Such areas shall be defined with a written proposal outlining the landscaping concept, as well as the proposed method of irrigation. In addition, all existing trees on the site shall be identified with a note as to proposed disposition.

11. Lighting, including the location, type and hooding devices to shield adjoining properties.

12. Location and design of recreational areas.

The Zoning Administrator shall determine from data submitted whether the proposed use will meet the development standards and design guidelines established in the Village Seven Planned Community District Regulations and Village Design Plan, and shall approve the application upon making a positive finding. The application may be disapproved, may be approved as submitted or may be approved subject to conditions, specific changes or additions. The approval of the Zoning Administrator shall be noted by endorsement upon two copies of all sketches.

In carrying out the purpose of this division, the Zoning Administrator shall consider in each specific case any or all of the following principles as may be appropriate:

- It is not a purpose of this section to control the character and application of such design character that individual initiative is stifled in the layout of any particular building or site and substantial additional expense incurred; rather, it is the intent of this division that any control exercised be the minimum necessary to achieve the over-all objective of the Village Seven SPA Plan and associated regulatory documents.

- The siting of any structure on the property, as compared to the siting of other structures in the immediate neighborhood, shall be considered.

- The size, location, design, color, number, lighting and materials of all signs and outdoor advertising structures shall be reviewed. No sign shall be approved in excess of the maximum limits set herein.

- Landscaping is provided in accordance with the Village Seven SPA Plan and associated regulatory documents shall be required on the site and shall be in keeping with the character or design of the site and existing trees shall be preserved whenever possible.

- Ingress, egress and internal traffic circulation shall be so designed as to promote convenience and safety.

G. Substantial Conformance:

The Zoning Administrator may determine a variation in an application from an adopted SPA document or statistic is in substantial conformance to the adopted document, subject to the

findings below, in Section II.3.10.3, and providing the statistical variation is less than ten percent.

II.3.10.3 Zoning Administrator - Required Findings

A. That the proposed project or use is consistent with the Chula Vista General Plan and adopted policies of the city;

B. That the proposed project or use is consistent with, or found to be in substantial conformance with, the Village Seven SPA Plan, the purpose and intent of these Planned Community District Regulations, and the Village Design Plan;

C. That the proposed project or use will not, under circumstances of the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity, or injurious to property or improvements in the vicinity; and,

D. That the proposed project or use is consistent with the principles and overall quality of design established for the Otay Ranch Planned Community.

In regard to applications on any of the aforementioned subjects, the Zoning Administrator shall set a reasonable time for the consideration of the same and give notice thereof to the applicant and to other interested person as defined in the CVMC. In the event objections or protests are received, the Zoning Administrator shall set the matter for public hearing as provided herein.

II.3.10.4 Design Review Committee

The Design Review Committee shall review plans for the establishment, location, and significant expansion or alteration of uses or structures in all multi-family, Mixed Use and Public Quasi-Public land use designations and shall approve, conditionally approve or deny such plans. The Design Review Committee shall also review all appeals filed to contest sign design rulings of the Zoning Administrator.

The Design Review Committee shall make its findings and action upon the provisions of the Otay Ranch General Development Plan, Village Seven Sectional Planning Area Plan, Planned Community District Regulations, Village Design Plan and other associated regulatory documents.

II.3.10.5 Design Review Committee – Appeals Procedure

Decision of the Design Review Committee may be appealed to the Planning Commission within 10 working days after the decision is filed with the City Clerk. The appeal shall be in writing and filed in triplicate with the Planning & Building Department on forms prescribed for the appeal, and shall specify therein the argument against the decision of the Design Review Committee. If an appeal is filed within the time limit specified, it automatically stays proceedings in the matter until the Planning Commission makes a determination.

Upon the hearing of such appeal, the Planning Commission may, by resolution, affirm, reverse or modify, in whole or in part, any determination of the Design Review Committee. The resolution must contain a Finding of Facts showing where the project meets or fails to meet the requirements of this Chapter and the provisions of the Otay Ranch General Development Plan, Sectional Planning Area Plan, Planned Community District Regulations, Village Design Plan and other associated regulatory documents.

II.3.10.6 Site Plan & Architectural Approval

The purpose of site plan and architectural approval is only to determine compliance with the Village Seven Sectional Planning Area Plan, Planned Community District Regulations, Village Design Plan, and associated regulatory documents. A Building Permit shall not be issued until site plan and architectural approval has been obtained for any land use requiring site plan and architectural approval.

A site plan and architectural approval application shall be accompanied by the following plan and other drawings and additional drawings and information not listed here as determined by the City to be necessary to enable the Zoning Administrator to make the determinations for these applications.

A. Legal description, legend, scale, north arrow, vicinity map and identification of designer.

B. The boundary lines of subject property fully dimensioned together with the name and dimensions of adjoining streets.

C. Existing topography and proposed grading plan showing, slope, retaining walls, pad elevations and percent of slope on streets, driveways and other graded areas.

D. Exiting and proposed streets, utilities and easements.

E. Access: Pedestrian, vehicular and services, points of ingress and egress, with driveway locations and dimensions.

F. Loading and trash areas, walls and/or fences (including height).

G. Proposed location, height and dimensions of buildings, including color and materials on all elevations. The floor area, number of stories, number of units and bedrooms (when applicable) shall be given. Proposed uses shall be indicated including floor area devoted to each use.

H. Parking layout, including dimensions, number of stalls and circulation flow.

I. Location, height and size of signs proposed on the property.

J. All Landscape Areas: Such areas shall be defined with a written proposal outlining the landscaping concept, as well as the proposed method of irrigation. In addition, all existing trees on the site shall be identified with a note as to proposed disposition.

K. Lighting, including the location, type and hooding devices to shield adjoining properties.

L. Location and design of recreational areas.

The Zoning Administrator shall determine from data submitted whether the proposed use will meet the development standards and design guidelines established in the Village Seven Planned Community District Regulations and Village Design Plan, and shall approve the application upon making a positive finding. The application may be disapproved, may be approved as submitted or may be approved subject to conditions, specific changes or additions. The approval of the Zoning Administrator shall be noted by endorsement upon two copies of all sketches.

In carrying out the purpose of this division, the Zoning Administrator shall consider in each specific case any or all of the following principles as may be appropriate:

- It is the intent of this division that any control exercised be the minimum necessary to achieve the over-all objective of the Village Seven SPA plan and associated regulatory documents, rather than control design character such that individual initiative is stifled in the layout of any particular building or site and substantial additional expense incurred; rather,

- The siting of any structure on the property, as compared to the siting of other structures in the immediate neighborhood, shall be considered.

- The size, location, design, color, number, lighting and materials of all signs and outdoor advertising structures shall be reviewed. No sign shall be approved in excess of the maximum limits set herein.

- Landscaping is provided in accordance with the Village Seven SPA plan and associated regulatory documents shall be required on the site and shall be in keeping with the character or design of the site and existing trees shall be preserved whenever possible.

- Ingress, egress and internal traffic circulation shall be so designed as to promote convenience and safety.

II.3.10.7 Site Plan & Architectural - Appeals

Appeals from determinations by the Zoning Administrator shall be to the Planning Commission, upon written request for a hearing before the Commission. In the absence of such request being filed within seven days after determination by the Administrator, the determination shall be final.

The appeal shall be filed with the Planning & Building Department on the form required by the City, and be accompanied by the non-refundable Required Fee therefore. The appeal shall include a statement of the reasons supporting the appeal, including a demonstration that any issues being raised were raised before the Zoning Administrator. Upon the proper filing of the appeal, the Director of Planning & Building shall cause the matter to be set for public hearing, giving the same notice as required in Sections 19.12.070 and 19.12.080 of the CVMC.

Upon the hearing of an appeal, the Planning Commission may by resolution, affirm, reverse or modify, in whole or in any part, any determination of the Zoning Administrator. The resolution shall contain Findings of Facts showing wherein the project meets or fails to meet any applicable site plan and architectural principles or development standards and design guidelines established in the Village Seven Sectional Planning Area plan and Village Design Plan. A copy of the decision resolution of the Planning Commission shall be filed with the City Clerk and mailed to the applicant. The decision of the Planning Commission shall be final on the eleventh day after its filing, except where further appeal is taken as provided herein.

The applicant or other interested person may appeal the decision of the Planning Commission granting or denying site plan and architectural approval to the City Council within 10 days after said decision is filed with the City Clerk. Said appeal shall be filed with the City Clerk in writing upon forms provided by the City and be accompanied by the non-refundable required Fee therefore. The appeal shall include a statement of the reasons supporting the appeal, including a demonstration that any issues being raised were raised during the public hearing. If a proper appeal is filed within the time limits specified, it automatically stays proceedings in the matter until a determination is made by the City Council on the appeal.

After hearing the appeal, the City Council may, by resolution, affirm reverse or modify, in whole or in any part, any determination of the Zoning Administrator or the Planning Commission. The Council resolution by which the appeal is decided shall contain Findings of Facts showing wherein the project meets or fails to meet the applicable site plan and architectural principles in Section 19.14.470, the provisions of the Design Manual, any design standards required for the project, or other non-conformity with the requirements of this Chapter. A copy of the decision resolution of the City Council shall be filed with the City Clerk and mailed to the applicant.

II.3.10.8 Conditional Use Permit

The granting of a Conditional Use Permit is an administrative act to authorize permitted uses subject to specific conditions because of the unusual characteristic or need to give special consideration to the proper location of said uses in relation to adjacent uses, the development of the community and to the various elements of the general plan. The purpose of this section is to set forth the findings necessary for such administrative action and to establish a procedure for granting Conditional Use Permits.

After the public hearing, the Planning Commission or the Zoning Administrator may, by resolution, grant a Conditional Use Permit if the Planning Commission or the Zoning Administrator finds from the evidence presented at said hearing that all of the following facts exists:

A. That the proposed use at the particular location is necessary or desirable to provide a service or facility which will contribute to the general well being of the neighborhood or the community.

B. That such use will not, under the circumstances of the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity, or injurious to property or improvements in the vicinity.

C, That the proposed use will comply with the regulations and conditions specified in this code for such use.

D. That the granting of this conditional use will not adversely affect the general plan of the City or the adopted plan of any governmental agency.

The Planning Commission or the Zoning Administrator shall make a written finding which shall specify acts relied upon in rendering said decision and attaching such conditions and safeguards as deemed necessary and desirable not more than 10 days following the decision of the Commission or the Zoning Administrator, and shall fully set forth wherein the facts and circumstances fulfill or fail to fulfill the requirements. A copy of this written Finding of Facts shall be filed with the City Clerk, with the Director of Planning & Building and mailed to the applicant. The decision of the Planning Commission or Zoning Administrator shall be final on the eleventh day following its filing in the office of the City Clerk, except where appeal is taken as provided herein.

II.3.10.9 Conditional Use Permit - Appeals

The applicant or other interested party may appeal the decision of the Zoning Administrator to the Planning Commission within 10 days after said decision is filed with the City Clerk. Said appeal shall be in writing and filed in triplicate with the Planning & Building Department on forms provided by said department, and shall specify wherein there was an error in the decision of the Zoning Administrator. If an appeal is filed within the time limit specified, it stays proceedings in the matter until the Planning Commission makes a determination.

Where the Planning Commission denies an application by less than four votes, the applicant shall have the right to either a rehearing at the next Planning Commission meeting or an appeal to the City Council without payment of additional fees. The choice of alternatives shall be discretionary with the applicant. All other proceedings pertaining to appeals shall continue to apply.

II.3.10.10 Variance

The granting of a Variance is an administrative act to allow a variation from the strict application of the adopted Village Seven SPA development regulations of the particular zone, and to provide a reasonable use for a Neighborhood of property having unique characteristics by virtue of its size, location, design or topographical features, and its relationship to adjacent or surrounding properties and developments. The purpose of the Variance is to bring a particular Neighborhood up to parity with other property in the same zone and vicinity insofar as a reasonable use is concerned, and it is not to grant any special privilege or concession not enjoyed by other properties in the same zone and vicinity. The Variance may not be used to correct improper zoning. It is the purpose of this section to set forth the findings necessary for such administrative action and to establish a procedure for granting variances. In no case shall a Variance be granted to permit a use other than a use permitted in the district in which the subject property is situated.

The Zoning Administration shall grant a Variance only when the following facts are found:

A. That a hardship peculiar to the property and not created by any act of the owner exists. Said hardship may include practical difficulties in developing the property for the needs of the owner consistent with the regulations of the zone; but in this context, personal, family or financial difficulties, loss of prospective profits, and neighboring violations are not hardships justifying a Variance. Further, a previous Variance can never have set a precedent, for each case must be considered only on its individual merits.

B. That such Variance is necessary for the preservation and enjoyment of substantial property rights possessed by other properties in the same zoning district and in the same vicinity, and that a Variance, if granted, would not constitute a special privilege of the recipient not enjoyed by his neighbor.

C. That the authorizing of such Variance will not be of substantial detriment to adjacent property, and will not materially impair the purposes of these regulations or the public interest.

D. That the authorizing of such Variance will not adversely affect the general plan of the City or the adopted plan of any governmental agency.

II.3.10.11 Variance - Appeals

The applicant or other interested persons may appeal the decision of the Zoning Administrator to the Planning Commission within ten days after the decision is filed with the City Clerk and the hearing on said appeal shall be processed by the Planning Commission in the same manner as a Conditional Use Permit within the original jurisdiction of the Planning Commission. The applicant or other interested persons shall have the same right of appeal from any determination of the Planning Commission in such instances as set forth in Sections 19.14.110 through 19.14.130 of the Chula Vista Municipal Code.

Upon the hearing of such appeal, the City Council may, by resolution, affirm, reverse or modify in whole or in part any determination of the Planning Commission, subject to the same limitations and this Chapter places requirements of findings as upon the Planning Commission. The resolution must contain a Finding of Facts showing wherein the conditional use meets or fails to meet the requirements of Sections 19.14.080 through 19.14.100. Not later than ten days following the adoption of said resolution, the City Clerk shall transmit a copy of the resolution and finding to the Director of Planning & Building and shall mail a copy to the applicant.

Any Conditional Use Permit or Zone Variance granted by the City shall be conditioned upon the privileges granted being utilized within one year after the effective date thereof. A Variance or Conditional Use Permit shall be deemed to be utilized if the property owner has substantially changed his/her position in reliance upon the grant thereof. Evidence of change of position would include completion of construction or any expenditures of money by the property owner preparatory to construction and shall also include the use of the property as granted. If there has been a lapse of work for the three months after commencement, the Conditional Use Permit or Zone Variance shall be void. The Commission may, by resolution, grant an extension of time contained in a currently valid Zone Variance or Conditional Use Permit without a public hearing upon appeal of the property

owner, provided that there has been no material change or circumstances since the granting of the Variance or Conditional Use Permit which would be injurious to the neighborhood or otherwise detrimental to the public welfare.

II.3.11 Exceptions & Modifications

II.3.11.1 Height Limitation Exceptions

Height limitations stipulated in these regulations shall not apply to:

A. Church spires, belfries, cupolas and domes, monuments, electric generating stations and liquefied natural gas tanks, water towers, fire and hose towers, observation towers, distribution and transmission towers, lines and poles, windmills, chimneys, smokestacks, flagpoles, radio towers, masts and aerials, or to parapet walls extending not more than ten feet above the limiting height of the building;

B. Places of public assembly in churches, schools and other permitted public and semi-public buildings, provided that these uses are located on the ground floor of such buildings;

C. Bulkheads, elevator and stair penthouses, water tanks, bams, silos, monitors and scenery lofts, provided no lineal dimension of any such structure exceeds fifty percent of the corresponding street lot line frontage; or towers and monuments, fire towers, hose towers, cooling towers, gas holders or other structures where the manufacturing process requires a greater height; provided however, that no such structures above the heights otherwise permitted in the district occupy more than twenty-five percent of the area of the lot and are no less than twenty-five feet from any lot line which is not a street lot line.

II.3.11.2 Projections into Required Yard Permitted

Certain architectural features may project into required yards or courts as follows:

A. Cornices, canopies, eaves or other architectural features may project a distance not exceeding four feet into any front or rear yard and forty percent into any side yard to a maximum of four feet. In the case of a side yard which is less than five feet, a two-foot projection is permitted, provided that such projection does not extend closer than one foot to the property line;

B. Fire escapes may project a distance not exceeding four feet, six inches;

C. An uncovered stair and any necessary landings may project a distance not to exceed six feet, provided such stair and landing shall not extend above the first floor of the building except for a railing not exceeding three feet in height;

D. Bay windows, balconies and chimneys may project a distance not exceeding three feet, provided that such features do not occupy, in the aggregate, more than one-third of the length of the building wall on which they are located;

E. An open, unenclosed stairway not covered by a roof or canopy may extend or project into a required rear or side yard not more than three feet, except as provided in subparagraph D.

II.3.12 Enforcement

II.3.12.1 Enforcement by City Officials

The City Council, City Attorney, City Manager, City Engineer, Director of Public Works, Fire Chief, Chief of Police, Director of Planning & Building, Director of Parks and Recreation, City Clerk and all officials charged with the issuance of licenses or permits shall enforce the provisions of this ordinance. Any permit, certificate or license issued in conflict with the provisions of this ordinance shall be void.

II.3.12.2 Actions Deemed Nuisance

Any building or structure erected hereafter, or any use of property contrary to the provisions of a duly-approved Design Review, Site Plan, Variance, Conditional Use Permit, or Administrative Review and/or this ordinance shall be declared to be unlawful and a public nuisance *per se* and subject to abatement in accordance with local ordinance.

II.3.12.3 Remedies

All remedies concerning this ordinance shall be cumulative and non-exclusive. The conviction and punishment of any person hereunder shall not relieve such persons from the responsibility of correcting prohibited conditions or removing prohibited buildings, structures, signs or improvements, and shall not prevent the enforced correction or removal thereof.

II.3.12.4 Penalties

Any person, partnership, organization, firm or corporation, whether as principal, agent, employee or otherwise, violating any provisions of this ordinance or violating or failing to comply any order or regulation made hereunder, shall be guilty of an infraction and, upon conviction thereof, shall be punishable as provided by local ordinance.

OTAY RANCH
VILLAGE 7 SPA PLAN

PUBLIC FACILITIES FINANCE PLAN

Approved by:
Chula Vista City Council
October 12, 2005

Resolution No.
2004-329

Prepared by:
burkett & wong Engineers

Table of Contents

Sections ..... **Pages**

II.5.1 EXECUTIVE SUMMARY 1
- A. General Conditions for Otay Ranch Village 7 PFFP. 3
- B. Public Facility Cost and Fee Summary for Proposed Project 4

II.5.2 INTRODUCTION 7
- II.5.2.1 Overview 7
- II.5.2.2 Purpose 7
- II.5.2.3 Growth Management Threshold Standards 7
- II.5.2.4 The Otay Ranch Village 7 SPA 8
- II.5.2.5 Public Facilities Finance Plan Boundaries 9

II.5.3 LAND USE ASSUMPTIONS 12
- II.5.3.1 Purpose 12
- II.5.3.2 Existing Development 12
- II.5.3.3 Development Phasing Forecast 13
- II.5.3.4 Project Development Summary 13
- II.5.3.5 Development Phasing 18
- II.5.3.6 Equivalent Dwelling Units 19

II.5.4 FACILITY ANALYSIS 21

II.5.4.1 TRAFFIC 22
- II.5.4.1.1 GMOC Threshold Standard 22
- II.5.4.1.2 GMOC Level Of Service (LOS) Definition 22
- II.5.4.1.3 Freeway Segment LOS Standards and Thresholds. 22
- II.5.4.1.4 Roadway Segment LOS Standards and Thresholds 23
- II.5.4.1.5 Intersection LOS Standards and Threshold 25
- II.5.4.1.5.1 Signalized Intersection Analysis 25
- II.5.4.1.5.2 Unsignalized Intersection Analysis 25
- II.5.4.1.6 Chula Vista Traffic Monitoring Program (TMP) 26
- II.5.4.1.7 Service Analysis 27
- II.5.4.1.8 Project Processing Requirements 31
- II.5.4.1.9 Existing Conditions 31
- II.5.4.1.10 Transit 36
- II.5.4.1.11 Trip Generation and Phasing 39
- II.5.4.1.11.1 Project Trip Generation 39
- II.5.4.1.11.2. Project Phasing 42
- II.5.4.1.12 Adequacy Analysis 45
- II.5.4.1.13 Cost & Financing Project Traffic Improvements 49
- II.5.4.1.14 Threshold Compliance and Recommendations 51

II.5.4.2 POLICE 61
II.5.4.2.1 Threshold Standard 61
II.5.4.2.2 Service Analysis 61
II.5.4.2.3 Project Processing Requirements 61
II.5.4.2.4 Existing Conditions 61
II.5.4.2.5 Adequacy Analysis 62
II.5.4.2.6 Financing Police Facilities 63
II.5.4.2.7 Threshold Compliance and Recommendations 64

II.5.4.3 FIRE AND EMERGENCY MEDICAL SERVICES 65
II.5.4.3.1 Threshold Standard 65
II.5.4.3.2 Service Analysis 65
II.5.4.3.3 Project Processing Requirements 65
II.5.4.3.4 Existing Conditions 66
II.5.4.3.5 Adequacy Analysis 66
II.5.4.3.6 Financing Fire Service Facilities 67
II.5.4.3.7 Threshold Compliance and Recommendations 68

II.5.4.4 SCHOOLS 69
II.5.4.4.1 Threshold Standard 69
II.5.4.4.2 Service Analysis 69
II.5.4.4.3 Project Processing Requirements 70
II.5.4.4.4 Existing Conditions 70
II.5.4.4.5 School Sizing and Location 73
II.5.4.4.6 Financing School Facilities 74
II.5.4.4.7 Threshold Compliance and Recommendations 76

II.5.4.5 LIBRARIES 77
II.5.4.5.1 Threshold Standard 77
II.5.4.5.2 Service Analysis 77
II.5.4.5.3 Project Processing Requirements 77
II.5.4.5.4 Existing Conditions 77
II.5.4.5.5 Adequacy Analysis 77
II.5.4.5.6 Financing Library Facilities 79
II.5.4.5.7 Threshold Compliance and Recommendations 79

II.5.4.6 PARKS, TRAILS AND OPEN SPACE 80
II.5.4.6.1 Park Threshold Standard 80
II.5.4.6.2 Service Analysis 80
II.5.4.6.3 Project Processing Requirements 80
II.5.4.6.4 Existing Conditions 80
II.5.4.6.5 Project Park Requirements 80
II.5.4.6.6 Park Adequacy Analysis 82
II.5.4.6.7 Open Space, Trails and Recreation 83
II.5.4.6.8 Financing Park, Open Space, and Trail Facilities 84
II.5.4.6.7 Financing Recreation Facilities 85
II.5.4.6.10 Threshold Compliance and Recommendations 86

II.5.4.7 WATER 90
II.5.4.7.1 Threshold Standard 90

II.5.4.7.2 Service Analysis 90
II.5.4.7.3 Project Processing Requirements 91
II.5.4.7.4 Existing Conditions 91
II.5.4.7.5 Adequacy Analysis 92
II.5.4.7.6 Existing Facilities 94
II.5.4.7.7 Proposed Facilities 94
II.5.4.7.8 Financing Water Facilities 95
II.5.4.7.7 Threshold Compliance and Recommendations 95

II.5.4.8 SEWER 98
II.5.4.8.1 Threshold Standard 98
II.5.4.8.2 Service Analysis 98
II.5.4.8.3 Project Processing Requirements 98
II.5.4.8.4 Existing Conditions 99
II.5.4.8.5 Adequacy Analysis 99
II.5.4.8.6 Recommended Sewerage Facilities 105
II.5.4.8.6.1 Improvements 106
II.5.4.8.6.2 Phasing 106
II.5.4.8.7 Financing Sewerage Facilities 107
II.5.4.8.8 Threshold Compliance and Recommendations 109

II.5.4.7 DRAINAGE 112
II.5.4.7.1 Threshold Standard 112
II.5.4.7.2 Service Analysis 112
II.5.4.7.3 Project Processing Requirements 113
II.5.4.7.4 Existing Conditions 113
II.5.4.7.5 Proposed Facilities 115
II-5.4.7.6 Financing Drainage Facilities 119
II.5.4.7.7 Threshold Compliance and Recommendations 120

II.5.4.10 AIR QUALITY 126
II.5.4.10.1 Threshold Standard 126
II.5.4.10.2 Service Analysis 126
II.5.4.10.3 Threshold Compliance and Recommendations 127

II.5.4.11 CIVIC CENTER 128
II.5.4.10.1 Threshold Standard 128
II.5.4.11.2 Service Analysis 128
II.5.4.11.3 Existing Conditions 128
II.5.4.11.4 Adequacy Analysis 129
II.5.4.11.5 Financing Civic Center Facilities 129
II.5.4.11.6 Threshold Compliance and Recommendations 129

II.5.4.12 CORPORATION YARD 130
II.5.4.12.1 Threshold Standard 130
II.5.4.12.2 Service Analysis 130
II.5.4.12.3 Existing Conditions 130
II.5.4.12.4 Adequacy Analysis 130
II.5.4.12.5 Financing Corporation Yard Facilities 130
II.5.4.12.6 Threshold Compliance 131

II.5.4.13 OTHER PUBLIC FACILITIES 132
II.5.4.13.1 Threshold Standard 132
II.5.4.13.2 Service Analysis 132
II.5.4.13.3 Existing Conditions 132
II.5.4.13.4 Financing Other Public Facilities 132
II.5.4.13.6 Threshold Compliance and Recommendations 132

II.5.4.14 FISCAL ANALYSIS 133
II.5.4.14.1 Threshold Standard 133
II.5.4.14.2 Facility Master Plan 133
II.5.4.14.3 Project Processing Requirements 133
II.5.4.14.4 Fiscal Analysis of Project 133
II.5.4.14.4.1 Introduction 133
II.5.4.14.4.2 Project Description 133
II.5.4.14.4.3 Project Demographics and Land Uses 134
II.5.4.14.4.4 Revenues 136
II.5.4.14.4.5 Operating Expenditures 139
II.5.4.14.4.6 Net Fiscal Impact 143

II.5.4.15 PUBLIC FACILITY FINANCE 145
II.5.4.15.1 Overview 145
II.5.4.15.2 Subdivision Exactions 145
II.5.4.15.3 Development Impact Fee Programs 145
II.5.4.15.4 Debt Finance Programs 146
II.5.4.15.5 Other Methods Used to Finance Facilities 147
II.5.4.15.6 Public Facility Finance Policies 148
II.5.4.15.7 Cumulative Debt 149
II.5.4.15.8 Lifecycle Cost 150

APPENDIX 152
Appendix A 7 Fiscal Impact Analysis Tables

List of Exhibits

No.	Title	Page
Exhibit 1	Regional Vicinity Map	10
Exhibit 2	Vicinity Map	11
Exhibit 3	Village 7 Site Utilization Plan	15
Exhibit 4	Conceptual Phasing Plan	16
Exhibit 5	Ownership Map	17
Exhibit 6	Key Street & Intersections	35
Exhibit 7	Transit Plan	38
Exhibit 8	Circulation Plan	44
Exhibit 9	Parks and Open Space Plan	88
Exhibit 10	Trails Plan	89
Exhibit 11	Proposed Water Facilities	96
Exhibit 12	Proposed Recycled Water Facilities	97
Exhibit 13	Interim Sewer Collection System	110
Exhibit 14	Permanent Sewer System	111
Exhibit 15	Preliminary Existing Basin Boundaries	122
Exhibit 16	Existing Conditions	123
Exhibit 17	Developed Drainage Basin Boundaries (McMillin Ownership)	124
Exhibit 18	Developed Conditions Hydrology (Otay Project, L. P.)	125

List of Tables

Table No.	Title	Page
Table A.1	Summary of City DIF Fees by Phase and Facility	5
Table A.2	Timing and Funding Source by Facility	6
Table B.1	Five year Residential Forecast Summary	13
Table B.2	Adopted GDP for Village 7 SPA Plan	17
Table B.3	Proposed SPA Village 7 Land Use Plan	16
Table B.4	Village 7 Development Phasing	18
Table B.5	Village 7 DUs & EDUs by Phase for Transportation & Interim Pre-SR125 Facilities	19
Table B.6	Public Facilities DIF Components	20
Table B.7	Level of Analysis	21
Table C.1	GMOC LOS Definition	22
Table C.2	Caltrans District 11 Freeway Segment LOS Definitions	23
Table C.3	Segment Capacity and LOS Standards	24
Table C.4	Street Segment LOS Threshold Descriptions	24
Table C.5	Intersection LOS Threshold Description	25
Table C.6	LOS Thresholds for Unsignalized Intersections	26
Table C.7	Telegraph Canyon Road (Class II) Existing TMP Speeds and LOS Conditions	31
Table C.8	Village 7 Trip Generation	39
Table C.9	Village 7 Internal Trips	40
Table C.10	Village 7 Trip Generation by Phase	41
Table C.11	Village 7 Traffic Improvement Phasing and Costs	49
Table C.12	Phasing DUs for Transportation Facilities	49
Table C.13	TDIF Fees	50
Table C.14	Interim SR-125 DIF Fees	50
Table C.15	Traffic Signal Fees	51
Table C.16	Significant Impacts and Mitigation Measures	53
Table D.1	Police Historic Response Times	63
Table D.2	Public Facilities Fees For Police	64
Table E.1	Fire Station Inventory	66
Table E.2	Fire/EMS –Emergency Response Times since 1994	67
Table E.3	Public Facilities Fees For Fire/EMS	68
Table F.1	Chula Vista Elementary School District Enrollments vs. Capacity	71
Table F.2	Sweetwater Union High School District High School Enrollments vs. Permanent Capacity	72
Table F.3	Sweetwater Union High School District 2004-2008 Planned Schools	73
Table F.4	Student Generation by Development Phase	73
Table G.1	Existing Library Facilities	77

No.	Title	Page
Table G.2	Future Library Facilities	78
Table G.3	Village 7 Library Space Demand Compared to Supply	79
Table G.4	Public Facilities Fees For Libraries	79
Table H.1	Quimby Act Parkland Requirements	81
Table H.2	Parkland Dedication Ordinance Standards	81
Table H.3	Parkland Dedication Requirements per City Ordinance	81
Table H.4	SPA Plan Park Acres and Eligible Credits	82
Table H.5	Park Acreage Demand Compared to Supply East of Interstate 805 as of January 2004	82
Table H.6	Otay Ranch Village 7 SPA By Phase	83
Table H.7	Park Acquisition and Development (PAD) Fees Development Component Only	84
Table H.8	Park Acquisition and Development (PAD) Fees Acquisition Component Only	85
Table H.9	Public Facilities Fees For Recreation	86
Table I.1	Water Duty Factors	92
Table I.2	Potable Water Demands	93
Table I.3	Recycled Water Demands	94
Table J.1	Sewer Capacity used by forecasted development	100
Table J.2	Projected Wastewater Generation by Land Use	100
Table J.3	Poggi Canyon Sewer Basin Sewage Flows	101
Table J.4	Wolf Canyon Sewer Basin Sewage Flows	101
Table J.5	Interim Condition Poggi Canyon Sewer Basin Sewage Flows	102
Table J.6	Poggi Canyon Sewer Basin Units Remaining	103
Table I.7	Excess Capacity in Threshold Reaches	104
Table J.8	Remaining Poggi Canyon Basin Capacity	104
Table J.9	Poggi Canyon Basin Impact Fees	107
Table J.10	Salt Creek Basin Impact Fees	108
Table K.1	Summary of Runoff Estimates for McMillin Ownership of Village 7	116
Table K.2	Contributing Areas and 100-Year flows for Existing and Developed Conditions	117

No.	Title	Page
Table L.1	Civic Facilities Inventory	128
Table L.2	Future Facilities Cost	128
Table L.3	Civic Center Fee for Otay Ranch Village 7 SPA	129
Table M.1	Corporate Yard Fee for Otay Ranch Village 7 SPA	131
Table N.1	Village 7 Public Facilities Fees For Other Public Facilities	132
Table O.1	Absorption Schedule and Market Values by Land Use	134
Table O.2	Otay Ranch Village 7 SPA Fiscal Impact General Assumptions	135
Table O.3	Otay Ranch Village 7 SPA Fiscal Impact Revenue Generation Assumptions	136
Table O.4	Otay Ranch Village 7 Project Fiscal Impact Cost Allocation Assumptions	140
Table O.5	Net Fiscal Impact of the Village 7 SPA on the City of Chula Vista	143
Table P.1	Estimated Revenue Available for Debt Service on Land Secured Financings	148
Table P.2	Estimate of Facilities Cost Potentially funded from Debt Service	149

II.5.1 EXECUTIVE SUMMARY

OVERVIEW

This Public Facility Finance Plan (PFFP) addresses the public facility needs associated with the Otay Ranch Village 7 Sectional Planning Area (SPA) Plan. The developer proposed project as described in the SPA Plan is referred to as "The Project" in this PFFP. The PFFP has been prepared under the requirements of the City of Chula Vista's Growth Management Program and Chapter 9, Growth Management of the Otay Ranch General Development Plan (GDP). The preparation of the PFFP is required in conjunction with the preparation of the SPA Plan for Otay Ranch Village 7 to ensure that the phased development of the project is consistent with the overall goals and policies of the City's General Plan, Growth Management Program, and the Otay Ranch General Development Plan (GDP) which was adopted by the Chula Vista City Council on October 28, 1993, to ensure that the development of the project will not adversely impact the City's Quality of Life Standards. This PFFP meets the policy objectives of the Otay Ranch GDP.

This PFFP is based upon the phasing and project information that has been presented in the draft Otay Ranch Village 7 SPA Plan dated July 31, 2003, the Otay Ranch GDP, as amended. The PFFP begins by analyzing the existing demand for facilities based upon the demand from existing development and those projects with various entitlements through the year 2010. Further, the PFFP uses the phasing as proposed by the project to determine the impacts associated with it.

When specific thresholds are projected to be reached or exceeded based upon the analysis of the phased development of the project, the PFFP provides recommended mitigation necessary for the continued compliance with the Growth Management Program and Quality of Life Standards. The PFFP does not propose different development phasing from that proposed by the project or alternative plans, but may indicate that the development phasing should be limited or reduced until certain actions are taken to guarantee public facilities will be available or provided to meet the Quality of Life Standards. Subsequent changes to the phasing shall require an amendment to this PFFP.

Typically, as an applicant receives each succeeding development approval, the applicant must perform the required steps that will insure the timely provision of the required facility. Failure to perform the required step curtails additional development approvals. The typical steps are illustrated below:

Performance of Facility Thresholds

GDP:

- Goals, objectives & policies established.
- Facility thresholds established.
- Processing requirements established.

SPA:

- Facility financing refined and funding source identified consistent with GDP goals, objectives & policies.

- Facility demand and costs calculated consistent with adopted land uses and GDP defined methodologies.
- Specific facility financing and phasing analysis performed to assure compliance with Growth Management Thresholds.
- Facilities sited and zoning identified.

Tentative Map:

- Subdivision approval conditioned upon assurance of facility funding.
- Subdivision approval conditioned upon payment of fees, or the dedication, reservation or zoning of land for identified facilities.
- Subdivision approval conditioned upon construction of certain facility improvements.

Final Map:

- Tentative Map conditions performed.
- Lots created.

Building Permit:

- Impact fees paid as required.

The critical link between the thresholds and development entitlements is the PFFP. Part II, Chapter 9, Section C of the GDP/SPA Processing Requirements, General Development Plan Implementation, requires the preparation of Public Facility Financing and Phasing Plans as a condition of approval of all SPAs. This PFFP satisfies the GDP requirement. The PFFP requires the preparation and approval of phasing schedules showing how and when facilities and improvements necessary to serve proposed development will be installed or financed to meet the threshold standards, including:

- An inventory of present and future requirements for each facility.
- A summary of facilities cost.
- A facility phasing schedule establishing the timing for installation or provisions of facilities.
- A financing plan identifying the method of funding for each facility required.
- A fiscal impact report analyzing SPA consistency with the Subregional Plan (SRP).

Subsection C of the City of Chula Vista Municipal Code (CVMC) Section 19.09.100 (Growth Management Ordinance) requires that if the City Manager determines that facilities or improvements within a PFFP are inadequate to accommodate any further development within that area the City Manager shall immediately report the deficiency to the City Council. If the City Council determines that such events or changed circumstances adversely affect the health, safety or welfare of City, the City may require amendment, modification, suspension, or termination of an approved PFFP.

A. GENERAL CONDITIONS FOR THE VILLAGE 7 PFFP

1. All development within the boundaries of the PFFP for the Otay Ranch Village 7 SPA shall conform to the provisions of Section 19.09 of the Chula Vista Municipal Code (Growth Management Ordinance) as may be amended from time to time and to the provisions and conditions of this Public Facilities Financing Plan.

2. All development within the boundaries of the PFFP for Otay Ranch Village 7 SPA shall be required to pay development impact fees, unless the developer has entered into a separate agreement with the City, for public facilities, transportation and other applicable fees pursuant to the most recently adopted program by the City Council, and as amended from time to time. Development within the boundaries of the Otay Ranch Village 7 SPA shall also be responsible for fair share proportionate fees that are necessary to meet the adopted facility performance standards as they relate to the SPA Plan and subdivision application.

3. The Public Facilities Finance Plan shall be implemented in accordance with Chula Vista Municipal Code (CVMC) 19.09.090. Future amendments shall be in accordance with CVMC 19.09.100 and shall incorporate newly acquired data, to add conditions and update standards as determined necessary by the City through the required monitoring program. Amendment to this Plan may be initiated by action of the Planning Commission, City Council or property owners at any time. Any such amendments must be approved by the City Council.

4 Approval of this PFFP does not constitute prior environmental review for projects within the boundaries of this Plan. All future projects within the boundaries of this PFFP shall undergo environmental review as determined appropriate by the City of Chula Vista.

5. Approval of this PFFP does not constitute prior discretionary review or approval for projects within the boundaries of the Plan. All future projects within the boundaries of the Otay Ranch Village 7 SPA PFFP shall undergo review in accordance with the Chula Vista Municipal Code. This PFFP analyzes the maximum allowable development potential for planning purposes only. The approval of this plan does not guarantee specific development densities.

6. The facilities and phasing requirements identified in this PFFP are based on the City Council approved Otay Ranch Village 7 SPA Plan.

7. The plan analysis is based upon the phasing presented in this document. Any changes to phasing shall require an amendment to the PFFP.

B. PUBLIC FACILITY COST AND FEE SUMMARY OTAY RANCH VILLAGE 7 SPA

The following tables identify and summarize the various facility costs associated with development of the Otay Ranch Village 7 SPA. The facilities and their cost are identified in detail in subsequent sections of this document. The tables indicate a recommended financing alternative based upon current Chula Vista practices and policies. However, where another financing mechanism may be shown at a later date to be more effective, the City may implement such other mechanisms in accordance with City policies. This will allow the City maximum flexibility in determining the best use of public financing to fund public infrastructure improvements.

The Traffic Impact Analysis by Linscott, Law & Greenspan (LL&G), dated May 20, 2004, has identified several projects that will be required as the result of the development of the Otay Ranch Village 7 SPA. The estimated cost of street improvements is identified in Table C.12. The improvement projects listed include both offsite and onsite improvements. Most of the improvement projects are eligible for funding through the City's Transportation Development Impact Fee (TDIF) program. In the event the developer constructs a TDIF improvement, the cost of the improvement may be eligible for credit against TDIF fees. Construction of non-TDIF eligible improvements shall be completed by the developer as a project exaction.

TDIF Fees, Interim SR125 facilities and traffic signal fees generated by the Otay Ranch Village 7 SPA and alternatives are identified on Table A.1. Funding for street improvements may be accomplished in one or more possible funding alternatives such as:

- Payment of TDIF fees.
- Construction of improvements by developer with credit toward DIF fees on building permits.
- Financing through assessment districts or Community Facility Districts.
- Expenditure of available DIF account funds.
- Construction of improvements by other developers.
- Federal Funds.

Some off-site sewer, drainage and water facilities may be the responsibility of the developer if the facility is needed to support the proposed development.

The Otay Ranch Village 7 SPA will trigger development impact fees for parks and libraries. The Otay Ranch Village 7 SPA is within Mello-Roos Community Facilities District No. 11. All properties, including non-residential, are assessed a special tax to fully mitigate impacts on school facilities caused by residential development.

Police, fire and emergency medical services, civic center, corporation yard, and other city public facilities will be funded, in part, from revenues generated from the payment of Public Facilities Development Impact Fees at building permit issuance. These fee revenues for the Otay Ranch Village 7 SPA Plan is identified on Table A.1.

Altogether, the City's development impact fees by phase and facility for the Otay Ranch Village 7 SPA are identified on the following Table A.1.

Table A.1[1]
Otay Ranch Village SPA 7 Project
Summary of DIF Fees by Phase & Facility

Facility	White	Blue	Red	Green	Totals
Traffic (1)	$141,600	$6,661,820	$3,506,754	$327,970	$10,638,144
Sewer	$69,708	$541,912	$262,912	$30,352	$904,884
Drainage (2)	N/A	N/A	N/A		N/A
Water (2)	N/A	N/A	N/A		N/A
Police	$0	$811,304	$301,500	$28,140	$1,140,944
Fire/EMS	$0	$356,404	$168,750	$15,750	$540,904
Schools (3)	N/A	N/A	N/A		N/A
Library	$0	$582,650	$282,375	$26,355	$891,380
Parks (4)	$0	$5,727,038	$3,046,125	$284,305	$9,057,468
Recreation	$0	$718,742	$404,625	$37,765	$1,161,132
Civic Center	$0	$814,042	$408,375	$38,115	$1,260,532
Corp. Yard	$0	$455,732	$264,750	$24,710	$745,192
Other Facilities	$0	$124,982	$62,625	$5,845	$193,452
Total	**$211,308**	**$16,794,626**	**$8,708,791**	**$819,307**	**$26,534,032**

Notes:
(1) Includes TDIF, Interim SR-125 & Traffic Signal Fees.
(2) No city imposed DIF program in place for this facility.
(3) No city imposed DIF program, however, all properties, including non-residential, are assessed a special tax to fully mitigate impacts on school facilities caused by residential development.
(4) See the City of Chula Vista's Park Land Dedication Ordinance.

Please reference Exhibit 4, Phasing Plan.

[1] The fees provided in this table are estimates only and subject to change. Fees are subject to change as the ordinance is amended by the City Council from time to time.

Table A.2 Otay Ranch Village 7 Timing and Funding Source by Facility		
Facility	**Funding Source**	**Project Timing**
Traffic		
1. Otay Ranch Village 7 TDIF	Pay TDIF	Building Permit
2. No Specific Facility	Pay Interim SR-125 DIF	Building Permit
3. No Specific Facility	Pay Traffic Signal Fee	Building Permit
TDIF Streets: **La Media Road** From Birch Road to Street C	Developer funded w/ TDIF credits	Prior to first Final Map
Rock Mountain Road[2] From Magdalena to SR-125	Developer funded w/ TDIF credits	Prior to first Final Map
Onsite non-TDIF public streets **Magdalena Avenue**[3] From Birch Road to Rock Mtn.	Developer Exaction	Prior to first Final Map
Street C From La Media to Magdalena Ave.	Developer Exaction	Prior to first Final Map
Sewer	Developer Build Pay City Fees	Concurrent w/ Phasing Building Permit
Drainage	Developer Build	Per Ordinance
Water	Pay OWD Capacity Fees	Pay @ purchase of Water Meters
Police	Pay PFDIF	Building Permit
Fire/EMS	Pay PFDIF	Building Permit
Schools	SUHSD Mello Roos District CVESD Mello Roos District	Building Permit
Libraries		
Parks Neighborhood Park Community Park	 PAD Credit/Fees PAD Fees	 Building Permit Building Permit
Recreation	Pay PFDIF	Building Permit
Civic Center	Pay PFDIF	Building Permit
Corp. Yard	Pay PFDIF	Building Permit
Other Public Facilities	Pay PFDIF	Building Permit

[2] If the Village 7 High School project is approved by the State of California and grading permit is issued for the high school site, or the high school is under construction, the half-width right of way for Rock Mountain Road along the frontage of the High School site shall be dedicated prior to the approval of the first final map.

[3] If the Village 7 High School project is approved by the State of California and grading permit is issued for the high school site, or the high school is under construction, the full-width of Magdalena Avenue along the frontage of the High School site shall be dedicated prior to the approval of the first final map.

II.5.2 INTRODUCTION

II.5.2.1 Overview

The City of Chula Vista has looked comprehensively at issues dealing with development and the additional impacts it places on public facilities and services. The approval of the Threshold Ordinance and the General Plan update were the first steps in the overall process of addressing growth related issues. The second step in this process was the development and adoption of a specific Growth Management Element, which set the stage for the creation of the City's Growth Management Program.

The Chula Vista City Council adopted the Growth Management Program and Implementing Ordinance No. 2448 on May 28, 1991. These documents implement the Growth Management Element of the General Plan, and establish a foundation for carrying out the development policies of the City by directing and coordinating future growth in order to guarantee the timely provision of public facilities and services.

The Growth Management Ordinance requires a Public Facilities Finance Plan (PFFP) to be prepared for future development projects requiring a Sectional Planning Area (SPA) Plan or Tentative Map. The contents of the PFFP are governed by Section 19.09.060 of the Municipal Code, which requires that the plan show how and when the public facilities and services identified in the Growth Management Program will be installed or financed.

II.5.2.2 Purpose

The purpose of the Public Facilities Finance Plan is to implement the City's Growth Management Program and to meet the General Plan goals and objectives as well as the Growth Management Element goals and objectives. The Chula Vista Growth Management Program implements the City's General Plan and Zoning Ordinance by ensuring that development occurs only when necessary public facilities and services exist or are provided concurrent with the demands of new development.

II.5.2.3 Growth Management Threshold Standards

City Council Resolution No. 13346 identified eleven public facilities and services with related threshold standards and implementation measures. These public facilities and services were listed in a policy statement dated November 17, 1987 and have subsequently been refined based on recommendations from the Growth Management Oversight Commission (GMOC).

The eleven public facilities and services include:

- Traffic
- Police
- Fire/EMS
- Schools
- Libraries
- Parks and Recreation
- Water
- Sewer
- Drainage
- Air Quality
- Fiscal

During development of the Growth Management Program two new facilities were added to the list of facilities to be analyzed in the PFFP:

- Civic Facilities
- Corporation Yard

Threshold standards are used to identify when new or upgraded public facilities are needed to mitigate the impacts of new development. Development approvals will not be made unless compliance with these standards can be met. These threshold standards have been prepared to guarantee that public facilities or infrastructure improvements will keep pace with the demands of growth.

II.5.2.4 The Otay Ranch Village 7 SPA Project

The Otay Ranch lies within the approximately 37,585-acre Eastern Territories Planning Area of the City of Chula Vista. Interstate 805 bounds this area on the west, San Miguel Mountain and State Route 54 on the north, the Otay Reservoirs and the Jamul foothills on the east, and the Otay River Valley on the south. The Otay Ranch Village 7 SPA project area is located in the western portion of the Otay Ranch GDP.

The Otay Ranch Village 7 area is under the ownership of several parties, as shown by Exhibit 5. McMillin Otay Ranch, LLC and Otay Project LP are the applicants for the proposed project and their ownerships comprise the majority of Village 7. The Otay Land Company, the Stephen & Mary Birch Foundation (S&MBF), and the FAA also own portions of Village 7. The Village 7 SPA Plan including this PFFP address the McMillin Otay Ranch, LLC and Otay Project LP ownerships.

The proposed Otay Ranch Village 7 SPA Plan project covers that portion of Village 7 under the ownerships of McMillin Otay Ranch, LLC and Otay Project LP. The Village 7 SPA Plan project site comprises approximately 276.9 acres of the 424.4-acre Village 7. The proposed SPA Plan would result in development of residential, community facilities, parks and open space uses, as well as a circulation, trail and infrastructure network to serve these uses. Additionally, the project proposes an elementary school site and a high school site on the McMillin Otay Ranch, LLC property. McMillin Otay Ranch, LLC and the Otay Project LP, the project applicants for development of their ownerships within Village 7 (see Exhibit 3), plan to submit Tentative Maps. This PFFP provides an evaluation of the Village 7 SPA Plan Public Facility Thresholds for the McMillin Otay Ranch, LLC and the Otay Project LP ownerships.

The Village 7 SPA Plan addresses development of a portion of Village 7 as allowed by the Otay Ranch GDP and Section 19.48.020 of the Chula Vista Municipal Code. Development of other ownerships within Village 7 (i.e., the lands owned by Otay Land Company, the Stephen and Mary Birch Foundation, and the Federal Aviation Administration (FAA)) are not covered by the Village 7 SPA Plan including this PFFP. Development of these areas would require an amendment to the Village 7 SPA Plan and this PFFP.

The McMillin Otay Ranch, LLC property comprises approximately 180.2 acres in the eastern portion of the project site. It is bounded by Birch Road to the north, future SR 125 to the east, the S&MBF property to the south, and the Otay Project LP and FAA properties to the west. The upper reach of Wolf Canyon runs east west through the middle of this ownership.

The Otay Project LP property comprises 93.3 acres in the western portion of the project site. Birch Road surrounds it to the north, the McMillin Otay Ranch, LLC property to the east, the Otay Land Company property to the south, and future La Media Road to the west. The 51.9-acre FAA property (know as the VORTAC property) is located within the southern portion of this ownership, creating an irregular-shaped parcel. The upper reach of Wolf Canyon, which runs in an east-west direction, also bisects this site. Similar to the McMillin Otay Ranch, LLC parcel, this ownership is characterized by rolling hills and has historically been dry farmed.

Surrounding the project site are other villages of the Otay Ranch GDP including Villages 2, 3 and 4 to the west, and the Eastern Urban Center (EUC) to the east. The Village 6 project, which is currently under construction, is located to the north of the project. A SPA Plan for Villages 2, 3, and 4 is currently being processed at the city. The EUC is designated in the Otay Ranch GPD for development with high density residential and commercial land uses. In addition, SR 125, an Expressway that stretches from La Mesa in the north to Otay Mesa in the south, is approved adjacent to the eastern side of the project site. SR 125 is currently under construction and is expected to be complete in late 2006.

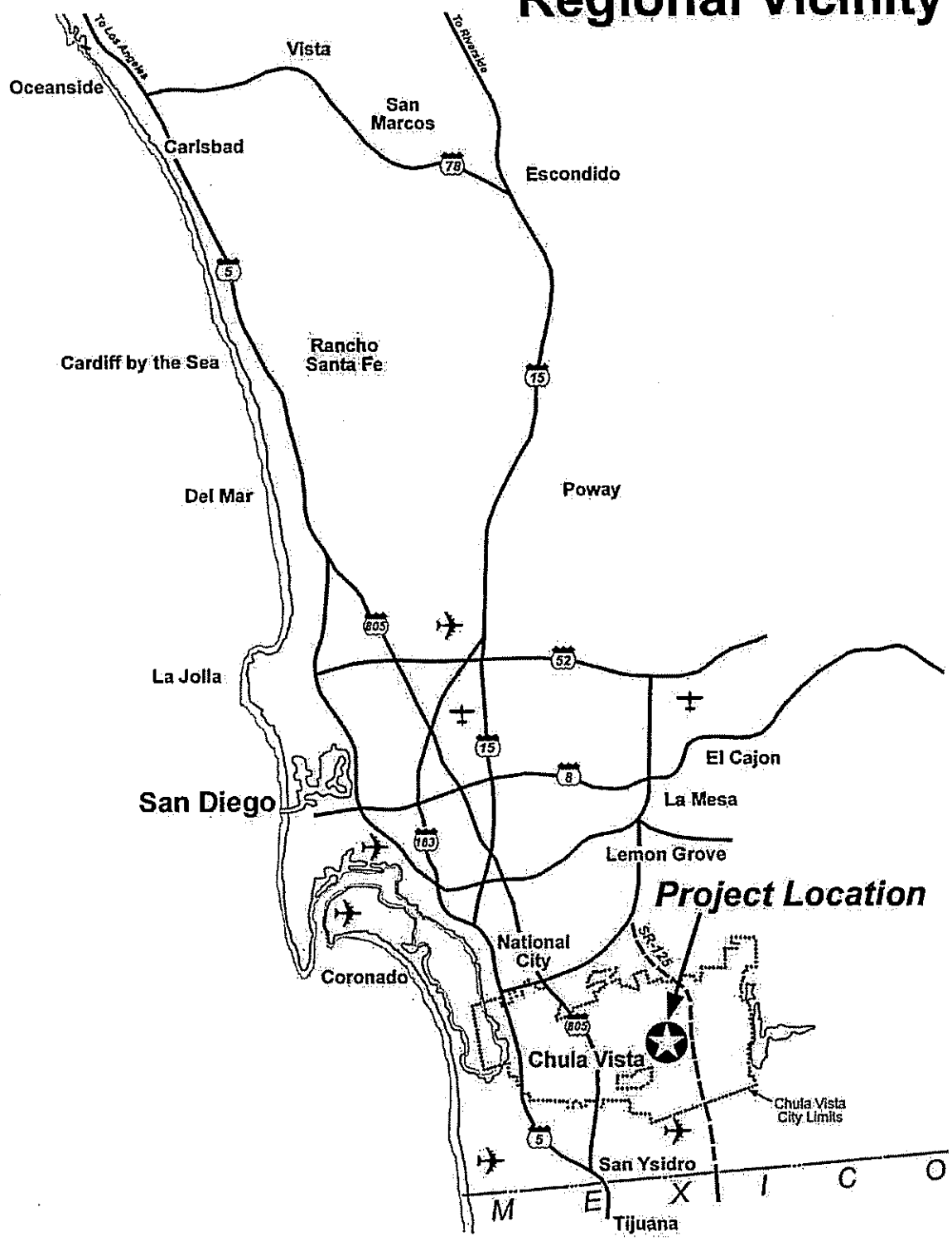
II.5.2.5 Public Facilities Finance Plan Boundaries

Section 19.12.070 of the Municipal Code requires that the City establish the boundaries of the PFFP at the time a SPA Plan or Tentative Map is submitted by the applicant. The boundaries shall be based upon the impact created by the Project on the existing and future need for facilities. The project boundaries will correlate the proposed development project with existing and future development proposed for the area of impact to provide for the economically efficient and timely installation of both onsite and offsite facilities and improvements required by the development. In establishing the boundaries for the PFFP, the City shall be guided by the following considerations:

1. Service areas, drainage, sewer basins, and pressure zones that serve the Project;
2. Extent to which facilities or improvements are in place or available;
3. Ownership of property;
4. Project impact on public facilities relationships, especially the impact on the City's planned major circulation network;
5. Special district service territories;
6. Approved fire, drainage, sewer, or other facilities or improvement master plans.

The boundaries of the PFFP for the Otay Ranch Village 7 SPA project are congruent with the SPA Plan boundaries. Also, the PFFP addresses certain facilities (streets, drainage, sewer, police, fire, etc.) that are impacted beyond the boundaries of the SPA Plan.

Regional Vicinity



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

3/22/04

Exhibit 1

Vicinity Map

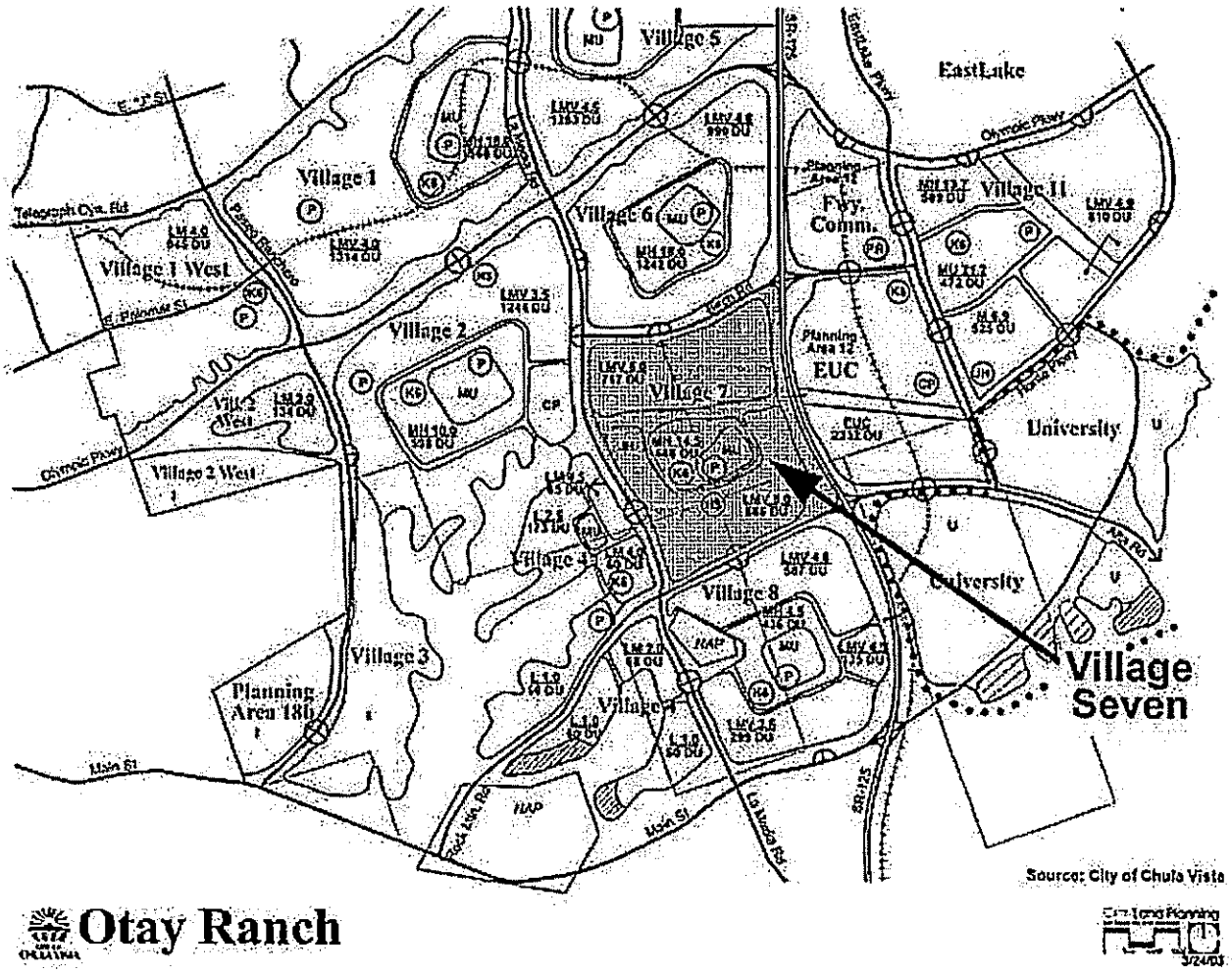


Exhibit 2

II.5.3 LAND USE ASSUMPTIONS

II.5.3.1 Purpose

The purpose of this section is to quantify how the Otay Ranch Village 7 SPA will be analyzed in relationship to all other projects, which are at some stage in the City's development process. The Growth Management Program addressed the issue of development phasing in relationship to location, timing, and fiscal/economic considerations.

Based upon the overall elements to be considered when projecting the phasing of development and policies contained in the Growth Management Program, the City was able to forecast where and when development will take place and produced a 5 year Development Phasing Forecast. Subsequent to the approval of the Growth Management Program, the forecasted development phasing has been updated periodically as facility improvements are made and the capacity for new development becomes available. The current update is dated January, 2004, and is summarized on Table B.2.

The specific factors that affect the development-phasing forecast include the status of development approvals and binding development agreements, and the completion of the construction of State Route 125. These components were reviewed as part of this PFFP in conjunction with the requirement to provide facilities and services, concurrent with the demand created by the Otay Ranch Village 7 to maintain compliance with the threshold standards.

The management of future growth includes increased coordination of activities of the various City departments as well as the Sweetwater Union High School District and the Chula Vista Elementary School District and the Otay Municipal Water District. The development-phasing forecast is a component of the City of Chula Vista's Growth Management Program. The Planning and Building Department provides annual growth forecasts for two time frames: 18 months and a 5-year period. This information enables City departments and the other aforementioned service agencies to assess the probable impacts that growth may have on maintaining compliance with the City's facilities and service Threshold Standards. In addition, with this data City departments and the other service agencies will be able to report potential impacts to the GMOC.

II.5.3.2 Existing Development

As a starting point, the PFFP considers all existing development up to January 2004 as the base condition. This information is based upon City of Chula Vista Planning and Building Department growth management monitoring data. According to this and other data, the population of the City as of January 2004 is estimated at 217,603. This estimate is based on city estimates of growth for 2003 and combined with data from the California Department of Finance (DOF).

For the purposes of projecting facility demands for the Otay Ranch Village 7 the City of Chula Vista utilizes a population coefficient of 3.036 persons per dwelling unit. This factor is used throughout this PFFP to calculate facility demands from approved projects. The coefficient has been confirmed for use in the PFFP by the Planning & Building Department. The same coefficient will be used for calculating the specific Otay Ranch Village 7 facility demands.

II.5.3.3 Development Phasing Forecast

A summary of the latest development-phasing forecast is shown in Table B.1. The table presents an estimate of the amount of development activity anticipated to the year 2008. The number of dwelling units forecasted from 2004 though 2008 is approximately 12,381 dwelling units. It should be noted that these projections are used for analytical purposes only and unless a development agreement or other legal instrument guarantees facility capacity, some projects with varying levels of entitlement may not have committed capacity.

Table B.1
City of Chula Vista Five Year Residential Unit Growth Forecast 2004 Through 2008

Projects	Forecast of Units Finaled 2004 to 2008			Units Remaining After 2008		
	MF	SF	Total	MF	SF	Total
Otay Ranch	4,094	3,746	7,840	2,300	1,700	4,000
Eastlake	926	784	1,710	0	0	0
Rolling Hills Ranch	168	594	762	0	0	0
Bella Lago	0	140	140	0	0	0
San Miguel Ranch	411	518	929	0	0	0
Subtotal	5,599	5,782	11,381	2,300	1,700	4,000
West Chula Vista[4]	900	100	1,000			
Total	**6,499**	**5,882**	**12,381**	**4,565**	**2,653**	**7,218**

Source: City of Chula Vista 24-Month and 5-Year Residential Growth Forecast Years 2004 through 2008, January 2004.

II.5.3.4 Otay Ranch Village 7 Development Summary

The basic land use pattern for Village 7 is that of an urban village, surrounded by prime arterials and an open space buffer augmented by the major open space feature in Wolf Canyon, consistent with the Otay Ranch General Development Plan. The land use pattern implements the village concept with higher intensity uses and residential densities within a village core and decreasing intensity/density away from the core area.

The Otay Ranch Village 7 SPA project is proposed to be constructed in three phases as shown on Exhibit 4. The Otay Ranch Village 7 SPA area consists of five separate ownership parcels with a combined area of approximately 424.4 acres. McMillin Otay Ranch, LLC, owns approximately 180.2 acres, which is most of the eastern one half of Village 7. Otay Project LP owns approximately 93.3 acres, which is most of the western one half of Village 7. In the central western portion of the village, the Federal Government (FAA) owns the 51.9-acre VORTAC site. The southeast corner of Village 7 is approximately 40 acres and owned by the Otay Land Company. The southwest corner is approximately 50 acres and owned by S&MBF. Table B.3 below summarizes the land use and acreage for the Village 7 SPA project. The Site Utilization Plan (Exhibit 3) illustrates the Village 7 land uses.

The Residential land use is proposed as the predominant land use in the Village 7 SPA. The Village 7 SPA allows for a total of 726 single-family dwelling units and 448 multi-family dwelling units. Residential densities set forth by the SPA Plan range from a maximum of

[4] The number of units developed in western Chula Vista has been variable. An estimate of 50 units per year equally divided between multi and single family has been entered as a target.

14.9 dwelling units per acre for multi-family to a minimum of 6.9 dwelling units per acre for single-family uses. Additionally, a minimum of 10 percent of the total dwelling units proposed by the Village 7 SPA would provide housing for low and moderate-income households.

Three phases of development are envisioned for the Otay Ranch Village 7 SPA project. These phases will be completed non-sequentially. The necessary infrastructure is identified in this PFFP to support each phase. The Phasing Plan (Exhibit 4) reflects the anticipated market demand for commercial development. Table B.2 illustrates the vision of the GDP for the ultimate build out of the entire Village 7.

Table B.2
ADOPTED GDP Village 7
Land Use Plan

Use	Dwelling Units				Gross Acreage								Approx. Pop.
	SF	MF	Total	Density	Res.	Park*	CPF	Sch.	C'ml.	Open Space	Art.	Total	
LMV	1,053		1,053	5.0	210.6			75.0				285.6	3,370
MU						9.3	6.3		7.2			22.8	0
MH		448	448	14.5	58.6			10.0				40.9	1,142
OTHER										45.3	17.1	62.4	0
TOTAL	1,053	448	1,501	6.2	241.5	9.3	6.3	85.0	7.2	45.3	17.1	411.7	4,512

* Part of park acreage requirements have been allocated to community parks. Actual park size to be determined by Parks

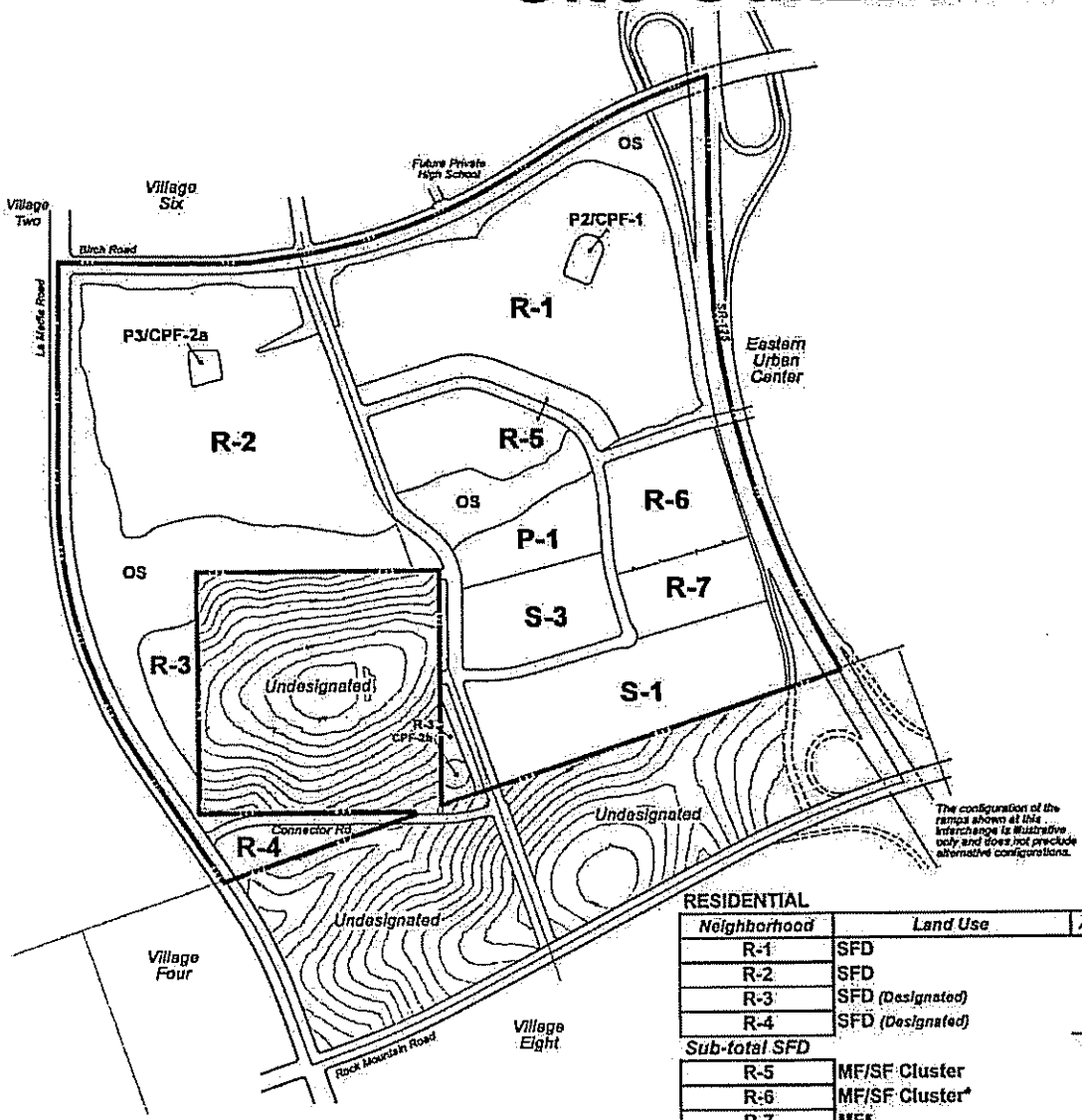
The statistics provided on the Site Utilization Plan (Exhibit 3) and Table B.3, Proposed SPA Village 7 Land Use Plan, are not directly comparable to those in the above GDP table since they do not include the VORTAC site and the Otay Land Company parcel within the current SPA area. The Site Utilization Plan is intended to be statistically consistent with the General Development Plan land use list and statistical summary while reflecting more accurate data. Site Utilization Plan acreages are based on the SPA Plan numbers that were calculated to the nearest tenth acre. These statistics are subject to change once precise engineering calculations have been completed.

Table B.3
Proposed Village 7 SPA
Land Use Plan

Use	Dwelling Units				Gross Acreage								Approx Pop.
	SF	MF	Total	Density	Res	Park	CPF	School	Open Space	Circulation	Undesignated	Total	
LMV	756		756	6.9	109.6							109.6	2295
MH		448	448	11.8	37.9							37.9	1360
OTHER						7.6	2.8	34.5	61.8	62.9*	121.3	276.9	
TOTAL	756	448	1204	8.2	147.5	7.6	2.8	34.5	61.8	62.9*	121.3	424.4	3655

* Includes Secondary Village Entry, Village Promenade, Village Core Promenade and Secondary Village Promenade (@ SR125) underpass.

Site Utilization Plan



RESIDENTIAL

Neighborhood	Land Use	Acres	dulac	DU
R-1	SFD	50.7	6.8	346
R-2	SFD	50.5	7.4	375
R-3	SFD *(Designated)*	5.3	4.2	22
R-4	SFD *(Designated)*	3.1	4.2	13
Sub-total SFD		*109.6*	*6.9*	*756*
R-5	MF/SF Cluster	17.4	7.6	132
R-6	MF/SF Cluster*	12.5	15.4	193
R-7	MF*	8.0	15.4	123
Sub-total MF		*37.9*	*11.8*	*448*
Total Residential		147.5	8.2	1,204

NON-RESIDENTIAL

Neighborhood	Land Use	Acres
P-1	Public Park	7.6 *(7.0 ac net req'd)*
P2/CPF-1	CPF *(Common OS)*	1.1
P3/CPF-2a	CPF *(Common OS)*	0.7
CPF-2b	CPF	1.0
S-1	High School *(Designated)*	23.4
S-3	Elem. School	11.1
OS	Open Space *(Designated)*	47.8
Undesignated	Undesignated Uses	121.3
Cir.	Circulation	62.9
Total Non-Residential		276.9
VILLAGE TOTAL		424.4

** Refer to SPA Text for provisions to blend these two parcels.*

CITY OF CHULA VISTA

Vista Verde

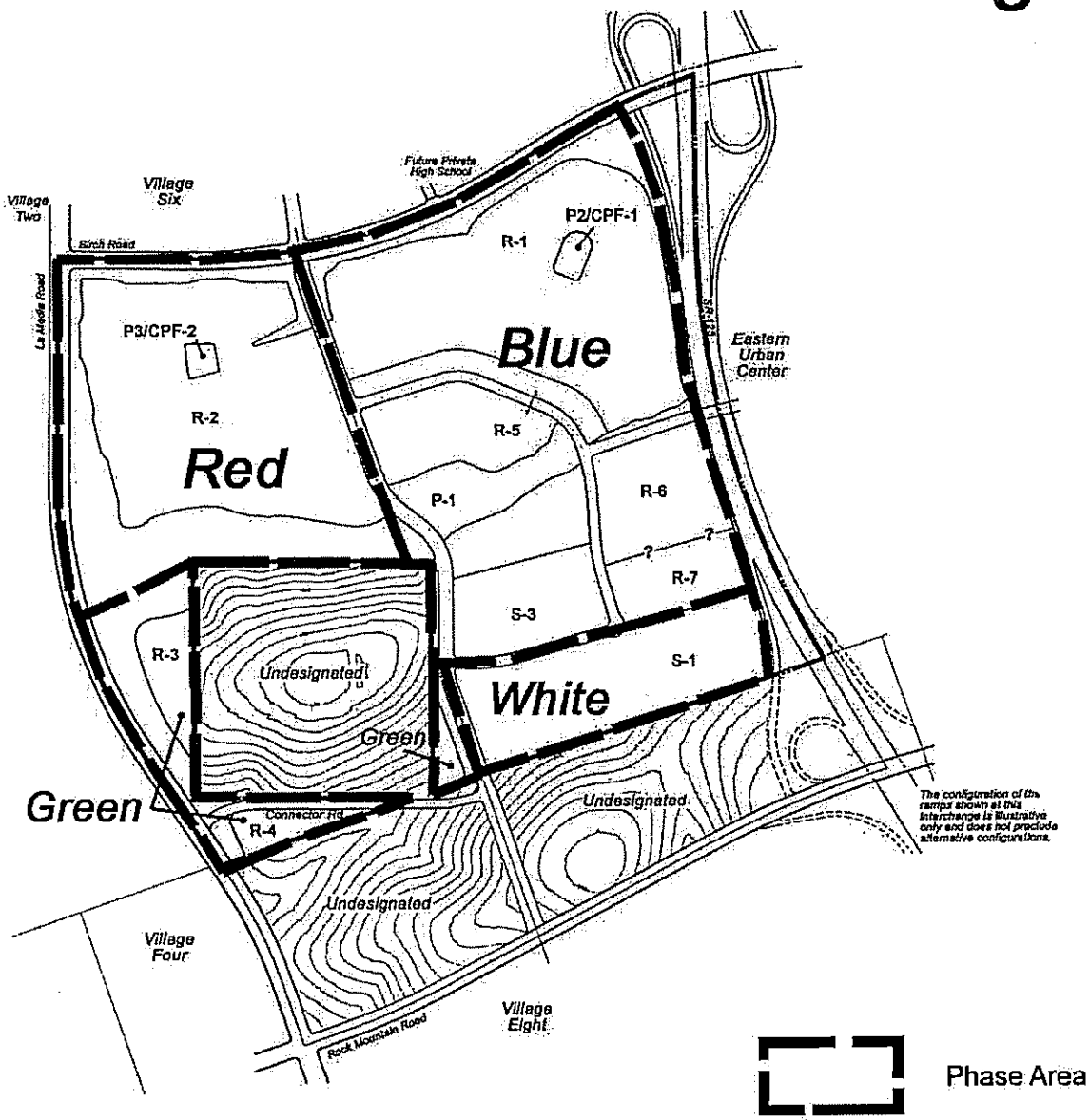
Village Seven - Otay Ranch

Cinli Land Planning

8/24/04

Exhibit 3

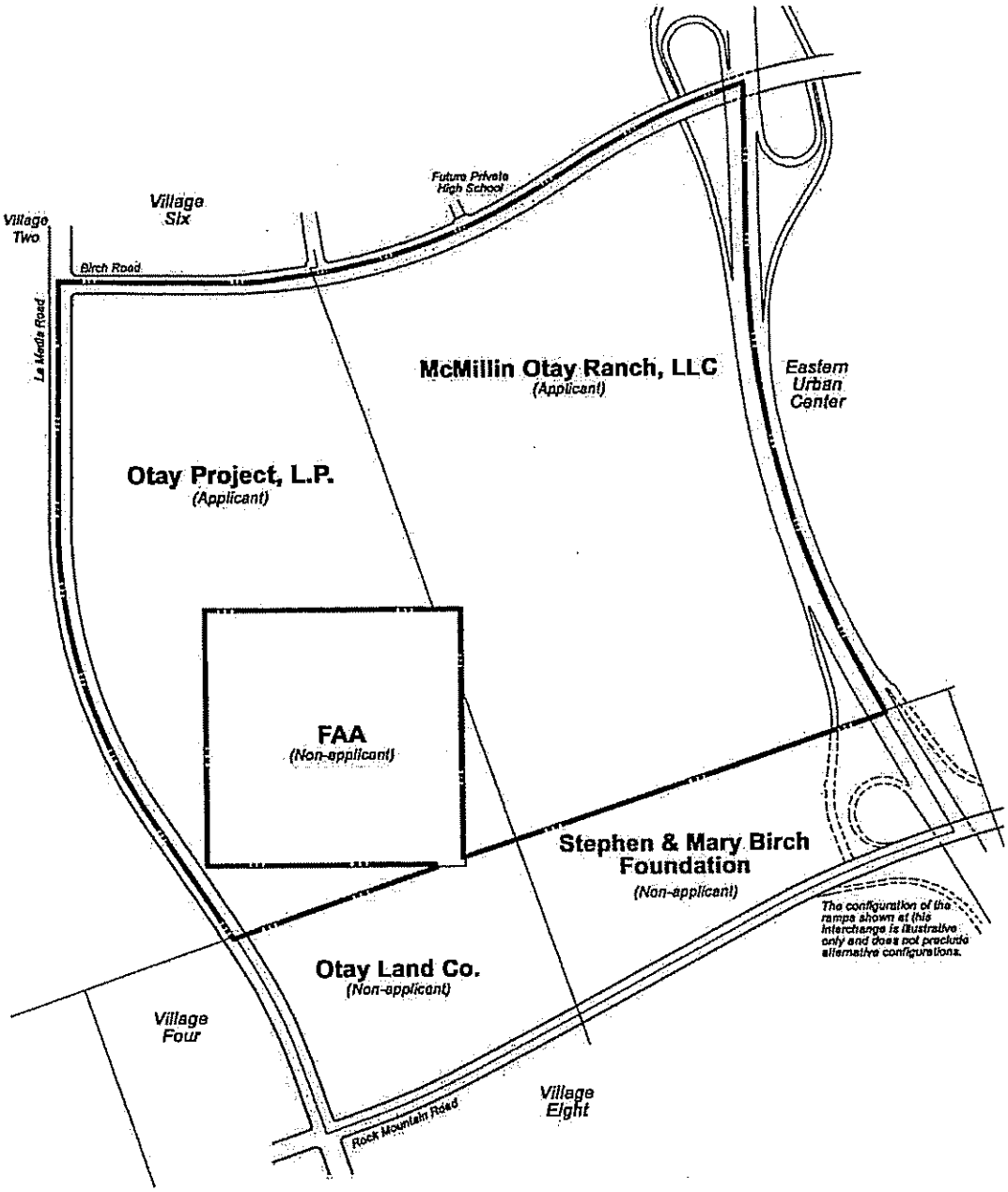
Phasing Plan



Note: Refer to the Village Seven PFFP for Phasing of Public Facilities and sub-phases.

Exhibit 4

Ownerships



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

5/24/0

Exhibit 5

II.5.3.5 DEVELOPMENT PHASING:

The development of the project will be completed in multiple, non-sequential phases to ensure construction of necessary infrastructure and amenities for each phase as the project progresses. Undesignated acres are within the Village 7 planning area but are not included in the Village 7 SPA Plan. The Phasing Plan (Exhibit 4) reflects anticipated market demand for a variety of residential and non-residential development. Table B.4 summarizes the Phasing Plan. It also reflects the anticipated ownership patterns within the Village.

Table B.4
Anticipated Development Phasing For Village 7 SPA
Table B.4

Neighborhood	Land Use	White		Blue		Red		Green		Undesignated Uses	Total Acres	DU Totals
		Ac.	DUs	Ac.	DUs	Ac.	DUs	Ac.	DUs			
Residential												
R-1	SFD			50.7	346						50.7	346
R-2	SFD					50.5	375				50.5	375
R-3	SFD							5.3	22		5.3	22
R-4	SFD							3.1	13		3.1	13
Subtotal				**50.7**	**346**	**50.5**	**375**	**8.4**	**35**		**109.6**	**756**
R-5	MF			17.4	132						17.4	132
R-6	MF			12.5	193						12.5	193
R-7	MF			8.0	123						8.0	123
Subtotal				**37.9**	**448**	**0.0**					**37.9**	**448**
CPF-1	CPF			1.1							1.1	
CPF-2a	CPF					0.7					0.7	
CPF-2b	CPF							1.0			1.0	
S-1	High School	23.4									23.4	
S-3	Elem. Sch			11.1							11.1	
P-1	Public Park			7.6							7.6	
Circulation		2.8		36.2		23.9		3.1			62.9	
OS				18.2		22.6		7.0			47.8	
Undesignated Uses										121.3	121.3	
Subtotal		**26.2**		**74.2**		**47.2**		**11.1**		**121.3**	**276.9**	
Total		**26.2**		**162.8**	**794**	**97.7**	**375**	**19.5**	**35**	**121.3**	**424.4**	**1204**

II.5.3.6 Equivalent Dwelling Units

A. Transportation

The current Transportation Development Impact Fees (TDIF) Ordinance sets forth the calculation of development impact fees for the Eastern Territories transportation improvements and for Interim Pre-SR-125 facilities.

The TDIF was last updated by City Council Ordinance 2887 on November 19, 2002. This amount is subject to change as it is amended from time to time. The City's Master Fee Schedule considers single Family Detached Dwellings at a density of less than eight Dwelling Units (DU) per gross acre Low Density Residential Developments. The current TDIF is $8,290 per Equivalent Dwelling Unit (EDU). Low Density Residential (<8 DU/gross acre) are charged one EDU/DU or $8,290/DU. Single-Family Attached Dwellings at a density of greater than eight up to twenty DUs/gross acre are considered Medium Density Residential Developments. Medium Density Residential (>8-20 DU/gross acre) are charged .8 EDU/DU or $6,632.00/DU. Multi-Family Dwellings at a density of greater than twenty DUs per gross acre are considered High Density Residential Developments. High Density Residential (>20 DU/gross acre) is charged .6 EDU/DU or $4,974/DU. General Commercial shall be charged at the rate of $174,090.00 per acre of land. Industrial shall be charged at the rate of $66,320 per acre of land. The total number of estimated commercial and industrial acres and the total number of dwelling units by phase for the Otay Ranch Village 7 SPA Plan is presented in Table B.5.

Table B.5
Otay Ranch Village 7
Dwelling Unit's & Equivalent Dwelling Unit's (EDU's)
by Phase for Transportation Facilities and SR-125 Facilities

Development Phase	Residential					
	Low Density Dwelling Units	Equivalent Dwelling Units	Medium Density Dwelling Units	Equivalent Dwelling Units	Total Dwelling Units	Total Equivalent Dwelling Units
White	0	0	0	0	0	0
Blue	346	346	448	358	794	704
Red	375	375	0	0	375	375
Green	35	35	0	0	35	35
Total	756	756	448	358	1,204	1,114

The current SR-125 Development Impact Fee is $820 per Equivalent Dwelling Unit (EDU), which may be amended from time to time. Each new single-family detached dwelling shall be considered one EDU for the purposes of this fee. A single-family attached dwelling (duplexes and condos) shall be 0.8 EDU's or $6,632/EDU. A unit within a multi-family dwelling (apartments) shall be considered 0.6 EDU's or $492/EDU. General Commercial shall be charged at the rate of $20,500.00 per acre of land. Industrial shall be charged at the rate of $16,400.00 per acre of land. The total number of estimated commercial acres and the total number of dwelling units by phase for the Otay Ranch Village 7 SPA Plan is presented in Table B.5.

B. Public Facilities

The Public Facilities Development Impact Fee (PFDIF) was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2886 and 2887. The current fee for single family residential development is $5,048/unit, multi-family residential is $4,726/unit, commercial (including office) development is $20,764/acre and industrial development is $3,848/acre. This amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the Otay Ranch Village 7 SPA project. The calculations of the PFDIF due for each facility are addressed in the following sections of this report. Table B.6 provides a break down of what facilities the fee funds.

Table B.6
Public Facilities DIF Fee Components

Component	Single Family /DU	Multi-Family /DU	Commercial /Acre	Industrial /Acre
Civic Center	$1,089	$976	$4,245	$711
Police	$804	$1,190	$10,356	$1,070
Corporation Yard	$706	$472	$3,266	$1,361
Libraries	$753	$719	$0	$0
Fire Suppression	$450	$448	$2,245	$597
GIS, Computers, Telecommunications & Records Management	$28	$26	$111	$18
Administration	$139	$124	$541	$91
Recreation	$1,079	$771	$0	$0
Total per Residential Unit	**$5,048**	**$4,726**		
Total per Com'l/Ind. Acre			**$20,764**	**$3,848**

II.5.4 FACILITY ANALYSIS

This portion of the PFFP contains 13 separate subsections for each facility addressed by this report. Of the 13 facilities, 11 have adopted threshold standards; the Civic Center and Corporation Yard do not. Table B.7 highlights the level of analysis for each facility.

Table B.7
Level of Analysis

Facility	Citywide	East of I-805	Service Area Sub-basin	Special District
Traffic	✓	✓		
Police	✓			
Fire/EMS	✓		✓	
Schools				✓
Libraries	✓			
Parks, Recreation & Open Space		✓		
Water			✓	✓
Sewer			✓	
Drainage			✓	
Air Quality	✓			
Civic Center[5]	✓			
Corp. Yard	✓			
Fiscal	✓		✓	

Each subsection analyzes the impact of the Otay Ranch Village 7 SPA based upon the adopted Quality of Life Standards. The analysis is based upon the specific goal, objective, threshold standard and implementation measures. The proposed SPA plan is used to determine facility adequacy and is referenced within the facility section.

Each analysis is based upon the specific project processing requirements for that facility, as adopted in the Growth Management Program. These indicate the requirements for evaluating the project consistency with the threshold ordinance at various stages (General Development Plan, SPA Plan/Public Facilities Finance Plan, Tentative Map, Final Map and Building Permit) in the development review process.

A service analysis section is included which identifies the service provided by each facility. The existing plus forecasted demands for the specific facility are identified in the subsection based upon the adopted threshold standard.

Each facility subsection contains an adequacy analysis followed by a detailed discussion indicating how the facility is to be financed. The adequacy analysis provides a determination of whether or not the threshold standard is being met and the finance section provides a determination if funds are available to guarantee the improvement. If the threshold standard is not being met, mitigation is recommended in the Threshold Compliance and Recommendations subsection which proposes the appropriate conditions or mitigation to bring the facility into conformance with the threshold standard.

[5] Specific Threshold Standards have not been developed for these facilities

II.5.4.1 TRAFFIC

II.5.4.1.1 GMOC Threshold Standard

1. Citywide: Maintain Level of Service (LOS) "C" or better, as measured by observed average travel speed on all signalized arterial segments except that during peak hours a LOS of "D" can occur for no more than any two hours of the day.
2. West of Interstate 805: Those signalized intersections which do not meet the standard above may continue to operate at their current LOS, but shall not worsen.

II.5.4.1.2 GMOC Level of Service (LOS) Definition

Six levels of services (LOS) have been defined varying from A (free flow) to F (severe congestion). A general definition of LOS is summarized in Table C.4. The City of Chula Vista's GMOC uses an LOS definition for signalized arterial segments as a method for evaluating and comparing traffic conditions. Arterial LOS measurements consider average weekday peak hours and exclude seasonal and special circumstance variations. The following table summarizes the GMOC Traffic Quality of Life Threshold Standard for signalized arterial streets:

Table C.1
GMOC LOS Definition

Level of Service	Average Travel Speed (mph)		
	Class 1	Class 2	Class 3
A	> 35	> 30	> 25
B	> 28	> 24	> 19
C	> 22	> 18	> 13
D	> 17	> 14	> 9
E	> 13	> 10	> 7
F	< 13	< 10	< 7

SOURCE: Highway Capacity Manual, 1994.

The arterial streets are divided into the following three classifications:

(1) Class I arterials are roadways where free flow traffic speeds range between 35 mph and 45 mph and the number of signalized intersections per mile is less than four (4). There is no parking and there is generally no access to abutting property.

(2) Class II arterials are roadways where free flow traffic speeds range between 30 mph and 35 mph, the number of signalized intersections per mile range between four (4) and eight (8). There is some parking and access to abutting properties is limited.

(3) Class III arterials are roadways where free flow traffic speeds range between 25 mph and 35 mph, and the number of signalized intersections per mile are closely spaced. There is substantial parking and access to abutting property is unrestricted.

II.5.4.1.3 Freeway Segment LOS and Thresholds

The analysis of freeway segment LOS is based on the procedure developed by Caltrans District 11, which is based on methods described in the *1994 Highway Capacity Manual.* The procedure involves comparing the peak hour volume of the mainline segment to the

theoretical capacity of the roadway (V/C). Directional and truck factors are also used to calculate the future freeway volumes. V/C ratios are then compared to the V/C ranges shown on the tables to determine the LOS for each segment. Caltrans recommends LOS E or better as an acceptable threshold for determining impacts on the regional freeway system. LOS E is used as the threshold of significance because a decrease from this level of service to LOS F determines the need to develop a freeway Deficiency Plan.

Table C.2
Caltrans District 11 Freeway Segment Level of Service Definitions

LOS	V/C	Congestion/Delay	Traffic Description
Used for freeways, expressways and conventional highways			
A	<0.41	None	Free flow
B	0.42-0.62	None	Free to stable flow, light to moderate volumes.
C	0.63-0.80	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted
D	0.81-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
E	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
Used for conventional highways			
F	<1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 sec./vehicle
Used for freeways and expressways			
F(0)	1.01-1.25	Considerable 0-1 hr delay	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
F(l)	1.26-1.35	Severe 1-2 hr delay	Very heavy congestion, very long queues.
F(2)	1.36-1.45	Very Severe 2-3 hr delay	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
F(3)	>1.46	Extremely Severe 3+ hours of delay	Gridlock

SOURCE: Caltrans 1992

Caltrans LOS Definition

The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and the motorist's and/or passengers' perception of operations. A LOS definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS for freeway segments can generally be categorized per Table C.2.

II.5.4.1.4 Segment LOS Standards and Thresholds

This section presents the LOS standards and thresholds utilized by the City of Chula Vista to analyze roadway segment performance. Table C.3 presents the City of Chula Vista roadway segment capacity and level of service standards for arterial roadways.

Table C.3 Chula Vista Segment Capacity and LOS Standards Average Daily Traffic Volumes					
Functional Classification	Level of Service				
	A	B	C	D	E
Expressway (6-lane)	52,500	61,300	70,000	78,800	87,500
Prime Arterial (6-lane)	37,500	43,800	50,000	56,300	62,500
Major Street (6-lane)	30,000	35,000	40,000	45,000	50,000
Major Street (4-lane)	22,500	26,300	30,000	33,800	37,500
Class I Collector (4-lane)	16,500	19,300	22,000	24,800	27,500
Class II Collector (3-lane)	9,000	10,500	12,000	13,500	15,000
Class III Collector (2-lane)	5,600	6,600	7,500	8,400	9,400

SOURCE: City of Chula Vista Street Design Standards Policy (July 1991)

Table C.4 Street Segment Level of Service Threshold Descriptions	
LOS	Description
A	Describes primarily free-flow operations. Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.
B	Also represents reasonably free-flow, and speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.
C	Provides for flow with speeds still at or near the free-flow speed of the roadway. Freedom to maneuver within the traffic stream is noticeably restricted at LOS C, and lane changes require more vigilance on the part of the driver. The driver now experiences a noticeable increase in tension because of the additional vigilance required for safe operation.
D	The level at which speeds begin to decline slightly with increasing flows. In this range, density begins to deteriorate somewhat more quickly with increasing flows. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.
E	Describes operation at capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream. At capacity, the traffic stream has no ability to dissipate even the most minor disruptions, and any incident can be expected to produce a serious breakdown with extensive queuing.
F	Describes breakdowns in vehicular flow. Such conditions generally exist within queues forming behind breakdown points such as traffic incidents and recurring points of congestion. Whenever LOS F conditions exist, there is a potential for them to extend upstream for significant distances.

SOURCE: Highway Capacity Manual, 1994.

The analysis of street segment LOS is based on the functional classification of the roadway, the maximum desired level of service capacity, roadway geometries, and the existing or forecasted average daily traffic (ADT) volume. City of Chula Vista LOS D were utilized to determine if a segment would operate over or under capacity. Table C.3, Street Segment Level of Service Threshold Descriptions, is a description of the various street segment LOS thresholds.

II.5.4.1.5 Intersection LOS Standards and Threshold

The analysis of existing and projected peak hour intersection performance was conducted using the methodology documented in the *1994 Highway Capacity Manual (Transportation Research Board Special Report 209)*. LOS C or better indicates acceptable operating conditions for signalized intersections during AM and/or PM peak hour conditions. Those intersections found to have LOS E or F under an analysis of future conditions are considered to have significant impacts and will require mitigation.

II.5.4.1.5.1 Signalized Intersection Analysis

The measure of effectiveness for intersection operations is level of service. In the 2000 Highway Capacity Manual (HCM), LOS for signalized intersections is defined in terms of delay. The LOS analysis results in seconds of delay expressed in terms of letters A through F. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Table C.5 is a description of the various intersection LOS thresholds.

Table C.-5
Intersection LOS Threshold Descriptions

Level of Service	Description
A	LOS A describes operations with very low delay, (i.e. less than 10.0 seconds per vehicle). This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	LOS B describes operations with delay in the range 10.1 seconds and 20.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
C	LOS C describes operations with delay in the range 20.1 seconds and 35.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	LOS D describes operations with delay in the range 35.1 seconds and 55.0 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or higher v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are more frequent.
E	LOS E describes operations with delay in the range of 55.1 seconds to 80.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.
F	LOS F describes operations with delay in excess of over 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

SOURCE: Highway Capacity Manual, 2000.

II.5.4.1.5.2 Unsignalized Intersection Analysis

For unsignalized intersections, level of service is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. Table C.6 below depicts the criteria, which are based on the average control delay for any particular minor movement.

Table C.6 Level of Service Thresholds for Unsignalized Intersections		
Average Control Delay Per Vehicle (Seconds/Vehicle)	**Level of Service**	**Expected Delay to Minor Street Traffic**
0.0 ≤ 10.0	A	Little or no delay
10.1 to 15.0	B	Short traffic delays
15.1 to 25.0	C	Average traffic delay
25.1 to 35.0	D	Long traffic delays
35.1 to 50.0	E	Very long traffic delays
≥ 50.0	F	Severe congestion

Source: Highway Capacity Manual, 2000.

LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This LOS is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form of side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

II.5.4.1.6 Chula Vista Traffic Monitoring Program (TMP)

The TMP stipulates that the existing level of service on arterial segments in Chula Vista be maintained at LOS C or better, with the exception that LOS D is acceptable on signalized arterial segments for two hours per day maximum. The Public Works Department of the City of Chula Vista evaluates LOS for arterial roadway segments utilizing the HCM methodology, Chapter 11, based on average travel speeds, to adhere to the Growth Management traffic threshold standards. The adopted Growth Management Ordinance mandates the project's participation in the traffic section as it relates to the City's annual review of network performance. All major circulation element facilities within the City of Chula Vista are subject to review. Those facilities where traffic volumes have increased by at least 10% since the last review or have experienced a significant change in conditions or are at the upper fringes of LOS C approaching LOS D are included in the annual traffic study, which is reviewed for conformance by the Growth Management Oversight Committee (GMOC). The City of Chula Vista requires the application of these guidelines to the future development of the Otay Ranch Village 7 SPA Project.

Utilization of the roadway and intersection performance standards presented in this chapter and the required adherence to the Growth Management traffic threshold standards will result in full conformance with the requirements of the City of Chula Vista.

II.5.4.1.7 Service Analysis

The Engineering Division of Chula Vista's General Services Department is responsible for ensuring that traffic improvements are provided to maintain a safe and efficient street system within the City. Through project review, City staff ensures the timely provision of adequate local circulation system capacity in response to planned development while maintaining acceptable LOS. To accomplish their review the Public Works Department has adopted guidelines for Traffic Impact Studies (January, 2001). These guidelines ensure uniformity in the preparation of traffic studies. Further, the guidelines assist in maintaining acceptable standards for planned new roadway segments and signalized intersections at the build out of the City's General Plan and Circulation Element. The Circulation Element of the General Plan serves as the overall facility master plan.

In conformance with requirements of the Congestion Management Program (CMP), an analysis of CMP freeways and arterials is required for any project that generates 2,400 daily, or 200 peak hour trips (As detailed in the 1991 Congestion Management Program). This analysis, *Traffic Impact Analysis for Otay Ranch Village 7, May 20, 2004, by Linscott, Law and Greenspan* (LL&G) was prepared for the City of Chula Vista. This document is referred to as the "LL&G Traffic Analysis" throughout this PFFP. The LL&G Traffic Analysis addresses both existing and planned circulation system conditions, details necessary improvements and outlines the incremental circulation improvements based upon planned project phasing. Further, the Traffic Impact Analysis also includes an evaluation of impacts that are considered significant as a result of project development.

Based on the distribution of project traffic as determined by the Select Zone Assignment (SZA) and the requirements of the CMP, the project study area was established. The study area is bound by Telegraph Canyon Road/Otay Lakes Road to the north, Hunte Parkway to the east. Main Street to the south and Interstate 805 (I-805) to the West. All signalized intersections, freeway interchanges and arterial segments within this area were analyzed under various scenarios by LL&G (see LL&G Traffic Analysis for scenario details). The proposed circulation network (described later in this section) was analyzed in the GPA currently being completed. The project access intersections on Birch Road, rock Mountain and La Media were also analyzed. The following Circulation Element intersections and segments analyzed in the LL&G Traffic Analysis report are listed below:

A. **Intersections:**

1. Telegraph Cyn Rd/I-805 SB Ramps
2. Telegraph Cyn Rd/I-805 NB Ramps
3. Telegraph Cyn Rd/Oleander Ave.
4. Telegraph Cyn Rd/Medical Center Dr
5. Telegraph Cyn Rd/Paseo Ranchero/Heritage Rd.
6. Telegraph Cyn Rd/Otay Lakes Rd./La Media Rd.
7. Otay Lakes Rd/SR-125 SB Ramps*
8. Otay Lakes Rd/SR-125 NB Ramps*
9. Otay Lakes Rd/Eastlake Parkway
10. Otay Lakes Rd/Hunte Parkway
11. Palomar Street/Oleander Ave.
12. Palomar Street/Brandywine Av.
13. Palomar Street/Heritage Road
14. Palomar Street/La Media Road
15. Olympic Parkway/I-805 SB Ramps
16. Olympic Parkway/I-805 NB Ramps
17. Olympic Parkway/Oleander Ave.
18. Olympic Parkway/Brandywine Ave.
19. Olympic Parkway/Heritage Rd.
20. Olympic Parkway/La Media Rd.
21. Olympic Parkway/Palomar Street
22. Olympic Parkway/SR-125 SB Ramps*
23. Olympic Parkway/SR-125 NB Ramps*
24. Olympic Parkway/Eastlake Parkway
25. Olympic Parkway/Hunte Parkway
26. Main Street/I-805 SB Ramps
27. Main Street/I-805 NB Ramps
28. Main Street/Oleander Avenue

29. Main Street/Brandywine Avenue
30. Birch Road/Heritage Road*
31. Birch Road/La Media Road*
32. Birch Road/SR-125/SB Ramps*
33. Birch Road/ SR-125/NB Ramps*
34. Birch Road/Eastlake Parkway*
35. Rock Mountain Road/La Media Rd.
36. Rock Mountain Road/SR-125 SB Ramps*
37. Rock Mountain Road/SR-125 NB Ramps*
38- Hunte Parkway/Eastlake Parkway
39. Heritage Road/Main St.*
40. Rock Mountain Road/Main St.*
41. Main Street/La Media Rd*
42. Main Street SR-125 SB Ramps*
43. Main Street SR-125 NB Ramps*

* Future Intersections

B. Segments

- **Telegraph Canyon Road**

- I-805 to Oleander Ave.
- Oleander Ave. to Medical Center Dr.
- Medical Center Dr. to Paseo Ranchero/Heritage Rd.
- Paseo Ranchero/Heritage Rd. to Otay Lakes Rd.

- **Otay Lakes Road**

- North of Telegraph Canyon Rd.
- La Media Rd. to SR-125
- SR-125 to Eastlake Parkway
- Eastlake Parkway to Lane Ave.

- **Palomar Street**

- I-805 to Oleander Ave.
- Oleander Ave. to Medical Center Dr.
- Medical Center Dr. to Heritage Rd.
- Heritage Rd. to La Media Rd.
- La Media Rd. to Olympic Parkway

- **Olympic Parkway**

- I-805 to Medical Center Dr.
- Medical Center Dr. to Heritage Rd.
- Heritage Rd. to La Media Rd.
- La Media Rd. to Palomar Street
- Palomar Street to Eastlake Parkway
- Eastlake Parkway to Hunte Parkway

- **Birch Road**

- La Media Rd. to SR-125
- SR-125 to Eastlake Parkway

- **Rock Mountain Road**

- Rock Mountain to La Media Rd.
- La Media Rd. to SR-125
- SR-125 to Eastlake Parkway

- **Main Street**

- I-805 to Oleander Ave.
- Oleander Ave. to Brandywine Ave.
- Brandywine Ave. to Heritage Rd.
- Heritage Rd. to Rock Mountain Rd.
- Rock Mountain Rd. to La Media Rd.
- La Media Rd. to SR-125 SB Ramps

- **Oleander Avenue**

- Telegraph Canyon Rd. to Palomar Street
- Palomar Street to Olympic Parkway
- Olympic Parkway to Main Street

- **Medical Center Drive**

- Telegraph Canyon Rd. to Palomar Street

- **Brandywine Avenue**

- Palomar Street to Olympic Parkway
- Olympic Parkway to Main Street

- **Paseo Ranchero**

- North of Telegraph Canyon Rd.
- Telegraph Canyon Rd. To Palomar Street
- Palomar Street to Olympic Parkway
- Olympic Parkway to Birch Rd.
- Birch Rd. to Main Street

- **La Media Road**

- Telegraph Canyon Rd. to Palomar Street
- Palomar Street to Olympic Parkway
- Olympic Parkway to Birch Rd.
- Birch Rd. to Rock Mountain Rd.
- Rock Mountain Rd. to Main Street

- **Eastlake Parkway**

- Fenton Street to Otay Lakes Rd.
- Otay Lakes Rd. to Olympic Parkway
- Olympic Parkway to Birch Rd.
- Birch Rd. to Rock Mountain Rd.

- **Hunte Parkway**

- Otay Lakes Rd. to Clubhouse Dr.
- Clubhouse Dr. to Olympic Parkway
- Olympic Parkway to Eastlake Parkway

C. Traffic Analysis

Three alternate land use plans are under consideration by the City of Chula Vista as part of the 2020 General Plan Update (GPU) for Villages 2, 3, 4, 7, 8 and 9. Adoption of the General Plan Update is anticipated prior to the approval of the Village Two SPA Plan. The Village Two proposed project is contained in GPU Alternative 2, which also contains the most intensive residential densities of the three alternatives. Therefore, the most intensive land uses proposed in General Plan Update Alternative 2 was included by LL&G in their analysis to insure the worst-case scenario is analyzed. The other GPU plans in Alternatives 1 and 3 are less intense and were not included in the LL&G Traffic Analysis.

The LL&G Traffic Analysis considered the Adopted and Proposed Circulation Elements. In the adopted circulation element, Main Street extends east to SR 125, with an interchange at SR 125. Rock Mountain Road intersects Main Street between Heritage Road and La Media Road. In the proposed Circulation Element, Main Street terminates at Heritage Road. The Main Street/SR 125 interchange will no longer be built. Rock Mountain Road is the east leg of the Heritage Road/Main Street intersection and La Media Road will terminate in Village 8.

A total of 10 Scenarios were analyzed in the LL&G Traffic Analysis, which have different assumptions concerning the study area, land use and roadway network. A detailed description of each scenario is provided in the LL&G Traffic Analysis.

D. SANDAG Traffic Modeling

The basis of the LL&G Traffic Analysis is the Series 10.0, 2030 City/County Forecast Traffic Model, which is produced by the San Diego Association of Governments (SANDAG). Linscott, Law & Greenspan worked with the City of Chula Vista and SANDAG to input the proper land use and network designations into the model for the 10 study scenarios. Details of each study scenario is provided in the LL&G Traffic Analysis.

For each of the study scenarios, the model was run with the appropriate land use, City of Chula Vista Circulation Element and the planned SR 125 assumptions for the entire study area. The Village 7 SPA land uses were coded into the Traffic Model exactly as proposed or adopted as appropriate. After the proper land use intensities and network configurations were entered into the model for each study scenario, the model was run. The SANDAG model outputs Average Daily Traffic volumes (ADTs) on all Circulation Element street segments.

The SANDAG model volumes for each scenario were used exactly as indicated in the output plot with two exceptions. The volumes on Telegraph Canyon Road between I-805 and Heritage Road for the Year 2010 and beyond appeared unusually high as compared to parallel east/west routes East "H" Street and Olympic Parkway. While volumes on Telegraph Canyon Road were in the high 60,000's, volumes on East "H" Street and Olympic Parkway were in the 40,000's. This is not realistic since most project traffic and other eastern territories traffic is in no way, forced to use Telegraph Canyon Road. Past modeling has shown a more even distribution among the three (3) east/west facilities. Therefore about 15% of the Telegraph Canyon Road traffic was shifted to East "H" Street and Olympic Parkway. This percentage shift results in a relatively equitable distribution among the three principal east/west routes. It should be noted that the total traffic on the corridor that includes East "H" Street, Telegraph Canyon Road and Olympic Parkway was not reduced at all. It was only reallocated.

Similarly, the volumes on Otay Lakes Road between SR 125 and Eastlake Parkway were extremely high (in the 80,000's), while parallel volumes on East "H" Street and Olympic Parkway were in the 30,000's and 40,000's. This is not realistic since traffic will generally flow to the area of least resistance. Therefore, the ADT on Otay Lakes Road between SR 125 and Eastlake Parkway was reduced by about 25% and this traffic was shifted to East "H" Street and Olympic Parkway. This percentage shift results in a relatively equitable distribution among the three principal east/west routes. Again, the overall traffic was not reduced in any way.

E. GMOC Analysis

Analysis of roadway segments under near-term conditions (Years 0-4) is conducted using the methodology described in the most recent version of the Highway Capacity Manual (HCM), Chapter 11 (Arterial Streets), which determines segment level of service based on speed. Classification of facilities and definition of segment lengths should be consistent with the City's current Growth Management Traffic Monitoring Program. The Threshold Standard for these arterial analyses requires the maintaining of LOS 'C' or better as measured by average travel speeds except that LOS 'D' can occur for no more

than any two hours of the day. Thus, if LOS 'D' condition is determined for any period of two (2) hours, additional analysis may be required along these high volume segments based on direction provided by the City Engineer.

For planned arterial facilities that are not currently included in the current Traffic Monitoring Program, the definition of segment length and facility classification will be based on direction provided by the City Engineer.

A near-term analysis of Telegraph Canyon Road arterial segments was conducted by LL&G based on the City of Chula Vista's GMOC Traffic Monitoring Program (TMP) methodology (see Table C.7). Only this segment was analyzed because the City of Chula Vista's significance criteria dictates that if planning analysis (v/c) indicates LOS D, E or F, the GMOC method shall be utilized in the short-term (0-4 year horizon). No studies were done on Olympic Parkway since a major portion of Olympic Parkway has just been constructed and no historical data is available.

Table C.7
Telegraph Canyon Road (Class II)
Existing TMP Speeds And LOS Conditions

Time And Direction	I-805 to Paseo Ranchero		Paseo Ranchero to Otay Lakes Road	
	SPEED	LOS	SPEED	LOS
AM Westbound	29.4	B	40.4	A
PM Eastbound	28.7	B	36.0	A

Source: City of Chula Vista TMP Data, 2004.

II.5.4.1.8 Project Processing Requirements

The PFFP is required by the Growth Management Program to address the following issues for the Traffic Facilities:

A. Identify onsite and offsite impacts and improvements by phase of development.

B. Provide cost estimates for all improvements.

II.5.4.1.9 Existing Conditions

This section summarizes the operation of the existing transportation network in the project study area for the key freeway segments, street segments, and intersections.

Following are brief descriptions of the existing streets in the project area.

A. <u>Freeway Segments</u>

I-805 is a north-south freeway, which originates in South County and terminates at its connection with the I-5 Freeway near Del Mar, California. Local interchanges in the project vicinity are at Olympic Parkway, Telegraph Canyon Road, and East H Street. I-805 is generally an eight-lane freeway between I-805 and SR-54 with auxiliary lanes present between some interchanges. LL&G determined that all study area freeway mainline segments are calculated to currently operate at LOS D or better in both northbound and southbound directions in the AM and PM peak hours.

B. Existing and Planned City Street System

The following provides a brief description of the existing and planned street system in the vicinity of the project area. This area roughly encompasses the Otay Ranch and adjacent areas between I-805 to the west, lower Otay Reservoir to the east, almost to East H Street on the north and Main Street to the south (see Exhibit 6).

- **Telegraph Canyon Road/Otay Lakes Road**
  Telegraph Canyon Road/Otay Lakes Road provides east-west access though the northern portions of the study area. Telegraph Canyon Road/Otay Lakes Road is classified as a Six-Lane Major west of Paseo del Rey, and as a Six-Lane Prime Arterial east of Paseo del Rey in the City of Chula Vista Circulation Plan. Today, it is generally a six-lane facility, which transitions into a Class I Collector to the east of Hunte Parkway. Bike lanes exist on both sides of the road and bus stops are located intermittently along Telegraph Canyon Road /Otay Lakes Road. On-street parking is prohibited. The posted speed limit is 40 mph from I-805 to Crest Drive/Oleander Avenue, 45 mph from Crest Drive/Oleander Avenue to Old Telegraph Canyon Road, and 50 mph from Old Telegraph Canyon Road to Hunte Parkway.

- **Palomar Street**
  Palomar Street is classified as a Four-Lane Major Street in the City of Chula Vista Circulation Plan. Currently, it is a four-lane divided road. On-street parking is prohibited. The posted speed limit is 35 mph and bike lanes are provided.

- **Olympic Parkway**
  Olympic Parkway is classified as a Six-Lane Prime Arterial from I-805 to Hunte Parkway, and as a Four-Lane Major east of Hunte Parkway in the City of Chula Vista Circulation Plan. On-street parking is prohibited. The posted speed limit is 45 mph. Bike Lanes are provided. The section of Olympic Parkway from La Media Road to Hunte Parkway was recently completed and is open to traffic. A raised median is provided along Olympic Parkway.

- **Oleander Avenue**
  Oleander Avenue is classified as a Class 11 Collector in the City of Chula Vista Circulation Plan. Currently, Oleander is a two-lane undivided roadway with two lanes of travel. Bike lanes are not provided. Curbside parking is permitted. The posted speed limit is 25 mph.

- **Medical Center Drive**
  Medical Center Drive is classified as a Class I Collector in the City of Chula Vista Circulation Plan and currently provides four lanes of travel. Bike lanes exist on both sides of the street and curbside parking is prohibited. The posted speed limit is 25 mph. Medical Center Drive becomes Brandywine Avenue south of E. Palomar Street.

- **Brandywine**
  Brandywine Avenue is classified as a Class I Collector in the City of Chula Vista Circulation Plan and currently provides four lanes of travel narrowing to two lanes with a two-way turn lane. Just north of Main Street. Bike lanes exist on both sides of the street and curbside parking is generally prohibited except in the two-lane section of Brandywine Avenue. The posted speed limit is 25 mph.

- **Paseo Ranchero**
  Paseo Ranchero is classified as a Class I Collector in the City of Chula Vista Circulation Plan and becomes Heritage Road south of Telegraph Canyon Road. Currently, Paseo Ranchero is an undivided roadway with four lanes of travel and a center two-way turn lane. Bike lanes exist today on both sides of the road and curbside parking is prohibited. The posted speed limit is 40 mph.

- **Heritage Road**
  Heritage Road is classified as a Six-Lane Prime Arterial in the City of Chula Vista Circulation Plan. Heritage Road currently ends at Olympic Parkway and is a six-lane prime arterial. Bike lanes exist today on both sides of the road; therefore curbside parking is prohibited. The posted speed limit is 40 mph.

- **La Media Road**
  La Media Road is classified as a Six-Lane Prime Arterial in the City of Chula Vista Circulation Plan. Currently, La Media Road terminates at Santa Venetia, and serves a newly opened high school and fire station. It is planned to open the section further south to Birch Road shortly. Six lanes of travel with a raised median are currently provided. Bike lanes exist today on both sides of the road; therefore curbside parking is prohibited. The posted speed limit is 40 mph.

- **Eastlake Parkway**
  Eastlake Parkway is classified as a Four-Lane Major Street in the City of Chula Vista Circulation Plan, between north of Otay Lakes Road to South of SDG&E easement and as a Six-Lane Major Road south of the SDG&E easement in Eastlake Greens. Currently, it provides four lanes (two lanes in each direction). The new section of Eastlake Parkway from south of Clubhouse Drive to Olympic Parkway is has six lanes of travel. Eastlake Parkway currently terminates at Olympic Parkway. Bike lanes exist on either side of the road and curbside parking is prohibited.

- **Hunte Parkway**
  Hunte Parkway is classified as a Four-Lane Major Arterial from Otay Lakes Road to Olympic Parkway in the City of Chula Vista Circulation Plan. Currently, it extends south of Otay Lakes Road to Olympic Parkway as a Four-Lane Major Street arterial with a posted speed limit of 45 mph. Bike lanes exist on either side of the road and curbside parking is prohibited. This facility connects to Olympic Parkway to the south. Construction of Hunte Parkway as a 6-lane Prime Arterial from Olympic Parkway to Eastlake Parkway is proposed.

- **Birch Road**
  Birch Road is classified as a Six-Lane Major Street between La Media Road and SR-125 and a six-lane Prime Arterial between SR-125 and Eastlake Parkway in the City of Chula Vista Circulation Plan. Currently, it does not exist. However, the section between la media Road and Magdalena Avenue in Village 6 is under construction.

C. <u>Existing Street Segments</u>

- **Daily Segment Volumes**
  LL&G obtained existing Average Daily Traffic (ADT) volumes from the City of Chula Vista where available. If Year 2000 or later ADT volumes were not available, the ADT was calculated from the peak hour intersection turning movement counts

assuming the PM peak hour traffic is 10 percent of the daily traffic for some segments.

- **Daily Segment LOS**
  LL&G determined that the levels of service on all the key segments are operating better than LOS D except the following segments:

  Telegraph Canyon Road
  I-805 to Oleander Avenue (LOS F)
  Oleander Avenue to Medical Center Drive (LOS E)
  Paseo Ranchero to Otay Lakes Road (LOS D)

  Currently, the City is in the process of widening Telegraph Canyon Road between the Canyon Plaza Entrance and I-805 northbound ramps to provide 4 westbound lanes. Widening of Olympic Parkway at I-805 to provide two through lanes in both directions across I-805 are in advanced stages of planning.

D. <u>Peak hour intersection</u>

Peak hour intersection turning movement volumes were conducted in July and September 2003 at the following study area intersections. Peak hour data for intersections along Main Street, which were available from previous traffic studies, were also used.

1. Telegraph Cyn Rd/I-805 SB Ramps
2. Telegraph Cyn Rd/I-805 NB Ramps
3. Telegraph Cyn Rd/Oleander Avenue
4. Telegraph Cyn Rd/Medical Center Dr.
5. Telegraph Cyn Rd/Paseo Ranchero/Heritage Rd.
6. Telegraph Canyon Road/Otay Lakes Road/La Media Road
7. Otay Lakes Road/Eastlake Parkway
8. Otay Lakes Road/Hunte Parkway
9. Palomar Street/Oleander Avenue
10. Palomar Street/Brandywine Avenue
11. Palomar Street/Heritage Road
12. Palomar Street/La Media Road
13. Olympic Parkway/I-805 SB Ramps
14. Olympic Parkway/I-805 NB Ramps
15. Olympic Parkway/Oleander Ave.
16. Olympic Parkway/Brandywine Ave.
17. Olympic Parkway/Heritage Rd.
18. Olympic Parkway/La Media Rd.
19. Olympic Parkway/Palomar St.
20. Olympic Parkway/Eastlake Parkway
21. Olympic Parkway/Hunte Parkway
22. Main Street/I-805 SB Ramps
23. Main Street/I-805 NB Ramps
24. Main Street/Oleander Avenue
25. Main Street/Brandywine Avenue

- **<u>Peak Hour Intersection LOS</u>**
  The LL&G Traffic Analysis analyzed the existing AM and PM peak hour operations of 25 key signalized intersections. These intersections are calculated to currently operate at LOS D or better except the following:

  1. Telegraph Canyon Rd/I-805 NB Ramps (LOS E in the PM peak hour)
  2. Olympic Parkway/I-805 SB Ramps (LOS E in the PM peak hour)
  3. Olympic Parkway/I-805 NB Ramps (LOS E in the AM peak hour)

Key Streets and Intersections

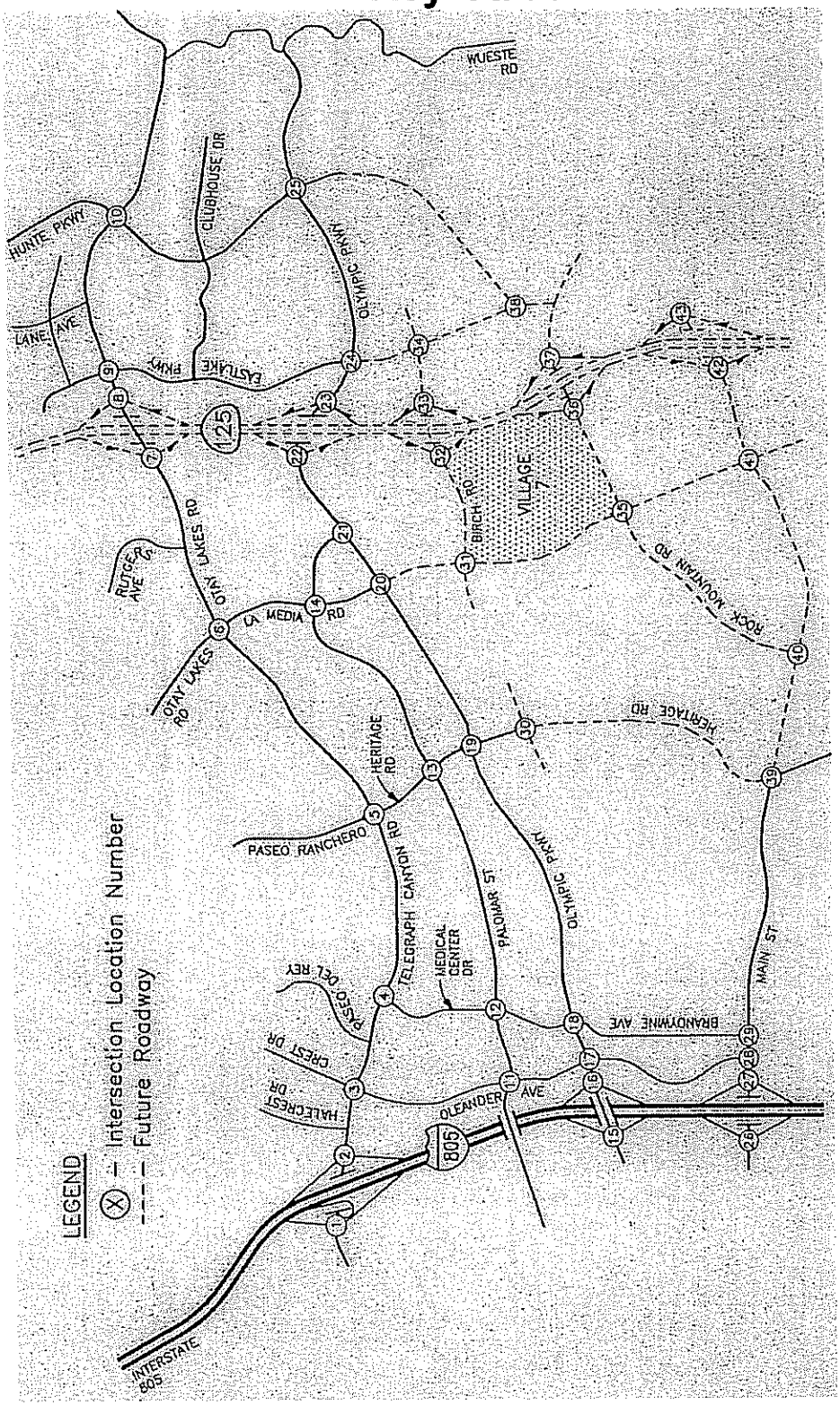


Exhibit 6

II.5.4.1.10 Transit

Public transportation creation is an integral part of the Otay Ranch Community. The design of the project area promotes access to public transit and locates land uses in proximity to proposed transit stations. Chula Vista Transit (CVT) provides bus service through the Eastern Territories of the City that can be extended to serve the project area. Regional transit plans also provide for commuter lines to serve villages in Otay Ranch.

The Village 7 SPA is not located along the light rail transit route. However, three transit stops are planned for the project. The conceptual transit system plan for the SPA Plan area is shown in Exhibit 7. The exhibit depicts several levels of service that are consistent with regional transit plans: a yellow line regional commuter service located on Olympic Parkway, a red line commuter service located on La Media Road and a blue line local Chula Vista transit on Heritage Road. Blue line or green line shuttle bus service can also be located through the Village core of the project.

The Metropolitan Transit Development Board (MTDB) is currently working with the City of Chula Vista to develop a Southbay Transit First Study that will be completed in conjunction with the city's General Plan Update. The study includes the project site; therefore, the following information is included in this document.

MTDB has developed the "Transit First" service concept to reduce the public's dependence upon the automobile. Transit and land use patterns should work together. The easy access to transit facilities in correlation with the service offered can make transit a viable travel mode alternative to the automobile, thus reducing traffic congestion. Currently, two percent of trips are conducted on public transit in the region. Efforts should be made to increase this travel mode split by making transit accessible and convenient. Additionally, providing transit facilities will meet the objectives of the City's CO_2 Reduction Plan which mentions transit as one of the action measures to reducing CO_2 emissions along with enhanced pedestrian connections to transit, increased housing density near transit, and site design with transit orientation.

The "Transit First" strategy includes a network of service types ranging from neighborhood shuttles serving short-distance trips, to higher-speed, limited stop routes for longer distance trips. The service types planned for the Otay Ranch are as follows:

A. Yellow Car: Serves longer-distance trips (6+ miles), maintaining high average speeds (35-40 mph) with limited stops. Yellow Car routes would complement Red Car services to form the spine of the regional transit system. Yellow Car services would require extensive use of transit priority treatments such as dedicated running ways, queue jumpers, and signal priority. Yellow Car service is used in two ways:
   - Serving corridors where longer station spacing is justified based on links between major origins and destinations and land use patterns that lead to longer-distance trip making.
   - Serving as an overlay in selected Red Car corridors where a faster, more limited-stop service is justified (in addition to Red Car service) for high-volume, long-distance trip needs.

B. Red Car: Serves medium-distance trips (1-9 miles), maintaining relatively high average speeds (20-25 mph) with limited stops. Red Car services are often linked to Blue Car service for local distribution. The current San Diego Trolley system and the County's express bus routes mostly operate as Red Car service. Red Car services would require

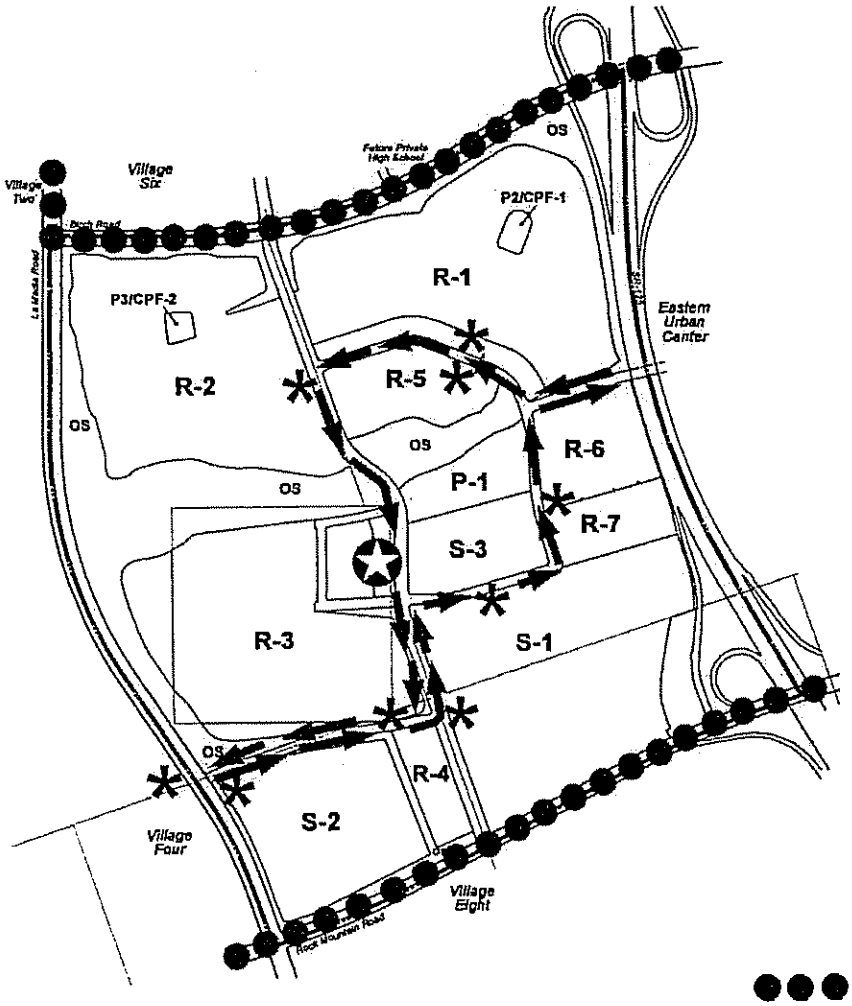
use of transit priority treatments such as dedicated running ways, queue jumpers, and signal priority.

C. Green Car: Serves community-level trip making that could include neighborhood circulators, feeder access to Yellow and Red Car service, and/or specialized fixed-route shuttles. Green Car services would likely use smaller shuttle vehicles. In some situations, Green Car services would benefit from dedicated running ways and queue jumpers.

D. Blue Car: Serves short-distance trips (0-5 miles) with frequent stop spacing. Blue Car service provides basic mobility, albeit at low speeds (10-25 mph), on primarily local and arterial streets. Most of the current San Diego region bus system operates as Blue Car service.

The Metropolitan Transit Development Board of Directors has endorsed a "Tier One" Plan of proposed Yellow Car and Red Car alignments identified through the South Bay Transit First (SBTF) Study. These routes have the best chance of being implemented initially.

Transit Plan



City-wide Transit Routes *(Blue Car)*

Internal Transit Routes *(Green Car)*

Bus Stop with Shelter & Turnout

Curbside Bus Stop

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning

3/22/04

Exhibit 7

II.5.4.1.11 Trip Generation and Phasing

II.5.4.1.11.1 Project Trip Generation

The following is a description of the proposed and adopted project trip generation calculations.

Proposed Project

SANDAG trip generation rates were utilized to determine the amount of traffic Village 7 would generate. Table C.8 was prepared by LL&G and provides the projected trip generation for the Otay Ranch Village 7 area. The trip generation for the Otay Ranch Village 7 area was calculated to generate a total of 25,079 ADT, 3,133 trips (1,629 inbound and 1,504 outbound trips) in the AM peak hour and 2,482 trips (1,442 inbound and 1,039 outbound trips) in the PM peak hour. The actual trip generation for the Otay Ranch Village 7 SPA is less than what Table C.8 indicates. The Village 7 SPA Plan has 756 Single Family dwelling units, 448 Multi-Family dwelling units, High School, Elementary School, Public Park, 2.8 CPF acres.

Table C.8
Otay Ranch Village 7 Trip Generation

Land Use	Quantity	Daily Trip Ends (ADT)[1]		AM Peak Hour					PM Peak Hour				
				% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
		Rate[2]	Volume			In	Out	Total			In	Out	Total
Single Family	1,053 DU	10/DU	10,530	8%	3:7	253	590	842	10%	7:3	737	316	1,053
Multi Family	448 DU	8/DU	3,584	8%	2:8	57	229	287	10%	7:3	251	108	358
Com'l	3.7 Ac.	700 /Ac.	2,590	4%	6:4	62	41	104	10%	5:5	130	130	259
Public Park	7.6 Ac.	5 /Ac.	38	4%	5:5	1	1	2	8%	5:5	2	2	3
CPF	4.1 Ac.	30 /Ac.	123	4%	5:5	2	2	5	8%	5:5	5	5	10
Elem. School	11.1 Ac.	90 /Ac.	999	32%	6:4	192	128	320	9%	4:6	36	54	90
Middle School	26.3 Ac.	50 /Ac.	1,315	30%	6:4	237	158	395	9%	4:6	47	71	118
High School	2,950 Pupils	2.00 /Pupil	5,900	20%	7:3	825	355	1,180	10%	4:6	235	355	590
Open Space[3]	61.8 Ac.												
Total Project			**25,079**			**1,629**	**1,504**	**3,133**			**1,442**	**1,039**	**2,482**

Source: LL&G

Notes:
1. Trip-ends are one-way traffic movements, either entering or leaving.
2. Generation rates obtained from the SANDAG Brief Guide (April 2002).
3. Does not generate any trips.

The total internal and net ADT and peak hour trips generated for the proposed project are shown in Table C.9. LL&G assumed that 15% of the residential trips would be internal. The project was calculated to add 20,845 ADT with 2,795 trips in the AM peak hour and 2,058 trips in the PM peak hour to the external street system.

Table C.9
Otay Ranch Village 7 Internal Trips

Land Use	Total Daily Trips			% of Trips which are internal	Internal Trips (Daily)			External Trips (Daily)		
	Daily	AM Peak Hour	PM Peak Hour		Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour	PM Peak Hour
RESIDENTIAL										
Single Family	10,530	842	1,053	15%	1,580	126	158	8,951	716	895
Multi Family	3,584	287	358	15%	538	43	54	3,046	244	305
Subtotal Residential	**14,114**	**1,129**	**1,411**		**2,117**	**169**	**212**	**11,997**	**960**	**1,200**
NON-RESIDENTIAL										
Commercial	2,590.	104	259	15%	389	10	39	2,202	94	220
Public Park	38	2	3	65%	25	1	2	13	1	1
CPF	123	5	10	75%	92	4	7	31	1	2
Elem. School	999	320	90	53%	529	70	48	470	250	42
Middle School	1,315	395	118	15%	197	24	18	1,118	371	101
High School	5,900	1,180	590	15%	885	60	98	5,015	1,120	492
Open Space [3]										
Subtotal Non-Residential	**10,965**	**2,004**	**1,070**		**2,117**	**169**	**212**	**8,848**	**1,836**	**859**
Total Project	**25,079**	**3,133**	**2,482**		**4,234**			**20,845**	**2,795**	**2,058**

Source: LL&G

Notes:
1. Trip-ends are one-way traffic movements, either entering or leaving.
2. Generation rates obtained from the SANDAG Brief Guide (April 2002).
3. Does not generate any trips.

Phasing Reconciliation

The phasing presented in the SPA Plan is non-sequential and is consistent with the construction phasing contained in the SPA plan. Table C.10 was prepared by LL&G and calculates the projected EDUs and trips generated in 5-year increments or phases. This table also calculates the projected land use and the cumulative trips for Village 7. The circulation system addressed and recommended in the Traffic Impact Analysis includes all improvements based on average daily trips (ADT) and the trigger points for needed improvements.

Table C.10
Otay Ranch Village 7
Trip Generation by Phase

Land Use	Quantity	Daily Trip Ends (ADT)		AM Peak Hour					PM Peak Hour				
				% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
		Rate	Volume			In	Out	Total			In	Out	Total
Phase 1 (Year 2005)													
High School	2,950 Pupils	2.00 /Pupil	5,900	20%	7:3	825	355	1,180	10%	4:6	235	355	590
Total Phase 1			**5,900**			**825**	**355**	**1,180**			**235**	**355**	**590**
Phase 2 (Year 2010)													
Single Family	675 DU	10/DU	6,750	8%	3:7	162	378	540	10%	7:3	473	316	1,053
Multi Family	448 DU	8/DU	3,584	8%	2:8	57	229	287	10%	7:3	251	108	358
Commercial	3.7 Ac.	700 /Ac.	2,590	4%	6:4	62	41	104	10%	5:5	130	130	259
CPF	4.1 Ac.	30 /Ac.	123	4%	5:5	2	2	5	8%	5:5	5	5	10
High School	2,950 Pupils	2 /Pupil	5,900	20%	7:3	825	355	1,180	10%	4:6	235	355	590
Elem. School	11.1 Ac.	90 /Ac.	999	32%	6:4	192	128	320	9%	4:6	36	54	90
Public Park	7.6 Ac.	5 /Ac.	38	4%	5:5	1	1	2	8%	5:5	2	2	3
Total Phase 2			**19,904**			**1,301**	**1,135**	**2,436**			**1,130**	**855**	**1,985**
External Trips			**16,781**			**1,234**	**951**	**2,184**			**909**	**758**	**1,667**
Phase 3 (Year 2015)													
Single Family	1,053 DU	10/DU	10,530	8%	3:7	253	590	842	10%	7:3	737	316	1,053
Multi Family	448 DU	8/DU	3,584	8%	2:8	57	229	287	10%	7:3	251	108	358
Commercial	3.7 Ac.	700 /Ac.	2,590	4%	6:4	62	41	104	10%	5:5	130	130	259
CPF	4.1 Ac.	30 /Ac.	123	4%	5:5	2	2	5	8%	5:5	5	5	10
High School	2,950 Pupils	2.00 /Pupil	5,900	20%	7:3	825	355	1,180	10%	4:6	235	355	590
Elem. School	11.1 Ac.	90 /Ac.	999	32%	6:4	192	128	320	9%	4:6	36	54	90
Middle School	26.3 Ac.	50 /Ac.	1,315	30%	6:4	237	158	395	9%	4:6	47	71	118
Public Park	7.6 Ac.	5 /Ac.	38	4%	5:5	1	1	2	8%	5:5	2	2	3
Total Phase 3			**25,079**			**1,629**	**1,504**	**3,133**			**1,442**	**1,039**	**2,482**
External Trips			**20,845**			**1,536**	**1,259**	**2,795**			**1,146**	**912**	**2,058**

Source: LL&G

Network Analysis

It was necessary to estimate future traffic volumes for several study years in order to determine if the planned circulation network or system could accommodate these volumes. As previously discussed, the Series 10.0, SANDAG 2030 City/County Forecast Traffic Model was used to estimate these volumes. The traffic model outputs freeway and street segment ADTs. These ADTs were utilized directly as outputted by the model. In addition, it was also necessary to estimate peak hour intersection volumes. The LL&G Traffic Analysis details the methodology to determine future traffic volumes.

The aforementioned 10 Scenarios that were analyzed in the LL&G Traffic Analysis have different assumptions concerning the study area, land use and roadway network. LL&G

developed the scenarios within three basic Development Plan assumptions. A brief description of the three Development Plans with the various scenarios is provided below. The LL&G Traffic Analysis provides a detailed description of the 16 scenarios. The two basic assumptions for the scenarios are:

Development Plan I
In Development Plan I, analysis of all study area intersections and segments were conducted for the Year 2005, 2010, 2015, 2030 and buildout time frames with the proposed project land uses, adopted City of Chula Vista land uses outside Village 7 and adopted City of Chula Vista Circulation Element.

Development Plan II
In Development Plan II, analysis of all study area intersections and segments were conducted for the Year 2005, 2010, 2015, 2030 and buildout time frames with the proposed project land uses, proposed City of Chula Vista land uses outside Village 7 and proposed City of Chula Vista Circulation Element. The proposed land uses represent the "worst case" or highest intensity" land uses.

For the two buildout conditions, the traffic model assumes that the entire City of Chula Vista circulation element and land uses are built and there is no toll on SR-125.

Network Performance Assessment Process
The LL&G Traffic Analysis included the traffic model projections for cumulative development projects. The report also identified the number of daily trips for the phasing of developments on key roadway segments in order to perform the analysis of network performance based on daily segment LOS. This performance evaluation was performed for roadway and freeway segments. A review of peak hour intersection operations was also performed which required the application of peak hour factors to average daily traffic volumes to develop peak hour turning movements at each of the key project intersections.

11.5.4.1.11.2 Project Phasing

Residential Threshold
LL&G conducted an analysis to determine approximately how many units within Village 7 could be built before access to La Media Road would be needed. LL&G assumed that access would initially be provided via only Magdalena Drive to Birch Road and the next access to be provided would be to La Media Road. Other assumptions that were necessary to conduct the analysis are listed below:

- SR 125 is completed with an interchange at Birch Road but not at Rock Mountain Road.
- High School with 2,950 students is built (trip generation rate of 2.0 ADT/student).
- Rock Mountain Road does not extend east or west of the site.
- Roadway connection to the EUC is not yet provided.
- Connection to La Media is needed once the northbound left-turn volume at the Birch Road/Magdalena Avenue intersection reaches 600 vehicles per hour (vph) or the eastbound right-turn volume, reaches 400 vph based on City standards.
- 60% of northbound residential traffic on Magdalena Avenue turns left.
- One half of the commercial area is developed and middle school and elementary school are not built.

- Assume each dwelling unit generates 9 ADT, 0.54 AM outbound trips (9 ADT*8% during AM peak * 75% of AM trips are outbound) and 0.18 inbound trips.

The large amount of high school AM inbound traffic, the AM eastbound right-turn is expected to "reach capacity" first.

Based on Table C.8, the high school generates 825 AM inbound trips and all these trips must use the Birch Road/Magdalena Avenue intersection (once residential units are built within Village 7, it could be assumed that 15% of these trips remain within Village 7 and the number of inbound trips using the Birch Road/Magdalena Avenue intersection would be 700 vph).

Assuming 60% of the 825 trips are oriented to/from the west, the AM peak hour eastbound right-turn volume would be 495 vph and with one half of the commercial traffic added in, 517 vph. Since these volumes exceed 400 vph (the capacity of a right-turn lane), access to La Media Road is required with the first residential building permit.

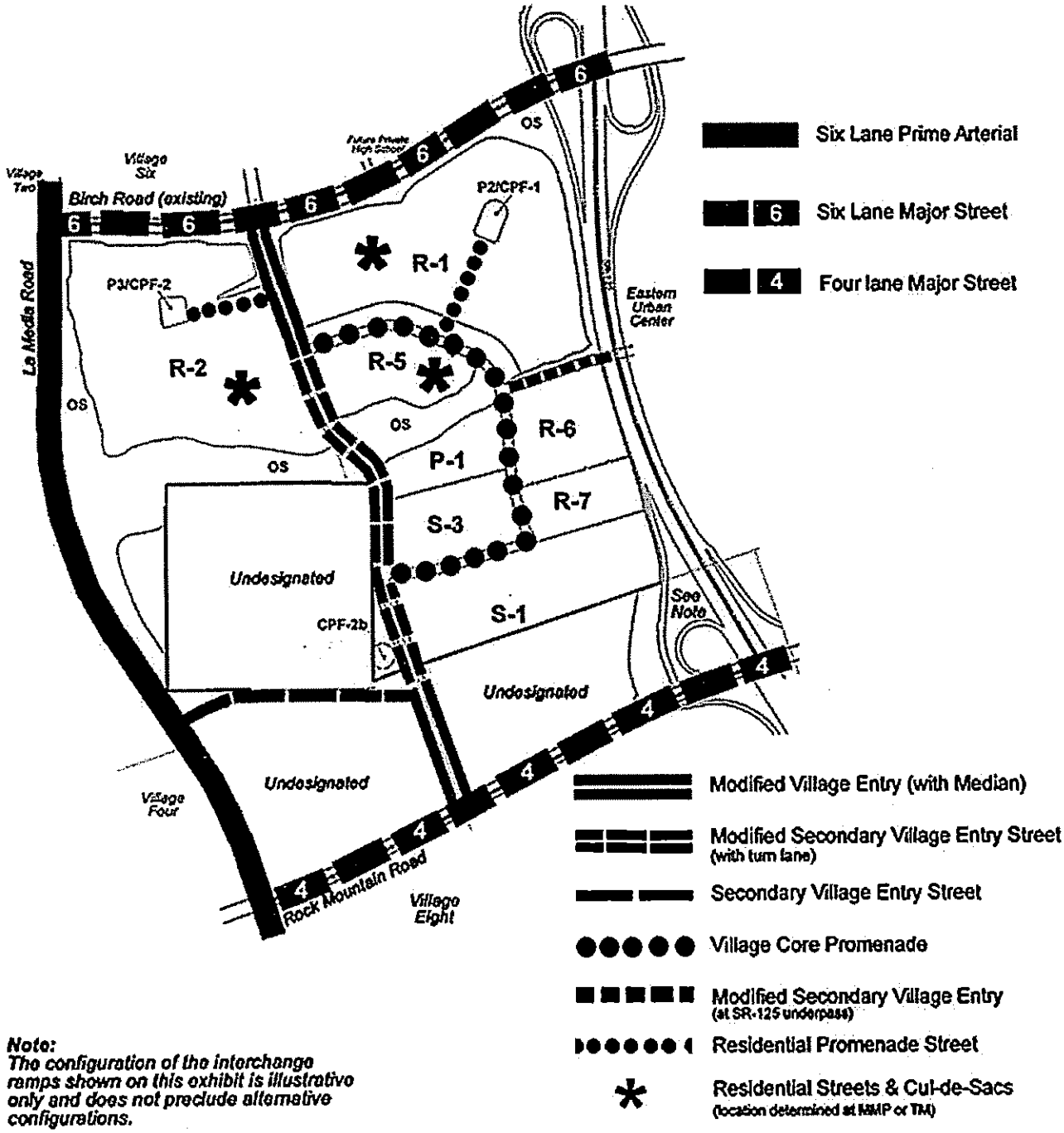
High School Only Threshold

The Birch Road/Magdalena intersection can accommodate all high school traffic until Birch Road is connected between La Media Road and Eastlake Parkway (or SR 125) since there would be virtually no cross traffic on Birch Road. Once Birch Road is connected, there will be cross traffic on Birch Road, which would make eastbound right-turns and the northbound left-turn volumes exceed City standards. Assuming cross traffic on Birch Road a high school of 1,475 students would generate over 400 AM peak hour eastbound right-turn vehicles at the Birch Road/Magdalena Avenue intersection. In summary, the high school would need access to La Media Road if over 1,475 students are desired and Birch Road is connected between La Media Road and Eastlake Parkway (or SR 125).

There is not a traffic demand justification for Rock Mountain Road assuming access to Birch Road, La Media Road and to the EUC are all provided.

Subsection C of the Municipal Code Section 19.09.100 (Growth Management Ordinance) requires that if the City Manager determines that facilities or improvements within a PFFP are inadequate to accommodate any further development within that area the City Manager shall immediately report the deficiency to the City Council. If the City Council determines that such events or changed circumstances adversely affect the health, safety or welfare of the City of Chula Vista, the city may require amendment, modification, suspension or termination of an approved PFFP.

Circulation



Note:
The configuration of the interchange ramps shown on this exhibit is illustrative only and does not preclude alternative configurations.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning

Exhibit 8

II.5.4.1.12 Adequacy Analysis

The City of Chula Vista created the Guidelines For Traffic Impact Studies in February 2001. This document establishes written guidelines for identification of project traffic impacts in Environmental Impact Report documents. Prior to the establishment of the guidelines, the City of Chula Vista hired BRW to review criteria that was being utilized by the City of San Diego and traffic impact study guidelines recommended by the San Diego Traffic Engineer's Council (SANTEC) / Institute of Transportation Engineers (ITE). The objective was to determine the applicability of these standards to developments and facilities within the City of Chula Vista, and develop a specific set of standards for the City of Chula Vista based on this review. The City of San Diego and SANTEC/ITE standards were used to reevaluate several completed studies in the City of Chula Vista to determine potential changes in the identification of project impacts. Results of this evaluation were communicated to the City of Chula Vista department heads and staff through a series of workshops. Discussions, comments and recommendations precipitated from these workshops provided the foundation for the guidelines.

The guidelines provide written criteria for determining the need and scope of traffic studies and identifying impacts. The use of these guidelines ensures uniformity in the preparation and review of traffic studies for developments within the City of Chula Vista. In addition, the guidelines help determine timelines for the implementation of specific improvements to address identified deficiencies.

A. DETERMINING WHEN A STUDY IS NEEDED

In conformance with requirements of the Congestion Management Program (CMP), an analysis of CMP freeways and arterials will be required for any project that generates 2,400 daily, or 200 peak hour trips (As detailed in the 1991 CMP).

For those developments that do not satisfy the requirements for a CMP analysis, a traffic study may be required based on direction provided by the City Engineer and the Environmental Review Coordinator.

B. METHODOLOGY

1. **Study Area Definition**
   a. Volume Thresholds for Study of CMP Freeway Facilities: All freeway segments are by definition included in the CMP network. All freeway mainline segments to which the proposed project will add 2400 total trips (Average Daily Trips or ADT) or 150 or more peak hour trips in either direction must be analyzed.
   b. Volume Thresholds for Study of CMP Arterial Facilities: All CMP arterial segments, including Regionally Significant Arterials (RSA) and other CMP arterial segments and intersections (including freeway on/off ramp intersections), to which the proposed project will add 800 or more total trips (ADT) or 50 or more peak hour trips in either direction must be analyzed.
   c. Volume Thresholds for Local Roadways and Intersections: Traffic studies will be required to review those local and collector roadway facilities that are not included in the CMP network based on direction provided by the City Engineer.

2. **Analysis Scenarios**
Each of the study area freeway segments, roadway segments, and intersections must be analyzed for the following scenarios:

a. Existing Conditions
b. Existing Conditions + Proposed Project
c. Existing Conditions + Approved and Pending Projects + Proposed Project (Only for non-master planned projects)
d. Horizon Years (Usually defined as five-year incremental study years for project, i.e. 2005, 2010, 2015, & 2020. However, final determination on years to be studied may vary based on direction of the City Engineer)
e. Regional Buildout Year + Proposed Project

Additional scenarios may be required depending on the size and phasing of any proposed development. For each analyzed scenario, peak hour analysis will include the AM and PM peaks. At the direction of the City Engineer, special studies of midday peak or other off-peak periods may be required.

3. **Growth Management Oversight Committee (GMOC) Near-Term Analysis**
As determined by the City Engineer, analysis of roadway segments under near-term conditions (Years 0-4) may be conducted using the methodology described in Chapter 11 (Arterial Streets) of the most recent version of the Highway Capacity Manual, which determines segment level of service based on speed, as detailed in the Significance Criteria below. Classification of facilities and definition of segment lengths must be consistent with the City's current Growth Management Traffic Monitoring Program. The Threshold Standard for these arterial analyses requires the maintenance of LOS C or better as measured by average travel speeds except that LOS D can occur for no more than any two hours of the day. Thus, if LOS D conditions are determined for any period of two (2) hours, additional analysis may be required along these high volume segments based on direction provided by the City Engineer.

For planned arterial facilities that are not currently included in the current Traffic Monitoring Program, the definition of segment length and facility classification will be based on direction provided by the City Engineer.

C. SIGNIFICANCE CRITERIA

Project impacts will be defined as either project specific impacts or cumulative impacts. Project specific impacts are those impacts for which the addition of project trips result in an identifiable degradation in LOS on freeway segments, roadway segments, or intersections, triggering the need for specific project-related improvement strategies. Cumulative impacts are those in which the project trips contribute to a poor level of service, at a nominal level.

Study horizon year as used herein is intended to describe a future period of time in the traffic studies, which corresponds to Sandag's traffic model years, and are meant to synchronize study impacts to be in line with typical study years of 2005, 2010, 2015 and 2020.

Criteria for determining whether the project results in either project specific or cumulative impacts on freeway segments, roadway segments, or intersections are as follows:

1. **Short-term (Study Horizon Year 0 to 4)**
   For purposes of the short-term analysis roadway sections may be defined as either links or segments. A link is typically that section of roadway between two adjacent Circulation Element intersections and a segment is defined as that combination of contiguous links used in the Growth Management Plan Traffic Monitoring Program. Analysis of roadway links under short-term conditions may require a more detailed analysis using the GMOC methodology if the typical planning analysis using volume to capacity ratios on an individual link indicates a potential impact to that link. The GMOC analysis uses the Highway Capacity Manual (HCM) methodology of average travel speed based on actual measurements on the segments as listed in the Growth Management Plan Traffic Monitoring Program.
   a. Intersections
      1. Project specific impact if both the following criteria are met:
         a) LOS E or LOS F.
         b) Project trips comprise 5% or more of entering volume.
      2. Cumulative impact if only (i) above is met.
   b. Street Links/Segments
      If the planning analysis using the volume to capacity ratio indicates LOS C or better, there is no impact. If the planning analysis indicates LOS D, E or F, the GMOC method should be utilized. The following criteria would then be utilized.
      1. Project specific impact if all the following criteria are met:
         a) LOS D for more than 2 hours or LOS E/F for 1 hour
         b) Project trips comprise 5% or more of segment volume.
         c) Project adds greater than 800 ADT to the segment.
      2. Cumulative impact if only (i) above is met.
   c. Freeways
      1. Project specific impact if both the following criteria are met:
         a) Freeway segment LOS is LOS E or LOS F
         b). Project comprises 5% or more of the total forecasted ADT on that freeway segment.
   b. Cumulative impact if only (i) above is met.

2. **Long-term (Study Horizon Year 5 and later)**
   a. Intersections
      1. Project specific impact if both the following criteria are met:
         a) Level of service is LOS E or LOS F.
         b) Project trips comprise 5% or more of entering volume.
      2. Cumulative impact if only (i) above is met.
   b. Street Segments
      Use the planning analysis using the volume to capacity ratio methodology only. The GMOC analysis methodology is not applicable beyond a four-year horizon.

1. Project specific impact if all three of the following criteria are met:
   a) Level of service is LOS D, LOS E, or LOS F.
   b) Project trips comprise 5% or more of total segment volume.
   c) Project adds greater than 800 ADT to the segment.
2. Cumulative impact if only (i) above is met. However, if the intersections along a LOS D or LOS E segment all operate at LOS D or better, the segment impact is considered not significant since intersection analysis is more indicative of actual roadway system operations than street segment analysis. If segment Level of Service is LOS F, impact is significant regardless of intersection LOS.
4. Notwithstanding the foregoing, if the impact identified in paragraph a. above occurs at study horizon year 10 or later, and is offsite and not adjacent to the project, the impact is considered cumulative. Study year 10 may be that typical SANDAG model year which is between 8 and 13 years in the future. In this case of a traffic study being performed in the period of 2000 to 2002, because the typical model will only evaluate traffic at years divisible by 5 (i.e. 2005, 2010, 2015 and 2020) study horizon year 10 would correspond to the Sandag model for year 2010 and would be 8 years in the future. If the model year were less than 7 years in the future, study horizon year 10 would be 13 years in the future.
5. In the event a direct identified project specific impact in paragraph a. above occurs at study horizon year 5 or earlier and the impact is offsite and not adjacent to this project, but the property immediately adjacent to the identified project specific impact is also proposed to be developed in approximately the same time frame, an additional analysis may be required to determine whether or not the identified project specific impact would still occur if the development of the adjacent property does not take place. If the additional analysis concludes that the identified project specific impact is no longer a direct impact, then the impact shall be considered cumulative.

c. Freeways
   1. Project specific impact if both the following criteria are met:
      a) Freeway segment LOS is LOS E or LOS F
      b) Project comprises 5% or more of the total forecasted ADT on that freeway segment.
   2. Cumulative impact if only (i) above is met.

II.5.4.1.13 Cost & Financing Traffic Improvements

A. Street Improvements

The following table summarizes the Otay Ranch Village 7 SPA major Street improvements as it relates to Otay Ranch Village 7 development phasing based on the project LL&G Traffic Analysis dated May 20, 2004.

Table C.11
Village 7 Traffic Improvement Phasing and Costs
Public facilities required to be constructed by Village 7[6]

Facility [7]	Description[8]	Estimated Roadway Costs
1	Magdalena Ave. from Birch Rd. to Rock Mtn	$4,500,000
2*	La Media Road from Birch Road to Street C	$5,000,000
2a	Street C from La Media to Magdalena Avenue	$1,600,000

* TDIF Streets

B. Transportation Development Impact Fee (TDIF)

The Otay Ranch Village 7 project is within the boundaries of the TDIF program and, as such, the project is subject to the payment of the fees at the rates in effect at the time building permits are issued. However, the improvements identified on Table C.11 will be required to be constructed according to the approved phasing plan. In this case, the DIF ordinance allows for the issuance of credit in lieu of fees when an eligible facility is constructed by the project. If the total eligible construction cost amounts to more than the total required DIF fees as indicated below, the owner/developer may be given credits toward future building permits outside of the SPA area. Table C.12 provides a breakdown of the proposed SPA phasing of dwelling units and CPF acres for the TDIF.

Table C.12
Otay Ranch Village 7 SPA
Phasing DUs & Acres for Transportation Facilities

Land Use	DU's	Acres	Phasing								Totals	
			White		Blue		Red		Green			
			DUs	Ac.	DUs	Ac.	DUs	Ac.	DUs	Ac.	DUs	Ac.
Low Density	745	N/A	0	N/A	346	N/A	375	N/A	35	N/A	756	N/A
Medium Density	448	N/A	0	N/A	448	N/A	0	N/A	0	N/A	448	N/A
Commercial	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
CPF	N/A	2.8	N/A	0	N/A	1.1	N/A	0.7	N/A	1.0	N/A	2.8
Total	**1,193**	**2.8**	**0**	**0**	**794**	**1.1**	**375**	**0.7**	**1,19**	**1.0**	**1,204**	**2.8**

[6] Developer shall agree to construct and to secure the facility prior to the Final map triggers the facility as defined in the Threshold Compliance and Recommendations section.

[7] The Developer will be required to process a Joint Use Agreement with the City of Chula Vista and any Agency for streets that cross existing easements.

[8] All intersections will be constructed with traffic signals.

The TDIF was last updated by City Council Ordinance 2887 in November 19, 2002. This amount is subject to change as it is amended from time to time. Single Family Detached Dwellings at a density of less than eight Dwelling Units (DU) per gross acre are considered Low Density Residential Developments by the City's Master Fee Schedule. The current TDIF is $8,180 per Equivalent Dwelling Unit (EDU). Low Density Residential (<8 DU/gross acre) are charged one EDU/DU or $8,180/DU. Single Family Attached Dwellings at a density of greater than eight up to twenty DUs/gross acre are considered Medium Density Residential Developments. Medium Density Residential (>8-20 DU/gross acre) are charged .8 EDU/DU or $6,544.00/DU. Multi-Family Dwellings at a density of greater than twenty DUs per gross acre are considered High Density Residential Developments. High Density Residential (>20 DU/gross acre) are charged .6 EDU/DU or $4,908.00/DU. General Commercial shall be charged at the rate of $171,780.00 per acre of land. Under the proposed Otay Ranch Village 7 SPA Plan, the total Fee by Phase for Transportation Facilities is estimated at $9,238,376 (see Table C.13).

Table C.13
Otay Ranch Village 7 SPA
TDIF Fees

Phase	Low Density Units	Fee $8,290/DU	Med Density Units	Fee $6,632/DU	Total
White	0	$0	0	$0	$0
Blue	346	$2,868,340	448	$2,971,136	$5,839,476
Red	375	$3,108,750	0	$0	$3,108,750
Green	35	$290,150	0	$0	$290,150
Total	**756**	$6,267,240	**448**	$2,971,136	$9,238,376

The current Interim SR-125 Development Impact Fee is $820 per Equivalent Dwelling Unit (EDU), which may be amended from time to time. Each new single-family detached dwelling shall be considered one EDU for the purposes of this fee. A single-family attached dwelling shall be 0.8 EDUs. A unit within a multi-family dwelling shall be considered 0.6 EDUs. General Commercial shall be charged at the rate of $20,500.00 per acre of land. Under the proposed Otay Ranch Village 7 SPA Plan, the total Fee by Phase for Interim SR-125 Facilities is estimated at $913,808 (see Table C.14).

Table C.14
Otay Ranch Village 7 Interim SR-125 DIF Fees

Development Phase	Single Family Detached Units	EDUs	Single Family Attached Units	EDUs	Total EDUs	SR-125 Fee @ $820/EDU Total
White	0	$0	0	$0	0	$0
Blue	346	$283,720	448	$293,888	794	$577,608
Red	375	$307,500	0	$0	375	$307,500
Green	35	$28,700	0	$0	35	$28,700
Total	**756**	$619,920	**448**	$293,888	**1,204**	$913,808

C. **Traffic Signal Fee**

Future development within Otay Ranch Village 7 will be required to pay Traffic Signal Fees in accordance with Chula Vista Council Policy No. 475-01. The estimated fee is calculated at $24.00 per vehicle trip generated per day for various land use categories (see Table C.15).

Table C.15
Otay Ranch Village 7 Traffic Signal Fees[9]

Development Phase	Trips	Traffic Signal Fee @ $24/Trip
White	5,900*	$141,600
Blue	8,114	$194,736
Red	3,771	$90,504
Green	380	$9,120
Total	**18,165**	**$435,960**

* High School site.

D. **Non-DIF Streets and Signals**

Otay Ranch Village 7 contains internal public streets and signals that by city policy, are not eligible for DIF credit. These streets and signals will be funded by the development.

II.5.4.1.14 Threshold Compliance and Requirements

A. Otay Ranch Village 7 shall be conditioned to pay TDIF Fees and Interim SR-125 DIF Fees at the rate in effect at the time building permits are issued.

B. The measures outlined in Table 25 of the LL&G Traffic Impact Analysis dated April 13, 2004 are required to mitigate cumulative and direct project impacts. This table is included as Table 16 of this PFFP.

C. Developer shall secure and enter into an agreement to construct La Media and Street "C" prior to the first final map. Developer shall further agree to complete the construction of La Media and Street "C" prior to the issuance of the first residential building permit for the project. Notwithstanding the foregoing, the City of Chula Vista may issue additional residential permits, as determined in the sole discretion of the City Engineer, but in no event exceed 350 residential permits, if the developer can demonstrate that the following conditions have been met:

1) The applicant shall provide evidence that actual enrollment in the High School located in Village 7 is less than or equal to 1600 students; and

2) The applicant shall submit a traffic study that demonstrates that the intersection of Birch Road and Magdalena Avenue will meet both Level of Service and design standards criteria; and

3) The applicant shall provide evidence that grading operations for La Media and Street "C" are substantially completed and roadway improvements for both La Media and Street "C" are adequately progressing toward completion.

D. If the Village 7 High School project is approved by the State of California and grading permit is issued for the high school site, or the high school is under construction, the half-width right of way for Rock Mountain Road and the full-width of Magdalena Avenue along the frontage of the High School site shall be dedicated prior to the approval of the first final map. Said dedications shall include landscape buffer easements and temporary

[9] Table is provided as an estimate only. Fees may change depending upon the actual number of dwelling units.

grading and construction easements to the satisfaction of the City Engineer.

E. Prior to the approval of the first final map which triggers the installation of the related street improvements, the developer of the Otay Ranch Village 7 project shall enter into an agreement to secure and construct a fully activated traffic signal including interconnected wiring at the following intersections:

1) Magdalena Avenue and Birch Street.
2) Street C and Magdalena Avenue.
3) Street C and La Media.
4) Rock Mountain and Magdalena Avenue.

F. The developer of Otay Ranch Village 7 shall fully design the aforementioned traffic signals as part of the improvement plans for the related intersections. Developer shall install underground improvements, standard and luminaries in conjunction with the construction of the related street improvements. In addition, developer shall install mast arms, signal heads, and associated equipment with traffic signal warrants as determined by the City Engineer.

G. Left-turn storage lengths and the right-turn deceleration lengths at all proposed intersections shall be provided in accordance with the recommendations of the LL&G Traffic Impact Analysis dated April 13, 2004.

Table C.16 Village 7 SPA Significant Impacts and Mitigation Measures		
SIGNIFICANT IMPACTS	**MITIGATION MEASURES**	**BUILDOUT LOS WITH MITIGATION**
A. DIRECT IMPACTS		
SCENARIO 1 - YEAR 2005 WITHOUT SR 125		
None	None	None
SCENARIO 2 - YEAR 2010		
None	None	None
SCENARIO 3 - YEAR 2015		
None	None	None
SCENARIO 4 - YEAR 2030		
None	None	None
SCENARIO 5 - BUILDOUT		
None	None	None
SCENARIO 6 - YEAR 2005 WITHOUT SR 125		
None	None	None
SCENARIO 7 - YEAR 2010		
None	None	None
SCENARIO 8 - YEAR 2015		
None	None	None
SCENARIO 9 - YEAR 2030		
35. Rock Mountain Rd./La Media Rd.	Widen Rock Mountain Road to a 6-Ln Major Road with the appropriate intersection geometry per City of Chula Vista Standards. This will require a General Plan Amendment.	LOS D (AM & PM)
Rock Mountain Rd. from La Media Rd. to SR 125	Widen Rock Mountain Road to a 6-Ln Prime Arterial with the appropriate intersection geometry per City of Chula Vista Standards. Prior to 2030, the applicant shall pay a fair share toward the construction of the six-lane segment of Rock Mountain Road between La Media and SR 125, or shall construct the road segment. This will require a General Plan Amendment.	LOS C

Table C.16 Continued Village 7 SPA Significant Impacts and Mitigation Measures		
SIGNIFICANT IMPACTS	**MITIGATION MEASURES**	**BUILDOUT LOS WITH MITIGATION**
A. DIRECT IMPACTS (CONTINUED)		
SCENARIO 10 – BUILDOUT		
35. Rock Mountain Rd./La Media Rd.	Widen Rock Mountain Road to a 6-Ln Major Road with the appropriate intersection geometry per City of Chula Vista Standards. This will require a General Plan Amendment.	LOS D (AM & PM)
Rock Mountain Rd. from La Media Rd. to SR 125	Widen Rock Mountain Road to a 6-Ln Prime Arterial with the appropriate intersection geometry per City of Chula Vista Standards. Prior to 2030, the applicant shall pay a fair share toward the construction of the six-lane segment of Rock Mountain Road between La Media and SR 125, or shall construct the road segment. This will require a General Plan Amendment.	LOS C
B. CUMULATIVE IMPACTS		
SCENARIO 1 - YEAR 2005 WITHOUT SR 125		
1. Telegraph Cnyn. Rd./I-805 SB Ramps	No units within Village 7 shall be constructed which would result in the total number of units within the eastern territories (starting on January 1, 2003), exceeding 8,990 units, prior to the construction of SR 125 between SR 54 and the International border.	NA
Telegraph Cnyn. Rd. from I-805 to Oleander Ave.	No units within Village 7 shall be constructed which would result in the total number of units within the eastern territories (starting on January 1, 2003), exceeding 8,990 units, prior to the construction of SR 125 between SR 54 and the International border.	NA
SCENARIO 2 - YEAR 2010		
None	None	None
SCENARIO 3 - YEAR 2015		
Rock Mountain Road from SR 125 to Eastlake Pkwy.	Contribute fairshare towards widening of Rock Mountain Road to a 7-Ln Major Street standards. This will require a General Plan Amendment.	LOS C
SCENARIO 4 - YEAR 2030		
Rock Mountain Road from SR 125 to Eastlake Pkwy.	Contribute fairshare towards widening of Rock Mountain Road to a 7-Ln Major Street standards. This will require a General Plan Amendment.	LOS B
SCENARIO 5 – BUILDOUT		
Rock Mountain Road from SR 125 to Eastlake Pkwy.	Contribute fairshare towards widening of Rock Mountain Road to a 7-Ln Major Street standards. This will require a General Plan Amendment.	LOS C

Note: NA - Not applicable since the impact is not mitigated prior to SR 125.

Table C.16 Continued Village 7 SPA Significant Impacts and Mitigation Measures		
SIGNIFICANT IMPACTS	**MITIGATION MEASURES**	**BUILDOUT LOS WITH MITIGATION**
B. CUMULATIVE IMPACTS (CONTINUED)		
SCENARIO 6 – YEAR 2005 WITHOUT SR 125		
1. Telegraph Cnyn. Rd./I-805 SB Ramps	No units within Village 7 shall be constructed which would result in the total number of units within the eastern territories (starting on January 1, 2003), exceeding 8,990 units, prior to the construction of SR 125 between SR 54 and the International border.	NA
Telegraph Cnyn. Rd. from I-805 to Oleander Ave.	No units within Village 7 shall be constructed which would result in the total number of units within the eastern territories (starting on January 1, 2003), exceeding 8,990 units, prior to the construction of SR 125 between SR 54 and the International border.	NA
SCENARIO 7 - YEAR 2010		
None	None	None
SCENARIO 8 - YEAR 2015		
Rock Mountain Road from Main St. to La Media Rd.	Contribute fairshare towards widening of Rock Mountain Road to a 4-Ln Major Street standards. This will require a General Plan Amendment.	LOS C
Rock Mountain Road from La Media Rd. to SR 125	Contribute fairshare towards widening of Rock Mountain Road to a 6-Ln Major Street standards. This will require a General Plan Amendment.	LOS C
Rock Mountain Road from SR 125 to Eastlake Pkwy.	Contribute fairshare towards widening of Rock Mountain Road to a 6-Ln Prime Arterial standards. This will require a General Plan Amendment.	LOS C
SCENARIO 9 - YEAR 2030		
35. Rock Mountain Rd./La Media Rd.	Contribute fairshare towards widening of Rock Mountain Road to a 6-Ln Prime Arterial standards with the appropriate intersection geometry per City of Chula Vista Standards. This will require a General Plan Amendment.	LOS D during the AM and PM peak hours
Rock Mountain Road from Main St. to La Media Rd.	Contribute fairshare towards widening of Rock Mountain Road to a 6-Ln Major Street standards. This will require a General Plan Amendment.	LOS C
Rock Mountain Road from SR 125 to Eastlake Pkwy.	Contribute fairshare towards widening of Rock Mountain Road to a 8-Ln Prime Arterial standards. This will require a General Plan Amendment.	LOS C

Note: NA - Not applicable since the impact is not mitigated prior to SR 125.

Table C.16 Continued Village 7 SPA Significant Impacts and Mitigation Measures		
SIGNIFICANT IMPACTS	**MITIGATION MEASURES**	**BUILDOUT LOS WITH MITIGATION**
B. CUMULATIVE IMPACTS (CONTINUED)		
SCENARIO 10 – BUILDOUT		
Rock Mountain Road from SR 125 to Eastlake Pkwy.	Contribute fairshare towards widening of Rock Mountain Road to a 8-Ln Prime Arterial standards. This will require a General Plan Amendment	LOS C
C. FREEWAYS		
SCENARIO 1 - YEAR 2005 WITHOUT SR 125		
None	None	None
SCENARIO 2 - YEAR 2010		
None	None	None
SCENARIO 3 - YEAR 2015		
NB I-805 from Telegraph Cnyn. Rd. to East "H" St.	Additional lanes would be required to maintain acceptable LOS. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.	NA
SB I-805 from East "H" St. to Telegraph Cnyn. Rd.	Same as above.	NA
SB I-805 from Olympic Pkwy. to Main St.	Same as above.	NA
SCENARIO 4 - YEAR 2030		
NB I-805 from Telegraph Cnyn. Rd. to East "H" St.	Additional lanes would be required to maintain acceptable LOS. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.	
SB I-805 from East "H" St. to Telegraph Cnyn. Rd.	Same as above.	NA
SB I-805 from Telegraph Cnyn. Rd. to Olympic Pkwy.	Same as above.	NA
SB I-805 from Olympic Pkwy. to Main St.	Same as above.	NA

Table C.16 Continued Village 7 SPA Significant Impacts and Mitigation Measures		
SIGNIFICANT IMPACTS	**MITIGATION MEASURES**	**BUILDOUT LOS WITH MITIGATION**
C. FREEWAYS (CONTINUED)		
SCENARIO 5 - YEAR 2030		
NB I-805 from Telegraph Cnyn. Rd. to East "H" St.	Additional lanes would be required to maintain acceptable LOS. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.	NA
SB I-805 from East "H" St. to Telegraph Cnyn. Rd.	Same as above.	NA
SB I-805 from Telegraph Cnyn. Rd. to Olympic Pkwy.	Same as above.	NA
SB I-805 from Olympic Pkwy. to Main St.	Same as above.	NA
SCENARIO 6 - YEAR 2005 WITHOUT SR 125		
None	None	None
SCENARIO 7 - YEAR 2010		
NB I-805 from Telegraph Cnyn. Rd. to East "H" St.	Additional lanes would be required to maintain acceptable LOS. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.	NA
SB I-805 from East "H" St. to Telegraph Cnyn. Rd.	Same as above.	NA
SCENARIO 8 - YEAR 2015		
NB I-805 from Telegraph Cnyn. Rd. to East "H" St.	Additional lanes would be required to maintain acceptable LOS. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.	NA
SB I-805 from East "H" St. to Telegraph Cnyn. Rd.	Same as above.	NA
SB I-805 from Olympic Pkwy. to Main St.	Same as above.	NA

Table C.16 Continued Village 7 SPA Significant Impacts and Mitigation Measures		
SIGNIFICANT IMPACTS	**MITIGATION MEASURES**	**BUILDOUT LOS WITH MITIGATION**
C. FREEWAYS (CONTINUED)		
SCENARIO 9 - YEAR 2030		
NB I-805 from Telegraph Cnyn. Rd. to East "H" St.	Additional lanes would be required to maintain acceptable LOS. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.	NA
SB I-805 from East "H" St. to Telegraph Cnyn. Rd.	Same as above.	NA
NB I-805 from Olympic Pkwy. to Telegraph Cnyn. Rd.	Same as above.	NA
SB I-805 from Telegraph Cnyn. Rd. to Olympic Pkwy.	Same as above.	NA
SB I-805 from Olympic Pkwy. to Main St.	Same as above.	NA
SCENARIO 10 - BUILDOUT		
NB I-805 from Telegraph Cnyn. Rd. to East "H" St.	Additional lanes would be required to maintain acceptable LOS. Continued freeway planning efforts and deficiency planning by Caltrans and SANDAG will determine mitigation strategies for the regional freeway system.	NA
SB I-805 from East "H" St. to Telegraph Cnyn. Rd.	Same as above.	NA
SB I-805 from Telegraph Cnyn. Rd. to Olympic Pkwy.	Same as above.	NA
NB I-805 from Main St. to Olympic Pkwy.	Same as above.	NA
SB I-805 from Olympic Pkwy. to Main St.	Same as above.	NA

Table C.16 Continued Village 7 SPA Significant Impacts and Mitigation Measures		
SIGNIFICANT IMPACTS	**MITIGATION MEASURES**	**BUILDOUT LOS WITH MITIGATION**
D. PROJECT ACCESS		
44. Magdelena Ave./Birch Rd.	Phasing of the following improvements shall be consistent with the project PFFP and to the satisfaction of the City Engineer, with intersection lane geometry per Figure 38 of the LL&G report. Prior to issuance of building permits triggering the construction of the intersection improvements, the applicant shall enter into an agreement to design, construct, and secure a fully actuated traffic signal including interconnect wiring, mast arms, signal heads and associated equipment, underground improvements, standards and luminaires at the Magdelena Avenue/Birch Road intersection. The design of the signal shall be to the satisfaction of the City Engineer. The applicant shall provide turn lane storage lengths as listed in Table 22 of the LL&G report.	LOS C or better
45. Magdelena Ave./Rock Mountain Rd.	Phasing of the following improvements shall be consistent with the project PFFP and to the satisfaction of the City Engineer, with intersection lane geometry per Figure 38 of the LL&G report. Prior to issuance of building permits triggering the construction of the intersection improvements, the applicant shall enter into an agreement to design, construct, and secure a fully actuated traffic signal including interconnect wiring, mast arms, signal heads and associated equipment, underground improvements, standards and luminaires at the Magdelena Avenue/ Rock Mountain Road intersection. The design of the signal shall be to the satisfaction of the City Engineer. The applicant shall provide turn lane storage lengths as listed in Table 22 of the LL&G report.	LOS C or better
46. Street "C"/La Media Rd.	Phasing of the following improvements shall be consistent with the project PFFP and to the satisfaction of the City Engineer, with intersection lane geometry per Figure 38 of the LL&G report. Prior to issuance of building permits triggering the construction of the intersection improvements, the applicant shall enter into an agreement to design, construct, and secure a fully actuated traffic signal including interconnect wiring, mast arms, signal heads and associated equipment, underground improvements, standards and luminaires at the Street "C"/La Media Road intersection. The design of the signal shall be to the satisfaction of the City Engineer. The applicant shall provide turn lane storage lengths as listed in Table 22 of the LL&G report.	LOS C or better

Table C.16 Continued Village 7 SPA Significant Impacts and Mitigation Measures	
SIGNIFICANT IMPACTS	**MITIGATION MEASURES**
E. INTERNAL CIRCULATION (INTERSECTION TRAFFIC CONTROL)	
Magdalena Avenue/Street "J"	Prior to issuance of building permits triggering the construction of the intersection improvements, the applicant shall enter into an agreement to design, construct, and secure All-way STOP control at the Magdalena Avenue/Street "J" intersection.
Magdalena Avenue/Street "D"	Prior to issuance of building permits triggering the construction of the intersection improvements, the applicant shall enter into an agreement to design, construct, and secure All-way STOP control at the Magdalena Avenue/Street "D" intersection.
Magdalena Avenue/MU-1 Access	Prior to issuance of building permits triggering the construction of the intersection improvements, the applicant shall enter into an agreement to design, construct, and secure All-way STOP control at the Magdalena Avenue/MU-1 intersection.
Magdalena Avenue/Street "E"	Prior to issuance of building permits triggering the construction of the intersection improvements, the applicant shall enter into an agreement to design, construct, and secure All-way STOP control at the Magdalena Avenue/Street "E" intersection.
Magdalena Avenue/Street "C"	Prior to issuance of building permits triggering the construction of the intersection improvements, the applicant shall enter into an agreement to design, construct, and secure a fully actuated traffic signal including interconnect wiring, mast arms, signal heads and associated equipment, underground improvements, standards and luminaires at the Magdelena Avenue/Street "C" intersection. The design of the signal shall be to the satisfaction of the City Engineer.

II.5.4.2 POLICE

II.5.4.2.1 Threshold Standard

A. Emergency Response: properly equipped and staffed police units shall respond to 81% of "Priority One" Emergency calls throughout the city within 7 minutes and shall maintain an average response time to all "Priority One" emergency calls of 5.5 minutes or less (measured annually).

B. Urgent Response: Properly equipped and staffed police units shall respond to 57% of "Priority Two" Urgent calls throughout the city within 7 minutes and maintain an average response time to all "Priority Two" calls of 7.5 minutes or less (measured annually).

II.5.4.2.2 Service Analysis

The City of Chula Vista Police Department provides police services. The purpose of the Threshold Standard is to maintain or improve the current level of police services throughout the City by ensuring that adequate levels of staff, equipment and training are provided. Police threshold performance was analyzed in the "Report on Police Threshold Performance 1990-1999", completed April 13, 2000. In response to Police Department and GMOC concerns the City Council amended the threshold standards for Police Emergency Response on May 28, 2002, with adoption of Ordinance 2860. Police Facilities are also addressed in *A Master Plan for the Chula Vista Civic Center Solving City Space Needs Through Year 2010,* dated May 8, 1989.

II.5.4.2.3 Project Processing Requirements

The PFFP is required by the Growth Management Program to address the following issues for Police Services.

A. Services reviewed must be consistent with the proposed phasing of the project.

B. Able to demonstrate conformance with *A Master Plan for the Chula Vista Civic Center* dated May 8, 1989, as amended.

II.5.4.2.4 Existing Conditions

The Chula Vista Police Department (CVPD) provides law enforcement services to the area encompassing the Otay Ranch Village 7 SPA. The CVPD is located in a new headquarters building at the corner 4th Avenue and F Street in Chula Vista. This new facility is expected to be adequate through the build-out of eastern Chula Vista. Currently, CVPD maintains a staff of approximately 221 sworn officers and approximately 103 civilian and support personnel. The Department has been authorized 228 sworn officers and 112 civilian staff. The Department is recruiting new officers and has approximately 15 officers in training. The Otay Ranch Village 7 SPA is within Police Patrol Beat 24 that is served by at least one patrol car 24 hours per day.

<u>Police Facility Inventory</u>

- New Police Headquarters at 4th Avenue and F Street.

II.5.4.2.5 Adequacy Analysis

According to the City's Growth Management Coordinator the response times for "Priority One" and "Priority Two" Calls for Service (CFS) were not met. During the July 2001 to June 2002 time period the Police Department responded to 80% of "Priority One" emergency calls within 7, below the 84% response time threshold. However, the average "Priority One" call response time was 5:07 minutes compared to the 5:30 minute threshold time. The GMOC considered this "Priority One"performance to be in "virtual compliance." Forty five point six percent (45.6%) of "Priority Two" urgent calls were responded to within 7 minutes compared to the 62% threshold. The average "Priority Two" call response time was 10:04 minutes compared to the 7:30 minute threshold time.

According to the GMOC, police response time is just one measure of how these services are keeping pace with growth. The city has implemented measures to improve police response time. These measures range from maintaining full staffing to technological improvements. Response time is recognized as being less than an ideal threshold particularly when it is looked at in isolation. A community attitude survey concerning the quality of police service consistently shows the police receiving high marks. The community is satisfied yet the threshold has failed. The difficulty is defining a threshold measure that reflects some aspect of police service that is directly impacted by growth, and that some corrective action can be taken to correct a failure. Linking a threshold to a crime rate figure is flawed, as crime is often inversely related to growth. That is, in a strong economy accompanied by increased growth, crime rates typically go down. The reverse occurs when the economy is weak. Two measures that do relate to the ability of the Police Department to maintain the quality of life and are growth related are maintaining adequate staffing and reducing false alarms.

The GMOC concluded that it must determine what additional appropriate measures will be necessary to monitor the quality of police service in the face of growth. To this end, the GMOC will investigate establishing a set of "targets" to be monitored. Currently, these "targets" are outside of the parameters as established by the city's Growth Management Ordinance. Monitoring these "targets" may lead to a specific recommendation by the GMOC for their formal inclusion as a threshold measure. This initial investigation period will evaluate the difficulty and cost of providing the information and if the target ultimately proves useful in assessing how the Police Department is responding to growth. The targets are:

- Maintaining the advanced hire program and an effective number of officers relative to the population.
- A decrease in the rate of false alarms, particularly in new developments.

As the table below indicates, the Police Department has made progress in reducing their response time over the past several years. The Police Department is engaged in several current or proposed initiatives to continue the reduction in response times.

Table D.1 Historic Response Times Priority I -- Emergency Response, Calls For Service			
	Call Volume	% of Call Response within 7 Minutes	Average Response Time
Threshold		81.0%	5:30
FY 2001-02	1,539 of 71,859	80.0%	5:07
FY 2000-01	1,734 of 73,977	79.7%	5:13
FY 1999-00	1,750 of 76,738	75.9%	5:21
CY 1999[10]	11,890 of 74,405	70.9%	5:50

Source: City of Chula Vista

The Police Department initiatives include:

- **Dispatch staffed:** The Dispatch section is now fully staffed.
- **Additional police car in East during busy times:** An additional car has been added to the eastern beat.
- **Greater area familiarity:** Team policing has been instituted.
- **Full Staffing:** Due to the implementation of the advance hire program staffing overall is at a record level with 223 positions filled out of 228 (as of 3/31/03).
- **Faster address location:** The Department has upgraded the entire patrol fleet to Mobile Data Computers (MDCs) for mapping capabilities. In-car mapping helps officers ascertain the quickest route to a call location. In addition, these maps can be more easily updated to include new streets in east Chula Vista.
- **Global positioning system:** The Department has GPS hardware for this system, and is currently preparing the software base needed to implement the technology. This technology will integrate GPS in patrol cars with the computer-aided dispatch (CAD) system, which will allow police dispatchers to route the nearest available units to calls for service.
- **Continuing efforts under the Advance Hire program:** Under this initiative, the Department is able to hire five officers over the number authorized. This program takes into account anticipated officer turnover and the lengthy lead-time required to place new officers on the street. This initiative helps ensure that adequate numbers of officers will be available for patrol duties, which in turn, favorably affects response times.

II.5.4.2.6 Financing Police Facilities

The Public Facilities Development Impact Fee (PFDIF) was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2886 and 2887. The current fee for single family residential development is $5,048/unit, multi-family residential is $4,726/unit, commercial (including office) development is $20,764/acre and industrial development is $3,848/acre. This amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the Otay Ranch Village 7 SPA project.

[10] The FY98-99 GMOC Report used calendar 1999 data due to the implementation of the new CAD system in mid-1998.

The Otay Ranch Village 7 SPA is within the boundaries of the PFDIF Program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current fee rate, the Otay Ranch Village 7 SPA Plan Police Fee obligation at buildout is $1,140,944.

Table D.2
Otay Ranch Village 7 SPA
Public Facilities Fees For Police[11]

Development Phase	Dwelling Units		Com'l Acres	Police Fee			
	SF	MF		Single Family $804/DU	Multi-Family $1,190/DU	Com'l $10,356/Ac.	Total Fee
White	0	0	0	$0	$0	$0	$0
Blue	346	448	0	$278,184	$533,120	$0	$811,304
Red	375	0		$301,500	$0	$0	$301,500
Green	35	0	0	$28,140	$0	$0	$28,140
Total	**1,204**		**0**	**$607,824**	**$533,120**	**$0**	**$1,140,944**

Table D.2 is an estimate of the proposed project. Actual fees may be different. PDIF Fees are subject to change depending upon City Council actions and or Developer actions that change residential densities, industrial acreage or commercial acreages.

II.5.3.2.7. THRESHOLD COMPLIANCE AND REQUIREMENTS

A. The City will continue to monitor police responses to calls for service in both the Emergency (priority one) and Urgent (priority two) categories and report the results to the GMOC on an annual basis.

B. That the Police Department remain diligent in meeting and achieving shorter response times than what is indicated as the Threshold Standard through the active pursuit and implementation of their current and planned programs and report on how these measures improved response times to next years GMOC.

C. Compliance will be satisfied with the payment of Public Facilities Fees. The proposed project will be required to pay public facilities fees for police services based on the number of dwelling units, the amount of commercial acres and the amount of industrial acres at the rate in effect the time building permits are issued.

[11] The PDIF Fee is subject to change as it is amended from time to time. Changes in the number of dwelling units, Industrial Acreage or Commercial Acreage may affect the estimated fee.

II.5.4.3 FIRE AND EMERGENCY MEDICAL SERVICES

II.5.4.3.1 Threshold Standard

Emergency response: Properly equipped and staffed fire and medical units shall respond to calls throughout the City within seven (7) minutes in 80 percent (current service to be verified) of the cases (measured annually).

II.5.4.3.2 Service Analysis

The City of Chula Vista Fire Department provides Fire and Emergency Medical Services (EMS). EMS is provided on a contract basis with American Medical Response (AMR). The City also has county-wide mutual and automatic aid agreements with surrounding agencies, should the need arise for their assistance. The purpose of the Threshold Standard and the monitoring of response times are to maintain and improve the current level of fire protection EMS in the City. Fire/EMS facilities are provided for in the 1997 Fire Station Master Plan, as amended. The Fire Station Master Plan indicates that the number and location of fire stations primarily determine response time. The Fire Station Master Plan evaluates the planning area's fire coverage needs, and recommends a nine (9) station network at build out to maintain compliance with the threshold standard.

II.5.4.3.3 Project Processing Requirements

Developments shall be in accordance with the project guidelines outlined in the Fire Station Master Plan as may be amended from time to time.

In accordance with the Fire Station Master Plan, the City, at its sole discretion, shall determine when a new fire station is required in order to achieve threshold service levels, meet specific project guidelines or maintain general operational needs of the Fire Department.

The requirement to pay for fire station construction and related equipment shall be the sole responsibility of the developer or developers and the City may require said developer or developers to provide a guarantee mechanism to assure the availability of such funding.

The SPA Plan and the PFFP are required by the Growth Management Program to address the following issues for fire services:

A. Specific siting of the facility takes place, which conforms to the *Fire Station Master Plan,* August 14, 1997, as amended.
B. Equipment needs identified.
C. Methods of financing discussed.
D. Timing of construction is consistent with threshold service levels, specific project guidelines and/or general operational needs of the Fire Department.
E. Demonstrate the ability to provide adequate facilities to access required fire stations in conjunction with the construction of sewer and water facilities.

II.5.4.3.4 Existing Conditions

There are currently seven (7) city stations and one (1) fire protection district station serving the City of Chula Vista. The existing and future stations are listed below:

Table E.1 Fire Station Inventory		
Chula Vista Existing Facilities	**Location**	
Station #1	447 "F" Street	
Station #2	80 East "J" Street	
Station #3	1410 Brandywine	
Station #4 + Fire Training Tower	850 Paseo Ranchero	
Station #5 (Montgomery)	391 Oxford Street	
Interim Station #6	975 Lane Avenue	
Otay Ranch #7	1640 Santa Venetia	
Fire Prevention Bureau	447 "F" Street	
Fire Administration	447 "F" Street	
County Fire Protection District Facility[12]		
Bonita/Sunnyside Fire Protection Dist.	4900 Bonita Road	
Planned Facilities		**Cost Estimate**[13]
Station #5 (to be reconstructed)	391 Oxford Street	$1,200,000
Station #6 (permanent facility)	Rolling Hills Ranch/Mt. Miguel	$1,000,000
EastLake Trails/Woods #8	East H Street/Mt. Miguel Rd.	None Established
Otay Ranch #9	Village 15	None Established
Other Capital Improvements		
Public Safety Communications (CAD/RMS)	Dispatch Center	$4,612,050
Public Safety Communications (800MHz)	Citywide	None Established
Brush Engine	Eastern Territories	$225,000

II.5.4.3.5 Adequacy Analysis

The City of Chula Vista Fire Department (CVFD) currently serves areas within the City's boundaries, including the Otay Ranch Otay Ranch Village 7 SPA. The closest CVFD stations to the project site are:

- Fire Station #3, located in the Sunbow development.
- Fire Station #4, located at 850 Paseo Ranchero.
- Interim Fire Station #6, located in the EastLake Woods.
- Planned Fire Station #8, to be located in the Rolling Hills development.

The station nearest to the Otay Ranch Otay Ranch Village 7 SPA project is the planned Fire Station #7 and will provide first-in coverage to the project.

According to the GMOC 2002 report, times for Emergency Response were not met during the July 2001, to June 2002, period. The Fire Department responded to 69.7% of emergency calls within 7 minutes, compared with the 80% threshold level that had been based on an estimated 1.3 minute dispatch and turnout and 5.7 minute travel time.

[12] The City of Chula Vista has an Automatic Aid Agreement with Bonita/Sunnyside and the cities of National City, Imperial Beach, Coronado and San Diego.

[13] Cost Estimates are approximate figures and subject to refinement by the City of Chula Vista.

This was unexpected as it was anticipated that changing to a new dispatch provider would improve response time. However, increases in dispatch, turn out, and travel time have been experienced. Both east and west Chula Vista have been impacted, although the degree of impact was considerably less in the west.

Table E.2
FIRE/EMS - Emergency Response Times Since 1994

Years	Call Volume	% of All Call Response Win 7:00 Minutes
FY 2001-02	7,626	69.7%
FY 2000-01	7,128	80.8%
FY 1999-00	6,654	79.7%
CY 1999	6,344	77.2%
CY 1998	4,119	81.9%
CY 1997	6,275	82.4%
CY 1996	6,103	79.4%
CY 1995	5,885	80.0%
CY 1994	5,701	81.7%

The basic causes for the decline in performance is that there have been regulatory and procedural changes that result in longer response times. Further, there has been continued growth in the east. It was reported that 79.4% of calls in the west are responded to within 7 minutes compared to 43.7% of the calls in the east. Fire Station 7 in Village 2 is now operational and will assist in improving response times. Station 7 will ultimately have a staff of 21. In addition, Fire Station No. 6 is planned for Rolling Hills Ranch, to be relocated from the temporary location in the Eastlake Business Park. The process to relocate the station will be completed in approximately 1 year. The station has a staff of 3 per shift for a total of 9.

American Medical Response (AMR) provides emergency medical services to the project site, on a contract basis for the City of Chula Vista. There are two AMR stations, which provide paramedic with EMT services to the City of Chula Vista exclusively.

II.5.4.3.6 Financing Fire Service Facilities

The Public Facilities Development Impact Fee (PFDIF) was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2886 and 2887. The current fee for single family residential development is $5,048/unit, multi-family residential is $4,726/unit and commercial (including office) development is $20,764/acre. This amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the Otay Ranch Otay Ranch Village 7 SPA project.

The Otay Ranch Otay Ranch Village 7 SPA is within the boundaries of the PFDIF Program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current fee rate, the Otay Ranch Otay Ranch Village 7 SPA Plan Fire Fee obligation at buildout is $541,354 (see Table E.3). Table E.3 is an estimate. Actual fees may be different. PDIF Fees are subject to change depending upon City Council actions and or Developer actions that change residential densities, industrial acreage or commercial acreages.

Table E.3 Otay Ranch Village 7 SPA Public Facilities Fees For Fire[14]							
Development Phase	Dwelling Units		Com'l Acres	Fire Fee			
	SF	MF		Single Family $450/DU	Multi-Family $448/DU	Com'l $2,245/Ac.	Total Fee
White	0	0	0	$0	$0	$0	$0
Blue	346	448		$155,700	$200,704	$0	$356,404
Red	375	0		$168,750	$0	$0	$168,750
Green	35	0		$15,750	$0	$0	$15,750
Total	**1,204**		**0**	**$340,650**	**$200,704**	**$0**	**$541,354**

II.5.4.3.7 Threshold Compliance and Recommendations

Threshold Compliance

Similar to the Police threshold, response time alone is not a complete measure by which to rate the Fire/EMS Department's response to growth. Other measures should be considered. A set of "targets" has been identified that represent benchmarks in how resources are being allocated to the fire Department in order for them to maintain the threshold. Monitoring these "targets" may lead to a specific recommendation by the GMOC for their formal inclusion as a threshold measure. This initial investigation period will evaluate the difficulty and cost of providing the information and if the target ultimately proves useful in assessing how the City is responding to growth.

The aforementioned disparity in response time from the eastern and the western portions of the city is in large part a function of the relative number and proximity of fire stations to residences and businesses. A potential factor may be community design. Fire Department staff has indicated a concern that relative to the western portion of the city, the new master planned areas are characterized by long circuitous streets, some guarded/gated communities, and in rare cases speed bumps on sections of private road. All of these features are believed to impact response times. The exact magnitude of design features on overall response time averages has not been quantified. Therefore, the significance of "design" in the decline in response times remains uncertain. In any event, the future physical layout of eastern development is now being adjusted to more closely resemble a grid pattern, which may improve response time performance. In addition, the GMOC's position is that the response time standard must be applied equally to both east and west. They have tasked the Fire Department with providing this level of service in an equitable fashion.

Threshold Requirements:

A. The City will continue to monitor fire department responses to emergency fire and medical calls and report the results to the GMOC on an annual basis. The GMOC has recommended that the Fire Department develop targets (i.e. schedules) for the following inputs, to be monitored by the GMOC: (1) timing of Fire Station construction, (2) equipment purchase for these stations, and (3) staff hire relative to growth.

B. The Otay Ranch Otay Ranch Village 7 project shall pay public facilities fees at the rate in effect at the time building permits are issued.

[14] The PDIF Fee is subject to change as it is amended from time to time. Changes in the number of dwelling units, Industrial Acreage or Commercial Acreage may affect the estimated fee.

II.5.4.4 SCHOOLS

II.5.4.4.1 Threshold Standard

The City annually provides the two local school districts with a 12 to 18 month development forecast and requests an evaluation of their ability to accommodate the forecast and continuing growth. The Districts' replies should address the following:

1. Amount of current capacity now used or committed.
2. Ability to absorb forecasted growth in affected facilities.
3. Evaluation of funding and site availability for projected new facilities.
4. Other relevant information the District(s) desire(s) to communicate to the City and GMOC.

II.5.4.4.2 Service Analysis

School facilities and services in Chula Vista are provided by two school districts. The Chula Vista Elementary School District (CVESD) administers education for kindergarten through sixth grades. The Sweetwater Union High School District (SUHSD) administers education for the Junior/Middle and Senior High Schools of a large district, which includes the City of Chula Vista. The purpose of the threshold standard is to ensure that the districts have the necessary school sites and funds to meet the needs of students in newly developing areas in a timely manner, and to prevent the negative impacts of overcrowding on the existing schools. Through the provision of development forecasts, school district personnel can plan and implement school facility construction and program allocation in line with development if adequate school funds are available.

On November 3, 1998, California voters approved Proposition 1A, the Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998. Prior to the passage of Proposition 1A, school districts relied on statutory school fees established by Assembly Bill 2926 ("School Fee Legislation") which was adopted in 1986, as well as judicial authority (i.e., Mira-Hart-Murrieta court decisions) to mitigate the impacts of new residential development. In a post Proposition 1A environment, the statutory fees provided for in the School Fee Legislation remains in effect and any mitigation requirements or conditions of approval not memorialized in a mitigation agreement, after January 1, 2000, will be replaced by Alternative Fees (sometimes referred to as Level II and Level III Fees). The statutory fee for residential development is referred to in these circumstances as the Level I Fee (i.e., currently at $2.24 per square foot for new residential construction and $0.36 per square foot for new commercial and industrial construction).

CVESD utilizes their School Facilities Needs Analysis (SFNA), February, 2003, to quantify, for the next five-year period, the impacts of new residential development on the districts school facilities, and to calculate the permissible Alternative Fees to be collected from such new residential development. To ensure the timely construction of school facilities to house students from residential development in Village 7, alternative fees or implementation of a Mello-Roos Community Facilities District (CFD) will be necessary.

In compliance with Government Code Section 65995 et. Seq. the SFNA provides the determination of eligibility for and the calculation of a Level II Fee of $1.51 per square foot of new residential construction. A corresponding Level III Fee of $3.04 per square foot of new residential construction is also identified.

SHUSD utilizes their School Facilities Needs Analysis (SFNA), April, 2004, to quantify, for the next five-year period, the impacts of new residential development on the districts school facilities, and to calculate the permissible Alternative Fees to be collected from such new residential development. To ensure the timely construction of school facilities to house students from residential development in Village 7, alternative fees or implementation of a Mello-Roos Community Facilities District (CFD) will be necessary.

In compliance with Government Code Section 65995 et. Seq. the SFNA provides the determination of eligibility for and the calculation of a Level II Fee of $1.92 per square foot of new residential construction. A corresponding Level III Fee of $3.84 per square foot of new residential construction is also identified.

II.5.4.4.3 Project Processing Requirements

The PFFP is required by the Growth Management Program to address the following issues for School Services:

1. Identify student generation by phase of development.
2. The siting of proposed school facilities will take place in conformance with the *Sweetwater Union High School District Long Range School Facility Master Plan,* and the Chula Vista Elementary School District's Standards and Criteria.
3. Reserve school sites, if necessary, or coordinate with the district for additional school classrooms.
4. Provide cost estimates for facilities.
5. Identify facilities consistent with proposed phasing.
6. Demonstrate the ability to provide adequate facilities to access public schools in conjunction with the construction of water and sewer facilities.
7. Secure financing.

II.5.4.4.4 Existing Conditions

School Facilities Inventory, Chula Vista Elementary School District

Currently, the CVESD's inventory consists of 37 elementary schools including 6 Charter schools. Table Q lists existing schools together with the capacity and enrollment of each. Capacity using existing buildings is 27,380. Enrollment is currently approximately 25,534. Ten of the 40 schools, Arroyo Vista, Casillas, Cook, Feaster, Heritage, Hilltop, Marshall, McMillin, Olympic View and Rogers are over capacity. Seven of the 40 schools, Castle Park, Chula Vista Hills, Discovery, Finney, Kellogg, Otay, and Rosebank are near capacity (see Table F). Eightteen schools are on a traditional calendar and 22 are on year-round calendar.

New elementary schools will be needed to meet the educational needs of students generated from the projected development and resultant population increase. The district has experienced rapid growth during the past decade. During the period from 1993 to 2002 District enrollment went up by 5,700 students, an increase of 30%. This growth was reportedly due to:

1. Demographic changes in older neighborhoods;
2. New growth in the eastern territories; and

3. Higher student generation ratios (students per household) in some new developments in the east.

Table F.1
Chula Vista Elementary School District
Enrollments vs. Capacity

School	Enrollment 9/19/03	Approximate Capacity	Remaining Capacity
Allen	426	500	74
Arroyo Vista	841	810	-31
Casillas	714	705	-9
Castle Park	575	590	15
Chula Vista Hills	585	600	15
Chula Vista LCC	558	600	42
Clear View	512	580	68
Cook	536	530	-6
Discovery	855	880	25
EastLake	621	740	119
Feaster	1124	1050	-74
Finney	525	540	15
Halecrest	503	570	67
Harborside	747	840	93
Hedenkamp	572	1000	428
Heritage	895	790	-105
Hilltop Drive	561	540	-21
Juarez-Lincoln	686	750	64
Kellogg	475	480	5
Lauderbach	887	960	73
Loma Verde	591	740	149
Los Altos	395	960	145
Marshall	712	740	-132
McMillin	802	765	-37
Montgomery	428	510	82
Mueller	911	955	44
Olympic View	741	730	-11
Otay	667	670	3
Palomar	436	490	54
Parkview	486	655	169
Rice	713	780	61
Rogers	606	580	-26
Rohr	455	560	105
Rosebank	726	730	4
Silver Wing	553	630	77
Sunnyside	519	590	71
Tiffany	650	730	80
Valle Lindo	572	600	28
Valley Vista	622	680	58
Vista Square	751	730	60
Total	**25,534**	**27,380**	**1,846**

Source: CVESD.

Table F.2 Sweetwater Union High School District Enrollments vs. Capacity			
School Site	**Adjusted Total Capacity**	**Current Enrollment[1]**	**Capacity vs. Projected**
Middle Schools			
Bonita Vista	1,750	1,124	626
Castle Park	1,750	1,460	290
Chula Vista	1,650	1,340	310
EastLake	1,885	984	901
Granger	1,380	1,245	135
Hilltop	1,630	1,153	477
Mar Vista	1,581	1,332	249
Montgomery	1,641	1,160	481
National City	1,054	889	165
Rancho Del Rey	1,630	1,594	36
Southwest	1,350	895	455
Subtotal	17,301	13,176	4,125
High Schools			
Bonita Vista	2,770	2,492	278
Castle Park	2,140	2,248	-108
Chula Vista	2,500	2,421	79
EastLake	3,160	2,399	761
Hilltop	2,230	2,101	129
Mar Vista	1,879	1,948	-69
Montgomery	2,440	2,181	259
Otay Ranch	2,400	1,685	715
San Ysidro	2,400	2,546	-146
Southwest	2,408	2,252	156
Sweetwater	2,163	3,197	-1,034
Palomar	600	447	153
Subtotal	**27,090**	**25,917**	**1,173**
Total	**44,391**	**39,093**	**5,298**

Source: SUHSD

School Facilities Inventory, Sweetwater Union High School District

The SUHSD currently administers eleven (11) junior high/middle schools and twelve (12) senior high schools including one continuation high school within the District. Of the eleven junior highs, ten have been converted to middle schools serving grades seven and eight. Many of the older middle schools capacities have been adjusted to accommodate new growth, however, the older middle schools were not originally designed to accommodate their current student populations. As the population grows, the District is projecting a need for and must

secure funding for two possibly three new middle schools and three new high schools throughout the District's boundaries.

Within the district, the primary need over the next several years is at the high school level. In 2002, the district completed construction and opened San Ysidro High School in Otay Mesa. In 2003 the district opened the Otay Ranch High School in Village 2. Planned for the future are two middle schools, and two more high schools to be located in Otay Ranch.

Table F.3
Sweetwater Union High School District
2004-2008 Planned Schools

Future Schools	Capacity	Est. Opening Date
Junior/Middle School in EastLake Woods	1,500	2005
High School/Otay Ranch Village 7	2,650-2950	2006

II.5.4.4.5 School Sizing and Location

The Otay Ranch Village 7 is proposed to consist of 1,501 dwelling units at build-out. However, the proposed Village 7 SPA project consists of 1,204 dwelling units that will generate approximately 773 total students using the Student Generation Factors provided below.

		Single Family Detached	Multi-Family Attached[15]
Elementary (K-6)	=	.3851[16] students/dwelling unit	.2255 students/d.u.
Middle School (7-8)	=	.11 students/dwelling unit	.063 students/d.u.
High School (9-12)	=	.21 students/dwelling unit	.095 students/d.u.

By phase and school category, Otay Ranch Village 7 SPA project is expected to generate the following students:

Table F.4
Otay Ranch Village 7
Student Generation By Development Phase

Phase	Dwelling Units		Student Generation							
			Elementary (K-6)		Middle (7-8)		High School (9-12)		Total Students	
	SF	MF	SF	MF	SF	MF	SF	MF	SF	MF
White	0	0	0	0	0	0	0	0	0	0
Blue	346	448	133	101	38	44	76	88	247	233
Red	375	0	144	0	41	0	83	0	268	0
Green	35	0	13	0	4	0	8	0	25	0
Subtotal	756	448	291	101	83	44	166	88	541	233
Total	1204		392		127		254		773	

[15] Rates from SUHSD
[16] Rates from CVESD SFNA report, February 2003.

At full build-out, Village 7 is expected to generate additional students.

Chula Vista Elementary School District

The State Department of Education must approve the site prior to district acceptance of the proposed Village Due to the tremendous growth and enrollment in the CVESD, it is the district's intent to retain the 10-acre site as identified in the SPA Plan. However, should the site be determined at a later date to be excess property for the purposes of a new school, the district will notify appropriate parties at that time.

The Village 7 Site Utilization Plan identifies a 10-acre elementary school site within the village core. As noted in Table F.4, the build-out of Village 7 would generate the need to house approximately 392 elementary school age students. Generally, CVESD prefers to construct elementary schools that serve approximately 750 students.

Sweetwater Union High School District

It is anticipated that the 126 middle school students generated by Village 7 will eventually be served at the future Village 7 Middle School. Students may attend the planned Village 11 Middle School or the Rancho del Rey Middle School until the Village 7 Middle School is constructed. The Village 11 Middle School site is approximately one mile east of Village 7. Rancho del Rey Middle School is located approximately three miles north of Village 7 along Paseo Ranchero. The Otay Ranch GDP School Facility Implementation Plan is based on the premise that schools will be constructed when half of the school's projected students reside in the community. The maximum middle school capacity is 1,500 students, which would indicate a school construction trigger of approximately 750 students. However, throughout the district there is abundant middle school capacity. Additional middle schools will be constructed when overall demand begins to approach existing capacity.

The maximum capacity of a high school is approximately 2,400 students. It is anticipated that the 381 students generated from Village 7 will be served at existing facilities until the Village 7 High School is completed.

Demand for adult school facilities will be satisfied within existing facilities in the Sweetwater Union High School District, until a new facility can be constructed in the Eastern Urban Center or a site reserved pursuant to the Otay Ranch GDP.

II.5.4.4.6 Financing School Facilities

California Government Code section 65995 et. seq. and Education Code Section 17620 et. seq. authorizes school districts to impose facility mitigation exactions on new development as a way to address increasing enrollment caused by that development.

The current allowable rate for school fees has been limited by the passage of SB 50 (as Proposition IA on November 31, 1998). The current fee is $2.24 per square foot for residential construction and $.36 per square foot for nonresidential. These amounts are divided between the two districts as follows: For the Sweetwater District - $1.25 and $0.19 per square foot for residential and nonresidential, respectively; and for the Chula Vista District - $0.99 and $0.17 per square foot for residential and nonresidential, respectively.

Although the collection of school fees is one method available to defray the cost of new development, it is not an acceptable solution since the maximum amount that could be collected by law represents less than one-fourth the cost to construct schools. The SUHSD is unable to meet the needs of this project with current school facilities and it is unable to construct new facilities to meet the impacts of this project through the provision of school fees.

In recognition of this funding deficiency, it is the policy of each district to fully mitigate the facility impacts caused by a master planned community via the creation of a Mello Roos Community Facilities District as a condition of approval of the SPA Plan (CVESD) or prior to recordation of a final map (SUHSD). The following Mello-Roos Districts have been created by each district:

SUHSD

CFD No.	1	EastLake
CFD No.	2	Bonita Long Canyon
CFD No.	3	Rancho del Rey
CFD No.	4	Sunbow
CFD No.	5	Annexable
CFD No.	6	Otay Ranch
CFD No.	7	Rolling Hills Estate
CFD No.	8	Coral Gate (Otay Mesa)
CFD No.	9	Ocean View Hills
CFD No.	10	Remington Hills (Annexable)
CFD No.	11	Otay Ranch (Lomas Verde)
CFD No.	12	Otay Ranch Village 1 West
CFD No.	13	San Miguel Ranch
CFD No.	14	Village 11 (Brookfield/Shea)
CFD No.	15	Otay Ranch Village 6 (ORC)

CVESD

CFD No.	1	EastLake
CFD No.	2	Bonita Long Canyon
CFD No.	3	Rancho del Rey
CFD No.	4	Sunbow
CFD No.	5	Annexable
CFD No.	6	Otay Ranch
CFD No.	10	Remington Hills (Annexable)
CFD No.	11	Otay Ranch (Lomas Verde)
CFD No.	12	Otay Ranch Village 1 West
CFD No.	13	San Miguel Ranch
CFD No.	14	Otay Ranch Village 11 (Brookfield/Shea)
CFD No.	15	Otay Ranch Village 6 (ORC)

Based on historical data available from each district an estimate of costs for the construction of school facilities on a per student basis is provided. Both districts follow state standards for determining the costs and size for school construction. The cost for a high school, including land acquisition, is approximately $34,005 per student (2004 dollars). The cost for a middle school, including land acquisition, is approximately $33,637 per student (2004 dollars). The cost for an elementary school, including land acquisition, is approximately $24,000 per student (2004 dollars). Using the aforementioned costs per student together with the school size, the following costs per facility can be anticipated.

Elementary School Cost
(1000 students) ($24,000/student w/land cost) $24,000,000

Middle School Cost
(1,500 students) ($33,640/student w/ land cost) $50,460,000

High School Cost
(2,400 students) ($34,000/student w/ land cost) $81,600,000

The above costs are estimates only and are subject to change depending upon land and construction costs.

II.5.4.4.7 Threshold Compliance and Recommendations

1. As future development applications are processed in the Eastern Territories, the City shall coordinate with each school district to ensure that development does not occur until acceptable school site(s) are identified and a financing mechanism satisfactory to each district is in place.

2. Prior to Final Map approval, the project proponent(s) shall provide documentation to the City confirming satisfaction of SUHSD and CVESD facility funding requirements to offset student generation impacts. Funding shall be satisfied through the Mello-Roos Community Facilities District financing method or other means acceptable to each District. In addition, condition the first tentative map to require that no final map shall be approved unless and until a school facility financing mechanism is in place to the satisfaction of the Sweetwater Union High School District and the Chula Vista Elementary School District.

II.5.4.5 LIBRARIES

II.5.4.5.1 Threshold Standard

In the area east of I-805, the city shall construct, by buildout (approximately year 2030) 60,000 GSF of library space beyond the citywide June 30, 2000 GSF total. The construction of said facilities shall be phased such that the city will not fall below the citywide ratio 500 GSF per 1,000 population. Library facilities are to be adequately equipped and staffed.

II.5.4.5.2 Service Analysis

The City of Chula Vista Library Department provides library facilities.

II.5.4.5.3 Project Processing Requirements

The PFFP is required by the Growth Management Program to address the following issues for Library services:

1. Identify phased demands in conjunction with the construction of streets, water and sewer facilities.
2. Specifically identify facility sites in conformance with the Chula Vista Library Master Plan.

II.5.4.5.4 Existing Conditions

The City provides library services through the Chula Vista Public Library at Fourth and "F" Street (Civic Center), the South Chula Vista Library in the Montgomery/Otay planning area, and the library at the EastLake High School. The Castle Park and Woodlawn Libraries have been closed. The existing and future libraries are listed on the Table G.1 and Table G.2, respectively.

Table G.1
Existing Library Facilities

Existing Libraries	Square Footage
Civic Center	55,000
South Chula Vista	37,000
EastLake	10,000
Total Existing Square Feet	**102,000**

II.5.4.5.5 Adequacy Analysis

Using the threshold standard of 500 square feet of library space per 1,000 population. The current demand for library space is approximately 103,944 square feet (based on a 12/03 estimated population of 207,999). Chula Vista currently provides 102,000 square feet of library space. This represents a current 1,944 square foot deficit. The demand generated by the 12,381 forecasted dwelling units (2004 through 2008) is 18,794 square feet (12,381 x 3.036[17]/1,000) x 500). By 2008 the demand for library space generated by the existing and forecasted dwelling units totals 122,739 (103,944 + 18,794) square feet. Comparing this

[17] Population coefficient of 3.036 persons per household.

demand to the existing library square footage of 102,000 square feet results in a deficit of 20,739 square feet after 2008. The SANDAG buildout population for Chula Vista is approximately 282,700. The City of Chula Vista is planning approximately 152,000 square feet of Library Facilities, which will meet build-out demand.

The Chula Vista Public Library Master Plan addresses such topics as library siting and phasing, the impacts of new technologies on library usage, and floor space needs. The plan calls for the construction of a full service regional library of approximately 30,000 square feet east of I-805 by the year 2005. The plan also recommends that this first branch be built in the Rancho del Rey at east H Street and Paseo Ranchero. During the past year the Library staff, in conjunction with the architectural firm of Carrier Johnson, has expended considerable time and effort in preparing conceptual plans for an approximate 36,400 square foot branch library to be constructed at the corner of East H Street and Paseo Ranchero. Further, the City Council approved an application for Library Bond Act grant funds to help construct the facility. Should the City be awarded a grant, the new branch should open by December 2005.

Even if the City does not receive grant funds, the Rancho del Rey Branch Library will be built. The Public Facilities Development Impact Fee for libraries was recently increased based upon the estimated $22 million cost of the Rancho del Rey Branch Library. This increase will ensure that enough funds are collected to construct and equip the project as planned. Under this scenario, the new branch is estimated to open in 2006.

However, with construction of the Rancho del Rey facility, the 10,000 square foot EastLake Library is recommended to be closed. With this closure, there is a projected net gain in library space of 5,481 square feet by the year 2007. Ultimately, with full buildout, the construction of a new regional library in Otay Ranch will keep pace with need.

Future library facilities are listed in the following table:

Table G.2
Future Library Facilities

Future Libraries	Square Footage	Estimated Cost
1st regional library (Rancho Del Rey) @ 30,000 sf	26,400*	$22,000,000
2nd regional library (Otay Ranch) @ 36,758 sf	23,600**	$15,000,000
Total Future Net Square Feet	**50,000**	
Total Master Plan Library Square Feet (existing and future)	**152,000**	

* Assumes construction of the first 36,400-square foot regional library by year 2006 and the closure of the 10,000-square foot EastLake library, per the Chula Vista Public Library Master Plan.

** Assumes construction of the second 23,600-square foot (minimum size) regional library.

Table G.3 highlights existing plus forecasted project demands for library space as compared to the existing and scheduled library space as well as the impact of the Otay Ranch Village 7 SPA on library facilities. The Otay Ranch Village 7 SPA will generate a total library demand of approximately 1,811 square feet, which can be accommodated in the projected total square feet of Library space.

Table G.3 Otay Ranch Village 7 SPA Library Space Demand vs. Supply				
	Population[18]	Demand Square Footage	Supply Square Footage	Above/(Below) Standard
Existing (Citywide)	207,999	103,944	102,000	(1,944)
Forecasted Projects to 2008[19]	37,589	18,975	0	(20,919)
1st regional library (Rancho del Rey)			26,400	5,481
Subtotal	**245,588**	**122,919**	**128,400**	**5,481**

11.5.4.5.6 Financing Library Facilities

The Public Facilities Development Impact Fee (PFDIF) was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2886 and 2887. The current fee for single family residential development is $5,048/unit, multi-family residential is $4,726/unit, commercial (including office) development is $20,764/acre and industrial development is $3,848/acre. This amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the Otay Ranch Village 7 SPA project.

The Otay Ranch Village 7 SPA is within the boundaries of the PFDIF Program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current fee rate, the Otay Ranch Village 7 SPA Plan Libraries Fee obligation at buildout is $891,380.

Table G.4 Village 7 SPA Public Facilities Fees For Libraries							
Development Phase	Dwelling Units		Com'l Acres	Library Fee			
	SF	MF		Single Family $753/DU	Multi-Family $719/DU	Com'l $0/Ac.	Total Fee
White	0	0	0	$0	$0	$0	$0
Blue	346	448	0.0	$260,538	$322,112	$0	$582,650
Red	375	0	0.0	$282,375	$0	$0	$282,375
Green	35	0	0.0	$26,355	$0	$0	$26,355
Subtotal	756	448	0.0	$569,268	$322,112	$0	$891,380
Total	**1204**		**0.0**	**$569,268**	**$322,112**	**$0**	**$891,380**

11.5.4.5.7 Threshold Compliance and Recommendations

Based upon the analysis contained in this library section, the city's current library facilities (102,000 square feet) are 1,944 square feet below the threshold standard (see Table G.3). The existing plus proposed new library space totals 128,400 square feet. The total forecasted projects including the Otay Ranch Village 7 SPA project totals a demand 128,400 square feet by 2008. This results in an <u>excess</u> (above standard) supply of 5,481 square feet.

No mitigation is required other than the payment of the Public Facilities DIF for library facilities at the rate in effect at the time building permits are issued.

[18] Based on City of Chula Vista Estimates, 2003 GMOC Annual Report.

[19] 12,381 dwelling units x 3.036 persons per dwelling

II.5.4.6 PARKS, TRAILS AND OPEN SPACE

II.5.4.6.1 Park Threshold Standard

Three (3) acres of neighborhood and community parkland with appropriate facilities shall be provided per 1,000 residents. This standard is specified in Section 17.10.040 of the Chula Vista Municipal Code.

II.5.4.6.2 Service Analysis

The City of Chula Vista provides public park and recreational opportunities through the General Services, Public Works, and Recreation Departments which are responsible for the acquisition and development of parkland. All park development plans are reviewed by City staff and presented to the Parks and Recreation Commission for review. A recommendation is made by this Commission to the deciding body, the City Council.

The Otay Ranch Parks and Recreation Facility Implementation Plan was adopted by the City Council on October 28, 1993. This plan identifies the parks facility improvement standards for Otay Ranch.

The City Council approved the Chula Vista Parks and Recreation Master Plan in November 2002. The Plan provides guidance for planning, siting and implementation of neighborhood and community parks.

II.5.4.6.3 Project Processing Requirements

SPA Plan/Public Facilities Finance Plans

1. Identify phased demands in conformance with the number of dwelling units constructed, street improvements and in coordination with the construction of water and sewer facilities.
2. Specific siting of the facility will take place in conformance with the *Chula Vista General Plan Park and Recreation Element.*
3. Site reserved at the SPA level of planning.

II.5.4.6.4 Existing Conditions

The existing and future parks as depicted in the Park and Recreation Element of the General Plan and as updated by the inclusion of more recent information are contained in the city's Park Master Plan.

11.5.4.6.3 Project Park Requirements

Compliance with Public Park Standards

The Village 7 SPA generates an estimated population of 3,655 (1,204 dwelling units x 3.036 population factor). To meet the city threshold requirements the amount of parkland dedicated is based on a standard of 3 acres per 1,000 populations (see Table H). The standard is based on State of California Government Code 66477, also known as the Quimby Act, that allows a city to require by ordinance, the dedication of land or payment of fees for park or recreational purposes.

Table H.1 Quimby Act Parkland Requirements		
Village 7 SPA Population	**Standard**	**Parkland Acres Required**
3,655	3 acres per 1,000 population	10.97

The City of Chula Vista Municipal Code (CVMC) Chapter 17.10, Parklands and Public Facilities, is based on the Quimby Act. However, the city's standard is slightly higher and is based on dedication of land on a per unit basis. Land is offered for dedication at the time of filing of a final map, or in the case of a residential development that is not required to submit a final map, at the time of the first building permit. Based on the City's Parklands and Public Facilities Ordinance, the parkland requirement is 11.48 acres (see Table H.3).

All new development in the City of Chula Vista is subject to the requirements contained in the CVMC Chapter 17.10, Parklands and Public Facilities. The ordinance establishes land development fees for park acquisition and development, sets standards for dedication and establishes criteria for acceptance of parks and open space by the City of Chula Vista. Fees vary depending upon the type of dwelling unit that is proposed. Single Family dwelling units are defined as single-family detached homes and detached condominiums. Multi-Family dwelling units include attached condominiums, townhouses, duplexes, triplexes and apartments. Parkland dedication requirements are shown on Table H.2.

Table H.2 City of Chula Vista Parkland Dedication Ordinance Standards		
Dwelling Unit Type	**Land Dedication per Unit**	**Dwelling Units per Park Acre**
Single-Family Detached	460 sf/du	95 du/ac.
Multiple - Family	341 sf/du	128 du/ac.

City of Chula Vista Municipal Code Chapter 17.10, Parklands and Public Facilities requirements for the Otay Ranch Village 7 SPA project are outlined in Table H.3.

Table H.3 Otay Ranch Village 7 Parkland Dedication Requirements per City Ordinance			
Dwelling Unit Type	**Number of D.U.**	**Parkland Required/DU**	**Required Acres**
Single Family Detached	746	460 sf/du	7.98
Multiple Family	448	341 sf/du	3.50
TOTAL	**1,204**		**11.48**

The Otay Ranch Village 7 SPA Phasing (Table B.4) and Site Utilization Plan identifies the park designations and acreage that are also shown in Table H.4. Table H.4 also identifies the phase of development in which the park will be constructed and the park acres that the city has determined will be given credit for purposes of satisfying the project's parkland dedication as measured against CVMC Chapter 17.10, Parklands and Public Facilities. The Neighborhood Park will be graded and offered for dedication in the context of the development of whatever phase is initiated by the Otay Ranch Village 7 Developers.

Table H.4 Otay Ranch Village 7 SPA Plan Park Acres And Eligible Credits[20]				
Park Identification	**Net Acreage**	**Phase**	**Proposed Credit %**	**Eligible Credit Acres**
NP - NEIGHBORHOOD PARK	7.0	Blue	100%	7.00
CP - COMMUNITY PARK	0.0	N/A	0	0.00
Total acres eligible for credit against PAD				7.00
Village 7 SPA PAD Requirements				11.48
Total Village 7 SPA CP Obligation				**4.48**

II.5.4.6.6 Park Adequacy Analysis

The table below, is a comparison of park acreage demands and supply east of Interstate 805 for existing, approved projects, as well as the phased addition of the Village 7 SPA project.

Table H.5 Park Acreage Demand Compared to Supply East of Interstate 805 As of January, 2004					
	Population East of I-805[21]	**Demand Park Acres[22]**	**Existing Park Acres**	**Eligible Credit Acres**	**Net Acres +/-Standard**
Existing	88,774	266.3	277.6[23]	277.6	+11.3
Forecasted Projects 2004 to 2008	34,553[24]	103.7	116.2[25]	116.2	+12.5
Total	**123,327**	**370.0**	**393.8**	**393.8**	**+23.8**

A review of the existing and approved park demands for Chula Vista east of I-805 including Otay Ranch Village 7 indicates a total demand of approximately 370.0 acres of Neighborhood and Community Park. The total supply of existing park acreage east of I-805 is approximately 393.8, which is 23.8 acres more than the demand by the end of 2008.

20 Parkland fee and acreage obligations are subject to change pending changes in the dwelling unit types and numbers.
21 Population figures are from the GMOC 2003 Questionnaire, 6/30/03.
22 Based on City Threshold requirement of 3 acres of neighborhood and community parkland per 1,000 residents east of I-805.
23 Includes Harvest Park (Village 1) and Santa Cora Park (Village 5).
24 Population figure derived from the 2003 Annual Growth Forecast, January 2004.
25 Park acreage from Park Phasing Eastern Chula Vista (2004-2007) table from the GMOC 2003 Questionnaire.

Table H.6 Otay Ranch Village 7 SPA by Phase							
Phase	Dwelling Units		Demand Park Acres	Supply Park Acres	Eligible Credit Acres	Net Acres +/- Standard	Project Cumulative +/- Standard
	SFD	MF					
White	0	0	0	0.00	0.00	0.00	0.00
Blue	346	448	7.16	7.00	7.00	-0.16	-0.16
Red	375	0	3.96	0.00	0.00	-3.96	-4.12
Green	35	0	0.36	0.00	0.00	-0.36	-4.48
Total	**756**	**448**	**11.48**	**7.00**	**7.00**	**-4.48**	**-4.48**

The proposed development of the Otay Ranch Village 7 SPA project requires a total of 11.4 acres for public parkland. The Otay Ranch Village 7 SPA plan identifies one 7.0-acre net public Neighborhood Park. It will be located within the village core of the project and will be phased in as determined by the Director of Planning and Building Department. The difference in the proposed Neighborhood Park requirements and the total parkland obligation will be accommodated through the payment of parkland development fees and dedication of land for Community Park elsewhere in Otay Ranch. Community Park acreage requirements will be accommodated through the dedication of land and the payment of fees.

II.5.4.6.7 Open Space and Trails

Open Space

The Otay Ranch GDP established a 12-acre per 1000 person open space standard, which is being met primarily by the offsite dedication of open space acreage within the Management Preserve pursuant to the RMP. On-site the location and general extent of open space is determined at the GDP level of planning. The Village 7 SPA provides 47.8 acres of on-site open space that includes the use of buffer areas, slopes and scenic corridors as required by the Otay Ranch GDP. The 47.8 acres exceeds the 43.86 acre (12-acre per 1000 person open space) standard.

Natural open space can be classified as land that has not been disturbed by development. The bulk of the natural open space within Otay Ranch is included within the RMP. The RMP establishes a Resource Preserve, which does not include any of the Village 7 planning area. The GDP categorizes "other open space" as a mixture of neighborhood and community parks, bike trails, hiking trails, school playgrounds, utility easements, scenic corridors, pedestrian walkways, landscape buffers, and other public recreation areas. The other open space areas identified for Village 7 are the arterial highway corridors, development perimeter slopes, neighborhood park, elementary school, middle school and high school playgrounds.

The 47.8 acres of Open Space lands as indicated on the Village 7 Site Utilization Plan shall be preserved through the dedication of open space easements and/or lots to the City, CFD or other appropriate agency, or to a Master Homeowners Association, which will be determined at the tentative tract map level of approval. Uses will be strictly controlled through zoning regulations (see Section II.3 PC District Regulations within this SPA Plan). Landscaping within open space areas shall comply with all requirements of the Chula Vista Landscape Manual.

Trails

Off-street trails that connect to the community-wide trail system of Otay Ranch as well as the regional system described in the Circulation Element of the Chula Vista General Plan are included as components of the perimeter arterials of Village 7. La Media Road includes a 10-foot off-street (Class I) trail for pedestrian and bicycle use within the ROW on the Village 7 side. The south side of Birch Road between Magdalena and SR-125 will be constructed with a 10-foot Village Pathway and 5-foot sidewalk. Both Birch and Rock Mountain Road include bike lanes (Class II) adjacent to the curb. Rock Mountain will be constructed with a five-foot wide pedestrian path behind the curb on both sides of the street. Within the village, the 10-foot Village Pathway extends along the Primary Entry Streets and the Village Promenade, connecting to the internal neighborhoods as well as the adjacent villages to the north and south. A similar, 10-foot wide regional trail extends along the Secondary Village Promenade from the SR-125 underpass to the Wolf Canyon Open Space Greenbelt. Pedestrian trails that vary in width from 5 to 6-feet are shown on the opposite side of the street from the Village Pathways and on both sides of the Residential Promenade.

Bicyclists will share the internal streets with motor vehicles due to the low traffic volume and limited speeds allowed on residential streets. The trails and bike lanes provided are indicated on the Trails Plan, Exhibit 10. Generally, the pedestrian trails follow the bicycle routes. Where the trails are off-street, the pedestrian and bicycle facilities are shared. Where bicyclists share the roadway with other vehicles, sidewalks are provided exclusively for pedestrians.

II.5.4.6.8 Financing Park Facilities

Chapter 17.10 of the Chula Vista Municipal Code, as amended, governs the financing of parkland and improvements. Included as part of the regulations are Park Acquisition and Development (PAD) fees established for the purpose of providing neighborhood and community parks. The Ordinance provides that fees are paid to the City prior to approval of a final subdivision map. PAD Fees are subject to periodic annual increases. The Otay Ranch Village 7 SPA project is responsible for the park development component of the PAD Fees as estimated in Table H.7.

TABLE H.7
Village 7 Park Acquisition and Development (PAD) Fees[26]
Development Component Only

Development Phase	Dwelling Units		Development Component Of PAD Fee's/DU Total		Total Fees Due
	SFD	MFD	SFD@$3,777	MFD@$2,803	
White	0	0	$0	$0	$0
Blue	346	448	$1,306,842	$1,255,744	$2,562,586
Red	375	0	$1,416,375	$0	$1,416,375
Green	35	0	$132,195	$0	$132,195
TOTAL	**756**	**448**	**$2,855,412**	**$1,255,744**	**$4,111,156**

[26] The Park Acquisition and Development Fee is subject to change as it is amended from time to time. Changes in the number of dwelling units can change the estimated fee.

TABLE H.8 Village 7 Park Acquisition and Development (PAD) Fees[27] Acquisition Component Only					
Development Phase	Dwelling Units		Acquisition Component Of PAD Fees/DU Total		Total Fees Due
	SFD	MFD	SFD@$4,994	MFD@$3,707	
White	0	0	$0	$0	$0
Blue	346	448	$1,503,716	$1,660,736	$3,164,452
Red	375	0	$1,629,750	$0	$1,629,750
Green	35	0	$152,110	$0	$152,110
TOTAL	**756**	**448**	**$3,285,576**	**$1,660,736**	**$4,946,312**

The Otay Ranch Village 7 SPA parkland demand is 11.4 acres based on the city's Park Land Dedication Ordinance. The Village 7 project will provide 7.0 net acres of parkland. The 4.4 acre balance will be provided through the payment of PAD fees and/or dedication of land elsewhere in Otay Ranch. Table H.7 identifies the fees calculated for the development component of the PAD fees while Table H.8 identifies the fees calculated for the parkland acquisition component of the PAD fees. The applicant has the opportunity to dedicate the 11.4 acres in lieu of paying the acquisition component of the PAD fees, which has been calculated in Table H.8 is estimated $4,946,312.

II.5.4.6.9 Financing Recreation Facilities

On November 19, 2002, the City Council approved Ordinances No. 2886 and 2887, which amended Chapter 17.10 of the Chula Vista Municipal Code, as detailed in the *"Park Acquisition and Development Fee, 2002 Update"* report, contributing to an increase in the in-lieu fees for park development and land acquisition. Ordinance 2887 amended Chapter 3.50 of the Municipal Code, as detailed in the *"Public Facilities DIF, November 2002 Amendment'*, adding a new recreation component to the Public Facilities DIF, updating the impact fee structure and increasing the overall fee.

Chapter 17.10 of the Chula Vista Municipal Code, first adopted in 1971, details requirements for parkland dedication, park improvements and the collection of in-lieu fees (i.e., PAD fees) from developers of residential housing in subdivisions or in divisions created by parcel maps, both east and west of Interstate 805. PAD fees cover parkland acquisition and the cost of related capital items associated with parkland development, including:

[27] The Park Acquisition and Development Fee is subject to change as it is amended from time to time. Changes in the number of dwelling units can change the estimated fee.

- Drainage Systems
- Street Improvements
- Lighted Parking Lots
- Concrete Circulation Systems
- Security Lighting
- Park Fixtures *(drinking fountains, trash receptacles, bicycle racks, etc.)*
- Landscaping *(including disabled accessible surfacing)*
- Irrigation Systems
- Restrooms and Maintenance Storage
- Play Areas *(tot lots, etc.)*
- Picnic Shelters, Tables, Benches
- Utilities
- Fine Grading
- Outdoor Sports Venues *(tennis courts, baseball/softball fields. basketball courts, soccer fields, skateboard and roller blade venues)*

In addition to parks-related items, a 1987 revision called for the dedication, within community parks, of major recreation facilities to serve newly developing communities, including:

- Community centers
- Gymnasiums
- Swimming pools
- Senior/teen centers

Historically, PAD fees have not been sufficient to construct these additional large capital items. However, major recreation facilities are now funded through a newly created component of the Public Facilities DIF. The major capital items to be included in the new component are: community centers, gymnasiums, swimming pools, and senior/teen centers. Based on the Parks and Recreation Master Plan, 140,595 square feet of major recreation facilities will be required to meet new development growth through build-out at a gross construction cost of $31.8 million. Since the demand for major public recreation facilities is created by residential development, facilities costs are not spread to commercial/industrial development. Table H.9 provides an estimate of the Recreational PDIF Fees for the project.

TABLE H.9
Village 7 Public Facilities Fees for Recreation[28]

Development Phase	Dwelling Units		Recreation Fee		Total
	SF	MF	$1,079/SF Unit	$771/MF Unit	
White	0	0	$0	$0	$0
Blue	346	448	$373,334	$345,408	$718,742
Red	375	0	$404,625	$0	$404,625
Green	35		$37,765	$0	$37,765
Total	756	448	$815,724	$345,408	$1,161,132

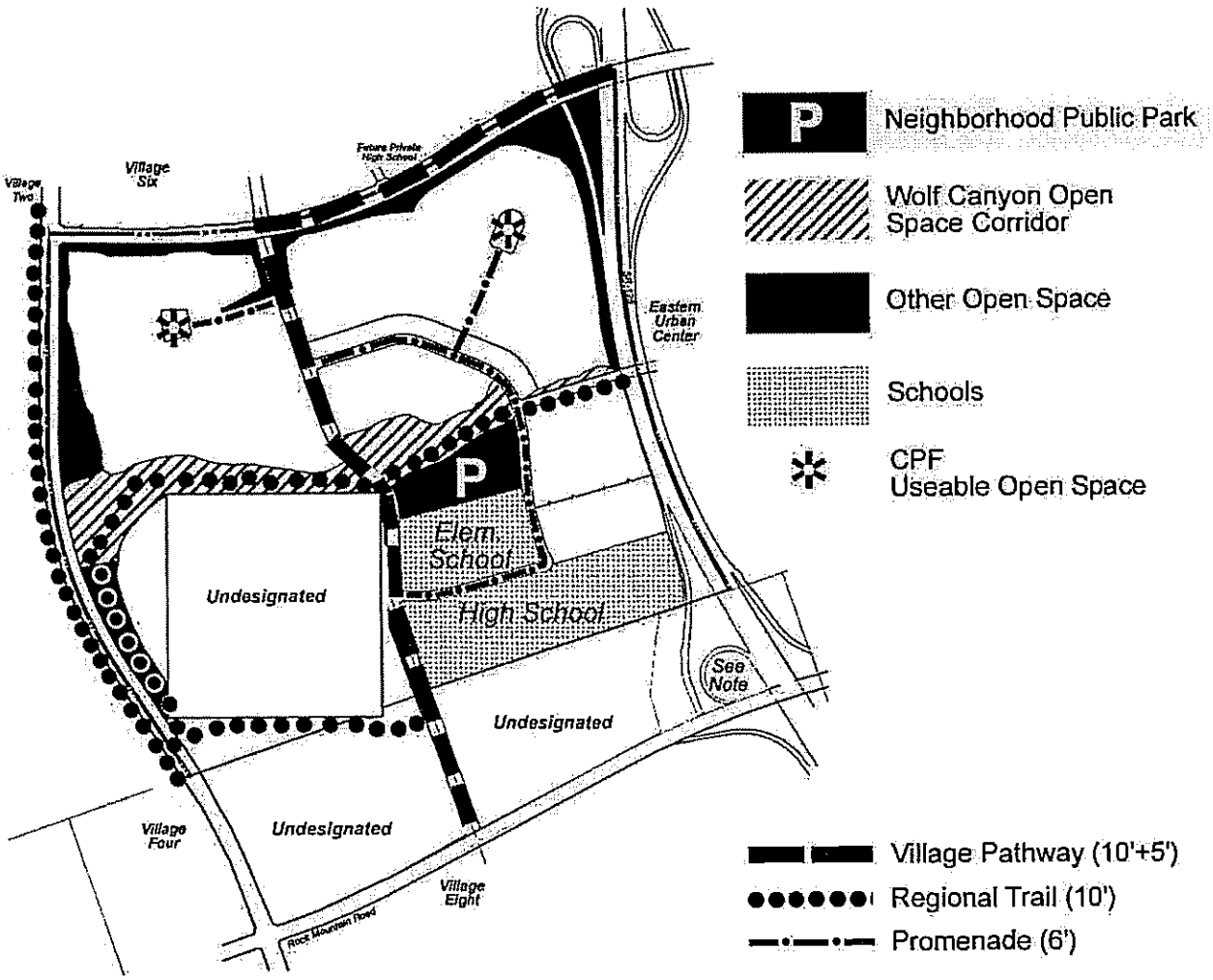
II.5.4.6.10 Threshold Compliance and Recommendations

Based upon the analysis contained in this section of the PFFP, the parks standard for both neighborhood and community parks measured on an area-wide basis east of Interstate 805 is projected to be met at the completion of the Otay Ranch Village 7 SPA project.

[28] Public Facility Fees for Recreation is subject to change as it is amended from time to time. Changes in the number of dwelling units can change estimated fee.

On a project-level, the Neighborhood Park provided within Otay Ranch Village 7 SPA does not meet the demand on a cumulative basis. In order to comply with the City's local park standard, it is the responsibility of the developer to comply with the City's Landscape Manual related to park planning, to grade the sites according to the approved plan, pay fees at a rate in effect at the time of final map approval and dedicate land, or a combination thereof, as required by CVMC Chapter 17.10, Parklands and Public Facilities unless otherwise approved by the Director of General Services.

Parks & Open Space



Note:
The configuration of the interchange ramps shown on this exhibit is illustrative only and does not preclude alternative configurations.

CITY OF CHULA VISTA

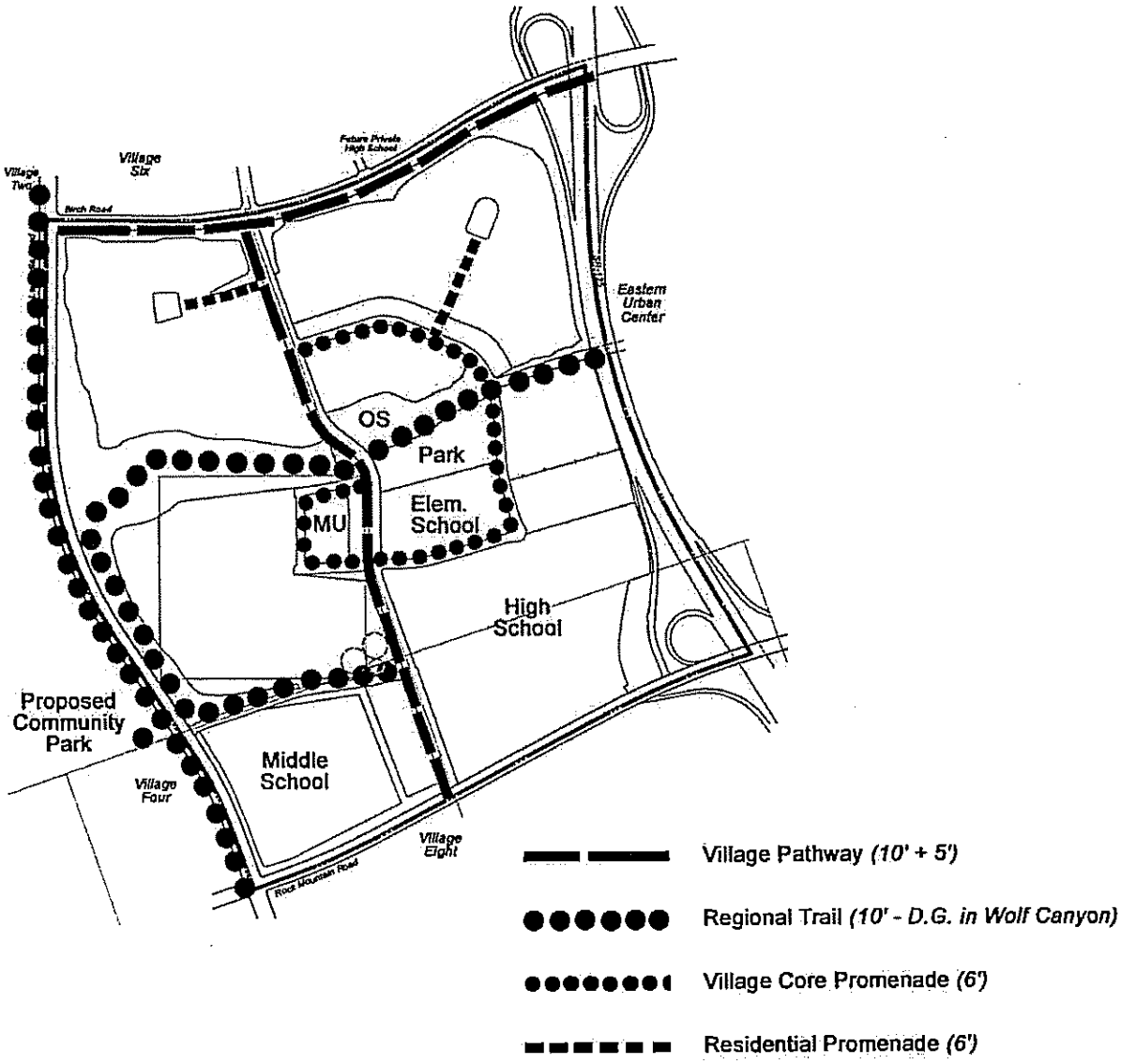
Vista Verde

Village Seven - Otay Ranch

Civil Land Planning
8/24/04

Exhibit 9

Trails



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

3/25/04

Exhibit 10

II.5.4.7 WATER

II.5.4.7.1 Threshold Standard

1. Developer will request and deliver to the City a service availability letter from the Water District for each project, as defined by the City.

2. The City annually provides the San Diego County Water Authority, the Sweetwater Authority, and the Otay Water District with a 12 to 18 month development forecast and requests an evaluation of their ability to accommodate the forecast and continuing growth. The Districts' replies should address the following:

   a. Water availability to the City and Planning Area, considering both short and long term perspectives.

   b. Amount of current capacity, including storage capacity, now used or committed.

   c. Ability of affected facilities to absorb forecasted growth.

   d. Evaluation of funding and site availability for projected new facilities.

   e. Other relevant information the District(s) desire(s) to communicate to the City and GMOC.

The growth forecast and water district response letters shall be provided to the GMOC for inclusion in its review.

II.5.4.7.2 Service Analysis:

The Otay Water District (OWD) will provide water service for Otay Ranch Village 7. Annexation into Improvement Districts 22 and 27 will be required prior to water service being provided. The district has existing and planned facilities in the vicinity of the project site. Expanding the existing system can provide future water service.

The *Village 7 Conceptual Water and Recycled Water Study, March 10, 2004 PBS&J,* is the basis for this section of the PFFP. The PBS&J report provides recommendations for improvements in zones 711 and 980 that are needed to provide water service to the proposed development. In addition to potable water, the PBS&J report provides recommendations for improvements in the recycled water zones 680 and 944 for the project.

The developer of the project will be required to prepare, for review and approval by the Otay Water District, a Subarea Water Master Plan (SAMP) concurrent with the processing of the tentative map and prior to approval of the final engineering plans for the project. The SAMP will provide more detailed information on the project such as project phasing; pump station and reservoir capacity requirements, and extensive computer modeling to justify recommended pipe sizes. The Otay Water District will not approve final engineering improvement plans until a SAMP has been approved for the project.

The design criteria implemented to evaluate the potable and recycled water systems for the Otay Ranch Village 7 project are established in accordance with the *Otay Water District Water Resources Master Plan, July 2002.* The design criteria are utilized for analysis of the existing water system as well as for design and sizing of proposed improvements and expansions to the existing system to accommodate demands in the study area.

The Village 7 project is consistent with land use and water demand assumptions in the District's Water Resource Master Plan (July 2002). Pursuant to city requirements, the OWD will conduct a water audit to verify that the District has planned and sized water supply facilities to meet Village 7 needs. Furthermore, the District receives its treated water from the San Diego County Water Authority (SDCWA), which has developed water supply plans based on the District's future needs. The SDCWA has prepared a Water Facilities Master Plan (2003), which recommends projects to meet long term water supply needs. These projects include securing water supply from Colorado River and local water supply development, including seawater desalination and water reclamation. Accordingly these planned water supply projects will secure a long-term water supply and satisfy Senate Bill (SB) 610.

II.5.4.7.3 Project Processing Requirements

The SPA Plan and the PFFP are required by the Growth Management Program to address the following issues for water services.

1. Identify phased demands in conformance with street improvements and in coordination with the construction of sewer facilities.
2. Identify location of facilities for onsite and offsite improvements in conformance with the master plan of the water district serving the proposed project.
3. Provide cost estimates and proposed financing responsibilities.
4. Identify financing methods.
5. A Water Conservation Plan shall be required for all major development projects (50 dwelling units or greater, or commercial and industrial projects with 50 EDUs of water demand or greater.

11.5.4.7.4 Existing Conditions

Most of the water used in the San Diego County Water Authority (SDCWA) area is imported from the Metropolitan Water District (MWD). MWD receives its water supply through the State Water Project and the Colorado River Aqueduct. The SDCWA conveys water from the MWD to local purveyors within San Diego County. The project area is located within the Central Service Area of the Otay Water District. Potable water for the development will be supplied from the 711 and 980 pressure zones.

Domestic water demand for the SPA Plan area will be estimated as a part of the SAMP to be approved by the OWD. An analysis of available water supply will also be completed to assure that sufficient supplies are planned to be available as demand is generated by the project.

Current OWD policies regarding new subdivision development require the use of recycled water where available. Consistent with the Otay Ranch GDP, it is anticipated that recycled water will be used to irrigate street parkway landscaping, parks and manufactured slopes along open space areas and landscaped areas of commercial, industrial and multi-family sites.

Recycled water supply is currently available from the Ralph W. Chapman Water Recycling Facility located near the intersection of Singer Lane and Highway 94. The plant has a practical capacity of 1.0 million gallons per day (MGD). The recycled water is delivered from the plant to storage ponds with a high water level of 944 feet situated within the District Use

Area located north of Proctor Valley Road. Potable water is currently used to supplement the recycled water supply during summer and dry weather month conditions.

Recycled water supply is also anticipated to be available from the City of San Diego's 15.0 MGD South Bay Water Reclamation Plant. This supply will be delivered to the District at a grade of 450 feet and then pumped to the 680 and 944 Zones via the planned 450-1 and 680-1 pump stations.

II.5.4.7.5 Adequacy Analysis

A. Water Conservation Plan

A Water Conservation Plan is required for all major development projects (50 dwelling units or greater, or commercial and industrial projects with 50 EDUs of water demand or greater). This plan is required at the Sectional Planning Area (SPA) Plan level or equivalent for projects which are not processed through a Planned Community Zone. The city has adopted guidelines for the preparation and implementation of the Water Conservation Plan.

This SPA Plan includes a Water Conservation Plan. The Water Conservation Plan provides an analysis of water usage requirements of the proposed project, as well as a detailed plan of proposed measures for water conservation, use of recycled water, and other means of reducing per capita water consumption from the proposed project, as well as defining a program to monitor compliance. This document is presented as chapter 9 of the SPA Plan document and therefore is not included in the PFFP.

B. Otay Ranch Village 7 SPA Water Demand

Table I.1 presents the duty factors used in projecting the total average day potable and recycled water demands for Village 7. The required fire flows and durations are also listed. The City of Chula Vista utilizes the Uniform Fire Code for determining required fire flows and durations for new development. For single-family residences, a fire flow of 1,500 gpm for duration of two hours is typically required.

Table I.1
Water Duty Factors

Land Use Designation	Unit Domestic Demand	Required Fire Flow	Required Fire Flow Duration Hours
Single Family-(3-8 DU/AC)	500 gpd/unit	1,500	2
Multi-Family (>8 DU/AC)	300 gpd/unit	2,500	2
Schools	1,785 gpd/ac	3,500	3
Commercial	1,785 gpd/ac	3,000	3
CPF	893 gpd/ac	3,000	3
Irrigation (Recycled Water)	2,155 gpd/ac	--	--

According to the PBS&J report the projected potable water demand for Village 7 area is approximately .59 million gallons per day (mgd) (see Table I.2).

Table I.2
Potable Water Demands

Land Use	Net Area	Dwelling Units	Unit Demand[1]	Average Daily Demand (gpd)
SF Residential	109.6	756	500 gpd/du	378,000
MF Residential	37.9	448	300 gpd/du	134,400
Elementary School	11.1		1,785 gpd/ac	19,814
High School	23.4		1,785 gpd/ac	41,769
Park	7.6		2,155 gpd/ac	16,378
CPF	2.8		893 gpd/ac	2,500
TOTAL		**1,204**		**592,861**

Source: PBS&J

1 Unit demand factors from draft Otay Water District Water Resources Master Plan (July 2002)

Generally, the potable water distribution system is designed to maintain static pressures between 65 pounds per square inch (psi) and 200 psi. This criterion is used to initially divide a project between water service zones. The potable water distribution system has been designed to yield a minimum of 40 psi residual pressure at any location under peak hour demand flows, and a minimum residual pressure of 20 psi during maximum day demand plus fire flow conditions. Potable water mains are sized to maintain a maximum velocity of 10 feet per second (fps) under a maximum day plus fire flow scenario and a maximum velocity of 6 fps under peak hour flow conditions.

Landscape systems generally require a minimum of 65 psi at the meter to obtain adequate coverage of the irrigated area. It is expected that this minimum pressure can be achieved at all locations within the Project. The primary criteria for sizing recycled water lines is the ability to meet peak hour recycled water demands while maintaining the maximum pipeline velocity between 5 to 8 fps. Table I.3 provides the projected recycled water demand for the project. The estimated recycled water demand is approximately 0.110 mgd.

Table I.3
Recycled Water Demands

Land Use	Net Area	Percent Irrigate	Irrigated Area (Ac)	Irrigation Rate[1]	Average Daily Demand (gpd)
MF Residential	37.9	15%	5.7	2.152 gpd/du	12,234
Park	7.6	100%	7.6	2,152 gpd/ac	16,355
Elementary School	11.1	20%	2.2	2.152 gpd/ac	4,777
High School	23.4	20%	4.7	2,152 gpd/ac	10,114
CPF	2.8	20%	0.6	2,152 gpd/ac	1,291
Open Space	47.8	50%	23.9	2,152 gpd/ac	51,433
Streets	62.9	10%	6.29	2,152 gpd/ac	13,536
TOTAL					**109,740**

Source: PBS&J

1 Unit demand factors from draft Otay Water District Water Resources Master Plan (July 2002)

II.5.4.7.6 Existing Water Facilities

The Project will receive supply from the District's Central Service Area. The San Diego County Water Authority via the Second San Diego Aqueduct supplies potable water to the Central Service Area. Water is delivered at Aqueduct connections No. 10 and No. 12 and is conveyed by gravity to District reservoirs with a high water level of 624 feet. Water is then pumped from the 624 Zone to the 711 and 980 Zones via the Central Area Pump Station (711-1 Pump station) and the EastLake Pump Station (980-1 Pump Station), respectively.

Recycled water supply is currently available from the Ralph W. Chapman Water Recycling Facility located near the intersection of Singer Lane and Highway 94. The plant has a practical capacity of 1.0 million gallons per day (MGD). The recycled water is delivered from the plant to storage ponds with a high water level of 944 feet situated within the District Use Area located north of Proctor Valley Road. Potable water is currently used to supplement the recycled water supply during summer and dry weather month conditions.

Recycled water supply is also anticipated to be available from the City of San Diego's 15.0 MGD South Bay Water Reclamation Plant. This supply will be delivered to the District at a grade of 450 feet and then pumped to the 680 and 944 Zones via the planned 450-1 and 680-1 pump stations.

Potable and recycled water service to the Project will be provided through extension of existing transmission mains in La Media and Birch Roads. Existing potable water mains include a 16-inch 711 Zone main in Olympic Parkway that will be extended in La Media Road and Hunte Parkway/Birch Road to the Project boundary, and a 16-inch 980 Zone main in Olympic Parkway that will be extended through Village 6 and Hunte Parkway/Birch Road toward SR125.

Existing recycled mains that will be extended to the project include a 20-inch 680 Zone main and 12-inch 944 Zone main in Olympic Parkway will be extended in La Media and Hunte Parkway/Birch Road.

Operational and emergency potable water storage for the Project will be provided in the existing 711 reservoirs located in the EastLake Greens subdivision (711-1 and 711-2 Reservoirs) and the District Use Area (711-3 Reservoir) and 980 Zone Reservoirs located in the District Use Area (980-1 and 980-2 Reservoirs).

II.5.4.7.7 Proposed Facilities:

The Project can receive water service by expanding the existing potable and recycled water systems. These extensions will be constructed either as part of adjacent subdivision development or concurrent with development of the project. Per District policy, the District will fund construction of regional water mains in La Media Road, Hunte Parkway, and Birch Road as Capital Improvement Program projects. Based on District planning criteria, redundant sources of potable water supply to the Project will be required prior to occupancy of the development.

Exhibit 11 illustrates the conceptual on-site potable water distribution systems for the project. While Exhibit 12 illustrates the conceptual on-site recycled water distribution systems for the project. Sizes of the on-site facilities will be determined based on final site layout and design criteria specified in the District Master Plan. As previously mentioned, a Sub-Area Master

Plan will be prepared concurrent with development of the Project tentative map that will address the sizing and phasing of onsite and off-site water facilities for the project based on hydraulic analysis of the proposed water system.

II.5.4.7.8 Financing Water Facilities:

The financing and construction of potable water facilities is provided by two methods:

Capacity Fees:
Otay Water District's Capital Improvement Program (CIP) wherein the District facilitates design and construction of facilities and collects an appropriate share of the cost from developers through collection of capacity fees from water meter purchases. Capital Improvement Projects typically include supply sources, pumping facilities, operational storage, terminal storage, and transmission mains.

The Otay Water District may use bond debt financing from Improvement Districts 22 and 27 to assist in the financing of the District's CIP program. CIP projects are paid for by capacity fees collected on the sale of water meters after building permit issuance.

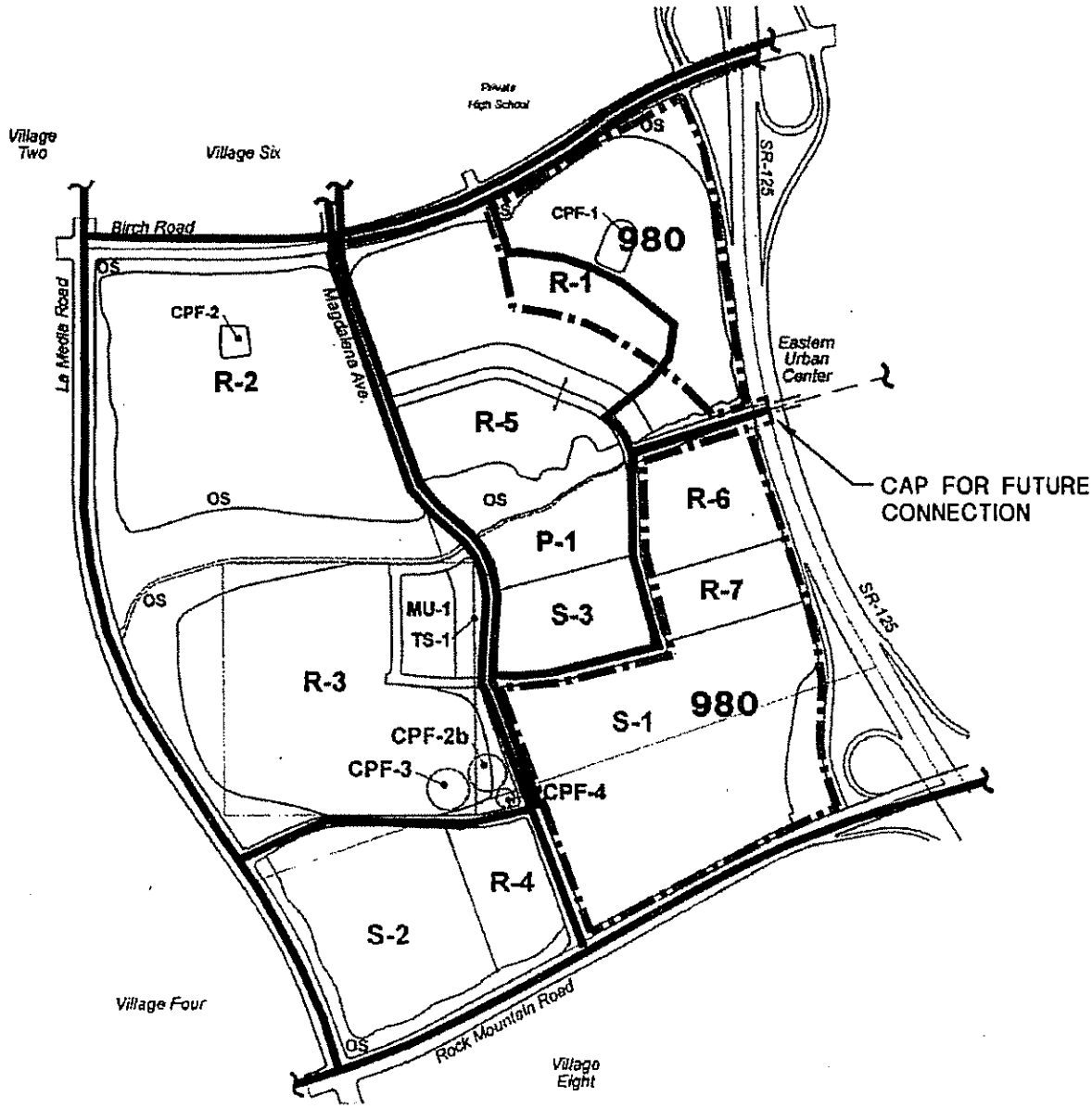
Exaction:
The developer is required to finance, construct, dedicate water and recycled water facilities that serve only his/her development to the Otay Water District.

Potable Water Improvement Costs
The total capital cost for potable water facilities will be determined at the time the system is designed and the SAMP is approved. In accordance with District Policy No. 26, the District may provide reimbursement for construction and design costs associated with development of these improvements.

Recycled Water Improvement Costs
The total capital cost for recycled water facilities will be determined at the time the system is designed and the SAMP is approved. The District may provide reimbursement for construction and design costs associated with development of these improvements.

II.5.4.7.9 Threshold Compliance and Recommendations

1. The Otay Ranch Village 7 SPA project shall have a district approved SAMP, prior to approval of a Final Map.
2. The potable and recycled water systems will be designed and the costs identified by phase of development. The applicant shall be responsible for funding the required system improvements. The developer shall request and deliver to the City a service availability letter from the OWD prior to the first final map being approved for Otay Ranch Village 7 SPA Project.



LEGEND

711 ZONE WATER MAIN

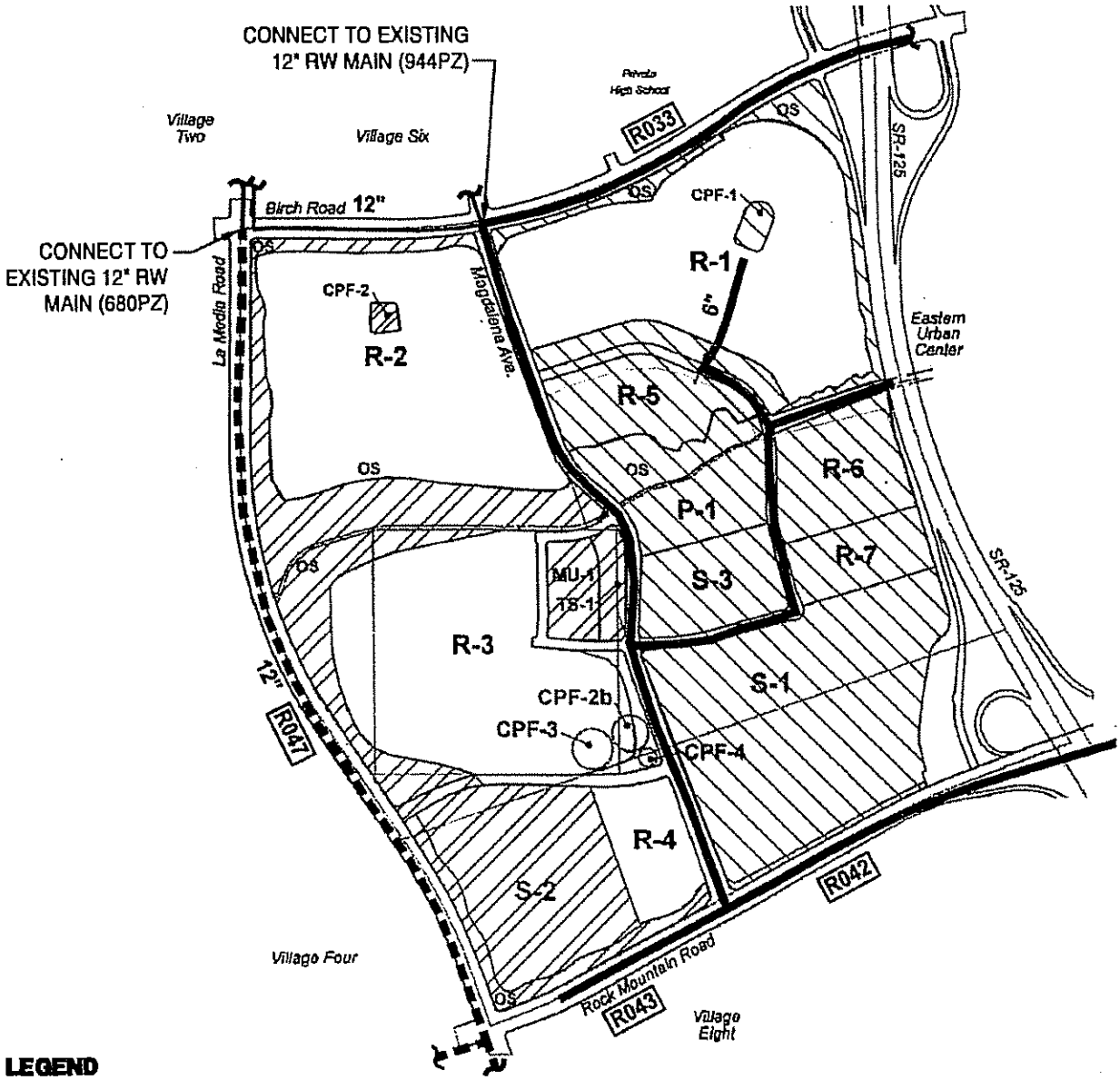
980 ZONE WATER MAIN

980 ZONE BOUNDARY

NO SCALE

Note: Refer to the Site Utilization Plan on page 15 of this PFFP for approved SPA land uses.

Exhibit 11
Proposed Water Facilities



LEGEND

680 ZONE SERVICE AREA
944 ZONE SERVICE AREA
680 ZONE MAIN
944 ZONE MAIN
EXISTING RW MAIN
R047 CIP No.

N
NO SCALE

RECYCLED WATER SYSTEM

Note: Refer to the Site Utilization Plan on page 15 of this PFFP for approved SPA land uses.

Exhibit 12
Proposed Recycled Water Facilities

II.5.4.8 SEWER

II.5.4.8.1 Threshold Standard

1. Sewage flows and volumes shall not exceed City Engineering Standards.

2. The City will annually provide the City of San Diego Metropolitan Wastewater Department with a 12-18 month development forecast and request confirmation that the projection is within the City's purchased capacity rights and an evaluation of their ability to accommodate the forecast and continuing growth. As an alternative, the City of Chula Vista Public Works Department will gather the necessary data. The information provided to the GMOC shall include the following:

   a. Amount of current capacity now used or committed.

   b. Ability of affected facilities to absorb forecast growth.

   c. Evaluation of funding and site availability for projected new facilities.

   d. Other relevant information.

II.5.4.8.2 Service Analysis

The City of Chula Vista currently purchases capacity for wastewater treatment through the City of San Diego. Chula Vista oversees the construction, maintenance and the operation of the sewer trunk line system. The City Engineer is responsible for reviewing proposed developments and ensuring that the necessary sewer facilities are provided with each development project.

The Sewer Threshold Standard was developed to maintain healthful, sanitary sewer collection and disposal systems for the City of Chula Vista. Individual projects are required to provide necessary improvements consistent with the City of Chula Vista Wastewater Master Plan dated July 1989 and shall comply with all city engineering standards.

The source of information regarding the existing and recommended sewer facilities is from the *Otay Ranch Village 7 Conceptual Sewer Study, April 14, 2004, by PBS&J.* This study is referred to as the PBS&J Sewer Study throughout this PFFP. In addition, this study analyzed the entire Village 7 Planning Area of which the proposed SPA Plan includes approximately 76%.

II.5.4.8.3 Project Processing Requirements

The SPA Plan and the PFFP are required by the Growth Management Program to address the following issues for Sewer Services:

1. Identify phased demands for all sewer trunk lines in conformance with the street improvements and in coordination with the construction of water facilities.

2. Identify location of facilities for onsite and offsite improvements, including reclaimed water facilities, in conformance with the PBS&J Sewer Study.

3. Provide cost estimates for all facilities and proposed financing responsibilities.

4. Identify financing methods.

II.5.4.8.4 Existing Conditions

Sewer service for Village 7 will be provided by the City of Chula Vista. The city operates and maintains its own sanitary sewer collection system that connects to the City of San Diego's Metropolitan Sewerage System. The *Otay Ranch Master Plan of Sewerage dated 1993, by Wilson Engineering*, documented the feasibility of providing sewer service to the project area.

The Village 7 project will drain into two sewer basins. The northern portion of the Project will drain to the Poggi Canyon Sewer Basin. This includes Neighborhoods R-1, R-2, R-5, P-1, P2/CPF-1, and P3/CPF-2. Wastewater collected within this basin will be conveyed to existing and planned sewer mains in Birch Road and La Media Roads that discharge to the existing Poggi Canyon Interceptor in Olympic Parkway. The southern portion of the Project is located in the Wolf Canyon Basin and includes Neighborhoods R-3, R-4, S-2, MU-1, TS-1, CPF-2b, CPF-3, and CPF-4. Wastewater flows will be conveyed by gravity to the future Wolf Canyon Trunk Sewer in Rock Mountain Road. The City anticipates completion of this sewer by the end of 2008.

The current regional phasing plans for the Wolf Canyon Trunk Sewer indicate that the sewer may not be completed until after the commencement of development within portions of Village 7 situated in the Wolf Canyon Basin. To serve these parcels, wastewater flows will be temporarily diverted to the Poggi Canyon Basin via on-site gravity mains. These parcels include Neighborhoods R-6, R-7, S-3, and S-1. All wastewater generated within the Project will eventually be conveyed to the Salt Creek Interceptor west of I-805 that discharges to the City of San Diego's South Metro Interceptor. The wastewater is ultimately treated by the City of San Diego at the existing Point Loma Wastewater Treatment Facility.

Proposed graded elevations will range from a low of approximately 410 feet in Wolf Canyon along the western boundary of the site to a high of approximately 570 to 580 feet in the northeast and southeast corners of the site. Natural drainage on the property is generally from east to west. The northernmost portion of the site drains in a northwesterly direction to the Poggi Canyon Drainage Basin and the southern portion of the Project drains in a westerly direction to the roadways, Magdalena Avenue and La Media Road, and then south to the Wolf Canyon Drainage Basin (see Drainage section exhibits).

II.5.4.8.5 Adequacy Analysis

Sewer flows generated by Village 7 were estimated by PBS&J. Their estimates were based on current City planning criteria for the permanent and interim on-site sewer system conditions. These estimated flows are the basis for design of new sewer facilities and the evaluation of existing facilities that will serve the project.

A. **Wastewater Generation & Treatment:**

In accordance with the City of Chula Vista Subdivision Manual, the PBS&J sewer study used city criteria to estimate sewer flows from different land uses. Single-family homes are estimated to produce an average of 265 gallons per day (gpd). Multi-family homes are assumed to produce 75 percent of the single-family generation, or 199 gpd. Elementary schools are assumed to produce 15 gallons per capita per day (gpcd). Middle and High Schools are estimated to produce 20 gpcd. For this study, it is assumed that the planned elementary school will house approximately 800 students, the middle school will

accommodate approximately 1,400 students, and the High School will have approximately 2,400 students. Commercial and community purpose development are assumed to generate 2,500 gpd per acre.

The Development Phasing Forecast Summary (2004 to 2008), as shown on Table J.1 lists 12,381 residential dwelling units (includes Otay Ranch Village 7) to be finaled by 2008. According to the Planning Department, approximately 20 acres of industrial, and 150 acres of commercial, in various categories of entitlement, are expected to be constructed through the year 2008. The City Engineering department estimates the current sewer capacity is approximately 4.151 mgd. Applying the per day wastewater factors for each land use generates approximately 4,083,465 gallons per day of wastewater associated with the forecasted development category. The forecasted development reduces the existing city sewer capacity surplus from 4.151 mgd to approximately .446 mgd (4,151,000 –3,705,065). The city will acquire additional capacity from the City of San Diego' Metropolitan System. In addition, capacity is available from the City of San Diego's Southbay Reclamation Facility.

Table J.1
Sewer capacity used by forecasted development

Land Use Type	2008 Forecast	Generation Factor	Gallons per Day
Residential	12,381 DU	265 gpd/unit	3,280,065
Commercial	150 Acres	2,500 gpd/acre	375,000
Industrial	20 Acres	2,500 gpd/acre	50,000
Total used by Forecasted Development			**3,705,065**
Total remaining sewer capacity			**445,935**

According to the PBS&J sewer study the projected flows from the Otay Ranch Village 7 planning area are 480,647 gpd as shown in Table J.2. The Village 7 SPA does not include the entire Village 7 area.

Table J.2
Village 7
Projected Wastewater Generation by Land Use

Land Use	Number	Units	Generation Rate[1] (gpd/Unit)	Average Daily Flow (gpd)
SF Residential	1053	DU	265	279,045
MF Residential	448	DU	199	89,152
High School	2400	Students	20	48,000
Middle School	1400	Students	20	28,000
Elementary School	800	Students	15	12,000
Commercial	5.6	AC	2500	14,000
CPF	2.3	AC	2500	5,750
Park	9.4	AC	500	4,700
Total				**480,647**

[1] Unit demand factors from Chula Vista Subdivision Manual (July 2001)

Source: PBS&J

The average wastewater generation rates were projected by the PBS&J Sewer Study for permanent and interim on-site sewer system conditions and then by respective basins. The permanent condition reflects the sewer system after Village 7 is fully developed and the Wolf Canyon Trunk Sewer is operational. The interim condition represents the temporary diversion of the southeastern portion of the Project to the Poggi Canyon Basin until the Wolf Canyon Trunk Sewer is constructed. This includes the high school, elementary school, and two multi-family neighborhoods (R-6 and R-7).

Tables J.3 and J.4 present estimated average Project wastewater flow generation and equivalent dwelling units for the permanent sewer system by sewer basin. The average projected flow rates for the Poggi Canyon and Wolf Canyon Basins are approximately 225,348 gpd (850 EDUs) and 255,299 gpd (963 EDUs), respectively.

Table J.3
Village 7 - Permanent Condition
Poggi Canyon Sewer Basin Sewage Flows and EDUs by Unit ID

Neighborhood ID	Land Use	Number	Units	Generation Rate[1] (gpd/Unit)	Average Daily Flow (gpd)	EDU
R-1	SF Residential	351	DU	265	93,015	351
R-2	SF Residential	375	DU	265	99,375	375
R-5	MF Residential	142	DU	199	28,258	107
P-1	Park	7.6	AC	500	3,800	14
P2/CPF-1	Park	1.1	AC	500	550	2
P3/CPF-2	Park	0.7	AC	500	350	1
TOTAL					**225,348**	**850**

[1] Unit demand factors from Chula Vista Subdivision Manual (July 2001)

Source: PBS&J

Table J.4
Village 7 - Permanent Condition
Wolf Canyon Sewer Basin Sewage Flows and EDUs by Unit ID

Neighborhood ID	Land Use	Number	Units	Generation Rate[1] (gpd/Unit)	Average Daily Flow (gpd)	EDU
R-3	SF Residential	290	DU	265	76,850	290
R-4	SF Residential	37	DU	265	9,805	37
R-6	MF Residential	187	DU	199	37,213	140
R-7	MF Residential	119	DU	199	23,681	89
S-3	Elementary School	800	Students	15	12,000	45
S-1	High School	2,400	Students	20	48,000	181
S-2	Middle School	1,400	Students	20	28,000	106
MU-1	Mixed Use/Com'l	3.7	AC	2,500	9,250	35
TS-1	Town Square	1.9	AC	2,500	4,750	18
CPF-2b	Commercial	1.0	AC	2,500	2,500	9
CPF-3	Commercial	0.2	AC	2,500	500	2
CPF-4	Commercial	1.1	AC	2,500	2,750	10
TOTAL					**255,299**	**963**

[1] Unit demand factors from Chula Vista Subdivision Manual (July 2001)

Source: PBS&J

Table J.5 presents the estimated average Project wastewater flow generation and equivalent dwelling units for the interim sewer system in the Poggi Canyon Sewer Basin. The average projected flow rates are approximately 346,242 gpd (1,307 EDUs).

Table J.5
Interim Condition Poggi Canyon Sewer Basin Sewage Flows and EDUs by Unit ID

Neighborhood ID	Land Use	Number	Unit	Generation Rate[1] (gpd/Unit)	Average Daily Flow (gpd)	EDU
R-1	SF Residential	351	DU	265	93,015	351
R-2	SF Residential	375	DU	265	99,375	375
R-5	MF Residential	142	DU	199	28,258	107
R-6	MF Residential	187	DU	199	37,213	140
R-7	MF Residential	119	DU	199	23,681	89
S-1	High School	2,400	Students	20	48,000	181
S-3	Elementary School	800	Students	15	12,000	45
P-1	Park	8	AC	500	3,800	14
P2/CPF-1	Park	1.1	AC	500	550	2
P3/CPF-2a	Park	0.7	AC	500	350	1
TOTAL					**346,242**	**1,307**

[1] Unit demand factors from Chula Vista Subdivision Manual (July 2001)

Source: PBS&J

B. <u>Poggi Canyon Sewer Basin:</u>

Wastewater generated within the Poggi Canyon Sewer Basin is conveyed to the City of San Diego Metropolitan Wastewater Department (Metro) sewerage system via the Poggi Canyon Interceptor, which generally follows from Olympic Parkway to Brandywine Avenue and then extends southwesterly through existing development to a temporary connection to the Date-Faivre Trunk Sewer south of Main Street. Following completion of the western portion of the planned Salt Creek Interceptor in Otay Valley Road, the Poggi Canyon Interceptor will be connected to the Salt Creek Interceptor near the intersection of Palm Avenue and Main Street and the temporary connection to the Date-Faivre Trunk Sewer will be removed.

Design criteria, including minimum pipe diameters and slopes, for the Poggi Canyon Interceptor was provided in the *Poggi Canyon Basin Gravity Sewer Basin Plan dated 1997 by Wilson Engineering.* The Basin Plan estimated average sewer flows from Village 7 to the Poggi Canyon Interceptor equal to 78,060 gpd (295 EDUs) at 265 gpd/EDU. The *Poggi Canyon Sewer Basin Plan Update and Pumped Flow Analysis dated 2002 by PBS&J*, calibrated the existing sewer system model, which included the Poggi Canyon Interceptor and Date-Faivre Trunk Sewer, with metered flow data. The calibrated generation rates from existing development were estimated to be 215 gpd/EDU. The City elected to evaluate the remaining capacity in the Poggi Canyon Interceptor sewer using a combination of their Subdivision Manual for new development and sewer flow meter data to assess existing pipe capacity. Using this method, Poggi Canyon is estimated to have adequate capacity for all of the proposed wastewater flows from Village 7.

The Basin Plan Update additionally identified that approximately 660 feet of the existing Poggi Canyon Interceptor located under I-805 (Reach 205) may reach capacity after

2005. The City has included improvement of this reach in its current CIP. The improvements will be funded through the existing Development Impact Fee (DIF). It is anticipated that the section of the Interceptor crossing I-805 will be constructed prior to the development of the Village 7 Development. After Reach 205 is completed, the next critical reach in the sewer is identified as P270 located at Brandywine Avenue and Olympic Parkway. This reach is estimated to have adequate capacity for all of the proposed permanent units in the Project. The projected average project flow to the Poggi Canyon Basin is 225,348 gpd.

The number of remaining EDUs to be built within the Basin was estimated by PBS&J. The existing and planned units are referred to as committed units with respect to capacity rights in the Poggi Interceptor. The PBS&J sewer study assumed that units completed at the beginning of November would be sold and occupied by the time the peak flow rate was measured on Thanksgiving Day. The developed units were then subtracted from the "committed" units verified by the City.

Table G.6 shows the "committed" units for entitled and non-entitled developments in the Poggi Canyon Basin, as well as, proposed additional units in Villages 2 and 7 above the committed number of units for these developments. The entitled EDUs include all development in the Basin that is either built or has at a minimum an approved Sectional Planning Area Plan. The non-entitled EDUs include Village 7, Village 7 and the northern portion of the Eastern Urban Center (EUC). Pursuant to a City request, PBS&J used the 1997 Basin Plan as the basis for determining the number of committed EDUs for the non-entitled villages.

Table J.6
Poggi Canyon Sewer Basin
Proposed Units Remaining to be built by Development

Development	Committed Units			Proposed Units	
	Total Units (EDU)	Constructed Units (EDU)	Remaining Units (EDU)	Additional Units (EDU)	Total with Additional Units (EDU)
Entitled Developments					
West of I-805	813	813	0		813
Sunbow I	952	&52	0		952
Sunbow II	1,986	1,533	453		1,986
Village 1 West	520	317	203		520
Village 1 ORC	1,120	986	134		1,120
East Lake Land Swap Area/ EastLake Greens	2,007	1,039	968		2,007
Village 5 ORC	592	215	377		592
Village 6	2,054	53	2,001		2,054
Village 1/5 McMillin	312	312	0		312
Freeway Commercial	1,132	0	1,132		1,132
Non-entitled Developments					
Village 2	1,201	0	1,201	1,001	2,202
Village 7	295	0	295	555	850
Eastern Urban Center	189	0	189		189
TOTAL	**13,173**	**6,220**	**6,953**	**1,556**	**14,729**

Source: PBS& J

C. Poggi Canyon Sewer Capacity:

The PBS&J sewer study conclusion regarding the available capacity in Reaches 205 and P270 is summarized in Table G.7 below. The maximum capacities in the two reaches are very close since the pipe diameters are the same (18-inches) and the difference in slope is very slight for both Reach 205 and P270.

Table J.7
Excess Capacity in Threshold Reaches

Reach	Max Capacity[1]	Recorded Flow[2]	Current Remaining Capacity		Olympic Pkwy Pump Station[4]	Available Capacity in EDUs[5]	
	Qmax (gpm)	Qpeak (gpm)	Qpeak (gpm)	Qavg[3] (gpm)	EDU	215 gpd/EDU	265 gpd/EDU
205	3,435	1,819	1,616	903	2,496	8,544	7,403
P270	3,684	1,510	2,174	1,235	2,496	10,768	9,207

1 Maximum capacity calculated by application of Manning's equation and based on a maximum d/D of 0.85.
2 Reach 205 recorded peak flow from November 27, 2003, at Manhole No. 6837. Reach P270 peak flow estimated from Reach P270 record data.
3. Used peaking factors of 1.78 and 1.76 for reaches 205 and P270, respectively, based on CVDS18.
4. Projected EDUs based on Olympic Parkway pump flow data of September 8, 2003 and generation rate of 265 gpd/EDU.
5. Available capacity assumes EDUs tributary to Olympic Parkway Pump Station are not conveyed to Poggi Canyon Interceptor

Source: PBS& J

According to the PBS&J sewer study the Olympic Parkway Pump Station receives flow from approximately 2,496 EDUs into the Poggi Canyon Basin at the end of 2003 (per house closing information provided by developers as of September 8, 2003). After the Salt Creek Interceptor is completed, the flow will gravity permanently into the Salt Creek Basin and free up capacity in the Poggi Canyon Basin. The available capacity in Table G.7 accounts for this transfer of flow.

The Eastlake Parkway Pump Station currently pumps to Telegraph Canyon, but will ultimately flow by gravity into Poggi Canyon after pumped flows from Salt Creek Basin leave the Poggi Canyon Basin. The PBS&J sewer study capacity analysis assumes all of the proposed 2,007 EDUs from the Eastlake Development in Table G.6 are tributary to the Poggi Canyon Basin.

Table G.8 shows the remaining capacity in the Poggi Canyon Interceptor Sewer after all of the "committed" units are sewered to the basin.

Table J.8
Remaining Poggi Canyon Basin Capacity
in Threshold Reaches minus Committed Units

Reach	Remaining Pipe Capacity	
	215gpd/EDU	265 gpd/EDU
205	1,591	450
P270	3,815	2,254

The PBS&J basin capacity analysis indicates that the Poggi Canyon Interceptor Sewer will have adequate capacity to accept the proposed 850 EDUs from Village 7 (see Table G.6). Table G.8 shows the total number of additional units that can be sewered by the Interceptor above and beyond the number of committed units before exceeding the maximum capacity. The number of proposed additional units for Village 7 is 555 EDUs per Table G.6. The first threshold, Reach 205 at a generation rate of 265 gpd/EDU, provides a remaining capacity of 824 EDUs, which is above the number of proposed additional units. Therefore, the Poggi Canyon Interceptor may receive all of the proposed flow from Village 7 including an additional 269 EDUs before reaching maximum capacity.

The development of some neighborhoods within Village 7 will be contingent upon the completion of certain regional facilities or implementation of temporary diversions. Village 7 neighborhoods R-6, R-7, S-1 and S-3 are planned to temporarily sewer north to the Poggi Basin until the future Wolf Canyon Trunk Sewer is built. Approximately 456 EDUs more than the proposed 850 EDUs will be sewered north to the Poggi Basin on an interim basis. Of this amount, 295 EDUs are committed per the 1997 Basin Plan. Therefore, the total additional units during the interim condition are 1,011 EDUs. At 1,011 EDUs there are 187 EDUs above the threshold at Reach 205 with a generation rate of 265gpd/EDU. If Reach 205 were complete, the Poggi Canyon Interceptor Sewer would have adequate capacity to accommodate all of the interim flows. In addition, phasing of developments in the Poggi Canyon Basin will free up capacity in the Interceptor sewer until regional facilities are in place.

D. <u>Wolf Canyon Sewer Basin:</u>

The City evaluated several regional sewer alternatives for the Wolf Canyon Basin. Subsequent to the evaluation, the future Wolf Canyon Trunk Sewer alignment was moved out of Wolf Canyon and into a planned improved roadway, Rock Mountain Road. This new alignment will significantly reduce the environmental impacts and capital costs associated with construction in a canyon. The conceptual grading in the project and sewer study was modified to reflect this revision.

Wastewater generated within the Wolf Canyon Basin will drain to the future trunk sewer in Rock Mountain Road. The trunk sewer will connect to the existing Salt Creek Interceptor at a location approximately 3,000 feet east of Heritage Road in the Otay River Valley. From the connection point, flows will be conveyed in the Salt Creek Interceptor to Metro facilities located west of I-5. Completion of the Salt Creek Interceptor is expected in 2004. The projected average project flow to the Wolf Canyon Basin is approximately 255,299 gpd.

II.5.4.8.6 Recommended Sewerage Facilities

Sewer facility improvements required to serve the Otay Ranch Village 7 project include on-site gravity sewer lines and contributions for the construction of the Poggi Canyon Interceptor. The sizing of on-site sewer lines should be verified during the improvement plan preparation process when slopes and alignments for sewer lines have been established. This chapter provides a discussion of the impact fees to be paid and the on-site facilities necessary to serve the Otay Ranch Village 7 project.

II.5.4.8.6.1 Otay Ranch Village 7 Improvements

Exhibit 13 illustrates the conceptual on-site sewer collection system for the Village 7 SPA based on the interim condition for the Poggi Canyon Basin. The interim sewer main in the looped road will divert flows from Neighborhoods R-6, R-7, S-1 and S-3 north to the backend of the proposed permanent sewer, which ultimately connects to an existing sewer manhole at the intersection of Magdalena Avenue and Birch Avenue.

Sewer facility improvements required to serve the Village 7 SPA include on-site gravity sewer mains and contributions for the construction of the Poggi Canyon and Salt Creek Interceptors, and potentially the Wolf Canyon Trunk Sewer. Flows generated in the Poggi Canyon Basin will flow to planned 8 to 12-inch sewer mains in La Media and Birch Roads that connect to the Poggi Canyon Interceptor in Olympic Parkway. The permanent sewer collection system in Exhibit 14 shows the backbone mains at ultimate buildout of Village 7 SPA.

Based on conceptual grading, permanent sewer in the western portion of the Wolf Canyon Basin collects flows in the south connector road between La Media Road and Magdalena Avenue, and then diverts flow south to Rock Mountain Road. Pipe sizes are estimated at 8 inches based on wastewater generation flows. At the time of the PBS&J sewer study, tentative maps were not available so approximate lengths of deep sewers in this area are not included. The sizing of on-site sewer lines will be determined during development of improvement plans for the Project when slopes and alignments for sewer lines have been established.

II.5.4.8.6.2 Otay Ranch Village 7 Phasing

A. <u>Poggi Basin Development</u>

In the permanent condition, the northern portion of the Project (R-l, R-2, R-5, P-l, P2/CPF-1, and P3/CPF-2) will sewer to planned mains in Birch Road and La Media Roads, as shown in Exhibit 14. These mains will be constructed as part of the Village 6 subdivision and are expected to be completed and operational prior to development of the Village 7 project. The total proposed EDUs for Village 7 at ultimate buildout is 850 EDUs. With approximately 295 EDUs committed per the 1997 Basin Plan, an additional 555 EDUs will be tributary to the Poggi Canyon Basin. Based on the hydraulic analysis, the Poggi Interceptor Sewer would have sufficient capacity to handle only 450 additional units from Village 7. The remaining 105 EDUs that are considered additional may be tributary to the Poggi Canyon Interceptor Swere until the Year 2012 when the EUC is anticipated to begin construction. This will free up 189 EDUs in the Poggi Canyon Basin until Reach 205 is upsized. At which point, all of the proposed units from Village 7 may be tributary to the Basin.

Until the Wolf Canyon Trunk Sewer is completed, the southeastern quadrant (R-6, R-7, S-1 and S-3) will require an interim sewer to the Poggi Basin via a deep sewer in the loop road, as shown in Exhibit 13. The maximum number of additional units above and beyond the committed units in Village 7 that will be tributary to the Poggi Canyon Basin on an interim basis is 1,011 EDUs. This exceeds the remaining capacity in Reach 205 by 561 EDUs. Once Reach 205 is improved, there will be sufficient capacity to accept all the temporary flow.

Assuming Reach 205 and the Wolf Canyon Trunk Sewer are not built prior to development of the southeastern quadrant, the timing of developments within the basin may free up capacity within the Poggi Interceptor Sewer to accommodate potential temporary flows. For instance, the latest estimated development timeframe for committed EDUs in Sunbow II (Sunbow Industrial) and the EUC is after 2012. This will free up 642 EDUs in the basin for additional units from Village 7. Once Reach 205 is constructed, the sewer basin would be able to handle a total of 2,254 additional units before the second threshold at Brandywine Avenue would be exceeded. With development of Sunbow Industrial and EUC in the distant future, the Poggi Basin has adequate capacity to accept all of the temporary flows from Village 7. Further, the remaining capacity within the Poggi Basin, are based on a conservative planning generation rate of 265 gpd/EDU. Using the lower generation rate of 215 gpd/EDU, the Poggi Canyon Basin would be able to accept all of the proposed and temporary EDUs in Reach 205 and P270 with additional capacity remaining.

B. <u>Wolf Canyon Basin Development</u>

Portions of the Project that lie within the Wolf Canyon Basin will sewer to the future trunk sewer in Wolf Canyon through a planned main in La Media Road and Magdalena Avenue. The southern portion of the Project (Neighborhoods R-3, R-4, S-2, and commercial land uses) will require the completion of future mains in Rock Mountain Road or other alignments to convey flows to the Salt Creek Interceptor.

II.5.4.8.7 Financing Sewerage Facilities

City of Chula Vista Development Impact Fees (DIP) will fund construction of regional sewer facilities, including the Poggi Canyon and Salt Creek Interceptors and potentially a Wolf Canyon trunk sewer. Village 7 development within the Poggi Canyon Sewer Basin will be required to pay the Poggi Canyon DIF and development within the Wolf Canyon Basin will be required to pay the Salt Creek DIF. These fees were established in the *Poggi Canyon Gravity Sewer Basin Plan* and the *Salt Creek Basin Study, 1994 by Wilson Engineering*, and through City of Chula Vista Ordinances 2716 and 2617, respectively. Table J.9 summarizes the current Poggi Canyon Basin Impact Fees and Table J.10 presents the current Salt Creek & Wolf Canyon Basin fees, which are being updated.

Table J.9
Village 7 SPA Poggi Canyon Basin Impact Fees[29]

Neigh.	Land Use	Impact Fee	Phase								Total Fees
			White		Blue		Red		Greeen		
			DU	Fees/Phase	DU	Fees/Phase	DU	Fees/Phase	DU	Fees/Phase	
Residential											
R-1	SFD	$400/EDU		$0	346	$138,400		$0		$0	$138,400
R-2	SFD	$400/EDU		$0		$0	375	$150,000		$0	$150,000
R-3	SFD	$400/EDU		$0		$0		$0	22	$8,800	$8,800
R-4	SFD	$400/EDU		$0		$0		$0	13	$5,200	$5,200
R-5	MF	$300/EDU		$0	142	$42,600		$0		$0	$42,600
R-6	MF	$300/EDU		$0	187	$56,100		$0		$0	$56,100
R-7	MF	$300/EDU		$0	119	$35,700		$0		$0	$35,700
Subtotal				**$0**	**794**	**$274,800**	**375**	**$150,000**			**$438,800**

[29] After issuance of the 295 EDU, each subsequent EDU shall pay the Salt Creek Interceptor DIF in effect at the time of issuance, whether or not the unit is in the basin of the Salt Creek Interceptor

Table J.9 Continued Village 7 SPA Poggi Canyon Basin Impact Fees											
Neigh.	Land Use	Impact Fee	Phase								Total Fees
			White		Blue		Red		Green		
			Site	Fees/Phase	Site	Fees/Phase	Site	Fees/Phase	Site	Fees/Phase	
Non-Residential											
CPF-1	CPF	$3,572/site		$0	1	$3,572		$0		$0	$3,572
CPF-2a	CPF	$3,572/site		$0		$0	1	$3,572		$0	$3,572
CPF-2b	CPF	$3,572/site		$0		$0		$0	1	$3,572	$3,572
S-1	High School	$68,572 /site	1	$68,572		$0		$0		$0	$68,572
S-3	Elem. School	$12,856 /site		$0	1	$12,856		$0		$0	$12,856
P-1	Neigh Park	$716/Acre		$0	7.6	$5,442		$0		$0	$5,442
Subtotal				**$68,572**		**$21,870**		**$3,572**		**$3,572**	**$97,586**
Total				**$68,572**		**$296,670**		**$153,572**		**$17,572**	**$536,386**

Table J.10 Village 7 SPA Salt Creek Basin Impact Fees											
Neigh.	Land Use	Impact Fee	Phase								Total Fees
			White		Blue		Red		Green		
			DU	Fee/Phase	DU	Fee/Phase	DU	Fee/Phase	DU	Fee/Phase	
Residential											
R-1	SFD	$284		$0	346	$140,400		$0		$0	$140,400
R-2	SFD	$284		$0		$0	375	$106,500		$0	$106,500
R-3	SFD	$284		$0		$0		$0	22	$6,248	$6,248
R-4	SFD	$284		$0		$0		$0	13	$3,692	$3,692
R-5	MF	$213		$0	142	$30,246		$0		$0	$30,246
R-6	MF	$213		$0	187	$39,831		$0		$0	$39,831
R-7	MF	$213		$0	119	$25,347		$0		$0	$25,347
Subtotal				$0	794	$235,824	375	$106,500		$9,940	$352,264
Non-Residential											
CPF-1	CPF	$2,840/site		$0	1	$2,840		$0		$0	$2,840
CPF-2a	CPF	$2,840/site		$0		$0	1	$2,840		$0	$2,840
CPF-2b	CPF	$2,840/site		$0		$0		$0	1	$2,840	$2,840
S-1	H.S.	$1,136/site	1	$1,136		$0		$0		$0	$1,136
S-3	E.S.	$1,136/site		$0	1	$1,136		$0		$0	$1,136
P-1	N.P.	$716/acre		$0	7.6	$5,442		$0		$0	$5,442
Subtotal				$1,136		$9,418		$2,840		$2,840	$16,234
Total				**$1,136**		**$245,242**		**$109,340**		**$12,780**	**$368,498**

Tables J.9 and J.10 are fee estimates only and are subject to change as they are amended from time to time. Further, fees for residential units may be different depending upon the actual number of building permits that are pulled.

II.5.4.8.8 Threshold Compliance and Recommendations

Facilities to accommodate sewer flows have been identified in the PBS&J sewer report. The construction of new sewer lines must be phased in before the construction of streets.

It is recommended that flow monitoring within the Poggi Canyon Sewer Basin should be performed as a confirmation that the metered flow does not exceed the basin capacity.

All gravity sewers will be designed to convey peak wet weather flow. For pipes with diameter of 12 inches and smaller, the sewers will be designed to convey this flow when flowing half full. For pipes of diameter larger than 12 inches, the sewers will be designed to convey peak wet weather flow when flowing at three-fourths of the pipe depth. All new sewers will be designed to maintain a minimum velocity of two feet per second (fps) at design capacity to prevent the deposition of solids.

The Reach 205 upgrade to the Poggi Canyon Trunk Sewer shall be completed prior to issuance of any building permit that will exceed 1635 EDU's cumulative for all projects utilizing the Poggi Canyon Trunk Sewer, in excess of entitled and reserved units.

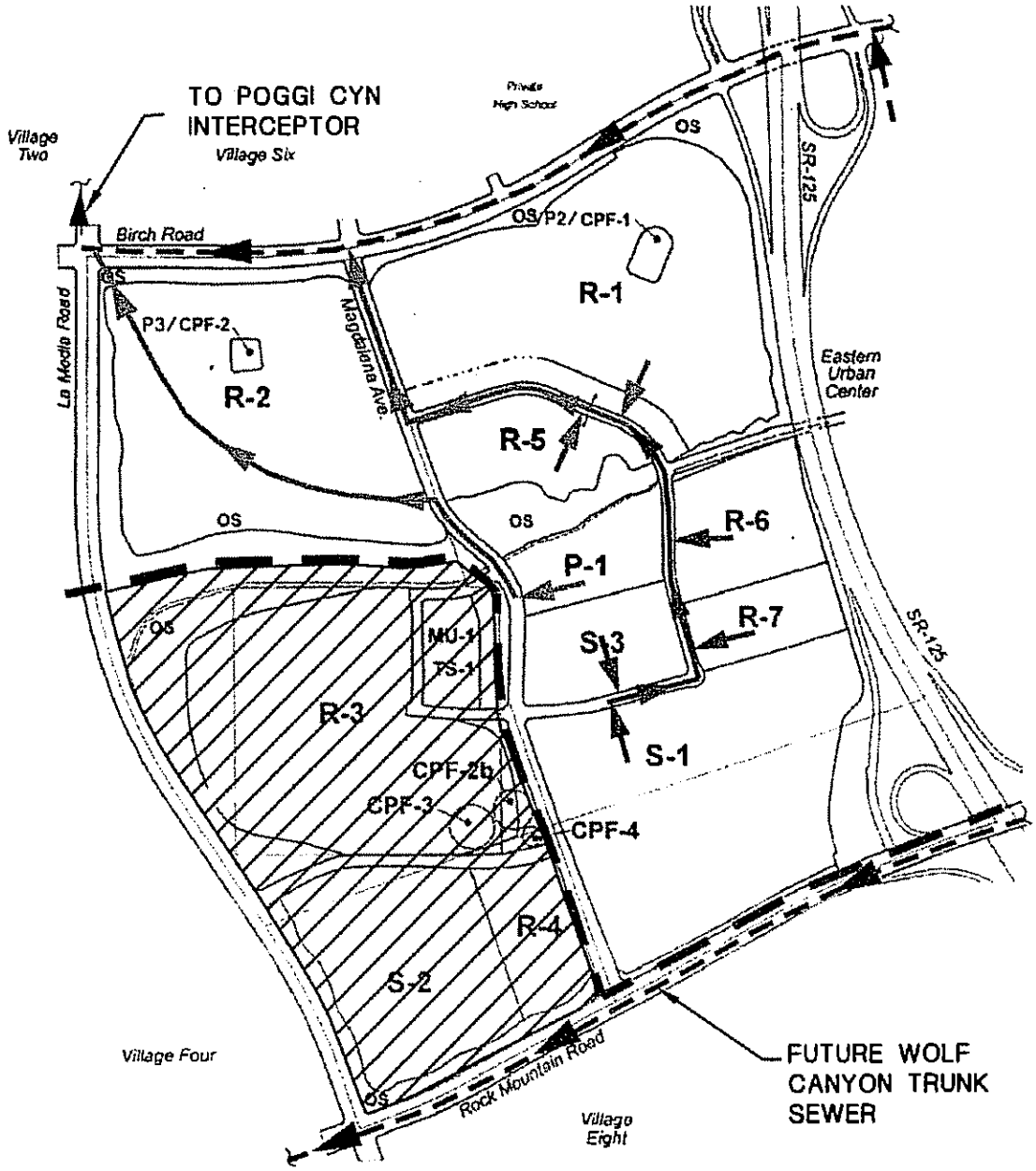
Prior to the approval of any final map within the Village 7 SPA containing the lot that, when developed in accordance with the adopted SPA plan, will cause the total number of EDUs within the basin of the Poggi Canyon Trunk Sewer to exceed 3,439 in excess of entitled and reserved units, the Rock Mountain Road Sewer improvements necessary to connect the Project to the Salt Creek Interceptor shall be secured.

Prior to the issuance of any building permit within the Project that will cause the total number of permitted EDUs within the basin of the Poggi Canyon Trunk Sewer to exceed 5, 000 in excess of entitled and reserved units, the Rock Mountain Road Sewer improvements necessary to connect the Project to the Salt Creek Interceptor shall be constructed.

Prior to issuance of each building permit for EDUs 1 through 295 in Village 7, the Poggi Canyon Gravity Sewer DIF in effect at the time of issuance shall be applied to each building permit. After issuance of the 295 EDU, each subsequent EDU shall pay the Salt Creek Interceptor DIF in effect at the time of Issuance, whether or not the unit is in the basin of the Salt Creek Interceptor (see Tables J.9 and J.10).

The applicant for the Otay Ranch Village 7 project shall:

1. Underwrite the cost of all studies and reports required to support the addition of sewer flows to existing lines.
2. Assume the capital cost of all sewer lines and connections identified herein.
3. Pay all current applicable sewer fees required of the City of Chula Vista.
4. Comply with Section 3-303 of the City of Chula Vista Subdivision Manual.
5. Construct off-site connections as required by the City Engineer.



LEGEND

- OFFSITE SEWER
- POGGI CANYON SEWER BASIN BOUNDARY
- INTERIM / PERMANENT SEWER MAIN
- INTERIM SEWER MAIN
- AREA TO BE SERVED BY FUTURE WOLF CANYON TRUNK SEWER

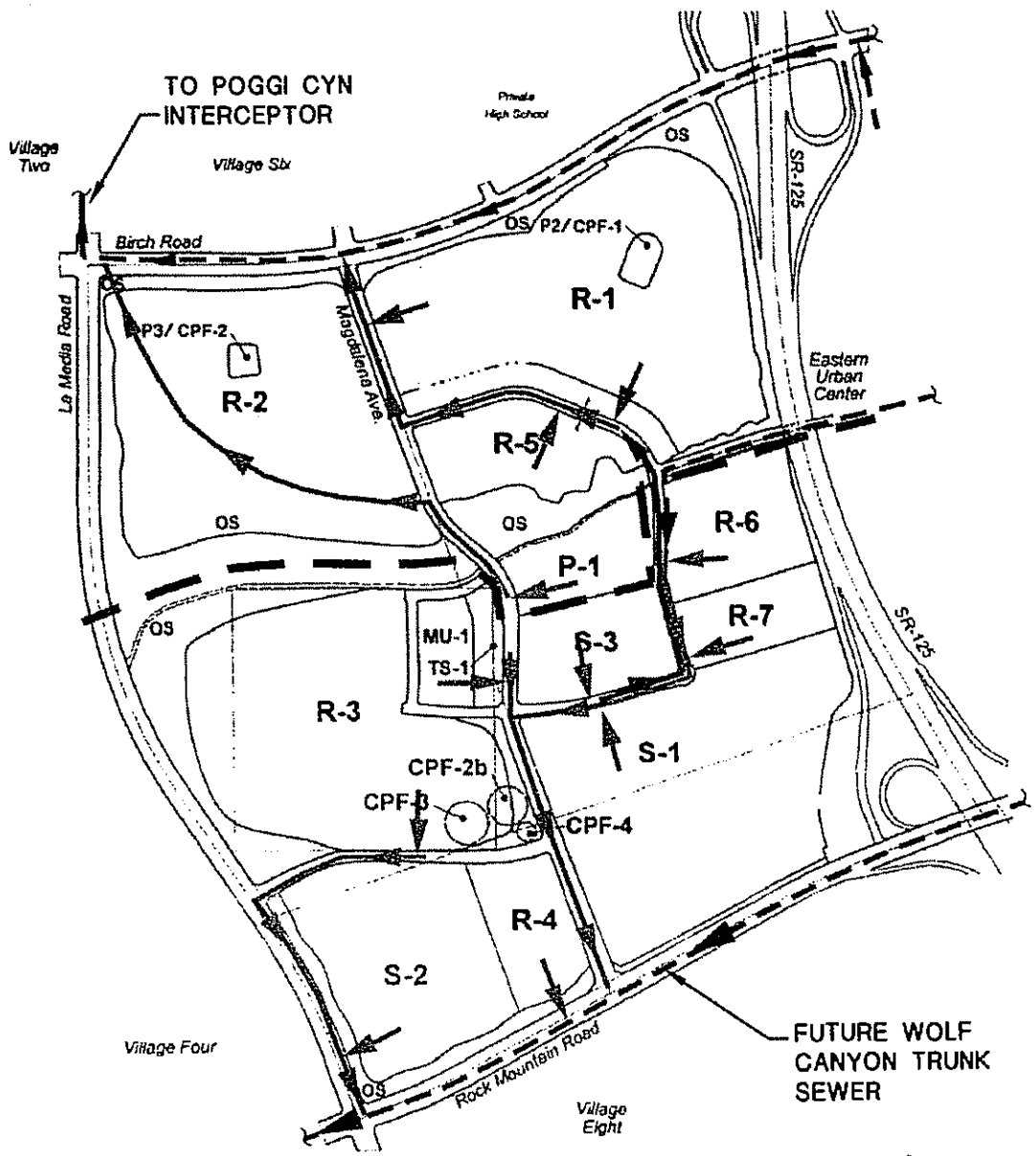
N

NO SCALE

INTERIM SEWER COLLECTION SYSTEM

Note: Refer to the Site Utilization Plan on page 15 of this PFFP for approved SPA land uses.

Exhibit 13



LEGEND

- POGGI CANYON SEWER BASIN BOUNDARY
- PERMANENT SEWER MAIN
- PLANNED OFF-SITE SEWER
- INTERIM SEWER MAIN TO BE ABANDONED IN PLACE

PERMANENT SEWER COLLECTION SYSTEM

Note: Refer to the Site Utilization Plan on page 15 of this PFFP for approved SPA land uses.

Exhibit 14

II.5.4.9 DRAINAGE

II.5.4.9.1 Threshold Standard

1. Storm water flows and volumes shall not exceed City Engineering Standards.

2. The GMOC shall annually review the performance of the City's storm drain system to determine its ability to meet the City's goals and objectives.

II.5.4.9.2 Service Analysis

The City of Chula Vista Public Works Department is responsible for ensuring that safe and efficient storm water drainage systems are provided concurrent with development in order to protect the residents and property within the city. City staff is required to review individual projects to ensure that improvements are provided which are consistent with the drainage master plan(s) and that the project complies with all City engineering drainage standards. *The City of Chula Vista Public Facilities Plan Flood Control Summary Report,* dated March 1989 (Phase II) provides details for the city planned drainage facilities.

Otay Ranch Village 7 drainage improvements are identified in the following two reports:

1. *Preliminary Drainage Study, Otay Ranch Village 7, Village of Vista Verde, May 24, 2004 by P&D Consultants.*
2. *Master Drainage Study for Otay Ranch Village 7, May 20, 2004, by Hunsaker & Associates.*

Otay Ranch Village 7 water quality improvements are identified in the following two reports:

1. *Preliminary Water Quality Technical Report for Otay Ranch Village 7 in the City of Chula Vista, revised May 24, 2004 by Rick Engineering Company.*
2. *Preliminary Water Quality Technical Report for Otay Ranch Village 7, Neighborhood R-2 and Village 4 Park Site, May 21, 2004 by Hunsaker & Associates.*

The *Preliminary Drainage Study, Otay Ranch Village 7, Village of Vista Verde, May 24, 2004 by P&D Consultants* was prepared in conjunction with the SPA and Tentative Map applications for the McMillin Ownership of the Otay Ranch Village 7 project. Specifically it was prepared for the eastern one half of Village 7 (east of Magdalena Street), which includes both the McMillin and the Sweetwater Union High School Site. The intent of the P&D Consultants study is to establish general design procedures and calculations, identify preliminary flows and major drainage facilities and set preliminary guidelines for the subsequent phase(s) of the project. The scope of P&D Consultants study was not intended for final engineering and does not include a detailed analysis of all related drainage facilities (i.e., peak run off at each inlet, outlet, interceptor, and concentration or confluence point). Additional drainage analysis may be required by the City Engineer during the tentative map phase of the project to demonstrate the adequacy of the proposed on-site storm drain system(s). Future drainage reports will be prepared as required by the City Engineer for the final engineering phase(s) of the project. Finally, the project will be required to comply with all current regulations related to water quality including best management practices (BMPs) for the construction and post construction phases of the project.

Master Drainage Study for Otay Ranch Village 7, May 20, 2004, by Hunsaker & Associates was prepared in conjunction with the SPA application for the Otay Project, L.P. ownership. The purpose of the Hunsaker report is to:

- Prepare hydrologic models to quantify existing and developed site runoff from the Village 7 site to Wolf Canyon.
- Design detention facilities to maintain developed condition peak flowrates from the site area below pre-developed peak flowrates to Wolf Canyon Creek.

The Otay Ranch Village 7 project is under the jurisdiction of the San Diego Regional Water Quality Control Board (SDRWQCB). The Otay Ranch Village 7 project is subject to the National Pollutant Discharge Elimination System (NPDES) requirements both during and after construction. NPDES requirements stem from the Federal Clean Water Act and are enforced either by the State Water Resources Control Board (SWRCB) or the Regional Water Quality Control Board (RWQCB) for the region in which the project is located.

The Preliminary Water Quality Technical Reports were prepared in conjunction with the Otay Ranch Village 7 SPA. The reports summarizes storm water quality requirements for post-development runoff the Village 7 SPA Plan. The Rick Engineering report addresses McMillin's ownership and the Hunsaker report addresses the Otay Project, L. P. ownership.

II.5.4.9.3 Project Processing Requirements

The SPA Plan and the PFFP are required to address the following issues for drainage issues:

A. Identify phased demands.

B. Identify locations of facilities for onsite and offsite improvements.

C. Provide cost estimates.

D. Identify financing methods.

II.5.4.9.4 Existing Conditions

A. Storm Drainage

The *City of Chula Vista Public Facilities Plan, Flood Control Summary Report, March, 1989, by the City of Chula Vista*, shows fifteen major drainage basins in Chula Vista. These drainage basin boundaries were determined by existing topography, drainage conditions and land uses. Four of these are essentially developed and not expected to have significant changes in runoff. Eleven drainage basins are east of I-805 with one of the basins, Long Canyon, is mostly developed to the predicted densities of the general plan. Some of the remaining basins are experiencing development and the subsequent changes in drainage conditions.

The City's Drainage Master Plan analyzed current and future requirements for drainage facilities. Because drainage facilities are directly related to the type and location of future development, it is not possible to determine which specific improvements will be required until the development project is presented and reviewed by staff at which time specific requirements will be determined and applied to the project.

The terrain of Village 7 is very similar to the adjacent Village 6 drainage area. The terrain is covered by heavily grazed lands that consist of rolling hills with arroyos

draining into larger canyons flowing to the south and west, away from the Otay Reservoir Basin. The natural drainage basin for this portion of the Otay Ranch is a combination of one subbasin flowing directly into Wolf Canyon and four subbasins draining south into unnamed tributaries that eventually drain into Wolf Canyon and one sub-basin draining north into Poggi Canyon. The northern portion of Neighborhoods R-1 and R-2 of the Village 7 SPA drain towards Poggi Canyon. The balance of the site is within the Wolf Canyon drainage basin, which ultimately discharges into the Otay River approximately 1.6 miles southwest of the study area.

Immediately east of the Village 7 project and across the planned SR 125 alignment is located the future Eastern Urban Center (EUC), a part of the Village 12 SPA. The majority of the EUC is contained within the natural Wolf Canyon drainage basin, and will ultimately drain through a drainage structure under SR 125 and through Village 7.

Exhibit 15, Preliminary Existing Drainage Basin Boundaries, shows several subbasins and portions of subbasins drain the Village 7 SPA Plan project site. The largest subbasin on the project site, which is approximately 384 acres in size, accepts discharge from the central portion of the project area, as well as part of the Eastern Urban Center (EUC) which is east of the project area, outside of the project boundaries. The subbasin discharges outfall on the west side of the Village 7 SPA Plan project area into Wolf Canyon. Another subbasin located directly south of the one referenced above drains a 218-acre area that constitutes the southern portion of the project site. This subbasin drains westerly into Wolf Canyon. Additionally, a 50-acre northern portion of the project area drains north into Poggi Canyon.

B. Storm Water Quality

Urban runoff discharged from municipal storm water conveyance systems has been identified by local, regional, and national research programs as one of the principal causes of water quality problems in most urban areas. The Municipal Storm Water Pollutant Discharge Elimination System (NPDES) Permit (Municipal Permit), issued on February 21, 2001 to the City of Chula Vista, the County of San Diego, the Port of San Diego, and 17 other cities in the region by the San Diego Regional Water Quality Control Board (SDRWQCB), requires the development and implementation of storm water regulations addressing storm water pollution issues in development planning and construction associated with private and public development projects.

The Preliminary Water Quality Technical Reports analyze the compliance of the storm water quality requirements for post-development runoff from the McMillin and Otay ownership of the Otay Ranch Village 7 project. McMillin Companies owns the northeast portion of the Otay Ranch Village 7 project site (east of Magdalena Road). Otay Project, L. P. owns the northwest portion of the Village 7 SPA (west of Magdalena Road). The reports have been revised per city engineering comments to include and address all the requirements outlined in the Model Standard Urban Storm Water Mitigation Plan (SUSMP).

The McMillin Village 7 project consists of the construction of approximately 790 dwelling units, an elementary school, neighborhood park, a high school site, and a series of extended detention basins along Wolf Canyon on approximately 180 acres. This project is subject to NPDES requirements. NPDES requirements are contained in Section

402(p) of the Federal Clean Water Act. These requirements are implemented through permits issued by the SWRCB or the local RWQCB and the City of Chula Vista.

II.5.4.9.5 Proposed Facilities

A. Storm Drainage

Upon development of the Village 7 site, a portion of the existing Wolf Canyon area is planned as a naturalized open basin area. To limit the increased runoff to predevelopment levels, detention basins are proposed to be constructed. The naturalized open basin area will function as a drainage facility providing both detention and water quality treatment areas, integrated into an environmental and scenic feature. To avoid the construction of a series of small detention basins within the EUC, the Village 7 Wolf Canyon basin (between Magdalena Avenue and SR 125) will be sized to retain runoff from the EUC as well as Village 7.

For the flows from the EUC, the P&D Consultants study accepted the drainage basins and drainage flows from a report entitled *Drainage Study to Size Pipe between E.U.C. and Village 7, dated February 11, 2004,by Rick Engineering Company.* The 100-year storm discharge of 492 cubic feet per second (cfs) per the report was used as the developed flow from the EUC under the SR 125, and into the Village 7 project area.

A small northerly portion of the Village 7 Neighborhood R-1 and the EUC drains toward Birch Road into Poggi Canyon, which was included and identified in the report titled *Otay Ranch SPA Village 6 Preliminary Drainage Study Major Drainage Patterns and Facilities, dated September 4, 2001.* This area is approximately 42 acres of the 300 acres of the drainage basin that drains to Poggi Canyon. Approximately 16 acres of the northerly portion of Neighborhood R-2 drains towards Poggi Canyon.

The northern portion of the Village 7 Neighborhood R-1 site, when developed, will drain through pipes in the local streets to Birch Road, westward to La Media Road, and onward to the Poggi Canyon drainage facilities. The total developed 100-year runoff for this basin is 87 cfs. This basin is the onsite portion of the larger drainage basin to the north of approximately 300 acres that drains into Poggi Canyon. This developed runoff has already been addressed in the report *Otay Ranch Village 6 Preliminary Drainage Study Major Drainage Patterns and Facilities.* Detention for the developed runoff will be provided in the Poggi Canyon regional detention facility.

The development of the Otay Ranch Village 7 Neighborhood R-2 site will include the construction of single-family residential homes. Development of the site will divert approximately 16 acres from Poggi Canyon to Wolf Canyon.

The main drainage course through Village 7 shall occur through Wolf Canyon. The offsite runoff from the EUC shall enter Village 7 on the east under the proposed SR 125. Exhibit 16 illustrates the developed drainage basin boundaries for the McMillin ownership of Village 7. The total developed 100-year flow for Basin A is 714 cfs, which includes the offsite drainage from the EUC (see Exhibit 16). The runoff from this basin will be routed through a series of detention areas to provide a maximum 100-year discharge of 243 cfs at me discharge point, equal to the existing pre-developed flow at the westerly boundary of the project. All of the storm runoff from Basin A will be routed through the detention areas, with the exception of a minor amount of runoff within

Magdalena Avenue. This runoff will be routed directly to the west, bypassing the ponds. The amount of runoff from Magdalena Avenue is not considered significant and will not increase the total discharge above the pre-developed condition.

The remaining drainage area, Basin B-l, shall flow from the site to the future southern extension of Magdalena Avenue and to Rock Mountain Road, ultimately flowing to the southern tributary of Wolf Canyon. This is a future school site and will include approximately 10 acres of natural area upstream of the developed school parcel until SR 125 is built. The runoff from the school site was modeled for ultimate conditions. The total 100-year developed runoff is 168 cfs. To mitigate the increase in Basin B-l, detention within the school parcel will be provided as part of the school site development. A minor amount of runoff within Magdalena Avenue and Rock Mountain Road will drain directly west; however, this flow is not considered significant with regard to overall detention requirements for Basin B-l (see Table K.1).

Table K.1
Summary of Runoff Estimates for McMillin Ownership of Village 7

Location	Existing Condition		Developed Condition	
	Area (Acres)	Q100 (cfs)	Area (Acres)	Q100 (cfs)
Basin A-1 (EUC)*	153	201	164	491
Basin A-2 North			45	84
Basin A-2 South			36	97
Basin A-2 Ponds			17	42
Subtotal Basin A-2	90	42	98	223
Total Basin A	243	243	262	714
Basin B-l	81	116	71	168
Basin C-l	59	83	42	87

* From the report titled *Drainage Study to Size Pipe Betweeen EUC and Village 7* *Source: P&D Consultants.*

The future onsite drainage facilities for the McMillin ownership of Village 7 were not specifically addressed by the P&D Consultants study. The onsite facilities consisting of storm drain pipes, inlets, cleanouts, headwalls, drainage ditches, etc. will be sized and designed during the final engineering and permitting phase of the project in accordance with City of Chula Vista standards. A detailed drainage report shall be prepared at that time which will size all onsite drainage facilities to accommodate the ultimate storm flows.

Future tentative mapping and final design for Village 7 will include preparation of separate drainage reports in accordance with previous reports and the City of Chula Vista's standards and requirements.

All runoff from the developed Otay Project L.P. ownership of Village 7 will be routed via storm drain to the detention and water quality basins located just upstream of the La Media culvert crossing (see Exhibit 17). A storm drain will intercept routed runoff from the McMillin portion of Village 7 and convey this flow (256 cfs) beneath the basins. This pipe will also convey the Village 7 basin outflows and will discharge on the western side of La Media Road into the existing Wolf Canyon channel. Runoff from Wolf Canyon Creek will ultimately discharge to the Otay River east of Otay Village 3.

Table K.2 summarizes contributing areas and 100-year flows for existing and developed conditions for the site's major discharge locations. As shown in the table, the proposed detention facility mitigates the 100-year peak flowrates well below the pre-developed peak flowrates from the study area at the proposed La Media crossing. The outflow of 109 cfs from the detention basin, in the Otay Project L. P. ownership of Village 7, is significantly lower than the pre-developed study area 100-year flow of 132 cfs at the same location (see Exhibit 16).

TABLE K.2
Contributing Areas and 100-year flows for existing and developed conditions

Location	Node Number	Existing Conditior Drainage Area (acres)	Developed Condition Drainage Area (acres)	Difference (acres)	Existing Condition 100-Year Flow (cfs)	Developed Condition 100-Year Flow (cfs)	Difference (cfs)
Village 7 Site & La Media Flow	133	n/a	98.8	n/a	n/a	269.1	n/a
Natural Area South of Creek	30,32	n/a	39.1	n/a	n/a	139.8	n/a
Area South of Creek (Ultimate Conditions - Developed)	30,32	n/a	39.1	n/a	n/a	210.3*	
La Media without detention		83.7	137.9	54.2	131.8	408.9	277.1
Detention Basin inflow	300	n/a	137.9	n/a	n/a	408.9	n/a
Detention Basin outflow		n/a	137.9	n/a	n/a	109.3	n/a
La Media with detention		83.7	137.9	54.2	131.8	84	-47.8

* Flow for Vortec property approximated based ultimate conditions. *Source: Hunsaker & Associates*

B. Storm Water Quality

Both the Rick Engineering Preliminary Water Quality Technical Report (WQTR) and the Hunsaker WQTR summarize the storm water protection requirements for the McMillin and Otay Project, L. P., respectively, portions of the Otay Ranch Village 7 project. The WQTRs describe the permanent storm water best management practices (BMPs) that will be incorporated in order to mitigate the impacts of urban runoff due to the Otay Ranch Village 7 SPA project.

The grading concepts for Village 7 SPA have not been approved for final engineering. The design scenarios for the post-project conditions are as follows:

1. **McMillin Ownership:**

The McMillin Village 7 project shall convey post-project flows from the majority of the Eastern Urban Center (EUC), located upstream of Village 7, east of the State Route 125. The EUC, which is currently undeveloped, is planned for high-density multi family residential, office and commercial land uses and will function as the urban center of the Otay Ranch. The runoff shall be conveyed from the EUC to Wolf Canyon where McMillin Village 7 on-site storm drainage will confluence with the EUC drainage. At this confluence the developed flows from the EUC and a large portion of the McMillin Village 7 will outlet into a forebay. The forebay will be followed by a series of extended detention basins (known as the Wolf Canyon Water Quality and Detention Basin). Further, the project is recreating a receiving water (that will convey a portion of Village 7 treated post-project flows) that will be located adjacent to the series of basins proposed for Wolf Canyon.

Field surveys, conducted in 2003 by Helix Environmental Planning, determined that the upper portion of Wolf Canyon consists of un-vegetated, non-wetland waters. This area has limited functions and values for wildlife and water quality, as it has been in active agricultural usage up to the present day. Therefore, it was determined that the appropriate location for the extended detention basin would be in Wolf Canyon, just upstream of Magdalena Road. In the design scenario for McMillin Village 7, the extended detention basin and the forebay shall be equipped to handle, treat, and detain the post-project flow from the future EUC project and the majority of the residential portion of the McMillin Village 7 project. The project proposes regional benefits with respect to water quality, while maximizing conservation of more significant biological resources offsite.

There are two alternatives proposed for the McMillin Village 7 project. Both alternatives use a combination of structural treatment control BMPs (in addition to the Wolf Canyon Water Quality and Detention Basin) to treat post-project flows, generated from the project, before leaving the site. The preliminary WQTR by Rick Engineering provides details of the two proposed alternatives; Alternative A and B. Alternative A proposes treating post-project flows tributary to the storm drain systems that are located in Magdalena Road and Rock Mountain Road and the storm drain system that serves the northern basin (that drains to Poggi Canyon) with inlet filter inserts. In addition, the project proposes an in-line treatment facility at the downstream portion of the storm drain system that outlets into the receiving water associated with the Wolf Canyon Basin. Alternative B proposes three in-line treatment facilities. One that would be located at the downstream portion of the storm drain system that outlets into the receiving water associated with the Wolf Canyon Basin. Another unit would be installed at the downstream portion (near the intersection of Magdalena Road and Birch Parkway) of the storm drain system that serves the drainage basin that flows northerly to Poggi Canyon. The last unit that would be associated with the storm drain system is located on Magdalena in the central portion of the project, just before the confluence with the Wolf Canyon Basin flows. For the remainder portion of the project (storm drain systems that serve the southern portion of the project) inlet filter inserts shall be installed. For location of the structural treatment control BMPs described above please refer to the exhibits located in the Preliminary WQTR by Rick Engineering.

Post-construction structural BMPs (either inlet filter inserts or an in-line treatment facility based on the chosen design alternative) shall serve the northerly portion of

McMillin Village 7 to treat post-project flows (before discharging through Village 6 and to Poggi Canyon). A regional detention facility further downstream has also been designed by Village 6 to capture and detain the post-project flows associated with this basin.

The drainage basin along the high school site, which is located in the southerly portion of the McMillin Village 7, will consist of a mass graded area plus a portion of Magdalena Road and Rock Mountain Road. A temporary desilting basin shall serve the high school site. In addition proposed storm drain systems shall be installed on Magdalena Road and Rock Mountain Road to convey the flows from the high school site and the runoff from the roads offsite in a westerly direction. Bio Clean Inlet Filter Inserts are proposed to be installed in a portion of the inlets that are located within this portion of McMillin Village 7 for the treatment of the post-construction runoff before discharging off-site.

2. Otay Project, L. P. Ownership

Development of the Otay Ranch Village 7 Neighborhood R-2 project site will include the construction of single-family homes as well as the associated streets, sidewalks, landscaping and utilities. Two flow-based BMPs will be located on the Village 7 Neighborhood R-2 project site.

The *Preliminary Water Quality Technical Report for Otay Ranch Village 7,Neighborhood R-2 and Village 4 Park Site, dated May 21, 2004, by Hunsaker & Associates*, details the design of the detention basin for Village 7 Neighborhood R-2. As shown in the referenced report, the detention facility mitigates the design peak flow increase from Village 7 below pre-development levels. The 85th percentile flow will be treated in one of the proposed Vortechs, or approved equivalent flow-based treatment units. Two offline treatment units will treat flow from the Village 7 Neighborhood R-2 site. In addition, the Hunsaker report addresses pre and post developed peak flows produced from the overall development site as well as the McMillin development upstream and Village 2 downstream.

Two flow-based Vortechs systems, or approved equivalent systems will treat the 85th percentile runoff from Village 7, Neighborhood R-2 as well as runoff from a portion of La Media Road and the adjacent slopes. The proposed Vortechs, or approved equivalent units will be designed as offline, pre-cast treatment units. In addition to a site specific treatment unit, the design will include a diversion structure that will divert the entire 85th percentile runoff flow from the watershed into the treatment unit. Flows in excess of the design flow rate pass over the weir and proceed downstream. Additional information about the Vortechs system can be found in Chapter 7 of the Hunsaker study.

II.5.4.9.6 Financing Drainage Facilities

Onsite Facilities

City policy requires that all master planned developments provide for the conveyance of storm waters throughout the project to City engineering standards. The Otay Ranch Village 7 project will be required to construct all onsite facilities that have not yet been identified through the processing of a subdivision.

In newly developing areas east of I-805, it is the City's policy that development projects assume the burden of funding all water quality maintenance activities associated with drainage facilities. As such, the City will enter into an agreement with the Otay Ranch Village 7 applicant whereby maintenance of such drainage facilities will be assured by one of the following funding methods:

1. A property owner's association that would raise funds through fees paid by each property owner; or
2. A Community Facilities District (CFD) established over the entire project to raise funds through the creation of a special tax for drainage maintenance purposes.

The owner/developer will assume the ownership and maintenance responsibilities of the storm drain system within McMillin Village 7 until construction is complete. At such time the City of Chula Vista will take over the maintenance responsibilities for the public storm drain facilities. Funding for a special tax district will establish long-term maintenance and monitoring of water quality facilities located within public open space or ROW, formed for that purpose.

Offsite Facilities

Off-site drainage facilities that are necessary to support the proposed project are either constructed or are in the process of being designed and processed with the City of Chula Vista by other projects. There are no off-site drainage facilities required of the Otay Ranch Village 7 project. However, if other projects do not complete an off-site drainage facility that is necessary for this project the applicant may be required to complete the facility.

II.5.4.9.7 Threshold Compliance and Recommendations

Compliance

A. The proposed detention basins located within the Wolf Canyon area will mitigate the increased runoff from the Village 7 development. For the McMillin ownership refer to the Preliminary Drainage Study by P&D Consultants. For the Otay Project, L. P. ownership refer to the Master Drainage Study by Hunsaker & Associates. Also, refer to the preliminary project WQTR for preliminary design calculations related to the planned detention basins. The future grading design for Village 7 shall include preparation of a final drainage report in accordance with the preliminary drainage studies and the City of Chula Vista standards and general requirements.

   Prior to approval of any grading plan by the City Engineer and/or Site Plan by the Design Review Committee, whichever occurs first, the applicant shall demonstrate compliance with the City of Chula Vista's Storm Water and Discharge Control Ordinance and The Development and Redevelopment Projects Storm Water Management Standards Requirement Manual (including the City of Chula Vista SUSMP). Applicant shall obtain the approval of the City Engineer of a Water Quality Technical Report that includes the following elements:

   1. Description of project characteristics, site conditions, flow patterns, pollutants emanating from the project site, and conditions of concern.
   2. Description of site design and source control BMPs considered and to be implemented.

3. Description of applicable treatment control BMPs considered and to be implemented to reduce or treat the identified pollutants. Treatment control BMPs may be selected from those post-construction BMPs analyzed in the Water Quality Report prepared by Rick Engineering or similar type of BMPs as approved by the City Engineer.
4. Justification for selection of the proposed treatment control BMP(s) including 1) targeted pollutants, justification, and alternative analysis, 2) design criteria (including calculations), 3) pollutants removal information (other than vendors specifications), and 4) literature references.
5. Site plan depicting locations of the proposed treatment control BMPs; and
6. Operation and maintenance plan for the proposed treatment control BMPs.

Recommendations

The Otay Ranch Village 7 shall be responsible for the conveyance of storm water flows in accordance with City Engineering Standards. The City Engineering Division will review all plans to ensure compliance with such standards.

The Otay Ranch Village 7 shall incorporate urban runoff planning in the Tentative Map. The Otay Ranch Village 7 shall be required to comply with all current regulations related to water quality including best management practices (BMPs) for the construction and post construction phases of the project. Both the future land development construction drawings and associated reports shall be required to include details, notes and discussions relative to the required or recommended BMPs.

The Otay Ranch Village 7 applicant/s will assure the maintenance of drainage facilities-by a property owner's association that would raise funds through fees paid by each property owner and/or participation in a Community Facilities District (CFD) established over the entire project to raise funds through the creation of a special tax for drainage maintenance purposes.

Future drainage studies shall be required for tentative map applications for those areas west of Magdalena Street to demonstrate the adequacy of the proposed on-site storm drain system(s) and the existing storm drain connections. In addition,

The Applicant/s, as required by the City of Chula Vista, shall prepare future drainage reports for the final engineering phase(s) of the Otay Ranch Village 7 project.

II.5.4.10 AIR QUALITY

II.5.4.10.1 Threshold Standard

The City annually provides the San Diego Air Pollution Control District (APCD) with a 12-18 month development forecast and request an evaluation of its impact on current and future air quality management programs, along with recent air quality data. The growth forecast and APCD response letters shall be provided to the GMOC for inclusion in its annual review.

II.5.4.10.2 Service Analysis

Air Quality Improvement Plan

One of the stated objectives of the City of Chula Vista's Growth Management Element (GME) of the General Plan is to be proactive in its planning to meet federal and state air quality standards. This objective is incorporated into the GME's action program. Although adopted in 1989, the GME has remained current by not only requiring air pollution reduction measures identified in 1989 but also "measures developed in the future."

To implement the GME, the City Council has adopted the Growth Management Program that requires Air Quality Improvement Plans (AQIP) for major development projects (50 residential units or commercial/industrial projects with equivalent air quality impacts). Title 19 (Sec. 19.09.0508) of the Chula Vista Municipal Code requires that a SPA submittal contain an AQIP. The AQIP shall include an assessment of how the project has been designed to reduce emissions as well as identify mitigation measures.

Per recently adopted guidelines; two options are available to meet the AQIP requirement. The Developer may choose to participate in the Chula Vista GreenStar Building Efficiency Program or evaluate the project using the Chula Vista CO_2 INDEX model including any necessary site plan modifications. The Village 7 SPA project sponsor has chosen to participate in the Chula Vista GreenStar Building Efficiency Program and has prepared a AQIP consistent with that selection. However, other landowners within Village 7 may choose another compliance method. Should that occur, a supplemental AQIP(s) shall be prepared concurrent with the Supplemental SPA Plan or SPA amendment for each ownership.

The AQIP included in the Village 7 SPA is entitled *Air Quality Improvement Plan, Village Seven Sectional Planning Area (SPA) Otay Ranch GDP by Cinti Land Planning dated August 24, 2004*. According to the AQIP the project sponsor has agreed to exceed the California 2001 Title 24, Part 6, Energy Efficiency Standards (CA 2001 Title 24, effective 6/1/01) by 15% in the majority (50% or greater) of residential dwelling units through participation in a building efficiency program such as ComfortWise or CA Energy Star, or develop a custom building efficiency program using construction methods that exceed CA 2001 Title 24 requirements by 15%.

The two project sponsors own the land comprising parcels R-l, R-2, R-5, R-6 and R-7 (see Exhibit 3), totaling 1,204 residential units. Others own all other private development sites in Village 7, hence the project sponsors' commitment includes only those parcels. The project sponsors' commitment is to construct 50% of their respective ownership, 602 units, within those parcels to the Chula Vista GreenStar Building Efficiency Program standard, as described above.

Because energy conservation technology and programs are constantly maturing, the specific program will not be identified until approval of the Village 7 Tentative map. At that time, the AQIP in the SPA shall be updated to identify the specific building efficiency program to be used, or the project sponsor will design a custom building program that exceeds CA 2001 Title 24 requirements by 15%. If a custom building program is submitted, it shall be accompanied by data confirming that it exceeds CA 2001 Title 24 to the satisfaction of the Director of Planning and Building or his/her designee. The lot numbers of the homes participating in the selected building efficiency program will also be identified at the Tentative Map (or final map) submittal/approval stage.

In addition to the GreenStar Building Commitment above, the Village 7 SPA also includes the following land use and design features that promote efficiency and energy conservation:

- Transit Oriented Development – Although this village is not located along a primary transit line, a transit stop will be located in the village core providing access to public mass transit for commuting and other trips. The compact design and integrated street/path circulation system places daily need within easy walking or biking distance. The greenbelt connection, which bisects the village, is an integral design element of the village core, connecting open space, trails, recreational amenities, civic uses and schools.
- Housing Efficiency - In addition to the transit benefits associated with increased density near transit centers, there are building related energy benefits. Smaller, and more compact single-family, attached single-family and multi-family homes use less energy for space heating and cooling than typical single-family detached homes.
- Street Widths, Pavement and Street Trees - Reducing street widths can reduce heat build-up and consequently energy demand for air conditioning. In addition to reduced pavement width, the inclusion of street trees that shade the pavement will reduce temperatures. Village 7 streets have reduced widths consistent with the standards in the Otay Ranch GDP; residential streets have a 32 foot paved section compared to a 36-40 foot section typical of suburban development patterns.

11.5.4.10.3 Threshold Compliance and Recommendations

The City continues to provide a development forecast to the APCD in conformance with the threshold standard. A separate Air Quality Improvement Plan has been provided as part of the SPA Plan process as noted in Section II.5.4.10.2.

II.5.4.11. CIVIC CENTER:

II.5.4.11.1 CITY THRESHOLD STANDARDS:

There is no adopted threshold standards for these facilities. The facility information is being provided in this report to aid in establishing operational benchmarks which will determine construction phasing of the Civic Center. These facilities are funded through the collection of the DIF fees in effect at the time building permits are issued.

II.5.4.11.2 SERVICE ANALYSIS:

Although the existing Civic Center successfully accommodated city administration offices prior to the mid-1980's population growth, increase in City staff to meet new demands of growth has caused increasing congestion problems. Most staff in the Public Services Building experience space shortages, lack of privacy and storage, and frequent noise distractions. This was reported in a survey, which is included in the Civic Center Master Plan dated May 8, 1989. Site Alternative Three "The Suburban Scheme" was selected from the master plan at a City Council conference on June 22, 1989.

II.5.4.11.3 EXISTING CONDITIONS:

Table L.1
Civic Facilities Inventory

Existing Civic Center facilities	Square Feet
Civic Center	111,940 s.f.
Previous County Health Center	3,120 s.f.
Future Public Works Inspections Division	1,200 s.f.
Total	**116,260 s.f.**

Parking Lots: 333 spaces

Table L.2
Future Facilities Cost

FUTURE FACILITIES COST	SIZE	ESTIMATED COST
1. City Hall	25,765 s.f.	$2,203,300
2. Public Services Facility	40,615 s.f.	$3,023,500
3. New City Hall Annex	28,925 s.f.	$3,023,600
4. Legislative Offices	6,000 s.f.	$1,330,000
5. Subterranean Parking	126 spaces	$1,008,000
6. Parking Structure	359 spaces	$2,872,000
7. Demolition	5,920 s.f.	$83,600
8. Surface Parking	45,425 s.f.	$227,100
9. Misc. Site Improvements	15,000 s.f.	$180,000
10. Landscaping	55,000 s.f.	$698,500
11. Land Acquisition (459 F St.)	-	
12. Master Plan	-	$65,250
TOTAL		**$15,459,300**

Note: Some of the size figures represents a combination of remodeled existing square footage and newly constructed square footage. The completed civic facilities will total 149,120 square feet with 625 parking spaces.

II.5.4.11.4 ADEQUACY ANALYSIS:

The need for the Civic Center cannot be easily related to population figures or acres of commercial and industrial land which will be developed in the future. The facilities, according to the master plan, are currently inadequate because of the lack of space. This inadequacy will worsen as employee numbers and their workloads increase in response to demands for services, which are generated by new development.

The City is moving ahead to implement Phase #1 of the Civic Center Master Plan by acquiring additional land to the west of the existing Civic Center for the proposed parking garage.

II.5.4.11.5 FINANCING CIVIC CENTER FACILITIES:

The Public Facilities Development Impact Fee (PFDIF) was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2886 and 2887. The current Civic Center fee for single-family residential development is $1,089/unit, multi-family residential is $979/unit, commercial (including office) development is $4,245/acre and industrial development is $711/acre. This amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the Otay Ranch Village 7 SPA project.

The Otay Ranch Village 7 project is within the boundaries of the PFDIF Program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current fee rate, the Otay Ranch Village 7 SPA Plan obligation at buildout is estimated at $1,260,532.

Table L.3
Civic Center Fee For Otay Ranch Village 7 SPA

Phase	Single Family Units	Multi-Family Units	Com'l Acres	SF Fee $1,089/Unit	MF Fee $979/Unit	Com'l Fee $4,245/ Acre	Total
White	0	0	0	$0	$0	$0	$0
Blue	346	448	0	$376,794	$437,248	$0	$814,042
Red	375	0	0	$408,375	$0	$0	$408,375
Green	35	0	0	$38,115	$0	$0	$38,115
Subtotal	756	448	0	$823,284	$0	$0	$1,260,532
Total	**1,204**		**0**	**$823,284**	**$437,248**	**$0**	**$1,260,532**

II.5.4.11.6 THRESHOLD COMPLIANCE AND RECOMMENDATIONS:

Civic Center facilities will be funded through the collection of the public facilities fees at the rate in effect at the time building permits are issued.

II.5.4.12 CORPORATION YARD

II.5.4.12.1 THRESHOLD STANDARDS:

There is no adopted threshold standard for this facility. The facility information is being provided in this report to aid the City in establishing operational benchmarks which will determine construction phasing of the corporation yard.

II.5.4.12.2 SERVICE ANALYSIS:

New development, with its resultant increase in required maintenance services, creates a need for a larger corporation yard. A new 25 acre yard located at 1800 Maxwell Road was completed this year by the city.

II.5.4.12.3 EXISTING CONDITIONS:

The new 25 acre Corporate Yard Facility was previously an SDG&E equipment and repair facility. The city has renovated and added new improvements for the maintenance and repair of city owned equipment. This facility consists of a renovated building that serves as the administration building for the Corporate Yard. Existing shop buildings have been renovated and new shops have been added as well as a new maintenance building. The Corporate Yard includes parking for employees, city vehicles and equipment. In addition, a Bus Wash/Fuel Island/CNG and associated equipment.

II.5.4.12.4 ADEQUACY ANALYSIS:

The need for a Corporate Yard cannot be easily related to population figures or acres of commercial and industrial land which will be developed in the future. The growth in population, increase in street miles and the expansion of developed areas in Chula Vista, requires more equipment for maintenance as well as more space for storage and the administration of increased numbers of employees. The need for a larger Corporation Yard has been specifically related to new development.

II.5.4.12.5. FINANCING CORPORATE YARD FACILITIES:

The Public Facilities Development Impact Fee (PFDIF) was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2886 and 2887. The current Corporate Yard fee for single-family residential development is $706/unit, multi-family residential is $472/unit, commercial (including office) development is $3,266/acre and industrial development is $1,361/acre. This amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the Otay Ranch Village 7 SPA project.

The Otay Ranch Village 7 project is within the boundaries of the PFDIF Program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current fee rate, the Otay Ranch Village 7 SPA Plan obligation at buildout is estimated at $745,192.

Table M.1 Corporate Yard Fee For Otay Ranch Village 7 SPA							
Phase	**Single Family Units**	**Multi-Family Units**	**Com'l Acres**	**SF Fee $706/Unit**	**MF Fee $472/Unit**	**Com'l Fee $3,266/ Acre**	**Total**
White	0	0	0	$0	$0	$0	$0
Blue	346	448	0	$244,276	$211,456	$0	$455,732
Red	375	0	0	$264,750	$0	$0	$264,750
Green	35	0	0	$24,710	$0	$0	$24,710
Subtotal	756	448	0	$533,736	$211,456	$0	$745,192
Total	**1,204**			**$533,736**	**$211,456**	**$0**	**$745,192**

5.3.12.5. THRESHOLD COMPLIANCE:

Corporate Yard facilities will be funded through the collection of the public facilities fees at the rate in effect at the time building permits are issued.

5.3.13. OTHER PUBLIC FACILITIES

5.3.13.1. THRESHOLD STANDARD:

There is no adopted threshold standard for these facilities which are part of the Public; Facilities Development Impact Fee Program and include GIS, Mainframe Computer, Telephone System Upgrade, Records Management and Administration. The information regarding these capital items is being provided in this section of the PFFP to aid the City and the Developer in calculating the PFDIF fees to be paid by the Otay Ranch Village 7 SPA project.

5.3.13.2. SERVICE ANALYSIS:

The public facilities identified above are described in the report entitled *Development Impact Fee for Public Facilities* dated April 20, 1993, known as document number C093-075.

5.3.14.2. EXISTING CONDITIONS:

The City continues to collect funds from building permit issuance in the Eastern Territories for deposit to the accounts associated with other public facilities. These facilities include administration, telecommunications, computer systems and GIS.

5.3.14.3. FINANCING OTHER PUBLIC FACILITIES:

The Public Facilities Development Impact Fee (PFDIF) was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2886 and 2887. The current Other Public Facility fee for single-family residential development is $167/unit, multi-family residential is $150/unit, commercial (including office) development is $652/acre and industrial development is $109/acre. This amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the Otay Ranch Village 7 SPA.

The Otay Ranch Village 7 project is within the boundaries of the PFDIF Program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current fee rate, the Otay Ranch Village 7 SPA Plan obligation at buildout is $193,452.

Table N.1
Other Public Facilities for Otay Ranch Village 7 SPA

Phase	Single Family Units	Multi-Family Units	Com'l Acres	SF Fee $167/Unit	MF Fee $150/Unit	Com'l Fee $652/ Acre	Total
White	0	0	0	$0	$0	$0	$0
Blue	346	448	0	$57,782	$67,200	$0	$124,982
Red	375	0	0	$62,625	$0	$0	$62,625
Green	35	0	0	$5,845	$0	$0	$5,845
Subtotal	756	448	0	$126,252	$67,200	$0	$193,452
Total	**1,204**			**$126,252**	**$67,200**	**$0**	**$193,452**

5.3.14.4 THRESHOLD COMPLIANCE AND RECOMMENDATIONS:

Other Public Facilities will be funded through the Collection of public facility fees at the rate in effect at the time building permits are issued.

II.5.4.14 FISCAL ANALYSIS

II.5.4.14.1 Threshold Standard

1. The GMOC shall be provided with an annual fiscal impact report which provides an evaluation of the impacts of growth on the City, both in terms of operations and capital improvements. This report should evaluate actual growth over the previous 12-month period, as well as projected growth over the next 12-18 month period, and 3-5 year period.

2. The GMOC shall be provided with an annual "economic monitoring report" which provides an analysis of economic development activity and indicators over the next previous 12-month period, as well as projected growth over the next 12-18 month period, and 3-5 year period.

II.5.4.14.2 Facility Master Plan

There is no existing Master Plan for fiscal issues. However, an economic base study and a long range fiscal impact study was prepared by P&D Technologies as part of the Chula Vista General Plan.

II.5.4.14.3 Project Processing Requirements

The SPA Plan and the PFFP are required by the Growth Management Program to prepare a phased fiscal/economic report dealing with revenue vs expenditures including maintenance and operations.

II.5.4.14.4 Fiscal Analysis of Project

II.5.4.14.4.1 Introduction

This section of the PFFP is based upon the Fiscal Impact Analysis as prepared by CIC Research, Inc. dated June 9, 2004. The CIC analysis identifies the estimated fiscal impact that the Otay Ranch Village 7 SPA will have on the operation and maintenance budgets of the City of Chula Vista (general fund). Information pertaining to the scope of development was derived from the SPA Plan and the Environmental Impact Report.

Two basic methodologies were utilized in estimating public agency revenues and expenditures; the case study and per unit/acre multiplier methods. The case study method was used to estimate secured property tax. The case study method is based on specific characteristics of the project from which revenues can be estimated. Appropriate city officials were contacted to identify actual tax rates, fees and costs. The per unit/acre multiplier method, which represents a more general approach was utilized to estimate unsecured property tax, sales tax, TOT, property transfer tax, utility tax, license fees, fines, other revenues and fees and all expenditures. CIC also utilized input from the fiscal impact prepared for Otay Ranch Village 6, Eastlake Trails, Eastlake III, and San Miguel Ranch. The City of Chula Vista's Fiscal Model was utilized to estimate per unit/acre multipliers.

Future revenues and expenditures are presented in current (2004) dollars. Also, revenues and expenditures are depicted annually, reflecting a conservatively projected development absorption schedule based on information provided by the city and the developer as well as

market analysis. This approach identifies annual project fiscal surpluses and deficits and represents a more realistic approach when compared to assuming instant build-out.

II.5.4.14.4.2 Project Description

The Village 7 SPA is proposed to be developed in the City of Chula Vista and includes 756 single-family units and 448 multi-family residential units, and 7.6 acres of publicly maintained park at build-out. This fiscal analysis is based on that project scenario. Any alternative project scenarios, additions and/or changes would require further analysis and revisions to this PFFP fiscal impact analysis. Presented in Table O.1 is a description of the projected absorption schedule as used in this fiscal analysis. This schedule includes a 7 year (2004 to 2010) development schedule. For the purpose of this analysis, absorption represents new units being sold and occupied, and commercial and industrial land developed sold and occupied.

Housing market values were estimated by CIC and ranged from approximately $300,000 (multi-family) to $400,000 (single family). The values used in the table represent the estimated average unit price for each type of development. Residential values were estimated using DataQuick and previous studies.

II.5.4.14.4.3 Project Demographics and Land Uses

In developing per unit/acre multipliers, CIC utilized demographic and land use information related to the City of Chula Vista as a whole and, more specifically, the subject Village 7 SPA. Included in Table O.2 are population, housing, land-use and infrastructure characteristics. The developer (McMillin & Otay Project, L.P.) provided the number of housing units and acres by land use for Village 7 SPA. The number of street miles were estimated using the average of other new developments. Lane miles were estimated using the city average. The number of streetlights also represents an estimate and was derived by using the City standard of 350 feet between streetlights.

Table O.1
Otay Ranch Village 7 SPA
Absorption Schedule and Market Values by Land Use

Land Use	Net Unit Value (000's)	Cumulative Developed and Occupied Net Acres							
		2004	2005	2006	2007	2008	2009	2010	Total
SF	$400	100	200	300	400	500	600	756	756
MF	$300	100	200	300	400	448	448	448	448
Total		200	400	600	800	948	1,048	1,204	1,204

Source: CIC Research, Inc.

Table O.2 Village 7 SPA Fiscal Impact General Assumptions		
Chula Vista		Sources
Population	189,664	CA Dept. of Finance
Occupied Housing Units	62,500	CA Dept. of Finance
Persons Per Household	3.03	CA Dept. of Finance
Street Miles	365	CV Public Works
Lane Miles	1351	CV Public Works
Traffic Signals	142	CV Engineering
Street Lights	6,307	CV Engineering
Estimated Avg. HH Income	$55,992	Claritas, Inc.
Median Housing Price	$197,000	DataQuick Info.Serv.
Land Uses (Developed Acres)		
Commercial	1,404.41	CV Planning
Industrial	728.29	CV Planning
Residential	8,226.81	CV Planning
Park	1708.42	CV Planning
Village 7 SPA		
Estimated Population	3,534	CIC Research, Inc
Housing Units	1,174	McMillin Co.
Persons Per Household	3.01	CV Planning
Public Park Acres	7.6	McMillin Co.
Street Miles	7	CIC Research, Inc.
Lane Miles	22	CIC Research, Inc
Street lights	106	CIC Research, Inc
Estimated Avg. HH Income	$80,000	CIC Research, Inc
Median Housing Price	$400,000	CIC Research, Inc

Source: CIC Research, Inc.

II.5.4.14.4.4 Revenues

Operating revenues for the City of Chula Vista resulting from the development of the proposed Village 7 SPA are estimated in this section. The major revenue sources which are expected to be generated from the subject developments and detailed in this chapter include property tax (secured and unsecured), property transfer tax, sales tax, franchise fees, TOT, utility tax, license revenue, miscellaneous fines, homeowner's property tax relief, gas tax and charges for various current services. The City of Chula Vista's Budget (FY 2003) for these revenue items is detailed in Table O.3 along with allocation rates. The following section details each of the revenue sources and the methodology employed to estimate revenues from the subject developments. For each identified revenue source, a detailed table reflecting the revenue flow over the project build-out (2004 to 2010) is presented in the Appendix of this report. All dollar figures are presented in 2004 dollars (no inflation rates were used).

Table O.3
Village 7 SPA Fiscal Impact
Revenue Generation Assumptions

Revenues	City of Chula Vista FY2003 Revenues	Allocation Assumption
Property Taxes		
Secured	$ 13,504,354	Based on 10.6% of 1% of TAV
Unsecured	$655,000	$312/acre industrial, $301/acre commercial
Other Taxes		
Property Transfer Tax	$963,000	$0.18 annual ave. per $1,000 assessed value
Sales & Use Tax	$20,353,998	$234/residential unit, $3,354/acre industrial, $3,570/acre commercial
Franchise Fees	$6,935,040	$41/residential unit,$2,523/acre industrial, $1,802/acre commercial
TOT	$2,173,500	$3/residential unit, $134/acre industrial, $70/acre commercial
Utility Tax	$4,170,600	$25 per residential unit, $1,518/acre industrial, $1,084 /acre commercial
Licenses		
Business License	$1,057,417	$319/acre industrial, $587/acre commercial
Other Licenses	$96,614	$1.50 per residential unit
Fines		
Library Fines	$170,000	$2.72 per residential unit
Parking Citations	$312,995	$3.76 per residential unit, $26/acre industrial, $42/acre commercial
Revenues from other Agencies		
Gas Tax	$2,559,533	$36 per residential unit, $105/acre industrial, $173/acre commercial

Secured Property Tax

Secured property tax revenues generated from the proposed developments were calculated on the basis of a one-percent tax rate on the current market value of the residential, industrial, and commercial development. The subject properties are in tax rate areas 0162. According to the County of San Diego, the City of Chula Vista would receive 10.6 percent of the one-percent of the property taxes collected in those tax rate areas. It should be noted that the citywide average share of property tax is roughly 14.7 percent.

Market values (assessed values) for the residential units were estimated by CIC Research using market data from DataQuick. Market values for commercial and industrial uses were estimated using COMPS, Commercial Property Information Services, Inc., as well as DataQuick and other published materials. These identified market values also represent the assessed values. Although assessed values increase two percent per year and readjust after the property resells, this analysis assumes no inflation and all values remain in 2004 dollars. Included in Table A-2 in the appendix is the cumulative assessed value over the build-out of the developments. Total assessed values for the Village 7 SPA range from $100 million during the first year (2004) to $559 million at build-out (2010).

The City of Chula Vista's share of the collected annual property tax is $592,800 for the Village 7 SPA (Table A-3) at build-out.

Unsecured Property Tax

Unsecured property, which includes personal property such as equipment, inventory, furniture, etc. is taxed for primarily commercial and industrial businesses. As there is no commercial or industrial property included in this project as currently specified, no unsecured property taxes are associated with it.

Property Transfer Tax

Sales of real property in San Diego County are taxed at a rate of $1.10 per $1,000 of the sales price. Chula Vista would receive 50 percent of the tax. An analysis conducted by the San Diego Association of Governments (SANDAG) indicates that the average turnover rate for residential property is once every seven years and once every 14 years for nonresidential property. The following formulas, which take both the transfer tax formula and the average turnover rate into account, were utilized to yield average annual per unit property transfer tax.

Single Family Residential	$\frac{\$.55}{\$1,000}$	X	1/7	=	.00007857
Commercial/Industrial	$\frac{\$.55}{\$1,000}$	X	1/14	=	.00003929

Using the above formulas, an estimated annual average property tax can be calculated. The Village 7 SPA would generate $33,400 (refer to Table A-5 in the Appendices) in average, annual property transfer tax at build-out.

Sales Tax

This fiscal impact methodology equates the collection of sales tax to both residential units and commercial and industrial acreage primarily using a demand allocation method. After subtracting the portion of the City's sale tax that represents Mexican and other non-resident shoppers (this is estimated to be 20% based on City of Chula Vista data). The remainder is allocated to local residents and businesses based on an analysis conducted by the City of San Diego's Finance Department and given the study site location and land-use mix, CIC utilized the following tax allocations, 75% for residential, 10% for retail/office commercial, and the remainder (15%) allocated to industrial land uses. The City's share of sales tax generated by the residential portion of the study property is based on $234 per household per year. This is derived by using 75 percent of the total sales tax collection in the City of Chula Vista, divided by the number of housing units and adjusted roughly 10 percent to

reflect the assumed higher household income in the new development versus the overall City average based on the housing cost differential. Total annual sales tax generated by the Village 7 Project is estimated at $281,700 at build-out (refer to Table A-6).

Franchise Fees

The City of Chula Vista receives a franchise tax fee from sales of natural gas, electricity, cable television and trash collection. Using the sale of gas and electricity as a guideline and based on a study prepared by San Diego Gas and Electric (SDG&E), 37 percent of the franchise fees are attributed to residential uses, 36.5 percent to retail/office uses and the remaining 26.5 percent is attributed to industrial uses. Using these guidelines, the city budget, area demographics and land use information results in an estimated $41 in annual franchise fees per housing unit. Utilizing this ratio results in a total annual franchise fee of $49,400 for the Village 7 SPA (see Table A-7 in the Appendices) at build-out.

Transient Occupancy Tax

Transient occupancy tax (TOT) is a tax added to the price charged for the use of a hotel or motel room. The majority of the tax is associated with new hotel developments. Since there is no planned hotel/motel development in this project, TOT would be generated by the residents by their associated use of local hotels/motels (primarily used for the lodging of visiting family and friends). The San Diego Convention and Visitors Bureau estimates that of all visitors who stay in hotels and motels, eight percent are visiting friends or relatives. Utilizing the City's FY2003 budget for TOT of $2,064,000 and assuming eight percent is generated by residential land uses results in multiplier ratios of roughly $3 per housing. Using this ratio and the estimate of TOT generated by the tourist commercial, the City of Chula Vista will receive a total annual TOT tax of $3,600 associated with the Village 7 SPA (refer to Table A-8 in the Appendices).

Utility Users' Tax

The City of Chula Vista's FY2002/03 budget for utility taxes is $3,170,600. These taxes are paid by the residents on gas, electric and telephone services. CIC utilized the same methodology for utility taxes and franchise fees. Using the land use allocation of 79 percent residential uses, 14 percent to retail/office uses and 7 percent to industrial uses, results in an estimated $25 in annual utility tax per housing. This ratio result in a total annual utility tax of $30,100 for the Village 7 SPA (refer to Table A-9 in the Appendices) at build-out.

Business License Fees

Although, there are business license fees generated from home occupations, the amount is negligible. Therefore, business license fees are allocated solely to commercial and industrial land uses in this fiscal impact study. As there is no commercial or industrial property included in this project as currently specified, no business license fees are associated with it.

Miscellaneous Revenues

CIC grouped numerous revenues into the category of miscellaneous. These revenues include: animal licenses, bicycle licenses, State homeowners property tax relief, gas tax, library fines, parking citations, swimming pool fees, recreation programs and park reservation fees. With the exception of gas tax and parking citations, all the revenues are assumed to be allocated entirely to residential uses. For these revenues, multipliers were developed by dividing the total revenues by the total number of citywide occupied housing units, commercial and industrial acreage. Total miscellaneous revenues attributed to the

Village 7 SPA are $65,700 per year at build-out (refer to Table A-11 of the Appendices). The allocation of gas tax and parking citations was calculated as follows:

- **Gasoline Tax**
  Gasoline tax revenue accrues on the basis of a complicated formula utilizing county to state and incorporated to unincorporated portion of population. According to the City of San Diego's "Fiscal Impact of New Development" and the Department of Motor Vehicle's auto registration records, an estimated 50 percent is attributed to residential uses and the remaining 50 percent is allocated based on vehicle registration (75% residential, 19% commercial and 6% industrial).

- **Parking Citations**
  Parking violation revenues were allocated by vehicle registration classification as estimated by the Department of Motor Vehicles (75% residential, 19% commercial and 6% industrial).

II.5.4.14.4.5 Operating Expenditures

Operating expenditures for the City of Chula Vista resulting from development of the Village 7 SPA are outlined in this section. CIC utilized the cost factors developed by Economic Research Associates (ERA) and the City of Chula Vista Finance Department. Table O.4 presents those cost factors. Detailed tables reflecting the annual expenditure cash flows are presented in the appendix to this report.

Table O.4
VILLAGE 7 SPA FISCAL IMPACT
COST ALLOCATION ASSUMPTIONS

	Population (Per person)	Comm'l (Per Acre)	Industrial (Per Acre)	Residential (Per DU)	Parks and Rec. (Per Acre)	Public Use (Per Acre)	Open Space (Per Acre)
Legislative & Administrative							
City Council	0.16						
Boards & Commissions	0.51	29.86	29.86	3.96			
City Clerk	0.47						
City Attorney							
Administration							
Total	**1.14**	**29.86**	**29.86**	**3.96**	**0**	**0**	**0**
Mangement and information services	0.61						
Human Resource	0.09						
Finance	0.11						
General Services	2.25						
Total	**3.06**	**0**	**0**	**0**	**0**	**0**	**0**
Development & Maintenance Services							
Community			284.19	12.95			
Development	0.82	545.87	12.53	21.55	18.06	27.09	2.26
Planning &	1.12		39.06	13.21	42.67	64.01	5.33
Building services				7.38			
Engineering							
Operations							
Total	**1.94**	**545.87**	**335.78**	**55.09**	**60.73**	**91.1**	**7.59**
Public Safety		7114.26	516.16		822.48	822.48	822.48
Police	5.39	1989.45	134.16	1.73	119.02	119.02	119.02
Fire							
Total	**5.39**	**9103.71**	**650.32**	**1.73**	**941.5**	**941.5**	**941.5**
Cultural & Leisure							
Recreation	19.78			3.82			
Library	60.43						
Nature Center							
Total	**80.21**	**0**	**0**	**3.82**	**0**	**0**	**0**
Non-Departmental	1.33						
Operations							
Total	**1.33**	**0**	**0**	**0**	**0**	**0**	**0**

Table O.4 Continued VILLAGE 7 SPA FISCAL IMPACT COST ALLOCATION ASSUMPTIONS	
FAZ based	
	Southeast Per DU
Development and Maintenance Services	
Public Works Operations	147.83
Public Safety	
Police	263.33
Fire	97.58

Source: City of Chula Vista, Finance Department
Economic Research Associates
February 23, 2004

Legislative and Administration

The cost for the City Council, various boards and commissions, the City Clerks office, the City Attorney's office and general city administration make up the legislative and administration cost center. Based on the City and ERA's analysis, the cost for the Village 7 project is allocated at a rate of $3.96 per residential dwelling unit and $1.14 per person. Table A-12 in the appendix shows annual legislative and administration expenditures for the Village 7 Project ($8,900) at build-out.

Management and Information Services

Management and Information Services include human resources, finance and general services. The City's model allocates the costs to residents at $3.06 per person. These multipliers translate into management and information services costs of $11,100 for the finished Village 7 Project (refer to Table A-13).

Development and Maintenance Service

Development and Maintenance Services include community development, planning and building services, engineering, and public works operations. The City's model allocates the costs both citywide and for each zone of the city. For Residential units $55.09 in citywide costs and $147.83 in zone costs are allocated for each dwelling unit. An additional $1.94 is allocated per capita. The remaining land uses associated with Village 7 have costs associated with them in the following manner: parks - 60.73 per acre, public use - $91.10 per acre These multipliers translate into Development and Maintenance Services costs of $252,100 for the finished Village 7 Project (refer to Table A-14).

Police

Police services costs are allocated to all land uses. Residential units in the Southeast zone are allocated $263.33 per unit and $5.39 per person. For Village 7 parks and public use was allocated 822.48 per acre for police costs. Total police costs at buildout is estimated to be $345,200 (refer to Table A-15)

Fire Protection

Fire costs are $99.31 for each residential unit. Parks and public use are associated with $822.48 per acre. These ratios result in annual fire protection costs of $120,800 for the Village 7 Project (refer to Table A-16).

Cultural and Leisure

Based on the City of Chula Vista model, cultural and leisure costs are assessed at a rate of $3.82 per dwelling unit and $80.21 per person. This sector is made up of the costs associated with the recreation department, the library, and the nature center. Total costs for the Village 7 project at completion would be $295,300

Other Non-Departmental

Other non-departmental costs are allocated at a rate of $1.33 per person. For Villae 7 this cost amounts to $4,800 at buildout.

II.5.4.14.6 Net Fiscal Impact

Utilizing the previously mentioned methodologies estimated net fiscal impacts are presented in Table O.6. As previously mentioned, all values are in 2004 dollars. No annual adjustments to revenues or costs were utilized. The estimated annual flows of costs and revenues are primarily related to the estimated project absorption and street maintenance schedules.

Table O.5 presents the results of the fiscal impact associated with the Village 7 Project. Fiscal revenues range from $151,200 in the first year of development (2004) to $927,800 at build-out (2010). Fiscal expenditures range from $256,200 in year one to $1,038,200 at build-out. The net fiscal impact from developing the Village 7 Project is negative in year one ($105,000 deficit) and remains so throughout. At build-out, the net fiscal impact is estimated to result in a deficit of $110,400.

Table O.5 NET FISCAL IMPACT OF THE VILLAGE 7 PROJECT ON THE CITY OF CHULA VISTA							
Revenue Sources	Revenues (In Thousands)						
	2004	2005	2006	2007	2008	2009	2010
Secured Property Tax	$74.2	$148.4	$222.6	$296.8	$354.5	$396.9	$463.0
Unsecured Property Tax	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Property Transfer Tax	$5.5	$11.0	$16.5	$22.0	$26.3	$29.4	$34.3
Sales & Use Tax	$46.8	$93.6	$140.4	$187.2	$221.8	$245.2	$281.7
Franchise Tax	$8.2	$16.4	$24.6	$32.8	$38.9	$43.0	$49.4
TOT Tax	$0.6	$1.2	$1.8	$2.4	$2.8	$3.1	$3.6
Utility Tax	$5.0	$10.0	$15.0	$20.0	$23.7	$26.2	$30.1
Business License	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Miscellaneous Revenues	$10.9	$21.8	$32.7	$43.6	$51.7	$57.2	$65.7
TOTAL REVENUES	**$151.2**	**$302.4**	**$453.6**	**$604.8**	**$719.7**	**$801.0**	**$927.8**
Expenditure Sources	Expenditures (In Thousands)						
	2004	2005	2006	2007	2008	2009	2010
Legislative & Administrative	$2.2	$3.7	$5.2	$6.3	$7.1	$7.8	$8.9
Management and Information services	$2.8	$4.6	$6.4	$7.8	$8.7	$9.7	$11.1
Development and Maintenance Services	$62.7	$104.4	$146.6	$177.7	$198.5	$219.6	$252.1
Police	$83.9	$140.7	$202.9	$244.9	$272.9	$301.6	$345.2
Fire	$29.8	$49.8	$70.5	$85.3	$95.3	$105.3	$120.8
Cultural and Leisure	$73.6	$122.6	$171.6	$207.9	$232.4	$257.0	$295.3
Non-Departmental	$1.2	$2.0	$2.8	$3.4	$3.8	$4.2	$4.8
TOTAL EXPENDITURES	**$256.2**	**$427.8**	**$606.0**	**$733.3**	**$818.7**	**$905.2**	**$1,038.2**
	2004	2005	2006	2007	2008	2009	2010
TOTAL REVENUES	$151.2	$302.4	$453.6	$604.8	$719.7	$801.0	$927.8
TOTAL EXPENDITURES	$256.2	$427.8	$606.0	$733.3	$818.7	$905.2	$1,038.2
NET FISCAL IMPACT	**($105.0)**	**($125.4)**	**($152.4)**	**($128.5)**	**($99.0)**	**($104.2)**	**($110.4)**

Source: CIC Research, Inc.

II.5.4.15 PUBLIC FACILITY FINANCE

II.5.4.15.1 Overview

The City will ensure the appropriate public facilities financing mechanisms are utilized to fund the acquisition, construction and maintenance of public facilities required to support the planned development of the Otay Ranch Village 7 SPA in compliance with the City's Growth Management Program.

Public facilities are generally provided or financed in one of the following three ways:

1. Subdivision Exaction:	Developer constructed and financed as a condition of project approval.
2. Development Impact Fee:	Funded through the collection of an impact fee. Constructed by the public agency or developer constructed with a reimbursement or credit against specific fees.
3. Debt Financing:	Funded using one of several debt finance mechanisms. Constructed by the public agency or developer.

It is anticipated that all three methods will be utilized for the Otay Ranch Village 7 project to construct and finance public facilities.

II.5.4.15.2 Subdivision Exactions

Neighborhood level public improvements will be developed simultaneously with related residential and non-residential subdivisions. Through the Subdivision Map Act, it is the responsibility of the developer to provide for all local street, utility and recreation improvements. The use of subdivision conditions and exactions, where appropriate, will insure that the construction of neighborhood facilities is timed with actual development.

The imposition of subdivision conditions and exactions does not preclude the use of other public facilities financing mechanisms to finance the public improvement, when appropriate.

II.5.4.15.3 Development Impact Fee Programs

Development Impact Fees are imposed by various governmental agencies, consist with State law, to contribute to the financing of capital facilities improvements within the City of Chula Vista. The distinguishing factor between a fee and a subdivision exaction is that exactions are requested of a specific developer for a specific project whereas fees are levied on all development projects throughout the City or benefit area pursuant to an established formula and in compliance with State law.

Otay Ranch Village 7 , through policy decisions of the City of Chula Vista and other governing agencies, is subject to fees established to help defray the cost of facilities that benefit Otay Ranch Village 7 and areas beyond this specific project. These fees may include but not be limited to:

1. Eastern Chula Vista TDIF — established to provide financing for circulation element road projects of regional significance in the area east of I-805.
2. Interim SR 125 Transportation Fee - Effective January 1, 1995, to fund interim improvements within the SR 125 right-of way consistent with the pre SR 125 strategy as identified in the Interim State Route 125 Facility Feasibility Study dated May 1993.
3. Traffic Signal Fee — to pay for traffic signals associated with circulation element streets.
4. Public Facilities Development Impact Fee — Public Facilities DIF established to collect funds for Civic Center Facilities, Police Facilities, Recreation, Corporation Yard, Libraries, Fire Suppression System, Geographical Information System (GIS), Mainframe Computer, Telephone System Upgrade and a Records Management System.
5. Park Acquisition and Development Fee — PAD Fee established to pay for the acquisition and development of park facilities.
6. Poggi Canyon Sewer Basin Development Impact Fee — to pay for constructing sewer improvements within the Poggi Canyon basin.
7. Salt Creek & Wolf Canyon Basin Impact Fees — to pay for constructing sewer improvements within the Salt Creek basin.
8. Otay Water District Fees — It should be noted that the Water District may require the formation of or annexation to an existing improvement district or creation of some other finance mechanism which may result in specific fees being waived.

II.5.4.15.4 Debt Finance Programs

The City of Chula Vista has used assessment districts to finance a number of street improvements, as well as sewer and drainage facilities. Both school districts have implemented Mello-Roos Community Facilities Districts to finance school facilities.

Assessment Districts

Special assessment districts may be proposed for the purpose of acquiring, constructing, maintaining certain public improvements under the Municipal Improvement Act of 1913, the Improvement Bond Act of 1915, the Benefit Assessment Act of 1982, and the Lighting and Landscape Act of 1972. The general administration of the special assessment district is the responsibility of the public agency.

Special assessment financing may be appropriate when the value or benefit of the public facility can be assigned to a specific property. Assessments are levied in specific amounts against each individual property on the basis of relative benefit. Special assessments may be used for both publicly dedicated on-site and off-site improvements and maintenance.

As a matter of policy, the City limits the type of improvements that can be financed by assessment district bonding in residential projects. Such improvements are generally limited to collector streets and larger serving entire neighborhood areas or larger. This policy applies to backbone infrastructure including streets, water, sewer, storm drain, and dry utility systems.

Mello-Roos Community Facilities Act of 1982

The Mello-Roos Community Facilities Act of 1982 authorizes formation of community facilities districts, which impose special taxes to provide the financing of certain public facilities or services. Facilities that can be provided under the Mello-Roos Act include the purchase, construction, expansion, or rehabilitation of the following:

1. Local park, recreation, or parkway facilities;
2. Elementary and secondary school sites and structures;
3. Libraries;
4. Any other governmental facilities that legislative bodies are authorized to construct, own or operate including certain improvements to private property.

II.5.4.15.5 Other Methods Used to Finance Facilities

General Fund

The City of Chula Vista's general fund serves to pay for many public services throughout the City. Those facilities and services identified as being funded by general fund sources represent those that will benefit not only the residents of the proposed project, hut also Chula Vista residents throughout the City. In most cases, other financing mechanisms are available to initially construct or provide the facility or service, then general fund monies would only be expected to fund the maintenance costs once the facility is accepted by the City.

State and Federal Funding

Although rarely available to fund an entire project. Federal and State financial and technical assistance programs have been available to public agencies, in particular the public school districts.

Dedications

Dedication of sites by developers for public capital facilities is a common financing tool used by many cities. In the case of Otay Ranch Village 7 , the following public sites are proposed to be dedicated:

1. Roads (if puhlic)
2. Open space and public trail systems

Homeowners Associations

One or more Community Homeowner Associations may be established by the developer to manage, operate and maintain private facilities and common areas within Otay Ranch Village 7.

Developer Reimbursement Agreements

Certain facilities that are off-site of Otay Ranch Village 7 and/or provide regional benefits may be constructed in conjunction with the development of Otay Ranch Village 7 . In such instances, developer reimbursement agreements will be executed to provide for a future payback to the developer for the additional cost of these facilities. Future developments are required to pay back their fair share of the costs for the shared facility when development occurs.

Special Agreements/Development Agreement

This category includes special development programs for financing construction of Telegraph Canyon Road and State Route 125. It also includes any other special arrangements between the City and the developer such as credits against fees, waiver of fees, or charges for the construction of specific facilities.

A development agreement can play an essential role in the implementation of the Public Facilities Financing Plan. The Public Facilities Financing Plan clearly details all public facility responsibilities and assures that the construction of all necessary public improvements will be appropriately phased with actual development, while the development agreement identifies the obligations and requirements of both parties.

II.5.4.15..6 Public Facility Finance Policies

The following finance policies were included and approved with the Growth Management Program to maintain a financial management system that will be implemented consistently when considering future development applications. These policies will enable the City to effectively manage its fiscal resources in response to the demands placed on the City by future growth.

1. Prior to receiving final approval, developers shall demonstrate and guarantee that compliance is maintained with the City's adopted threshold standards.

2. The Capital Improvement Program Budget will be consistent with the goals and objectives of the Growth Management Program. The Capital Improvement Program Budget establishes the timing for funding of all fee related public improvements.

3. The priority and timing of public facility improvements identified in the various City fee programs shall be made at the sole discretion of the City Council.

4. Priority for funding from the City's various fee programs shall be given to those projects which facilitate the logical extension or provision of public facilities as defined in the Growth Management Program.

5. Fee credits, reimbursement agreements, developer agreements or public financing mechanisms shall be considered only when it is in the public interest to use them or these financing methods are needed to rectify an existing facility threshold deficiency. Such action shall not induce growth by prematurely extending or upgrading public facilities.

6. All fee credit arrangements or reimbursement agreements will be made based upon the City's plans for the timing and funding of public facilities contained in the Capital Improvement Program Budget.

7. Public facility improvements made ahead of the City's plans to construct the facilities will result in the need for additional operating and maintenance funds. Therefore all such costs associated with the facility construction shall become the responsibility of the developer until such time as the City had previously planned the facility improvement to be made.

II.5.4.15.7 Cumulative Debt

The City of Chula Vista has an established policy limiting the maximum debt to be placed on a residential dwelling unit to an additional one percent above the property tax. This policy was restated in the adopted Growth Management Program.

Like many other cities, Chula Vista has long understood that it is not the only agency that can utilize public finance mechanisms and, therefore, cannot always guarantee that the total debt will remain at or below a maximum of 2 percent. As a result, the City makes an effort to coordinate its debt finance programs with the other special districts (schools and water) that provide service to the residents of Chula Vista to ensure that the cumulative debt does not become excessive. Coordination is also necessary to guarantee all public facilities needed to support a development can be financed and constructed as needed.

Debt capacity is found by totaling the assessed value of residential and commercial/industrial property and applying to this total two percent rate cap established by City policy as can be seen in Table P.1. Subtracting from this total assessed value the value of taxes resulting from application of the effective property tax rate as determined by the County Tax Collector (1.03486%), produces the revenue available from indebtedness that could be placed on the property.

Table P.2. identifies $5,000,000 as the estimated cost of facilities that may qualify for debt financing. This amount is about the same as the first alternative interest cost and bond term example but greater than any of the other alternative interest cost and bond term examples identified on the following page. Using the alternative of 5.0% net interest cost (NIC) and 30 year bond term applied to a conservative $2 million in available annual debt service allows for the financing of approximately $30,745,000 in eligible improvements. This results in an excess bonding capacity of approximately $25,745,000 some of which will be utilized by school financing. Therefore, there appears to be sufficient revenue capacity available to finance the improvements listed, although additional analysis will be required at the time of the first utilization of debt financing in the SPA.

The Public Works Department generally requires the preparation of an assessment district feasibility plan for the build-out of a master planned community prior to initiation of the first assessment district in order to determine the debt capacity limits and benefit zones related to using public financing to fund infrastructure improvements.

Table P.1
Estimated Revenue Available for Debt Service on Land Secured Financings

DU's or Acres	Assessed Value/Unit or Acre	FAR	Total AV
743 Single Family Detached	$400,000	N/A	$302,400,000
448 Multi-Use Residential Units	$300,000	N/A	134,400,000
		Total Assessed Value	$436,800,000
		2.0% Tax Rate Cap by City Policy	$8,736,000
		1.03486% Tax Rate Utilized	$4,520,000
Annual revenue available to pay debt service @ 2.00% - 1.35%			$4,216,000

Using $2 million as a conservative amount available for annual debt service and varying the net interest cost (NIC) and term of bond, the following public facility costs could be funded through a financing vehicle such as Mello-Roos and special assessment districts bonds.

- A 5.0% (NIC) and 30 year term will fund approximately $31 million.
- A 5.5% (NIC) and 30 year term will fund approximately $29 million.
- A 6.5% (NIC) and 25 year term will fund approximately $24 million.
- A 6.5% (NIC) and 20 year term will fund approximately $22 million.
- A 7.5% (NIC) and 25 year term will fund approximately $22 million.
- A 7.5% (NIC) and 20 year term will fund approximately $20 million.

TABLE P.2
Preliminary Estimate of Facilities Cost
Potentially Funded from Debt Service[30]

Facility	Segment	Estimated Costs[31]
2 or 3	La Media Road from Birch Road to Street C	$5,000,000
Total Costs		$5,000,000

II.5.4.15.8 Lifecycle Cost

Section 19.09.060 Analysis subsection F(2) of the Growth Management Ordinance requires the following:

> "...The inventory shall include Life Cycle Cost ("LCC") projections for each element in 19.09.060(E)...as they pertain to City fiscal responsibility. The LCC projections shall be for estimated life cycle for each element analyzed. The model used shall be able to identify and estimate initial and recurring life cycle costs for the elements..."

Background

The following material presents information on the general aspects of life cycle cost analysis as well as its specific application to the City of Chula Vista operations. The discussion regarding the general benefits and process of LCC is meant to provide a common base of understanding upon which further analysis can take place.

Life cycle costing (LCC) is a method of calculating the total cost of asset ownership over the life span of the asset. Initial costs and all subsequent expected costs of significance are included in the life cycle cost analysis as well as disposal value and any other quantifiable benefits to be derived as a result of owning the asset. Operating and maintenance costs over the life of an asset often times far exceed initial costs and must be factored into the (decision) process.

Life cycle cost analysis should not be used in each and every purchase of an asset. The process itself carries a cost and therefore can add to the cost of the asset. Life Cycle Cost

[30] Estimate is subject to change based on detailed construction cost estimates

[31] Cost estimates were based on the City of Chula Vistas "Eastern Area Development Impact Fees for Streets, dated July 2002 by Wildan.

analysis can be justified only in those cases in which the cost of the analysis can be more than offset by the savings derived through the purchase of the asset.

Four major factors that may influence the economic feasibility of applying LCC analysis are:

1. Energy Intensiveness — LCC should be considered when the anticipated energy costs of the purchase are expected to be large throughout its life.
2. Life Expectancy — For assets with long lives (i.e., greater than five years), costs other than purchase price take on added importance. For assets with short lives, the initial costs become a more important factor.
3. Efficiency — The efficiency of operation and maintenance can have significant impact on overall costs. LCC is beneficial when savings can be achieved through reduction of maintenance costs.
4. Investment Cost — As a general rule, the larger the investment the more important LCC analysis becomes.

The four major factors listed above are not, however, necessary ingredients for life cycle cost analysis. A quick test to determine whether life cycle costing would apply to a purchase is to ask whether there are any post-purchase costs associated with it. Life cycle costs are a combination of initial and post-purchase costs.

Applications for LCC Analysis

The City of Chula Vista utilizes the concepts of life cycle cost analysis in determining the most cost effective purchase of capital equipment as well as in the determination of replacement costs for a variety of rolling stock. City staff uses LCC techniques in the preparation of the City's Five Year Capital Improvement Budget (CIP) as well as in the Capital Outlay sections of the annual Operating Budget.

In addition to these existing processes, the City should require the use of LCC analysis prior to or concurrent with the design of public facilities required by new development. Such a requirement will assist in the determination of the most cost effective selection of public facilities.

APPENDIX

A. Fiscal Impact Analysis Tables

APPENDIX A

Table A-1
ABSORPTION SCHEDULE BY LAND USE

Land Use	Per Unit/ Net Acre Value (000's)	Cumulative Developed and Occupied Units/Net Acres							
		2004	2005	2006	2007	2008	2009	2010	TOTAL
Multi-Family Residential	$400 per du	100	200	300	400	500	600	756	756
Single Family Residential	$300 per du	200	300	400	448	448	448	448	448
Residential Population (@ 3.01/du)		903	1505	2107	2552	2853	3154	3624	3624
Parks		0	0	7.6	7.6	7.6	7.6	7.6	7.6
Public Use		0	1.1	1.1	1.8	1.8	2.8	2.8	2.8

Table A-2
ASSESSED VALUE

Land Use	Per Unit/ Net Acre Value (000's)	Cumulative Assessed Value(000's)							
		2004	2005	2006	2007	2008	2009	2010	TOTAL
SINGLE FAMILY RESIDENTIAL UNITS	$400	$ 40,000	$ 80,000	$ 120,000	$ 160,000	$ 200,000	$ 240,000	$ 302,400	$ 302,400
MULTI FAMILY RESIDENTIAL UNITS	$300	$ 30,000	$ 60,000	$ 90,000	$ 120,000	$ 134,400	$ 134,400	$ 134,400	$ 134,400

Table A-3
Secured Property Tax Revenue (000s)

SECURED PROPERTY TAX REVENUES		2004	2005	2006	2007	2008	2009	2010
TOTAL OTAY RANCH VILLAGE 7								
Total Assessed Values		$ 70,000	$ 140,000	$ 210,000	$ 280,000	$ 334,400	$ 374,400	$ 436,800
Tax Rate	1.0%	$700	$1,400	$2,100	$2,800	$3,344	$3,744	$4,368
TOTAL CHULA VISTA SHARE*	10.6%	**$74.2**	**$148.4**	**$222.6**	**$296.8**	**$354.5**	**$396.9**	**$463.0**

Table A-4

UNSECURED PROPERTY TAX	Tax Per Acre	Unsecured Property Tax Revenue (000's) 2004	2005	2006	2007	2008	2009	2010
Industrial Uses	$312	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Commercial Uses	$301	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
TOTAL OTAY RANCH VILLAGE 7		**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**

* Derived from discussions with the County Assessors Office and the City of Chula Vista (According to the Master Tax Agreement between the City of Chula Vista and the County, 41% of the County's general, library and flood control funds would go to the city.)

Table A-5
ESTIMATED PROPERTY TRANSFER TAX REVENUES

Single Family Resale Ratio	0.00007857
Commercial Resale Ratio	0.00003929

Product	Resale Rate (Years)	Property Transfer Tax (000s) 2004	2005	2006	2007	2008	2009	2010
Single Family Units	7	$3.1	$6.3	$9.4	$12.6	$15.7	$18.9	$23.8
Multi Family Units	7	$2.4	$4.7	$7.1	$9.4	$10.6	$10.6	$10.6
Commercial/Indusrial Acres	14	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
TOTAL OTAY RANCH VILLAGE 7		**$5.5**	**$11.0**	**$16.5**	**$22.0**	**$26.3**	**$29.4**	**$34.3**

Table A-6
ESTIMATED SALES TAX REVENUES

2003 Budget For Sales Tax	$20,353,998

Land Use	Sales Tax Per Unit/Acre (000s)	City of Chula Vista's Share of Sales Tax (000s) 2004	2005	2006	2007	2008	2009	2010
Total Single Family Units	$0.234	$23.4	$46.8	$70.2	$93.6	$117.0	$140.4	$176.9
Total Multi Family Units	$0.234	$23.4	$46.8	$70.2	$93.6	$104.8	$104.8	$104.8
Total Industrial Acres	$3.354	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total Commercial Acres	$3.570	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
TOTAL OTAY RANCH VILLAGE 7		**$46.8**	**$93.6**	**$140.4**	**$187.2**	**$221.8**	**$245.2**	**$281.7**

Table A-7
ESTIMATED FRANCHISE FEES

2003 Budget For Franchise Fees	$6,935,040

Land Use	Per Unit	Franchise Fee Revenue (000's)						
		2004	2005	2006	2007	2008	2009	2010
Total Single Family Units	$41	$4.1	$8.2	$12.3	$16.4	$20.5	$24.6	$31.0
Total Multi Family Units	$41	$4.1	$8.2	$12.3	$16.4	$18.4	$18.4	$18.4
Total Industrial Acres	$2,523	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total Commercial Acres	$1,802	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
TOTAL OTAY RANCH VILLAGE 7		**$8.2**	**$16.4**	**$24.6**	**$32.8**	**$38.9**	**$43.0**	**$49.4**

Table A-8
ESTIMATED TRANSIENT OCCUPANCY TAX

2003 Budget For Transient Occupancy Tax	$2,173,500

Land Use	TOT per Unit/Net Acre	Transient Occupancy Tax (000's)						
		2004	2005	2006	2007	2008	2009	2010
Total Single Family Units	$3	$0.3	$0.6	$0.9	$1.2	$1.5	$1.8	$2.3
Total Multi Family Units	$3	$0.3	$0.6	$0.9	$1.2	$1.3	$1.3	$1.3
Total Industrial Acres	$134	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total Commercial Acres	$70	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
TOTAL OTAY RANCH VILLAGE 7		**$0.6**	**$1.2**	**$1.8**	**$2.4**	**$2.8**	**$3.1**	**$3.6**

Table A-9
ESTIMATED UTILITY TAX

2003 Budget For Utility Tax	$4,170,600

Land Use	Tax per Unit/Net Acre	Utility Tax Revenue (000's)						
		2004	2005	2006	2007	2008	2009	2010
Total Single Family Units	$25	$2.5	$5.0	$7.5	$10.0	$12.5	$15.0	$18.9
Total Multi Family Units	$25	$2.5	$5.0	$7.5	$10.0	$11.2	$11.2	$11.2
Total Industrial Acres	$1,518	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total Commercial Acres	$1,084	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
TOTAL OTAY RANCH VILLAGE 7		**$5.0**	**$10.0**	**$15.0**	**$20.0**	**$23.7**	**$26.2**	**$30.1**

Table A-10
ESTIMATED BUSINESS LICENSE REVENUE

2003 Budget For Business License Tax	$1,057,417

Land Use	Average Business License Fee Per Acre	Business License Fees (000's) 2004	2005	2006	2007	2008	2009	2010
Total Industrial Acres	$319	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total All Commercial Acres	$587	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
TOTAL OTAY RANCH VILLAGE 7		**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**

Table A-11
ESTIMATED MISCELLANEOUS REVENUES

2003 Budget	Total Budget	Allocation of Budget: Residential	Commercial	Industrial	Per House Unit	Per Comm. Acre	Per Industrial Acre
Animal License	$96,614	$96,614			$1.55		
Bicycle License	$0	$0			$0.00		
Motor Vehicle Licenses	$0	$0			$0.00		
State HOPTR	$0	$0			$0.00		
Gas Tax	$2,559,533	$2,239,591	$243,156	$76,786	$35.83	$173.1	$105.4
Library Fines	$170,000	$170,000			$2.72		
Parking Citations	$312,995	$234,746	$59,469	$18,780	$3.76	$42.3	$25.8
Charges for Current Services							
Swimming Pools	$0	$0			$0.00		
Recreation Program	$668,907	$668,907			$10.70		
Park Reservation Fees	$0	$0			$0.00		
Other Park & Recr. Fees	$0	$0			$0.00		
Total Misc. Revenue	$3,808,049	$3,409,859	$302,625	$95,566			
	Per Unit/Acre				$54.56	$215.48	$131.22

Land Use	Per Unit/Acre	Miscellaneous Revenue (000's) 2004	2005	2006	2007	2008	2009	2010
Total Single Family Units	$54.56	$5.5	$10.9	$16.4	$21.8	$27.3	$32.7	$41.2
Total Multi Family Units	$54.56	$5.5	$10.9	$16.4	$21.8	$24.4	$24.4	$24.4
Total Industrial Acres	$131.22	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total Commercial Acres	$215.48	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
TOTAL OTAY RANCH VILLAGE 7		**$10.9**	**$21.8**	**$32.7**	**$43.6**	**$51.7**	**$57.2**	**$65.7**

Table A-12

ESTIMATED LEGISLATIVE AND ADMINISTRATIVE EXPENDITURES

			Estimated Cost (000's)						
Legislative & Administrative			2004	2005	2006	2007	2008	2009	2010
Multi-Family Residential	$3.96	per du	$ 0.4	$ 0.8	$ 1.2	$ 1.6	$ 2.0	$ 2.4	$ 3.0
Single Family Residential	$3.96	per du	$ 0.8	$ 1.2	$ 1.6	$ 1.8	$ 1.8	$ 1.8	$ 1.8
Population	$1.14	per person	$ 1.0	$ 1.7	$ 2.4	$ 2.9	$ 3.3	$ 3.6	$ 4.1
Total Legislative & Administrative			$ 2.2	$ 3.7	$ 5.2	$ 6.3	$ 7.1	$ 7.8	$ 8.9

Table A-13

ESTIMATED MANAGEMENT AND INFORMATION SERVICES EXPENDITURES

			Estimated Cost (000's)						
Management and Information services			2004	2005	2006	2007	2008	2009	2010
Population	$3.06	per person	$ 2.8	$ 4.6	$ 6.4	$ 7.8	$ 8.7	$ 9.7	$ 11.1
Total Management and Information services			$ 2.8	$ 4.6	$ 6.4	$ 7.8	$ 8.7	$ 9.7	$ 11.1

Table A-14
ESTIMATED DEVELOPMENT AND MAINTENANCE SERVICES EXPENDITURES

Development and Maintenance Services		Estimated Cost (000's) 2004	2005	2006	2007	2008	2009	2010
Multi-Family Residential	$55.09	$ 5.5	$ 11.0	$ 16.5	$ 22.0	$ 27.5	$ 33.1	$ 41.6
Single Family Residential	$55.09	$ 11.0	$ 16.5	$ 22.0	$ 24.7	$ 24.7	$ 24.7	$ 24.7
Population	$1.94	$ 1.8	$ 2.9	$ 4.1	$ 5.0	$ 5.5	$ 6.1	$ 7.0
Parks	$60.73	$ -	$ -	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5
Public Use	$91.10	$ -	$ 0.1	$ 0.1	$ 0.2	$ 0.2	$ 0.3	$ 0.3
Public Works Operations-For Southeast Zone								
Multi-Family Residential	$147.83	$ 14.8	$ 29.6	$ 44.3	$ 59.1	$ 73.9	$ 88.7	$ 111.8
Single Family Residential	$147.83	$ 29.6	$ 44.3	$ 59.1	$ 66.2	$ 66.2	$ 66.2	$ 66.2
Total Development and Maintenance Services		$ 62.7	$ 104.4	$ 146.6	$ 177.7	$ 198.5	$ 219.6	$ 252.1

Table A-15
ESTIMATED POLICE SERVICES EXPENDITURES

Police		Estimated Cost (000's) 2004	2005	2006	2007	2008	2009	2010
Multi-Family Residential	$263.33	$ 26.3	$ 52.7	$ 79.0	$ 105.3	$ 131.7	$ 158.0	$ 199.1
Single Family Residential	$263.33	$ 52.7	$ 79.0	$ 105.3	$ 118.0	$ 118.0	$ 118.0	$ 118.0
Population	$5.39	$ 4.9	$ 8.1	$ 11.4	$ 13.8	$ 15.4	$ 17.0	$ 19.5
Parks	$822.48	$ -	$ -	$ 6.3	$ 6.3	$ 6.3	$ 6.3	$ 6.3
Public Use	$822.48	$ -	$ 0.9	$ 0.9	$ 1.5	$ 1.5	$ 2.3	$ 2.3
Total Police		$ 83.9	$ 140.7	$ 202.9	$ 244.9	$ 272.9	$ 301.6	$ 345.2

Table A-16
ESTIMATED FIRE SERVICES EXPENDITURES

Fire		Estimated Cost (000's)						
		2004	2005	2006	2007	2008	2009	2010
Multi-Family Residential	$99.31	$ 9.9	$ 19.9	$ 29.8	$ 39.7	$ 49.7	$ 59.6	$ 75.1
Single Family Residential	$99.31	$ 19.9	$ 29.8	$ 39.7	$ 44.5	$ 44.5	$ 44.5	$ 44.5
Parks	$119.02	$ -	$ -	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ 0.9
Public Use	$119.02	$ -	$ 0.1	$ 0.1	$ 0.2	$ 0.2	$ 0.3	$ 0.3
Total Fire		$ 29.8	$ 49.8	$ 70.5	$ 85.3	$ 95.3	$ 105.3	$ 120.8

Table A-17
ESTIMATED CULTURAL AND LEISURE EXPENDITURES

Cultural and Leisure		Estimated Cost (000's)						
		2004	2005	2006	2007	2008	2009	2010
Multi-Family Residential	$3.82	$ 0.4	$ 0.8	$ 1.1	$ 1.5	$ 1.9	$ 2.3	$ 2.9
Single Family Residential	$3.82	$ 0.8	$ 1.1	$ 1.5	$ 1.7	$ 1.7	$ 1.7	$ 1.7
Population	$80.21	$ 72.4	$ 120.7	$ 169.0	$ 204.7	$ 228.8	$ 253.0	$ 290.7
Total Cultural and Leisure		$ 73.6	$ 122.6	$ 171.6	$ 207.9	$ 232.4	$ 257.0	$ 295.3

Table A-18
ESTIMATED OTHER NON-DEPARTMENTAL EXPENDITURES

Non-Departmental		Estimated Cost (000's)						
		2004	2005	2006	2007	2008	2009	2010
Population	$1.33	$ 1.2	$ 2.0	$ 2.8	$ 3.4	$ 3.8	$ 4.2	$ 4.8
Total Non-Departmental		$ 1.2	$ 2.0	$ 2.8	$ 3.4	$ 3.8	$ 4.2	$ 4.8

UNNAMED CANYON

FOR NOTHERLY PORTION OF VILLAGE 7 SEE DRAINAGE PLANNING BASIN (B1, B2, AND B3) PER OTAY MASTER DRAINAGE STUDY FOR POGGI CANYON CREEK DATED OCT. 18, 1999

PROPOSED BIRCH PARKWAY

PROPOSED LA MEDIA ROAD

PROPOSED OTAY VALLEY ROAD

Q_{100}=156 cfs
Area=141.9 ac

Q_{100}=254 cfs
Area=240.4 ac

Q_{100}=346 cfs
Area=343.2 ac

Q_{100}=382 cfs
Area=384.0 ac

WOLF CANYON

McMILLIN BOUNDARY

OTAY VALLEY

UNNAMED CANYON

UNNAMED CANYON

6.1

Q_{100}=164 cfs
Area=141.4 ac

UNNAMED CANYON

PROPOSED ROCK MOUNTAIN ROAD

UNNAMED CANYON

Q_{100}=229 cfs
Area=206.7 ac

6.2

P&D

400' 0' 400' 800' 1200'
GRAPHIC SCALE: 1"=400'

LEGEND

NATURAL BASIN BNDRY	
FLOW PATH	
Cubic Feet per Second	cfs
Area in Acres	ac
NODE NUMBER	(8.1)
100 YEAR EVENT	Q_{100}

P&D Consultants created this drainage map. However, the 100-year, 6-hour flow rates were determined by Rick Engineering Company.

PREPARED BY:

P&D CONSULTANTS, INC.
8954 RIO SAN DIEGO DRIVE, SUITE 810
SAN DIEGO, CALIFORNIA 92108
TELE: (619) 291-1475 FAX: 291-1476

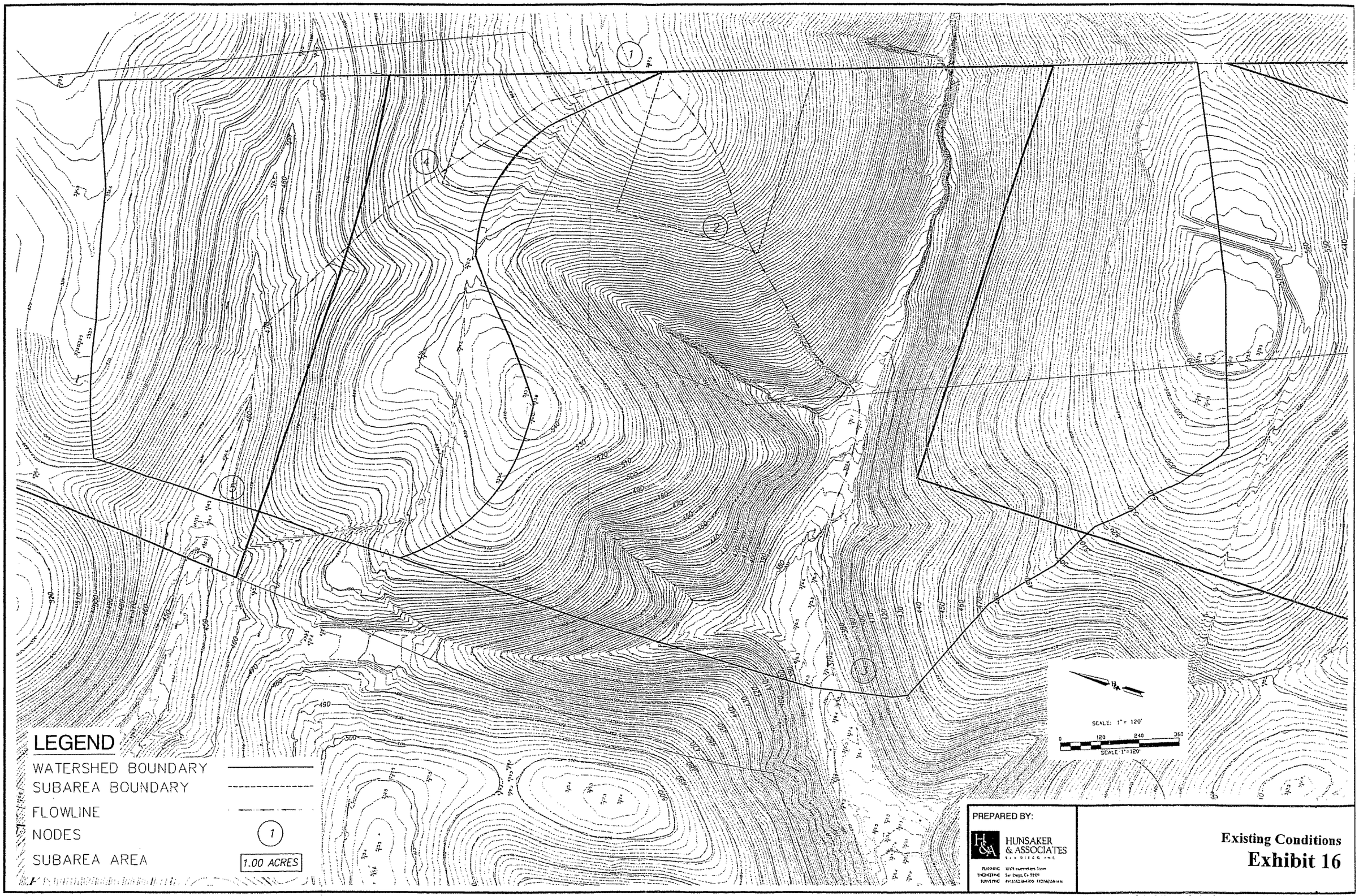
PRELIMINARY EXISTING DRAINAGE BASIN BOUNDARIES

OTAY RANCH VILLAGE 7
McMILLIN - LOMAS VERDES
CHULA VISTA, CA

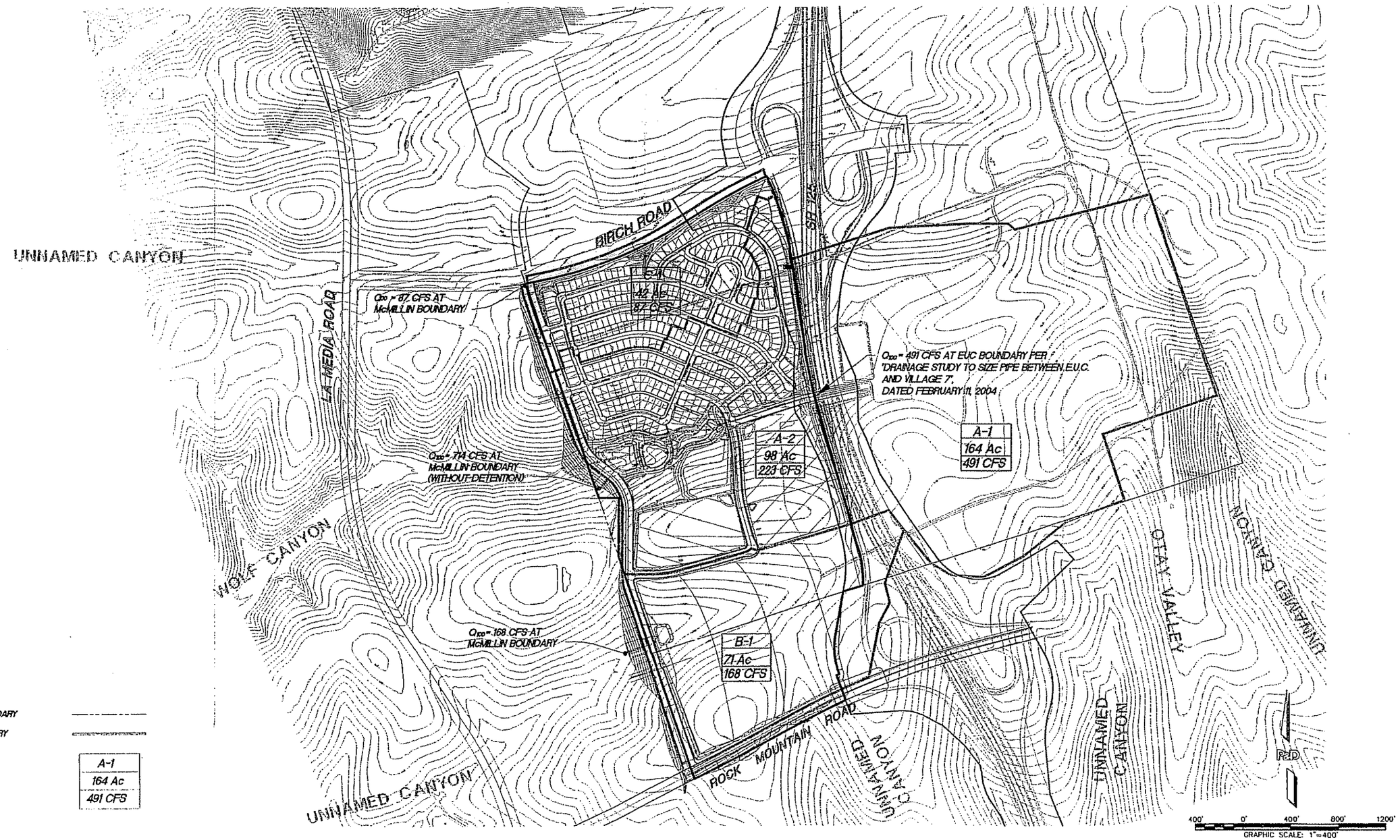
Preliminary Existing Basin Boundaries

Exhibit 15

DWGNAME: P:/ENGR/75221/ACAD/HYDRO/221HYDR-X.DWG



HSA 05/21/2004



LEGEND

McMILLIN OWNERSHIP BOUNDARY	
DEVELOPED BASIN BOUNDARY	
BASIN DESIGNATION	A-1
BASIN AREA (ACRES)	164 Ac
BASIN RUNOFF (CFS)	491 CFS

PREPARED BY:

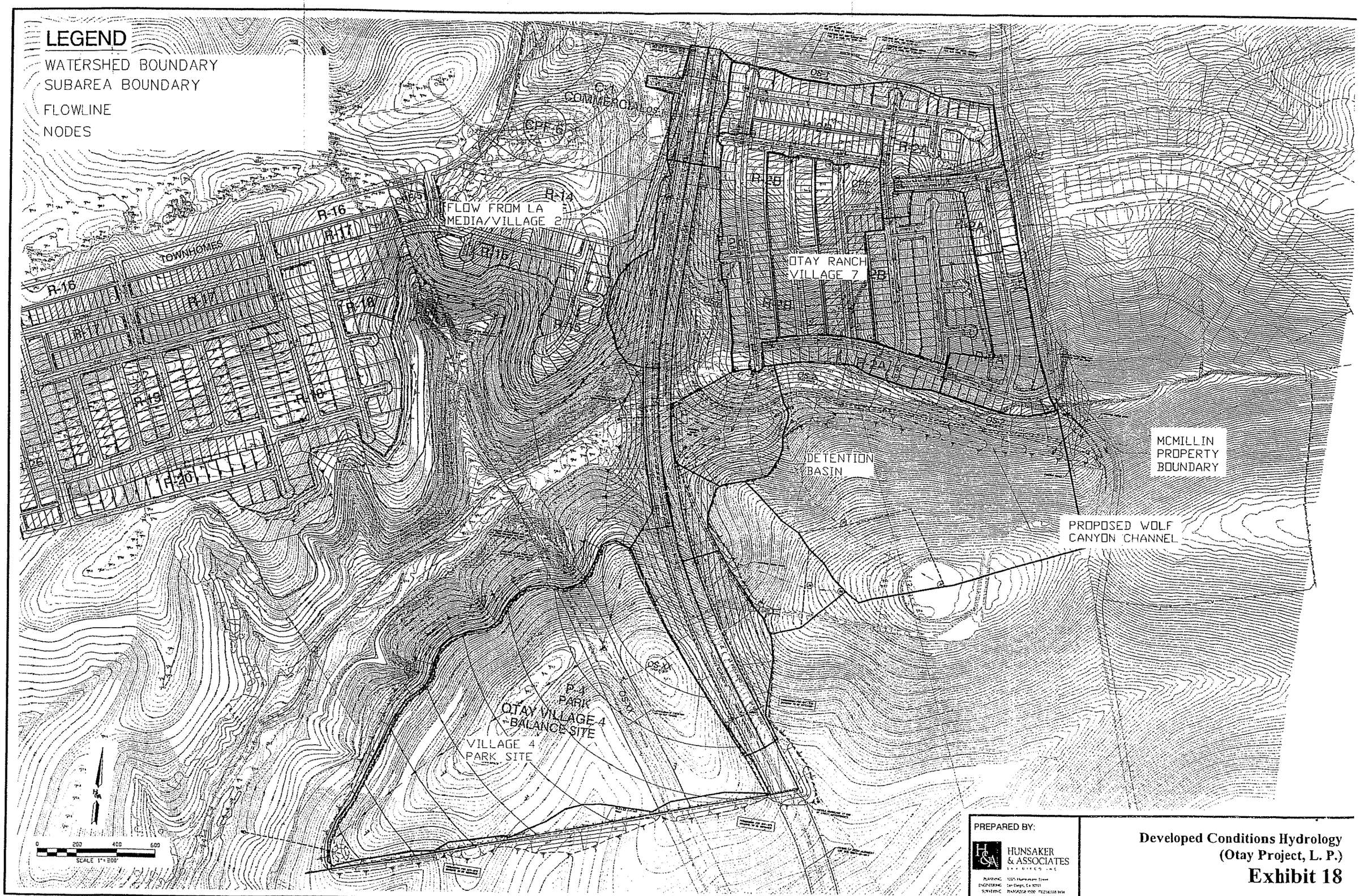
P&D CONSULTANTS, INC.
8954 RIO SAN DIEGO DRIVE, SUITE 610
SAN DIEGO, CALIFORNIA 92108
TELE: (619) 291-1473 FAX: 291-1476

DEVELOPED DRAINAGE BASIN BOUNDARIES
OTAY RANCH VILLAGE 7
VILLAGE OF VISTA VERDE
CHULA VISTA, CA

Developed Drainage Basin Boundaries (McMillin Ownership)

Exhibit 17

P:\ENGR\75221\ACAD\HYDRO\221HYDR-PROP.DWG



PREPARED BY:

HUNSAKER & ASSOCIATES

Developed Conditions Hydrology
(Otay Project, L. P.)

Exhibit 18

SPA PLAN

Village Seven Sectional Planning Area (SPA)
Otay Ranch GDP

Adopted October 12, 2004

by Resolution No. 2004-329

Project Sponsor

McMillin Otay Ranch, LLC
2727 Hoover Avenue
National City, CA 91950
Contact: Dave Gatzke
(619) 336-3726

Prepared by

Cinti Land Planning
2932 Poinsettia Drive
San Diego, CA 92106
Contact: Gary P. Cinti
(619) 223-7408

SECTION II.2
SECTIONAL PLANNING AREA (SPA) PLAN

TABLE OF CONTENTS

SECTION PAGE

II.2.1 Introduction II.2.1-1
- II.2.1.1 Background, Scope & Purpose of the Plan
- II.2.1.2 Document Organization
- II.2.1.3 Location & Regional Setting
- II.2.1.4 Community Structure
- II.2.1.5 Legal Significance/EIR
- II.2.1.6 SPA Plan Consistency with GDP/PC Zone District
- II.2.1.7 Related Documents
- II.2.1.8 Planning Process

II.2.2 Development Concept II.2.2-1
- II.2.2.1 Design Influences
  - Site Characteristics & Visual Context
  - Surrounding Land Uses
- II.2.2.2 Land Use Pattern
- II.2.2.3 Density Transfer
- II.2.2.4 SPA Adoption Area
- II.2.2.5 Housing Programs
- II.2.2.6 Urban Design Concepts
- II.2.2.7 Landscape Concept
- II.2.2.7 Community Signage Program
- II.2.2.8 Agricultural Plan

II.2.3 Circulation II.2.3-1
- II.2.3.1 Introduction
- II.2.3.2 Project Access
  - Regional Access
  - Local Access
- II.2.3.3 Project Circulation Network
- II.2.3.4 Street Standards
  - Arterials & Major Roads
  - Village Entry Streets
  - Village Core Street
  - Promenade Streets
  - Residential Streets
  - Alley
- II.2.3.5 Phasing of Road Improvements
- II.2.3.6 Transit Planning Principles
- II.2.3.7 Bicycle Routes, Pedestrian Trails & Cart Paths

TABLE OF CONTENTS

SECTION PAGE

II.2.4 Grading II.2.4-1
- II.2.4.1 Introduction
- II.2.4.2 Grading Concept
- II.2.4.3 Steep Slope Analysis
- II.2.4.4 Grading Policies

II.2.5 Parks, Recreation & Open Space II.2.5-1
- II.2.5.1 Introduction
- II.2.5.2 Required Park Land & Improvements
- II.2.5.3 Open Space
- II.2.5.4 Edge Plan
- II.2.5.5 Community Gardens
- II.2.5.6 Park & Open Space Implementation

II.2.6 Development Phasing II.2.6-1

II.2.7 Public Facilities II.2.7-1
- II.2.7.1 Introduction
- II.2.7.2 Potable Water Supply & Master Plan
- II.2.7.3 Potable Water Demand
  - Water Conservation
- II.2.7.4 Recycled Water Supply & Master Plan
- II.2.7.5 Sewer Service
- II.2.7.6 Storm Water Drainage System
- II.2.7.7 Urban Run-off
- II.2.7.8 Roads
- II.2.7.9 Schools
- II.2.7.10 Child Care Facilities
- II.2.7.11 Police & Fire Services
  - Law Enforcement
  - Fire Protection & Emergency Medical Services
- II.2.7.12 Library Services
- II.2.7.13 Community Purpose Facilities (CPF)

II.2.8 Appendices II.2.8-1
- II.2.8.1 Appendix A - Index of SPA Requirements
- II.2.8.2 Appendix B - GDP Compliance

LIST OF TABLES

TABLE		PAGE
Table A	GDP Land Use Table	II.2.1-15
Table B	Improved Park Land Dedication Required	II.2.5-2
Table C	Parks Provided and Eligible Credits	II.2.5-2
Table D	Anticipated Development Phasing	II.2.6-1
Table E	Potable Water Demand	II.2.7-3
Table F	Recycled Water Demand	II.2.7-6
Table G	Sewage Generation	II.2.7-9
Table H	Student Generation	II.2.7-15
Table I	Required Community Purpose Facility Acres	II.2.7-21

LIST OF EXHIBITS

EXHIBIT		PAGE
1.1	Regional Vicinity	II.2.1-7
1.2	SPA Boundaries	II.2.1-8
1.3	Ownerships	II.2.1-9
1.4	Community Structure	II.2.1-12
1.5	Adopted General Development Plan	II.2.1-16
1.6	Overall Conceptual Village Plan	II.2.1-18
1.7	Site Utilization Plan	II.2.1-19
1.8	GDP/SRP & SPA Plan Documents	II.2.1-24
2.1	Design Influences	II.2.2-2
2.2	Landscape Concept Plan	II.2.2-9
2.3	Agricultural Plan	II.2.2-12
3.1	Circulation Plan	II.2.3-4
3.2	Arterial Highways	II.2.3-6
3.3	Village Entry Streets	II.2.3-8
3.4	Secondary Village Entry Streets	II.2.3-9
3.5	Village Promenade Street	II.2.3-10
3.6	Residential Streets	II.2.3-12
3.7	Transit Plan	II.2.3-15
3.8	Trails Plan	II.2.3-17
4.1	Conceptual Grading Plan	II.2.4-5
4.2	Steep Slope Areas	II.2.4-6
5.1	Parks & Open Space	II.2.5-3
6.1	Phasing Plan	II.2.6-2
7.1	Domestic Water	II.2.7-4
7.2	Recycled Water	II.2.7-7
7.3	Sewer Plan	II.2.7-10
7.4	Storm Water	II.2.7-13

SECTION II.2
SECTIONAL PLANNING AREA (SPA) PLAN

II.2.1 Introduction

II.2.1.1 Background, Scope & Purpose of the Plan

Otay Ranch Village Seven represents the continued southward extension of the initial development approved in Otay Ranch Sectional Planning Area (SPA) One, containing Villages One and Five, and the subsequent planning of Village Six immediately to the north of Village Seven. It continues the village development pattern established in the Otay Ranch General Development Plan (GDP), which is being implemented in the previously approved neighborhoods.

This SPA Plan refines and implements the land use plans, goals, objectives and policies of the Otay Ranch General Development Plan (GDP). This Plan addresses existing and planned land uses, public facilities, design criteria, circulation, parks and open space, for Otay Ranch Village Seven. Preparation and approval of this SPA Plan is required by the Otay Ranch General Development Plan pursuant to Title 19, Zoning, of the Chula Vista Municipal Code. The objectives of this plan are to:

- Implement the goals, objectives and policies of the Chula Vista General Plan, particularly the Otay Ranch General Development Plan.
- Implement Chula Vista's Growth Management Program to ensure that public facilities are provided in a timely manner and financed by the parties creating the demand for, and benefitting from, the improvements.
- Foster development patterns which promote orderly growth and prevent urban sprawl.
- Maintain and enhance a sense of community identity within the City of Chula Vista and surrounding neighborhoods.
- Establish a pedestrian oriented village with an intense urban core to reduce reliance on the automobile and promote walking, and use of bicycles, buses and light rail transit.
- Promote synergistic uses between villages to balance activities, services and facilities.
- Accentuate the relationship of the land plan with its natural setting and the physical character of the region, and promote effective management of natural resources by concentrating development into less sensitive areas while preserving large contiguous open space areas with sensitive resources.
- Contribute to the unique Otay Ranch image and identity which differentiates Otay Ranch from other communities.

- Wisely manage limited physical resources.
- Implement development consistent with the provisions of the Otay Ranch resource conservation and management plans.
- Establish a land use and facility plan which assures village viability in consideration of existing and anticipated economic conditions.

This SPA Plan defines, in more detailed terms, the development parameters for the Otay Ranch Village Seven SPA, including the land use mix, design criteria, primary circulation pattern, open space and recreation concept, and infrastructure requirements. Additionally, the character and form of the project will be implemented through a series of guidelines and development standards prescribed in the Otay Ranch Village Seven Planned Community (PC) District Regulations, Village Seven Design Plan and other associated regulatory documents (see Section II.2.1.7 for additional information).

The SPA plan, once approved, is the implementation tool of the General Development Plan. It establishes design criteria for the site and defines precisely the type and amount of development permitted. It establishes the City's standards for that development including open space provisions and major improvements to be constructed by the developer(s).

The Planned Community District Regulations adopted as part of this SPA Plan serve as an important tool through which the City will review and evaluate schematic, preliminary and final plans for each individual project to be built within the SPA. The PC District Regulations also establish standards for development and uses within the planning area.

This SPA Plan is adopted as a supplement to other existing City regulations, focusing on the Otay Ranch Village Seven development area. The specific provisions provided herein, including the PC District Regulations and related SPA documents, shall supersede the general standards established in other regulations, including the City Zoning Ordinance. If an issue is not addressed in the SPA Plan, then applicable City regulations shall apply. In some cases, city-wide standards such as those in the Chula Vista Landscape Manual and Grading Ordinance are incorporated into the SPA plan by reference and so will be applicable to Village Seven development.

II.2.1.2 Document Organization

The Village Seven SPA Plan is divided into documents or components: the SPA Plan; Planned Community (PC) District Regulations; Village Seven Design Plan; Public Facilities Finance Plan; Affordable Housing Program; Air Quality Improvement Plan; Water Conservation Plan; Non-Renewable Energy Conservation Plan; Parks, Recreation, Open Space and Trails Plan; and supporting Technical studies and Plans. The purposes of these documents are as follows:

SPA Plan

The purpose of the SPA plan is to define, in more detail than the City's General Plan and Otay Ranch General Development Plan, the development parameters for Village Seven, including the land uses, urban design criteria, circulation pattern, open space and recreation concept, and infrastructure requirements to support the community.

Planned Community District Regulations

The Planned Community (PC) District Regulations are adopted by ordinance pursuant to Title 19 of the Chula Vista Zoning Code. The Village Seven PC District Regulations are the applicable zoning regulations for the village. The regulations are intended to implement the goals and policies of the Chula Vista General Plan, Otay Ranch General Development Plan and the Village Seven SPA by establishing land use districts and standards to classify, regulate, restrict and separate the uses of land, buildings and structures and regulate and limit the type, height and bulk of buildings and structures in the various land use districts. These standards are established to protect the public health, safety and general welfare of the citizens of Chula Vista; to safeguard and enhance the appearance and quality of development of Village Seven, and to provide the social, physical and economic advantages resulting from comprehensive and orderly planned use of land resources. The regulations provide the basis by which the City will review and evaluate the preliminary and final drawings for subsequent development applications, and provide guidance at the design review level. In the event of conflict, these regulations supersede other city regulations.

Village Seven Village Design Plan

This document guides the site, building and landscape design within Village Seven to ensure that the quality of the adopted urban design and architectural concepts established for the overall Otay Ranch community are maintained. The Village Design Plan identifies a theme for the village and delineates the identity through streetscape and landscape design, signage programs and architectural and lighting guidelines. The Design Plan also identifies the village core design concepts that will implement Otay Ranch's planned pedestrian orientation. General design concepts, as anticipated by the GDP, are more precisely defined to address Village Seven.

Public Facilities Finance Plan

The Public Facilities Finance Plan (PFFP) implements the City of Chula Vista Growth Management Program and Ordinance. The intent of the document is to ensure that the phased development of the project is consistent with the overall goals and policies of the City's General Plan, Growth Management Program, and the Otay Ranch General Development Plan. The PFFP ensures that development of the project will not adversely impact the City's Quality of Life Standards. The PFFP also contains a fiscal analysis identifying capital budget impacts on the City as well as maintenance and operation costs for each proposed phase of development.

The PFFP components include an analysis of infrastructure facilities, such as water and sewer, and the provision of community services, law enforcement, libraries, schools, parks and animal control facilities. The analysis and provisions of the PFFP fulfill the GDP requirements for the SPA-level Master Facility Plans for most facilities associated with the development of Village Seven. Where additional project specific study and planning is needed, separate technical studies and plans for Village Seven have been prepared and included as a component of the SPA Plan or the Village Seven SPA Environmental Impact Report (EIR).

Affordable Housing Program

The City of Chula Vista Housing Element requires that residential development with fifty (50) or more dwelling units provide a minimum of 10% of the total dwelling units for low and moderate income households. Of these units, one-half (5%of the total project) are to be designated available to low income households and the remaining five percent (5%) to moderate income households. In order to guarantee the provision of Affordable Housing opportunities, the City requires that a specific Affordable Housing Program ("AHP") consistent with the Housing Element of the Chula Vista General Plan, be prepared. The Affordable Housing Program is implemented through an Affordable Housing Agreement(s) between the City and the Developer(s).

Air Quality Improvement Plan

The purpose of the Air Quality Improvement Plan for the Village Seven SPA is to respond to the Growth Management policies of the City of Chula Vista and those policies and regulations established at the broadest geographic level (State and Federal) in order to minimize air quality impacts during and after construction of projects within Village Seven. The Plan also demonstrates compliance with the air quality standards and policies of the San Diego County Air Pollution Control District (APCD).

Water Conservation Plan

The purpose of the Water Conservation Plan is to respond to the Growth Management policies of the City of Chula Vista, which are intended to address the long term need to conserve water in new developments, to address short term emergency measures, and to establish standards for water conservation.

Non-Renewable Energy Conservation Plan

The Otay Ranch GDP requires that all SPA Plans include a Non-Renewable Energy Conservation Plan. This Plan identifies measures to reduce the use of non-renewable energy resources through, but not limited to: transportation; building design and use; lighting; recycling and alternative energy sources.

Parks, Recreation, Open Space and Trails Plan

The Otay Ranch GDP requires that all SPA Plans prepare a Parks, Recreation and Open Space and Trails Plan. This Plan identifies locations, potential facilities, ownership, maintenance and phasing of park, recreation and trails facilities to be provided in the village.

Technical Studies and Plans

The Otay Ranch GDP identified Project-wide Implementation Tasks that included preparation for an Overall Design Plan, Master Facility Plans and Phase II of the Resource Management Plan for Otay Ranch. These Project-wide Implementation Tasks have been completed and serve as the basis for subsequent SPA Planning. The GDP also identified SPA-level Implementation Tasks that included preparation of SPA Plans, PFFPs, Regional Facilities Reports, Master Facilities Plans, and others. The full list of GDP and SPA Implementation Tasks are located in Part III Implementation, of the 1993 GDP (pages 403-412).

In the preparation of the SPA One Plan, a number of Master Facility Finance Plans were prepared to address the provision of certain facilities on a Ranch-wide basis. For this reason, subsequent SPA plans are required only to prepare Technical Studies and Master Facility Plans specific to their development. The studies and plans for Village Seven have been prepared as part of the Environmental Impact Report (EIR) for the development of Village Seven, the PFFP, or as part of this SPA Plan. These plans and studies, in conjunction with mitigation measures identified by the Village Seven EIR, fulfill the Otay Ranch GDP requirements for individual Village SPA Plan implementation. The Village Seven Technical Studies and Plans include:

- Biological Resources Report
- Geologic/Geotechnical Feasibility Study
- Traffic Study
- Master Drainage Plan
- Water Quality Technical Report
- Master Sewer Plan
- Master Water & Recycled Water Plan

II.2.1.3 Location & Regional Setting

Otay Ranch lies within the approximately 37,585-acre Eastern Territories Planning Area of the City of Chula Vista. The Eastern Territories Planning Area is bounded by Interstate 805 on the west, San Miguel Mountain and State Route 54 on the north, the Otay Reservoirs and the Jamul foothills on the east, and the Otay River Valley on the south. Otay Ranch Village Seven is located in roughly the center of the Eastern Territories Planning Area (see Vicinity Map, Exhibit 1.1)

The Village Seven project area is located in the north-central portion of the Otay Valley Parcel of the Otay Ranch General Development Plan. The proposed SPA area is consistent with the Village

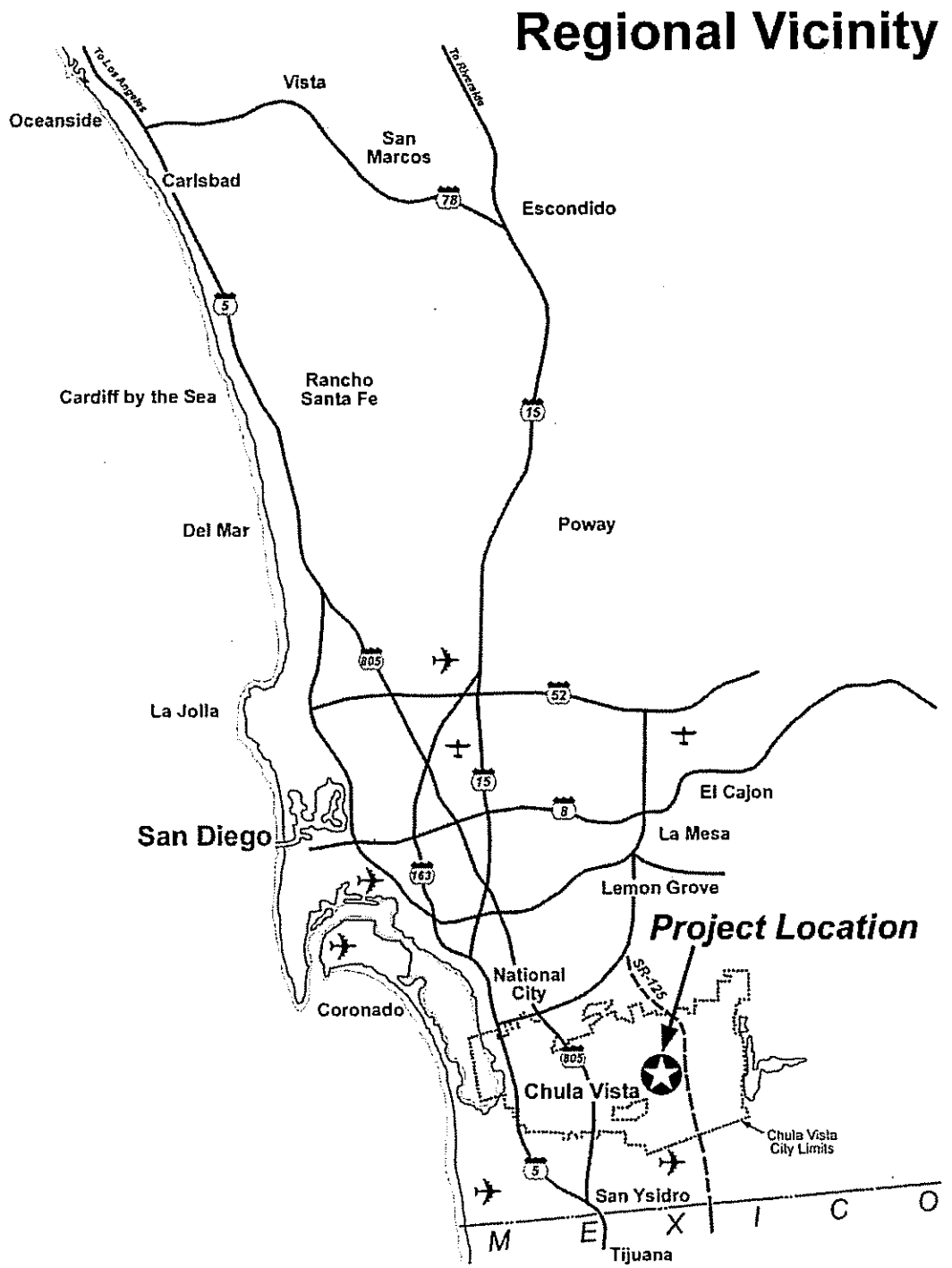
Seven as identified in the General Development Plan (as segmented and refined through more detailed road alignment studies). The overall Village Seven SPA project area includes approximately 425 acres of gently rolling terrain and is bounded by the proposed alignments of SR-125 on the east, Birch Road on the north, La Media Road on the west and Rock Mountain Road on the south, of which 121.3 acres are undesignated in this document. (see Project Location/SPA Boundaries, Exhibit 1.2).

The project area is immediately south of Otay Ranch Village Six which is under development per the Otay Ranch Village Six SPA Plan approved in 2002. Additional future urban development will be located on the adjacent Otay Ranch properties, Villages Two and Four to the west and southwest, Village Eight to the south and the Eastern Urban Center (Planning Area 12) to the east, across SR-125.

Access to the site will be provided via Birch Road, an east-west arterial, which forms the northern boundary of the SPA and La Media Road, a north-south arterial, which is the western boundary. The extension of both arterials to the Village Seven's northern boundary will be completed in conjunction with the development of Otay Ranch Village Six. Additional future access will be provided via Rock Mountain Road on the southern boundary. Entries/exits to the SR-125 highway are planned at both Birch Road and Rock Mountain Road.

Historically, the Otay Valley Parcel has been used for ranching, grazing, dry farming and truck farming activities. In addition, an approximately 50-acre aviation navigation facility is currently located within the Village Seven planning area. This facility is slated for eventual relocation outside of the planning area as a part of Village Seven development.

The Village Seven site is comprised of five separate ownerships (see Exhibit 1.3). This SPA Plan has been cooperatively prepared by the two majority landowners, Otay Project, L.P. (Otay Ranch Company) and McMillin Otay Ranch, LLC. Adoption of the SPA Plan will grant development approval only to that property owned by the applicants. Inclusion of other ownerships will require amendment(s) of this initial SPA approval, as required by the amended Otay Ranch GDP Implementation provisions (Otay Ranch GDP/SRP, Part II, Chapter 1, Section E). Although, the SPA approval is for and focus of this SPA Plan is on the applicant's portion of the village, some planning issues, particularly context and consistency with other adopted plans, community structure and infrastructure, are more appropriately discussed considering the entire village. Hence, this SPA Plan will address some issues with respect to the entire village and others with respect to only the applicant's property. Descriptions of facilities and features outside of the applicant's ownership are provided as conceptual plans which demonstrate how a coherent village as a whole could be implemented. These concepts are subject to revision when the additional landowners' SPA amendment(s) are processed.



CITY OF CHULA VISTA

Vista Verde

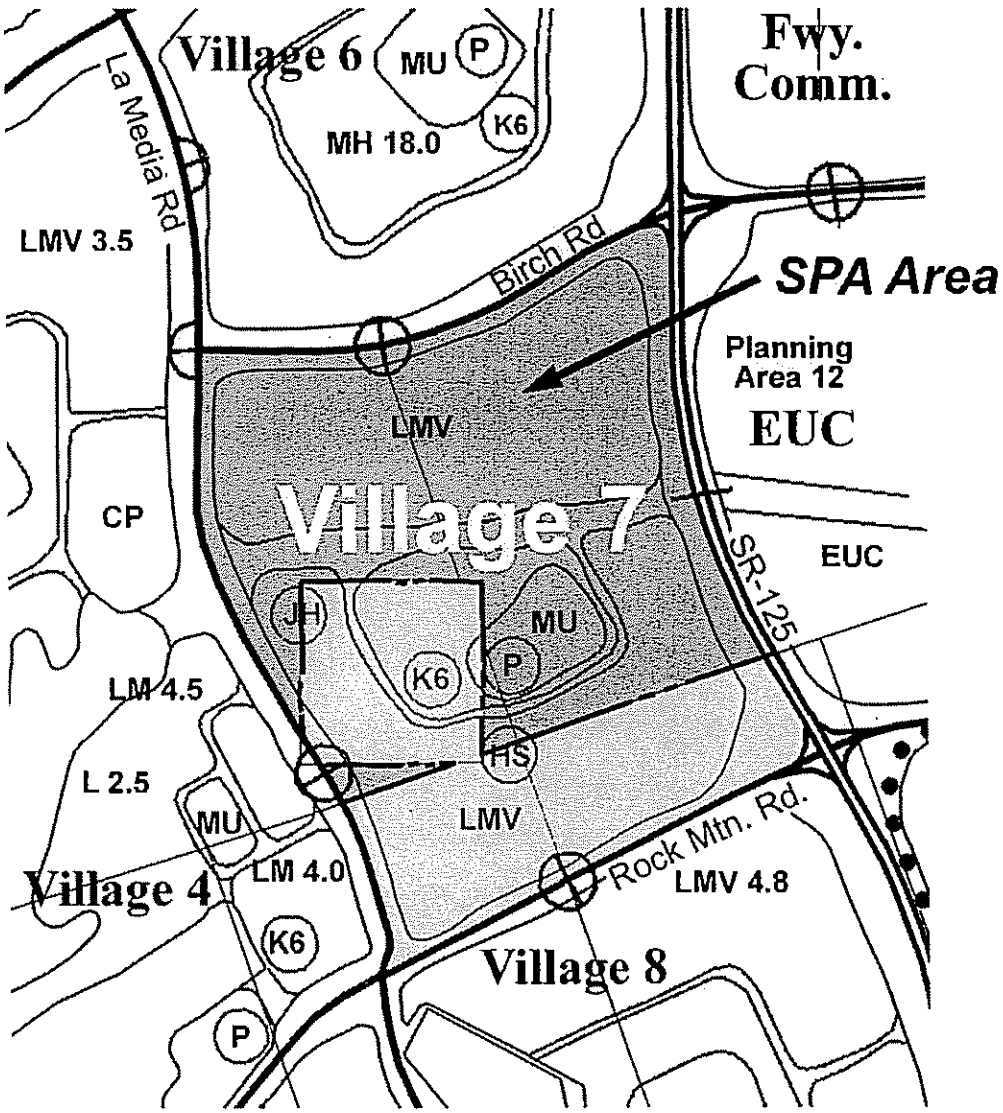
Village Seven - Otay Ranch

Cinti Land Planning

3/22/04

Exhibit 1.1

SPA Boundaries



CITY OF CHULA VISTA

Vista Verde

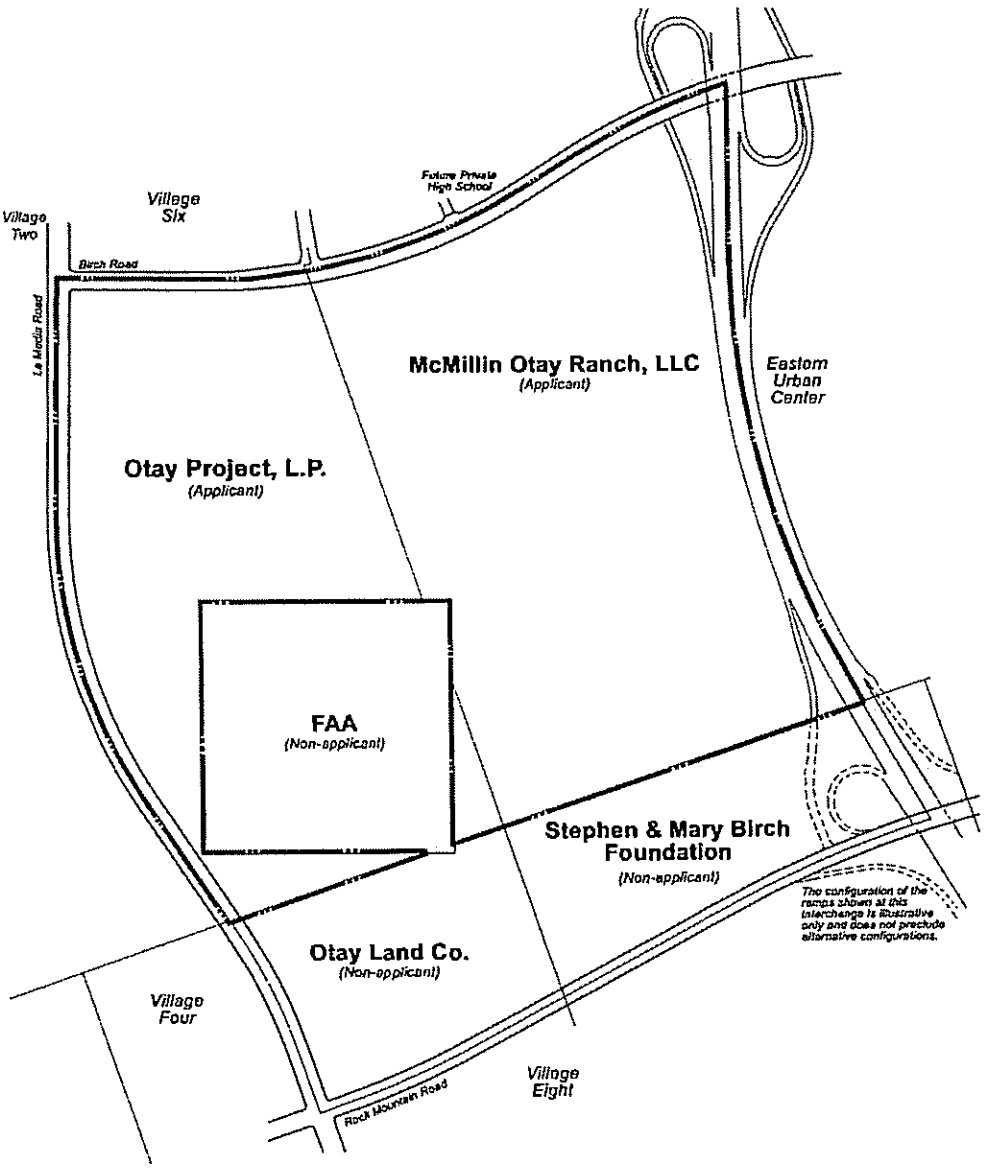
Village Seven - Otay Ranch

Cinti Land Planning

3/22/04

Exhibit 1.2

Ownerships



Vista Verde

CITY OF CHULA VISTA Village Seven - Otay Ranch

Civil Land Planning

5/24/04

Exhibit 1.3

II.2.1.4 Community Structure

The community structure of the Otay Ranch Village Seven neighborhood, at the broadest level, is established by the Chula Vista General Plan. The General Plan is implemented by and more detailed plans and policies for the Otay Ranch area are provided in the Otay Ranch General Development Plan. This section is intended to highlight the major design features of the Village Seven SPA Plan as an introduction to the project. A more detailed discussion of the project with respect to the provisions of the Otay Ranch General Development Plan is provided in Section II.2.1.6 SPA Plan Consistency with GDP/PC Zone, below.

The Otay Ranch General Development Plan identifies the "village" as a fundamental concept for the development of Otay Ranch. The "village" is the "building block" for shaping the character and success of the community. An Otay Ranch village clusters development in an appropriately sized area, with conveniently located homes, jobs, schools, parks and other daily needs. Village characteristics include:

- Well defined edges such as open spaces buffers or wildlife corridors.
- Mixed-use centers focused on shops, plazas, parks, and housing arranged to encourage people to meet and greet one another throughout the day and into the night.
- Pedestrian pathways, and biking on streets, linked to interesting destinations.
- A wide variety of housing types, responding to the needs of families, singles, students and seniors.
- Locating activity hubs and higher density residential next to transit stations.
- Designed for people, with inviting pedestrian-accessible public spaces.
- Planned to reduce reliance on the automobile.
- Offering residents the choice to live, work, play, learn or shop within Otay Ranch.

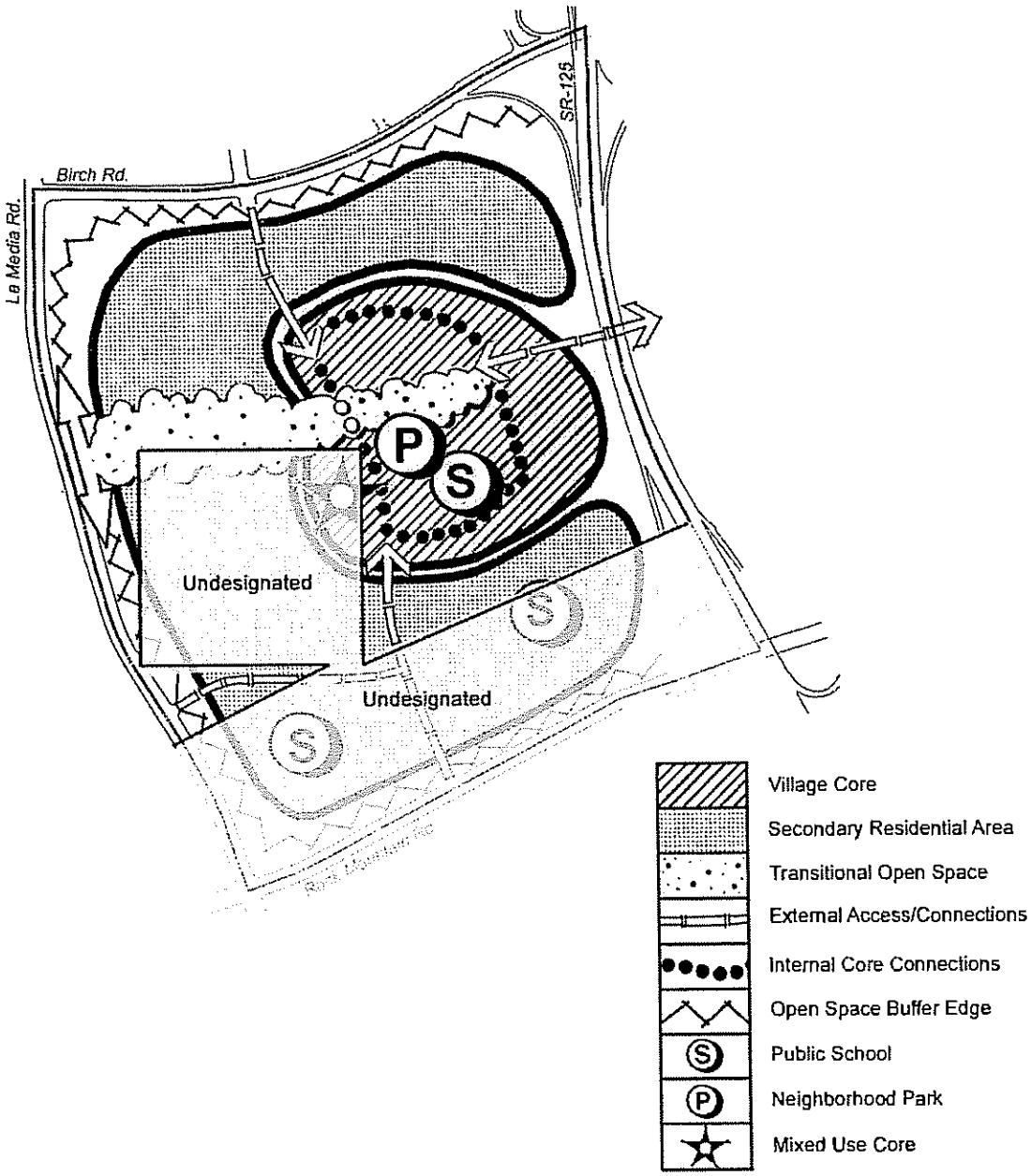
Village Seven is one of eleven "urban villages" identified in the Otay Ranch General Development Plan for areas located adjacent to existing urban areas. Each urban village includes a Village Core which provides a unique focus to create a sense of identity. For Village Seven, the focal point and commercial hub is the Village Core located in the central portion of the planning area, at the junction of the entry roads and an open space corridor. The Village Core is a central area of more intense uses, including a local transit stop, multi-family housing, mixed use, neighborhood park, elementary school and community serving activities. The surrounding, primarily single family residential area, is identified as the "secondary area" in the General Development Plan.

The village core will connected to the open space greenbelt by trails which will extend to the EUC, with its urban character, to the east and the more natural Wolf Canyon and adjacent villages to the west. The village core is envisioned to include a "town square" mixed-use (commercial/residential) area. The commercial configuration will be defined in greater detail through the Master Precise Plan process for the village core. An elementary school, neighborhood park and multi-family housing complete the village core area (see Community Structure Exhibit 1.4). The core's direct connection to the EUC provides mutual benefits to each Village/Planning Area. The Village Seven secondary area is comprised of single family residential dwellings located north and south of the central core area and sites for a middle school and a high school (see Community Structure Exhibit 1.4).

II.2.1.5 Legal Significance/EIR

The project is subject to the requirements of the California Environmental Quality Act (CEQA). The provisions of CEQA will be implemented by the City as a part of the approval process for this SPA plan package. All mitigation measures identified and incorporated into the project as a part of the CEQA process shall be implemented through this SPA plan or other appropriate component(s) of the SPA plan package. Implementation of mitigation requirements will be reviewed as defined in the mitigation monitoring program prepared for the project.

Community Structure



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

6/14/04

Exhibit 1.4

II.2.1.6 SPA Plan Consistency with GDP/PC Zone District

A SPA Plan must be consistent with the Otay Ranch General Development Plan and the Chula Vista General Plan. According to the Otay Ranch General Development Plan, consistency of the Sectional Planning Area (SPA) Plan and subsequent discretionary applications with the General Development Plan is evaluated by the following criteria (GDP Part II, Chapter 1, Section E, Subsection 2):

- *Total land use acres for each individual village may not vary by greater than 15% of the designated acres as indicated on the overall project summary table of the Otay Ranch GDP, except for the reasons of environmental/wildlife corridor reservations.*

- *Mixed-use and medium-high and high density residential uses for a village may not exceed the Otay Ranch GDP specified acres as indicated on the overall project summary table of the Otay Ranch GDP, except as permitted by transfer, consistent with the Otay Ranch GDP requirements.*

- *Units may be moved between villages in response to the location of major public facilities, i.e. schools.*

- *The total number of units within a village may not exceed the total number of units as indicated on the Overall Project Summary Exhibit of the Otay Ranch GDP for that village.*

- *If the residential development area is reduced at the SPA level, priority should be given to preserving the amount of land devoted to higher densities supporting transit and pedestrian orientation.*

- *The Otay Ranch Overall Design Plan shall be accepted prior to or concurrent with the approval of the first SPA, and shall be subject to review and approval by the City of Chula Vista and County of San Diego.*

- *Village Design Plan shall be subject to review and approval concurrent with SPA approval, by the responsible jurisdiction.*

With respect to the last two criteria, the Overall Design Plan was adopted with approval of Otay Ranch SPA One and the Village Seven Design Plan is being submitted with this proposed SPA Plan. The remaining consistency criteria are also met as noted in the following discussion which identifies the relevant provisions of the Otay Ranch General Development Plan for Village Seven and describes the appropriate responses included in the SPA Plan package.

The Village Seven site is defined in the Otay Ranch General Development Plan. The following description of the site and setting is taken from that document (Part II, Chapter 1, Section F, Subsection 7.a):

Village Seven is comprised of approximately 421 acres located east of Wolf Canyon and north of Rock Mountain Road.

Open Space and Habitat: *The Village Seven site has historically been used for agricultural purposes and does not contain significant environmental resources. The upper reaches of Wolf Canyon extend into the village, although this area has no sensitive resources.*

Land Use: *Village Seven is located in the interior of the Otay Valley Parcel, surrounded by land used for agricultural activities. The village is surrounded by Villages Six, Eight, Four and the Eastern Urban Center (EUC) to the east, across SR-125. Village Seven is located immediately west of the proposed SR-125. A 51.9 acre Vortac facility (an aviation navigational facility) is located within the village site.*

Visual: *Village Seven contains views into the upper reaches of Wolf Canyon, and more distant views to the mountains to the east and northeast. The Vortac facility provides potentially negative near views within the village.*

Relationship to Other Otay Ranch Villages: *Village Seven has a direct access to the Eastern Urban Center (EUC), and a close relationship with Villages Two and Four, the lower density villages on the edges of Wolf Canyon to the west. Village Seven is located between these lower intensity villages and the urban uses planned for the Eastern Urban Center. Thus, Village Seven will provide a transition from the lower densities, open space, and recreational opportunities near Wolf Canyon to the more intense neighborhoods in the EUC.*

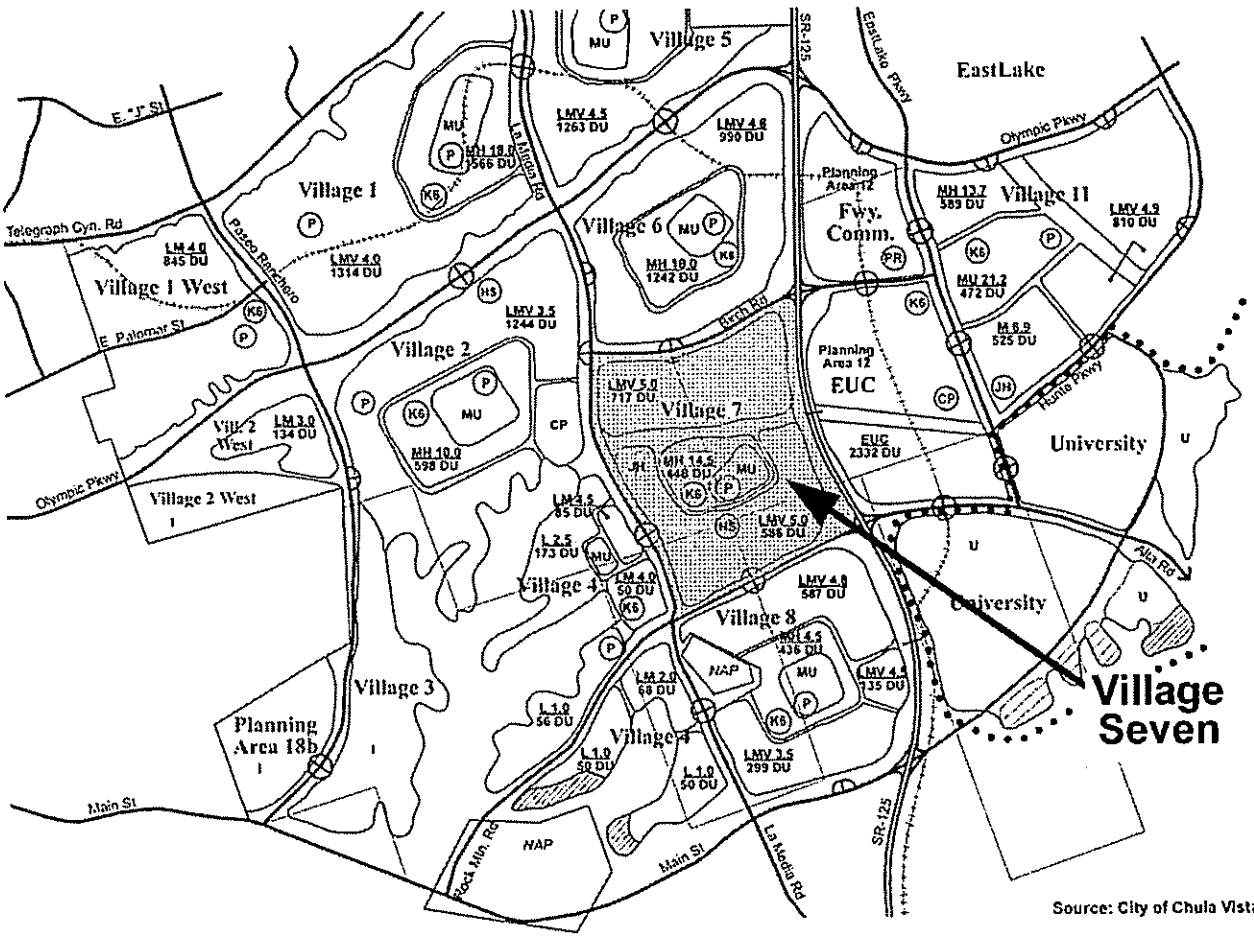
Subsequent to the preparation of the General Development Plan quoted above, Otay Ranch SPA One comprising Villages One and Five was approved and necessary construction permits issued. With approval and development of SPA One, along with more detailed engineering studies, the alignment of the boundary arterials, La Media Road on the west and Birch Road on the north have been more precisely aligned. The proposed alignment of future SR-125, the eastern SPA boundary, has also been modified. These changes in alignments to the major roads forming the boundaries of the SPA have caused a change in total acreage within the planning area, as noted in the project statistics discussion below. However, the physical boundaries of the SPA are consistent with the General Development Plan. Also, more detailed mapping has determined that the Vortac facility is only approximately 50 acres.

The General Development Plan also provides a basic description of the development to be included within Village Seven, development statistics, and a generalized map depicting land use locations and development policies (see General Development Plan Map Exhibit 1.4). The following village description is taken from the General Development Plan text (Part II, Chapter 1, Section F, Subsection 7.b):

Village Seven is an urban village. Urban Villages are adjacent to existing urban development and are planned for transit oriented development with higher densities and mixed uses in the village cores. Village Seven includes:

- ❑ *A maximum of 1,053 single family residential units*
- ❑ *A maximum of 448 multi-family residential units*
- ❑ *Build-out population of approximately 4,512*
- ❑ *A middle school*
- ❑ *A high school*
- ❑ *A trail connection through the village connecting Wolf Canyon to the west and the Eastern Urban Center to the east*
- ❑ *A village core area containing:*
    - *Commercial uses in a mixed use setting*
    - *Public and community purpose facilities*
    - *A transit stop*
    - *An elementary school*
    - *Multi-family residential*
    - *A Town Square/Village Green/Main Street*
    - *Affordable Housing*
    - *Neighborhood Park*

Adopted General Development Plan



Source: City of Chula Vista

Otay Ranch

Exhibit 1.5

The proposed Overall Conceptual Village Plan (Exhibit 1.6) demonstrates consistency with this description. The single family, multi-family and total residential unit counts are consistent with the General Development Plan. The specific uses and village components included in the initial SPA approval are shown on Exhibit 1.7, the Site Utilization Plan.

The core area shown on the Overall Conceptual Village Plan will provide: commercial uses in a mixed use "town square" setting in the MU-1 and TS-1 area which will include a transit stop; an elementary school in Neighborhood S-3; neighborhood park in P-1; and, multi-family housing on Neighborhoods R-5 through R-7 (some include affordable housing). Adjacent to the village core, neighborhood S-1 will be a high school site and to southwest S-2 will be a middle school site.

In addition to the narrative village description, the General Development Plan includes land use statistics as shown in Table A below (from GDP Part II, Chapter 1, Section F, Subsection 7.b).

Table A
GDP Land Use Table

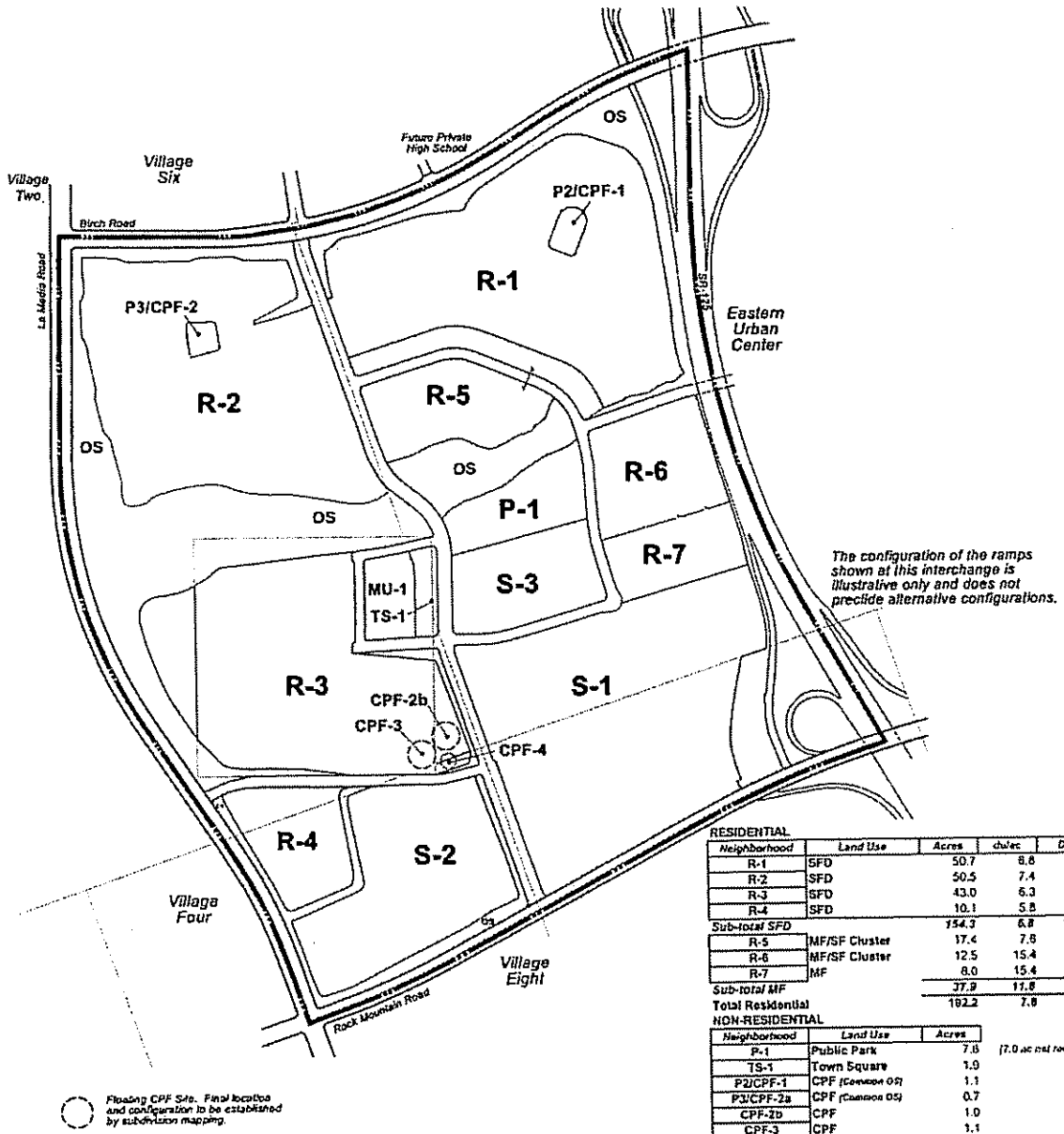
Village Seven													
Use	SF Units	MF Units	Total Units	Res. AC	du/AC	Park AC*	CPF AC	Sch. AC	C'ml. AC	OS AC	Art. AC	Total AC	Approx. Pop.
LMV	1,053	0	1,053	210.6	5.0	--	--	75.0	--	--	--	285.6	3,370
MU	0	0	0	0.0	0.0	9.3	6.3	--	7.2	--	--	22.8	0
MH	0	448	448	30.9	14.5	--	--	10.0	--	--	--	40.9	1,142
OTHER	0	0	0	0.0	0.0	--	--	--	--	45.3	17.1	62.4	0
TOTAL	1,053	448	1,501	241.5	--	9.3	6.3	85.0	7.2	45.3	17.1	411.7	4,512

*Part of park acreage requirements have been allocated to community parks. Actual park size to be determined by Parks Master Plan at SPA level.

The statistics provided on the Overall Conceptual Village Plan and Site Utilization Plan (Exhibits 1.6 and 1.7) are not directly comparable to those in the GDP table since they are net of interior circulation and the total acreage within the planning area has changed as detailed previously. Both are intended to be statistically consistent with the General Development Plan land use list and statistical summary while reflecting more accurate data. Acreages on both exhibits are based on planimeter readings to the nearest tenth acre; these statistics may change based on more precise engineering calculations.

Overall Conceptual Village Plan

(in Site Utilization Plan format)



RESIDENTIAL

Neighborhood	Land Use	Acres	du/ac	DU
R-1	SFD	50.7	6.8	346
R-2	SFD	50.5	7.4	375
R-3	SFD	43.0	6.3	273
R-4	SFD	10.1	5.8	59
Sub-total SFD		154.3	6.8	1,053
R-5	MF/SF Cluster	17.4	7.6	132
R-6	MF/SF Cluster	12.5	15.4	193
R-7	MF	8.0	15.4	123
Sub-total MF		37.9	11.8	448
Total Residential		192.2	7.8	1,501

NON-RESIDENTIAL

Neighborhood	Land Use	Acres	
P-1	Public Park	7.8	(7.0 ac net req'd)
TS-1	Town Square	1.9	
P2/CPF-1	CPF (Common OS)	1.1	
P3/CPF-2a	CPF (Common OS)	0.7	
CPF-2b	CPF	1.0	
CPF-3	CPF	1.1	
CPF-4	CPF	0.2	
S-1	High School	55.8	(50.0 ac net req'd)
S-2	Middle School	25.6	(25.0 ac net req'd)
S-3	Elem. School	11.1	(10.0 ac net req'd)
MU-1	Mixed Use/Comm.	3.7	
OS	Open Space	60.5	
Cir.	Circulation	62.9	
Total Non-Residential		233.2	
VILLAGE TOTAL:		424.4	3.5 1,501

CITY OF CHULA VISTA

Vista Verde

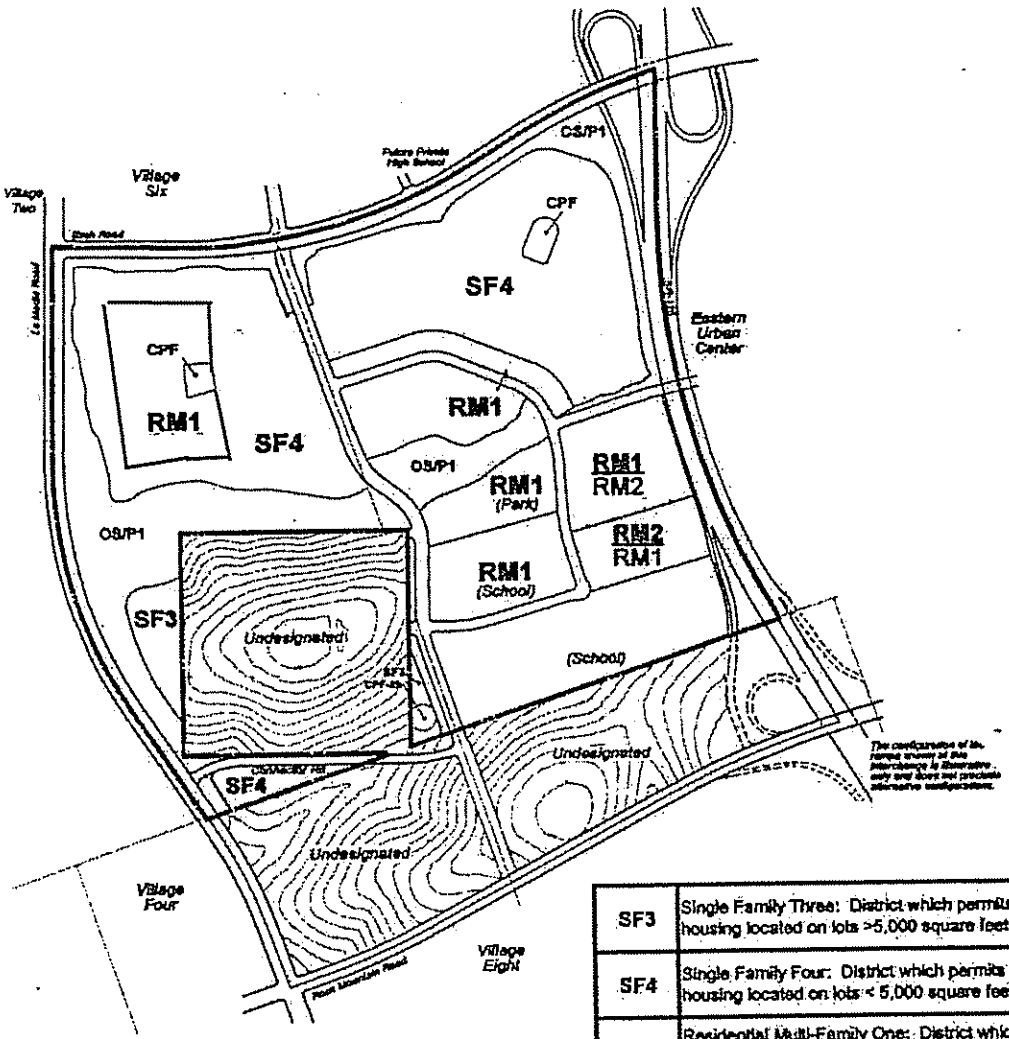
Village Seven - Otay Ranch

Chris Land Planning

5/24/04

Exhibit 1.6

Land Use Districts



SF3	Single Family Three: District which permits single family housing located on lots >5,000 square feet.
SF4	Single Family Four: District which permits single family housing located on lots < 5,000 square feet.
RM1	Residential Multi-Family One: District which permits housing ranging from 8 units/acre up to 14.9 units/acre including small lot single family, alley, duplex, townhouse and stacked flats product types
RM2	Residential Multi-Family Two: District which permits housing at densities from 15+ units/acre.
CPF	Community Purpose Facility: District which permits uses established pursuant to the Community Purpose Facilities requirements of the P-C Planned Community Zone
OS/P1	Open Space/Park One: District which permits developed or usable open space and park uses, and may include naturalized open space

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Crd Land Planning

5/25/04

Exhibit PC-1

In addition to the village description provided in narrative and statistical form, the Otay Ranch General Development Plan also includes specific policies to be implemented in the SPA level planning. These policies are re-stated below (from GDP Part II, Chapter 1, Section F, Subsection 7.c):

Village Character Policies:

- *The village character should be guided by the following qualities:*
  - *The greenbelt corridor connecting the village with Wolf Canyon, the Eastern Urban Center and Salt Creek shall be a unifying feature of the village.*
  - *Compatibility with the Eastern Urban Center.*
  - *Views into Wolf Canyon and distant views to the mountains to the east and northeast.*
  - *Complimentary relationship with Village Four.*
- *Higher densities shall be strategically located to provide a transition from the more intense urban uses of the Eastern Urban Center and SR-125, to the lower intensity uses near Wolf Canyon.*

Village Core Policies:

- *The greenbelt connection which winds through the village shall be an integral design element of the village core, potentially connecting open space, trails, recreational amenities, civic uses and schools. The greenbelt may be located within or adjacent to the core area.*

Parks and Open Space Policies:

Application of the 3 acres per 1,000 residents standard would result in the development of 13.5 acres of local parks in Village Seven. To satisfy this requirement, 9.3 acres of neighborhood parks/town square are planned. The remaining obligation is satisfied through the provision of community parks in Villages Two, Ten and the EUC.

The following policies shall guide the design of parks and open spaces in Village Seven:

- *A regional pedestrian and open space link will be provided through the village connecting Wolf Canyon on the west to the Eastern Urban Center and Salt Creek on the east. This greenbelt connection may take several forms, including a greenbelt, parks, trails, and the pedestrian portion of promenade streets. The average width and continuous character of the greenbelt shall be defined in the Overall Ranch Design Plan. The greenbelt shall*

average 200 feet in width (excluding street ROW) over the entire length of any village (requirements set forth in Section E, Implementation) to provide a direct connection between the village core, Wolf Canyon, and the intense uses of the Eastern Urban Center (see GDP/SRP Land Use Map).

- *The average width of the pedestrian open space/trail corridor shall be calculated from one edge of the village to the other.*

- *Buffering shall be provided to screen the Vortac facility (aviation navigation facility) from adjacent land uses, if this use is not relocated.*

Other Village Seven Policies:

- *Three schools are planned in Village Seven. These shall be appropriately separated with intervening land uses. The high school and middle school shall abut the regional open space, providing for non-vehicular access.*

- *A transit stop shall be approximately located at the SPA level and will be conditioned for dedication at the Tentative Map level.*

The development concept depicted on the proposed Overall Conceptual Village Plan and Site Utilization Plan, Exhibits 1.6 and 1.7, implements these policies. This implementation is further described in the Section II.2.2 Development Concept, in this SPA Plan and in the Village Seven Design Plan. The SPA Plan package provides detailed design and character responses to these policies and/or establishes standards and guidelines for subsequent planning and design approvals in Village Seven to assure that the General Development Plan policies are respected in final development plans.

The greenbelt corridor is implemented with an open space designation extending east from La Media Road to the neighborhood park site and a roadway connecting to the EUC via an underpass crossing of SR-125. The greenbelt will provide a design focus and visual amenity for the entire village, particularly since it is immediately adjacent to the village core which will be the activity focus for the village. Higher densities are also clustered around the eastern end of the greenbelt, which transition to the higher intensity uses planned for the EUC, east of SR-125. Village Four, west of La Media Road, is planned in the General Development Plan with lower residential densities than other urban villages and is and is being considered as a location for a Community Park. It will also extend the Wolf Canyon open space corridor as the canyon becomes more prominent to the west. These features will be natural extensions of the low density residential and open space uses on the western edge of Village Seven. Development areas at the top of the Village Seven perimeter slopes on the north and south side of the greenbelt will enjoy views to the distant mountains to the northeast and is given to residential and park purposes.

Consistent with the Village Core policy, the Wolf Canyon greenbelt is an integral design feature, at the northern edge of the mixed-use area and bisecting the village core. It provides connections among Village Seven uses/destinations as well as community-wide and regional amenities (EUC, community park to the west, and ranch-wide trails and open space). The open space greenbelt ranges from over 600 feet in width at the western end to approximately 200 feet wide adjacent to the park. The greenbelt continues east with a more formal trail design adjacent to residential paralleling the street accessing the EUC This size exceeds, and design is consistent with, the Park and Open Space Policies width requirements. This shall be specifically established during the Tentative Map process.

The park area shown on the proposed Site Utilization Plan is consistent with the park provision standard from the Otay Ranch General Development Plan and park design criteria included in the City's Parks Master Plan. Park acreage has been calculated based on the proposed mix of residential unit types shown on the Site Utilization Plan. Actual park dedication and fee requirements shall be based on the actual units approved in subsequent phases of planning.

Since the Village Seven development concept envisions the relocation of the Vortac facility, no screening or buffering is proposed for the ultimate condition. This may be an interim design issue however, as development begins around the existing facility (see Village Design Plan). Grading which preserves the Vortac site, as an interim condition, is also described in the Grading chapter of this SPA Plan. Appropriate buffer areas are shown as open space on the proposed Site Utilization Plan, outside of development Neighborhood boundaries. Buffers to homes along the arterials average 75 feet in width consistent with the General Development Plan Land Use Map.

With regard to the Other Village Seven Policies, guidance for site planning is addressed in the Village Seven Design Plan. The high school site (S-1) is separated from the elementary school site (S-3) by the core promenade street and from the middle school site (S-2) by the village entry street and the R-4 residential neighborhood. The elementary school takes access off the Core Promenade instead of Magdalena Avenue. The middle school and elementary schools will be separated by considerable distance. Because of the limited amount of regional open space "edge" available, the middle and high schools are located to the south and the greenbelt edge is given to residential and park uses. In addition, the high school is more appropriately located adjacent to an arterial road due to peak traffic volumes generated each morning and afternoon, at the beginning and end of the school day. Non-vehicular access to these school sites will be readily available via trails along the greenbelt and each of the interior village roads shown on the Site Utilization Plan.

Although the community-wide fixed route transit system does not enter this village, a transit stop for bus connections to other villages will be provided within the Village Core, near parcels MU-1 and TS-1 which will comprise the focal point of the core area.

In addition to the Village Seven-specific requirements addressed above, the GDP, Part III Implementation, also sets forth numerous implementation tasks that must be completed with the preparation/approval of the various SPA Plans which will implement the GDP. The consistency of

the Village Seven project with those requirements are outlined in Appendix A of this SPA Plan. The GDP also establishes numerous general goals and objectives for land use; mobility; housing; parks, recreation, open space; public facilities; safety; phasing; and resource protection, conservation and management. Appendix A of this SPA Plan provides a re-statement of the GDP goals and objectives followed by an explanation of how they are implemented by the plan for Village Seven.

II.2.1.7 Related Documents

There are several documents related to this SPA Plan. The Chula Vista General Plan and Otay Ranch General Development Plan establish the broad policy level standards and requirements for planning each of the villages/SPAs in Otay Ranch. The General Development Plan also quantifies the development intended within the SPA and establishes the PC Zoning implementation process.

All of the other documents which are components of the SPA plan are prepared concurrently and based on this SPA plan. The various documents which are components of the SPA plan package are depicted in Exhibit 1.8 and include PC District Regulations (zoning regulations), Village Design Plan (design guidelines), Public Facility Finance Plan (facility financing and phasing), and single issue plans (Parks, Recreation, Open Space and Trails; Water Conservation; Non-Renewable Energy Conservation; Air Quality Improvement; and, Affordable Housing). Project level CEQA documents are also prepared concurrently, building upon the more broad based environmental analysis completed at the General Development Plan level, to document potential environmental impacts and identify mitigation measures to reduce or eliminate such impacts.

Subsequent to the approval of all the SPA level documents, a landscape master plan, subdivision maps, grading plans, and improvement plans will be prepared. These will provide the necessary details to actually construct the project described by the SPA level documents. These plans, the construction process and ultimate uses/activities within the SPA are required to be consistent with the applicable provisions of this SPA Plan, related documents and applicable City of Chula Vista policies and standards. An index of SPA Plan requirements, including topics addressed in related documents is provided in Appendix B.

GDP/SRP & SPA Documents

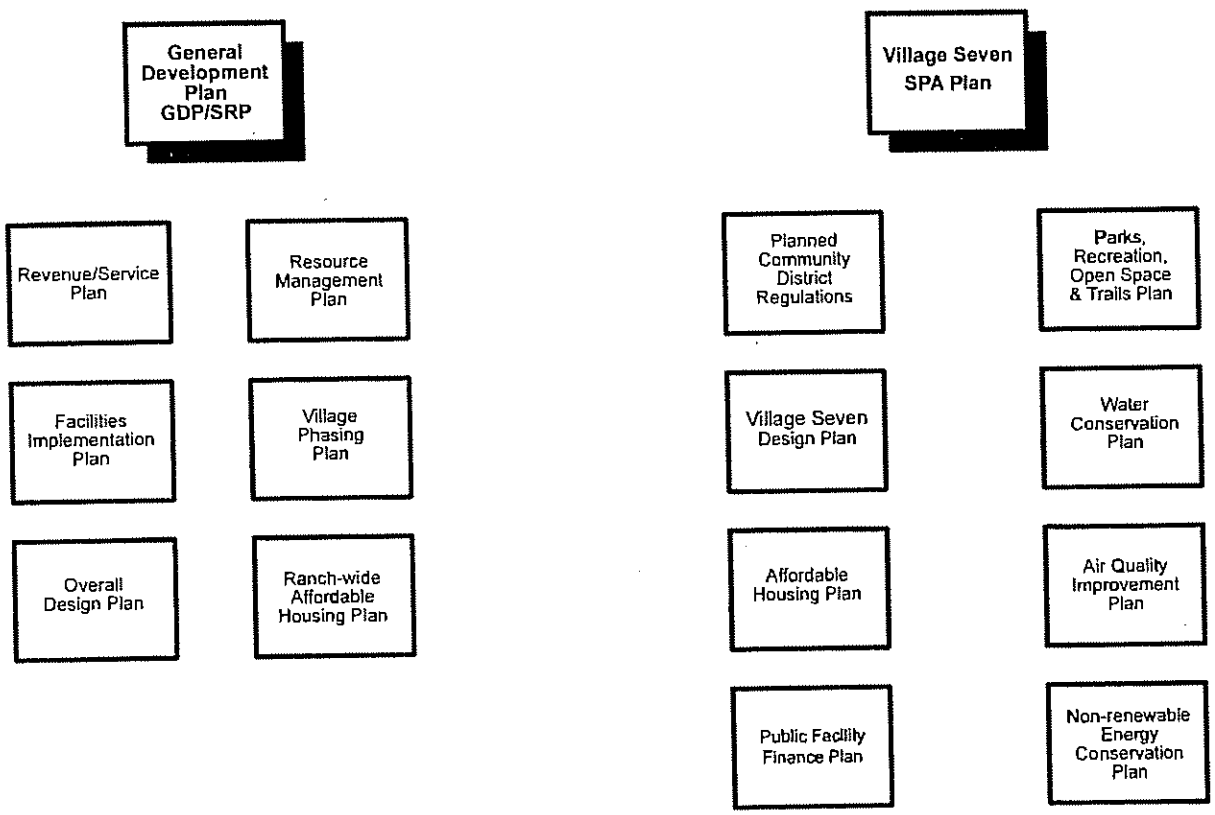


Exhibit 1.8

II.2.1.8 Planning Process

At the broadest level, the planning process for Otay Ranch Village Seven begins with the Chula Vista General Plan which is the foundation for planning and land use decision making in the City of Chula Vista. Because of its role, a determination of consistency between the General Plan and the Otay Ranch General Development Plan was necessary and was made when the General Development Plan was adopted. The Otay Ranch General Development Plan is an implementation tool for the General Plan, via the PC zoning process. As an implementing tool, the General Development Plan applies and details the broad policies of the General Plan to specific needs of the Otay Ranch project area. For example, the Land Use Element of the General Plan designates land uses for Otay Ranch Village Seven in a more general manner but very similar to the Otay Ranch General Development Plan Land Use Map. Similarly, the policy requirements of the other General Plan Elements are implemented/detailed in the General Development Plan which now serves as the primary guide for more detailed planning at the village/SPA level.

On October 28, 1993, the San Diego County Board of Supervisors and Chula Vista City Council jointly adopted the Otay Ranch General Development Plan/Subregional Plan for the 36-square mile master planned community of Otay Ranch. The Otay Ranch General Development Plan includes plans for eleven urban villages, a golf course community, a resort village, the Eastern Urban Center, four industrial areas and two rural estate planning areas. The Otay Ranch open space system, consisting of 13,000+ acres, facilitates completion of the Chula Vista Greenbelt System, as articulated in the Chula Vista General Plan and Greenbelt Master Plan. San Diego's light rail transit system or a fixed route system connecting to the light rail system, is planned to traverse Villages One, Five, Six, the Freeway Commercial area, the Eastern Urban Center and the University site. A park and ride facility will be provided in the Freeway Commercial area to serve the trolley.

The Otay Ranch General Development Plan permits urban levels of development on the Otay Valley Parcel, implemented through the Otay Ranch village concept. The village concept was developed with input from city and county urban designers, the San Diego Association of Governments (SANDAG), and the Metropolitan Transit Development Board (MTDB). These agencies have also participated in ongoing planning for the individual villages. The concept provides for urban villages approximately one mile square, distinct entities defined by the open space system and major arterials.

Village cores are centrally located within each village. These mixed-use village centers are designed to contain essential facilities and services: elementary schools, shops, civic facilities, child care centers, local parks and higher density housing. A majority of the village population is to live within walking distance of the transit stations located in village cores.

The General Development Plan consists of the Otay Ranch General Development Plan, including the Land Use Map, Facility Implementation Plan, Service/Revenue Plan, Village Phasing Plan, and Resource Management Plan. The General Development Plan Land Use Map depicts generalized facility locations, land use designations, and the open space systems for Otay Ranch. Based on the

General Development Plan provisions for Village Seven, this implementing SPA Plan has been developed.

II.2.2 Development Concept

II.2.2.1 Design Influences

A number of factors influence the design of the Otay Ranch Village Seven SPA Plan. The primary design influence is the pedestrian friendly village concept described in the Otay Ranch General Development Plan. Other influences are site conditions and characteristics, such as landforms, biological resources, drainage patterns, aesthetics, land use relationships and circulation patterns.

Existing and planned adjacent development patterns, Chula Vista General Plan policies, and the Otay Ranch General Development Plan provisions governing adjoining undeveloped land also influence the design of Village Seven, including the regional open space system, off-site circulation, biology, public facility connections and the planned land uses for adjacent properties. These factors are briefly described below and depicted on the Design Influences Exhibit (Exhibit 2.1). Otay Ranch Village Seven design influences and requirements are also addressed in the Village Seven Design Plan and Landscape Master Plan.

Site Characteristics & Visual Context

Village Seven is bisected by the upper portion of Wolf Canyon, although the area has no sensitive resources due to historic agriculture uses. The canyon comprises most of the topographic character of the site, the remainder of which is gently rolling hills.

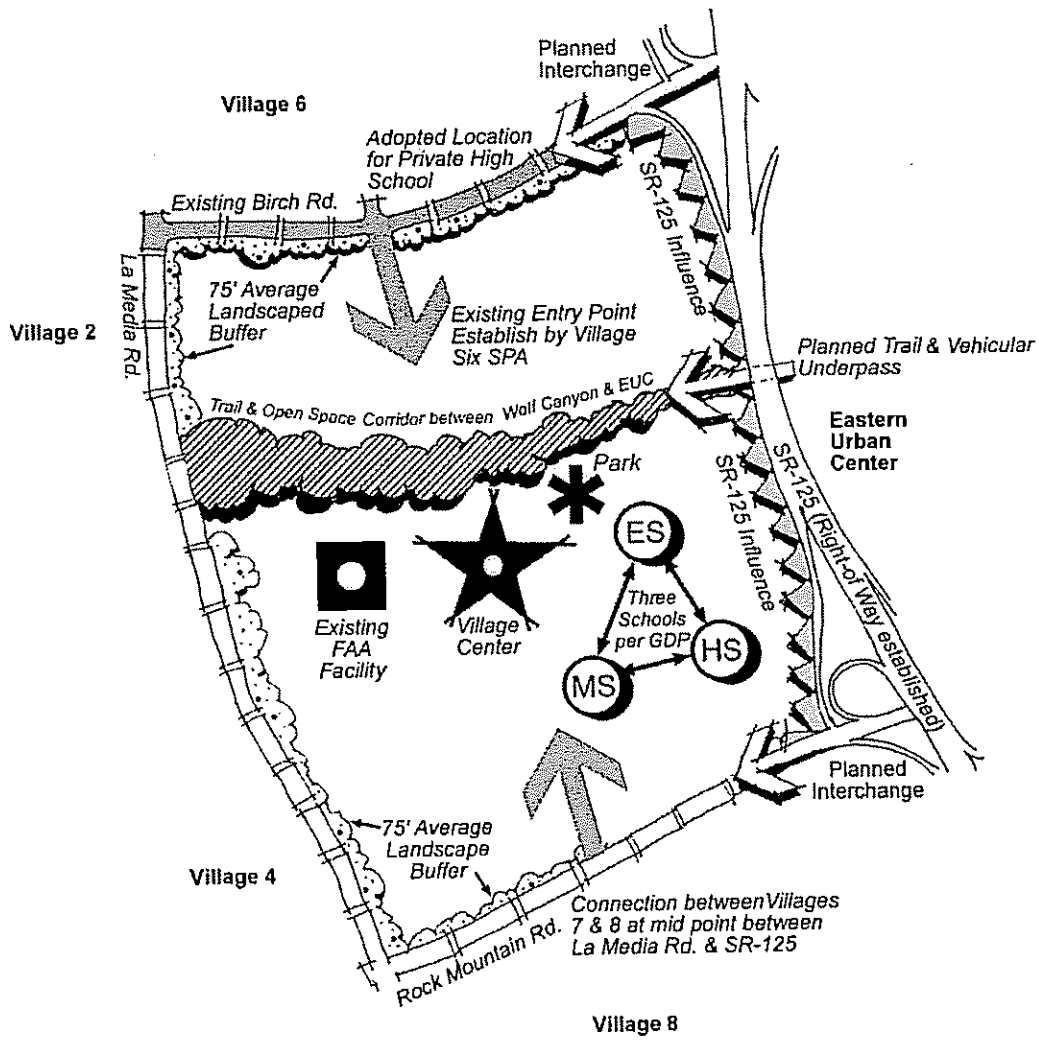
The village site is located in the interior of the Otay Valley Parcel between the proposed alignment of SR-125 and the planned extension of La Media Road. The proposed alignment of Birch Parkway forms the northern boundary of the village while Rock Mountain Road will form the southern boundary of the SPA.

The project area contains views into the upper reaches of Wolf Canyon, and more distant views to the mountains to the east and northeast. The Vortac aviation navigation facility provides potentially negative close-range views within the village if it is not relocated as planned.

Surrounding Land Uses

The Village Seven plan was also influenced by developing and planned surrounding land uses, all of which are within the Otay Ranch GDP. The Otay Ranch GDP requires a sensitive design that includes transition areas between villages. The northern edge of Village Seven is Otay Ranch Village Six, which is also defined as an urban village, separated from Village Seven by a major arterial (Birch Road). Villages Two and Four are immediately west of Otay Ranch Village Seven, across La Media Road. The proposed alignment of SR-125, a freeway, defines the eastern edge and separates Village Seven from the Eastern Urban Center. Village Eight is located to the south, separated from the Village Seven SPA by the proposed alignment of Rock Mountain Road.

Design Influences



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning
San Diego, CA (619) 223-7408
6/14/04

Exhibit 2.1

While surrounded by major roadways, Village Seven is defined by significant open space, landscape buffers and slopes at the edges. These separate the village from land uses in adjacent villages or planning areas and provide the major visual amenity extending to the village core. However, while relatively isolated from these adjacent areas, consistency with the General Development Plan provisions assures necessary and desirable connections (especially transit, trail, and other infrastructure) from Village Seven to the adjacent Otay Ranch community, existing and planned.

II.2.2.2 Land Use Pattern

The basic land use pattern intended for Village Seven is that of an urban village, surrounded by prime arterials and an open space buffer augmented by the major open space feature in Wolf Canyon, consistent with the Otay Ranch General Development Plan (see Overall Conceptual Village Plan, Exhibit 1.6). The land use pattern implements the village concept with higher intensity uses and residential densities within a village core and decreasing intensity/density away from the core area. The Village Seven Concetual Plan defines the village core in the central portion of the planning area, focused on the commercial/mixed-use and town square area. In addition to the commercial focal point, a public neighborhood park, and an elementary school site comprise the core, along with multi-family residential development averaging 11.8 units/acre. The surrounding secondary area includes the middle and high school sites, a cluster of three CPF sites at the intersection of the southern village entrance streets, and single family residential areas with designated densities ranging from 5.8 to 7.4 units/acre.

II.2.2.3 Density Transfer

The SPA Plan provides guidance for future development at the subdivision and improvement plan level, and is the basic reference for determining permitted land uses, densities, total units, and required public facilities. These are illustrated in the Site Utilization Plan, Exhibit 1.7, which is the principal map for this SPA Plan.

Even though the SPA Plan contains specific guidance for development, it is not intended to be used in a manner which predetermines the development solution for each and every Neighborhood. It is intended to be used as a basic guide which reflects the City's intent for determining the intensity, design and desired character of use for the property. The development pattern and interior circulation arrangement indicated on the Site Utilization Plan is based on preliminary design. Minor modifications may result from technical refinements in the tentative map process and these shall not require an amendment to this SPA plan as long as the plans and maps are generally consistent with the overall intent of this SPA plan. Minor modifications to these configurations that have been approved by the Director of Planning and Building may be implemented administratively as part of the tentative tract map approval process.

Specifically, a density transfer between Neighborhoods R-6 and R-7 is anticipated as detailed planning and design for these sites progresses. Development on these two sites is expected to be "blended" with a mixture of product types. The boundary line between the two parcels, as shown

on the Site Utilization Plan, is intended to be moved to accommodate the proposed site plans for each parcel. The mapped location of their common boundary is only intended to illustrate the relative magnitude of the currently proposed product mix on the two sites. The boundary and density adjustment shall be made with the approval of the first Design Review. The R-7 product is currently intended to be entirely multi-family and located toward the southern end of the site. The R-6 product may be multi-family or single attached/cluster but will be located to the northern end of the site. The site plan(s) for the overall site will likely share an entry or entries and strong internal circulation connections between the two product areas is expected. Reconfiguration of the R-6/R-7 boundary and density transfer, as required, shall be completed administratively with approval of a coordinated plan for both sites. However, the total number of dwelling units allowed shall not exceed the total shown on Exhibit 1.7 for the two Neighborhoods.

Further, the SPA Plan is not a guarantee that a certain dwelling unit yield will be achieved at the subdivision level. The maximum density as specified for individual Neighborhoods shall not be exceeded; however, actual dwelling unit yields for projects will be determined by field conditions, site plan and architectural review, and a number of external factors that influence the design and density of individual projects. Transfers in density from one Neighborhood to another may be permitted subject to Part II, Chapter 1, Section E, Subsection 2.c of the Otay Ranch General Development Plan.

II.2.2.4 SPA Adoption Area

This Village Seven SPA Plan provides comprehensive plans for the entire Village Seven area at a conceptual level in the Overall Conceptual Village Plan, as required by the Otay Ranch GDP. However, the applicant(s) do not own or control the entire project site and adoption of this SPA Plan, and associated regulations, plans and documents, shall only have effect within the area indicated on the Site Utilization Plan, Exhibit 1.7. Expansion of the Site Utilization Plan designated area, to include property within the Village Seven SPA owned by others shall require a formal amendment of this SPA Plan and all associated plans.

Although approval of this SPA Plan grants SPA-level approval only to the development designated on the Site Utilization Plan, it also represents the endorsement by the City of Chula Vista of the overall development plan described for the entire SPA, including infrastructure, utilities and other facilities required to support development within the adoption area which may be located outside of the adoption area. The location of any needed facility outside of the Site Utilization Plan designated area shall not preclude the City from taking any and all necessary steps to provide for such facilities concurrent with need and consistent with the approved Village Seven SPA Public Facilities Financing Plan.

II.2.2.5 Housing Programs

The predominant land use in Otay Ranch Village Seven is residential, intended to provide housing in response to local market demands. This SPA permits a variety of housing types in responding to

these demands, ranging from multi-family development at 15.0 du/ac to single family homes at 4.2 du/ac. The SPA Plan divides the housing mix in two residential categories: Multi-family and Single Family. Within these residential categories, a number of housing types are permitted to respond to changing market conditions.

The City of Chula Vista ("City"), along with all other cities in California, is required by state law to have a Housing Element as a component of its General Plan. The Housing Element describes the housing needs of the community and the responses necessary to fulfill them.

The Chula Vista Housing Element contains numerous objectives, policies and related action programs to accomplish these objectives. Key among these policies is the affordable housing policy which requires that residential development with fifty (50) or more dwelling units provide a minimum of 10% of the total dwelling units for low and moderate income households, one-half of these units (5% of the total project) being designated to low income and the remaining five percent (5%) to moderate income households.

In order to guarantee the provision of Affordable Housing opportunities, the City requires that a specific Affordable Housing Program ("AHP") and agreement(s), consistent with the Housing Element, be prepared and signed by the Developer(s). This will serve as the required Affordable Housing Plan required by the General Development Plan. The AHP delineates how, when and where affordable housing units are to be provided, intended subsidies, income and/or rent restrictions, and methods to verify compliance. These programs and policies shall be applied to the Otay Ranch Planned Community in general, and the Village Seven SPA specifically, as detailed in the adopted Ranch-Wide Affordable Housing Plan and the Otay Ranch Village Seven Affordable Housing Program included as a component of this SPA Plan. Due to multiple ownerships within Village Seven, the Affordable Housing Program will be designed to accommodate commitments by more than one property owner to provide their "fair share" of affordable housing opportunities based on their share of the market-rate housing provided within Village Seven.

II.2.2.6 Urban Design Concepts

The following summarizes the basic urban design concepts to be implemented in Otay Ranch Village Seven. The Village Seven Design Plan provides more detailed guidance and will be utilized to guide and review the proposed urban design developed at later, more detailed levels of planning and design, particularly in the Village Core where the strongest urban design statements are anticipated.

The organization of land uses is the key to the village concept. Villages are comprised of two basic components: a central area of more intense uses, the Village Core and surrounding areas typically consisting of residential uses, the Secondary Area. The village core serves as the focal point and commercial hub of the village. Village cores are centered around a main street or plaza and include the following land uses: retail/commercial, residential, neighborhood parks and other civic or community uses, such as churches, child care or senior centers. Residential neighborhoods surround the village core, and provide a range of housing opportunities. The Otay Ranch General

Development Plan calls for designs which emphasize and enhance each village's characteristics to create neighborhoods and communities with unique identities.

Village Cores are generally expected to have a more formal and organized design and appearance (increased emphasis on hardscape and building design) while secondary areas are less formal and organized (dominance of informal landscape). The Otay Ranch General Development Plan includes the following design guidance for Village Core areas (Part II, Chapter 1, Section D Subsection 1.b):

- *Village core buildings shall not exceed four stories. Buildings constructed at lower heights may be converted to four-story buildings.*
- *Locate taller buildings near the center of the village core, with building heights and sizes gradually decreasing outward from the center.*
- *Buildings shall have front access and orientation to streets and sidewalks. Access to parking lots shall be secondary to the street.*
- *Avoid street side facades of unarticulated blank walls or an unbroken line of garage doors.*
- *Building facades shall be varied and articulated to provide visual interest. Encourage street level windows and numerous building entries. Arcades, porches, bays, and balconies shall be encouraged.*
- *Use landscape themes to help define village character.*

These basic concepts are expanded upon in the Village Seven Village Design Plan.

II.2.2.7 Landscape Concept

All development in Otay Ranch Village Seven shall comply with all the requirements stated in the *Chula Vista Landscape Manual* adopted by Resolution No. 17735 in November 1994 and any subsequent revisions, and the *Landscape Plan Review Checklist* dated November 2003.

The Landscape Concept Plan, Exhibit 2.3, provides a consistent design framework for community areas while allowing flexibility in individual Neighborhoods. The Village Seven landscape plan builds upon the Otay Ranch-wide landscape design concepts of the Overall Design Plan. The Overall Design Plan identifies important elements of the overall project setting and establishes ranch-wide design concepts or themes which will integrate the many diverse components of the developed community. Focusing on interconnecting community design elements, the Overall Design Plan established design concepts for the major arterials which surround Village Seven, the Village Greenway (see Section II.2.3.7 of this SPA Plan) which connects Village Seven with adjacent

villages, and identifies village entry locations. The village landscape concept detailed below is consistent with the applicable provisions of the Overall Design Plan.

The village landscape concept strengthens the design set forth in the land use plan. This design includes an urban village core, connected to prime arterials by village entry streets and an open space buffer surrounding the entire village and extending into the heart of the village. The land use plan calls for a village core with medium-high/high densities. The densities decrease when moving away from the core area.

The street system also contributes to the village structure and the street landscape treatments will be used as community design elements. The peripheral arterials, village entry streets and promenade streets will each have a distinct landscape theme with a dominant tree species and/or planting patterns in order to create specific appearances for each street category. Slope planting for Village Seven will be per the Landscape Master Plan for Village Seven.

Elements in the Landscape Concept include:

- La Media Road and Rock Mountain Road (Prime Arterial - Ranch Theme Street): Prime arterial streets shall have landscaping that incorporates the existing Ranch Theme in the Otay Ranch development. A specific canopy evergreen theme tree shall run the length of the street in the right-of-way and within the median. The evergreen canopy trees will immediately identify the Otay Ranch development.

- Birch Road (Six Lane Major Street): Six Lane Major streets shall have landscaping that incorporates the existing Ranch Theme in the Otay Ranch development. A majority of a deciduous theme tree mixed with an evergreen tree shall be in the median. Evergreen canopy trees shall flow along the right-of-way on both sides of the street. These trees shall blend with the adjacent developments.

- Village Entry Streets, Core and Village Promenade Streets: Canopy trees shall be used along the entire length of the street to add pedestrian scale and provide shade for all users. The design will have three forms: 1) in the Core area, tree wells at the curb will be used; 2) a parkway adjacent to the curb will be used in residential areas; and, 3) village entry areas shall have medians incorporated into the design. A double row of canopy trees will be provided along one side of the road and a single row on the opposite side.

- Entries: The Primary Entry area is the main point of entry to Village Seven. These are located at the entries from Birch Road and Rock Mountain Road. A tree that differs from the surrounding entry area will provide a unique accent statement and feeling of arrival at this entry point. Secondary Entries are incorporated in the Secondary Village Entry Street streetscape from La Media Road.

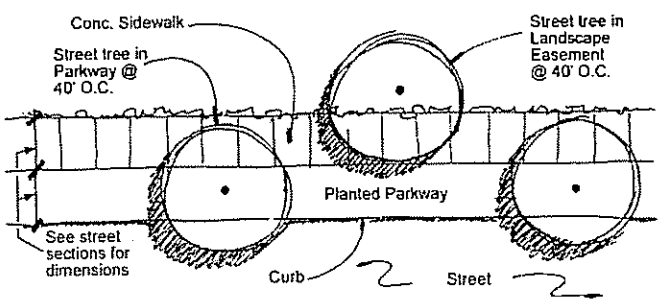
- Landmarks: Each landmark, whether primary or secondary, will have a distinct landscape character. As an example, the commercial/mixed-use area will have a common theme tree, so that it can be recognized and highlighted in the community.

- Special Landscape Zone (SR-125): This area is a buffer to the freeway view and noise. It will also be the entry way to Village Seven from the SR 125 freeway. The design for this area must follow the criteria stipulated in the "SR-125 Design Guidelines" prepared by DeLorenzo Inc., dated June 21, 1999.

- Landscape Buffer: The buffer is essentially the slope landscaping that surrounds Village Seven. It provides a landscape screen between the residents and the busy Prime Arterials and Major Street. The buffer acts as a view corridor for drivers along these roads. The landscape will include masses of spreading trees up and down the slope with drifts of shrubs below them.

- Wolf Canyon Greenbelt: Wolf Canyon is the most significant open space in Village Seven and an important component of the Chula Vista Greenbelt which surrounds the City. Wolf canyon landscaping will be consistent with a rustic natural setting. The canyon bottom will include a meandering, landscaped channel to improve the water quality of storm water run-off, which must be approved by the Regional Water Quality Control Board. It will be planted with informal groves of native California sycamore and willow trees. A coordinated design for the landscape palette and signing between landowners will be required. On adjacent drier slopes, native oak trees and associated plant materials will be planted. Above the cha nnel, a decomposed granite trail/service drive will provide recreation and maintenance access.

- Featured Side of Streets: The Promenade Streets, the Entry Streets, and Arterial Highways have a featured side of the street intended for pedestrians. This side of the street, which shall be identified during the Tentative Map process, shall have a staggered double row of street trees on one side to shade pedestrians. Exhibit 2.2 illustrates this concept. Parkway and sidewalk dimensions may vary with the particular street.

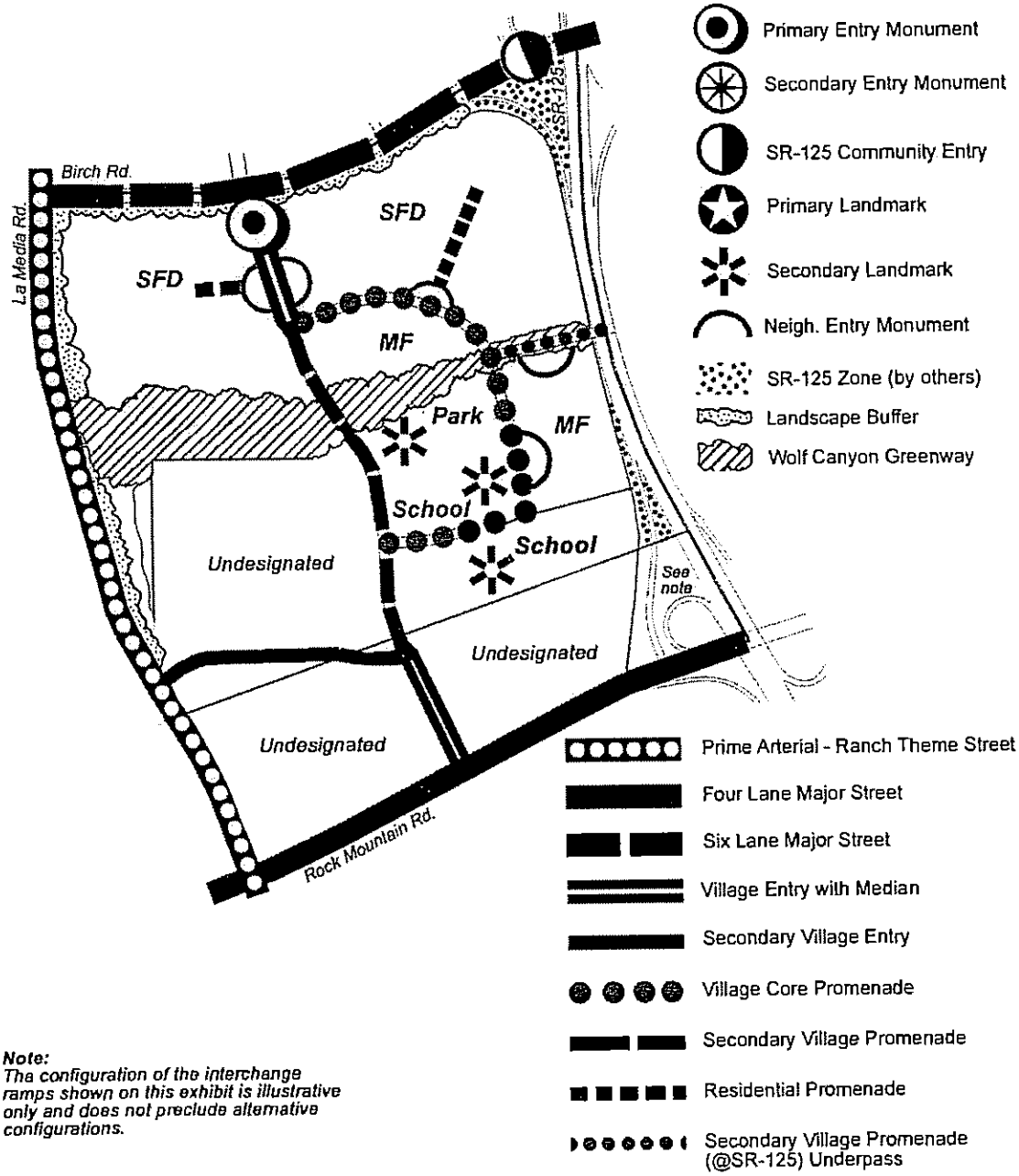


Staggered Double Row of Trees on Featured Side of Street
(Applies to featured side of Promenade, Entry Streets, and Arterial Highways)

Exhibit 2.2

- The Landscape Concept also includes an emphasis on water conservation and low-water use plant materials in appropriate locations. The Village Seven Village Design Plan and Landscape Master Plan provide further details on these design concepts.

Landscape Concept



Note:
The configuration of the interchange ramps shown on this exhibit is illustrative only and does not preclude alternative configurations.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning 8/14/04

Exhibit 2.3

II.2.2.8 Community Signage Program

Community signage (village entry signs, *etc.*) will be located according to the provisions of the Overall Design Plan. The details of sign design and location are provided in the Village Seven Village Design Plan.

In addition, to the permanent community signage identified above, a temporary village identification/entry sign may be installed during the initial residential construction/sales phase of Village Seven development. Such temporary signs and banners could be necessary due to the separate ownership/development scheduling of the village core and the majority of the secondary area within Village Seven. The secondary area is expected to develop earlier than the village core and during that time, village identity and marketing presence will need to be established independent of the primary village entry and village core. A temporary sign may be constructed along Birch Road and/or La Media Road concurrent with the initial sales of homes in Village Seven with approval of the Zoning Administrator, and shall be removed when 95% of the secondary area homes are occupied or after 5 years, whichever occurs first. Construction and removal of any temporary sign shall be the responsibility of the secondary area developer.

No highway oriented signage (oriented to SR-125) is permitted within Village Seven.

II.2.2.9 Agricultural Plan

The Otay Ranch Mitigation Measures adopted with the GDP require the preparation of an agricultural plan concurrent with the approval of any SPA affecting on-site agricultural resources. The Findings of Facts state that the agricultural plan shall indicate the type of agriculture activity being allowed as an interim of the site and establish buffering guidelines intended to prevent potential land use interface impacts relative to noise, odors, dust, insects, rodents and chemicals that may be associated with agricultural activities and operations.

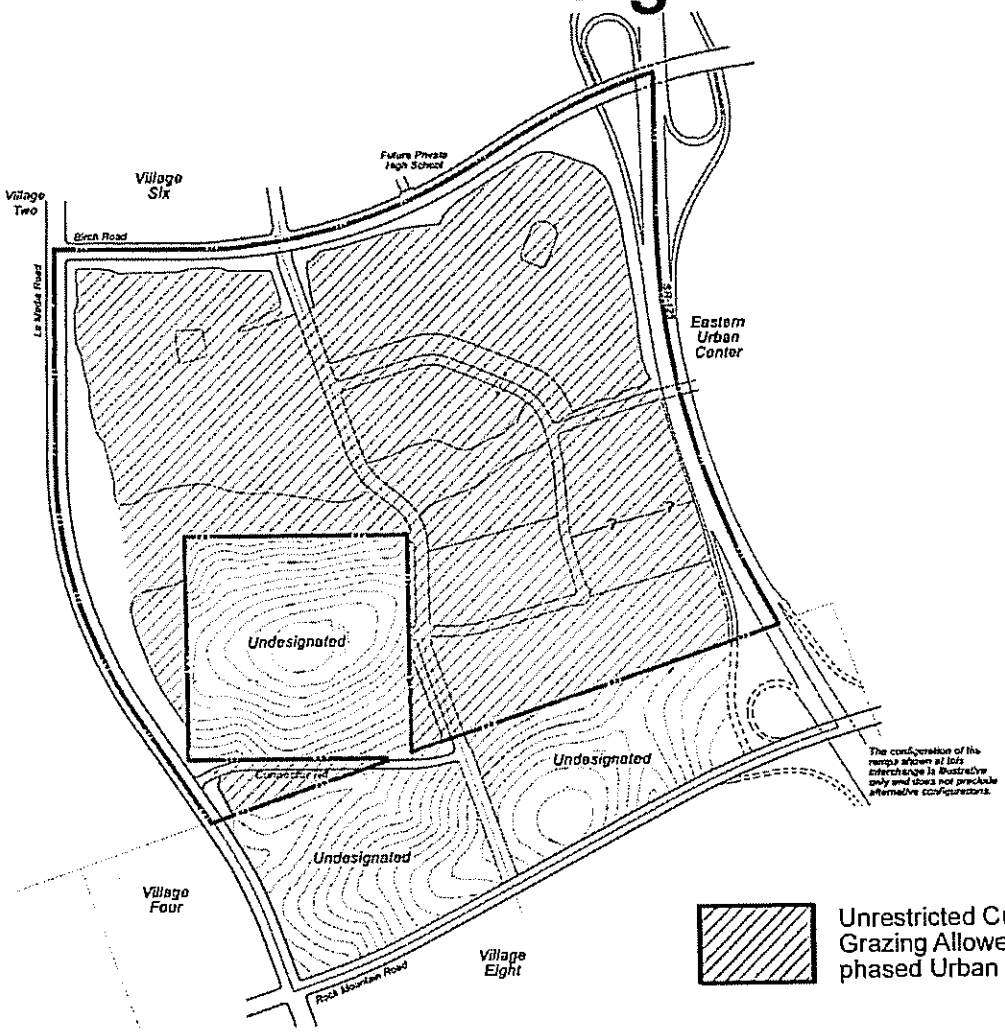
Historical agricultural uses in the Village Seven SPA project area include dry farming, as well as cattle and sheep grazing. Crop production was limited to hay and grains due to limited water availability. Between 1950 and 1960, the agricultural products from the property were primarily grains and lima beans. Cultivation and cattle grazing activities are permitted and currently conducted within the majority of the Village Seven SPA project area.

Land utilized for agricultural activities in areas surrounding Village Seven has decreased in recent years. Factors that have led to the decrease in agricultural use include the conversion of farmland to urban uses as a result of increases in land value (and property taxes). Property taxes often exceed income from agricultural production. The high cost of importing water for irrigation has also resulted in many agricultural activities becoming cost prohibitive.

The phased development of the Village Seven SPA will incrementally convert on-going agriculture uses to urban development. Consistent with the Otay Ranch GDP, the following agricultural standards shall be employed within the Village Seven area:

- A 200 foot fenced buffer shall be maintained between developed property and on-going agriculture operations.
- In those areas where pesticides are to be applied, vegetation shall be utilized to shield adjacent urban development (within 400 feet) from agriculture activities. Use of pesticides shall comply with federal, state and local regulations.
- The farmland owners shall notify adjacent developed property owners of potential pesticide application through advertisements in newspapers of general circulation.
- The developer does not propose grazing on Conveyance Land, as there is no Conveyance Land within the Village Seven project area.
- Agricultural uses shall comply with the Agricultural Plan Map that follows (Exhibit 2.4).

Agricultural Plan



Unrestricted Cultivation & Grazing Allowed prior to phased Urban Development

Notes:

1. 200' Fenced buffer required between developed property and agricultural operations.
2. 400' Buffer required between pesticide use and urban development.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning

5/25/04

Exhibit 2.4

II.2.3 Circulation

II.2.3.1 Introduction

The Village Seven SPA circulation plan provides for a transportation system which extends existing routes and constructs planned facilities. The circulation plan incorporates vehicular and non-vehicular modes of transportation.

The plan arranges roads into a hierarchy, organized by function, to facilitate access within the community and offsite, consistent with the Otay Ranch General Development Plan and the City of Chula Vista General Plan Growth Management Element. The road classifications have been refined to reflect the specific opportunities and constraints of the Village Seven SPA (*e.g.*, multiple ownerships, phasing of development, and mixed use character, *etc.*). An effort has been made, where feasible, to reduce paving sections to slow the flow of traffic and create a pedestrian friendly environment.

The SPA Plan Public Facilities Finance Plan (see Chapter II, Section II.5 Public Facilities Finance Plan) establishes a transportation phasing plan with specific improvements and timing of circulation improvements to maintain the levels of service established in the City's Threshold Standards in the City's Growth Management Element of the General Plan.

Specific project access points, transit facilities and internal circulation components, including bicycle, cart, pedestrian, hiking and road crossings will be determined by the City Engineer during the tentative tract map process. Variations to the concepts herein may occur where pedestrian orientation, safety or efficiency can be enhanced.

The plan also considers non-vehicular circulation systems by establishing an internal trail system, including connections to local and regional trails systems to create a comprehensive system of vehicular and non-vehicular routes.

II.2.3.2 Project Access

Regional Aecess

Regional access to the project area is currently provided by I-805 via Olympic Parkway, which is located approximately one mile north of the project site. Future construction of SR-125, at the eastern boundary of Village Seven, will provide additional north-south access for the traffic generated for the build-out of the Eastern Territories. Secondary north-south access is available on 1-5, along the Bayfront, six miles west of the SPA project area. State Route 54 north of Village Seven, and SR 905 south of Village Seven, provide regional east-west circulation the project area.

The Otay Ranch General Development Plan provides for the eventual expansion of the regional fixed route transit system into Otay Ranch, with the planned route bisecting Village Six, just north of Village Seven and the EUC, to the east. A transit station providing local transit

connections to these regional system facilities will be provided in the Village Seven Core. Regional and community trails through Village Seven will also provide intra-village routes in support of regional transit.

Local Access

Local access to the Village Seven SPA project area is currently provided by Olympic Parkway, which connects to I-805. The Village Seven site is accessed from Olympic Parkway via La Media Road, a north-south route which is being constructed as a part of the Village Six project, just north of Village Seven. La Media Road will be extended along the western edge of Village Seven.

Birch Road is another east-west arterial that will serve the Village Seven SPA and will form its northern boundary. This route has been constructed along the southern edge of the Village Six site in conjunction with that project and will serve as a connector to I-805 via La Media Road and Olympic Parkway to the west and SR-125 to the east.

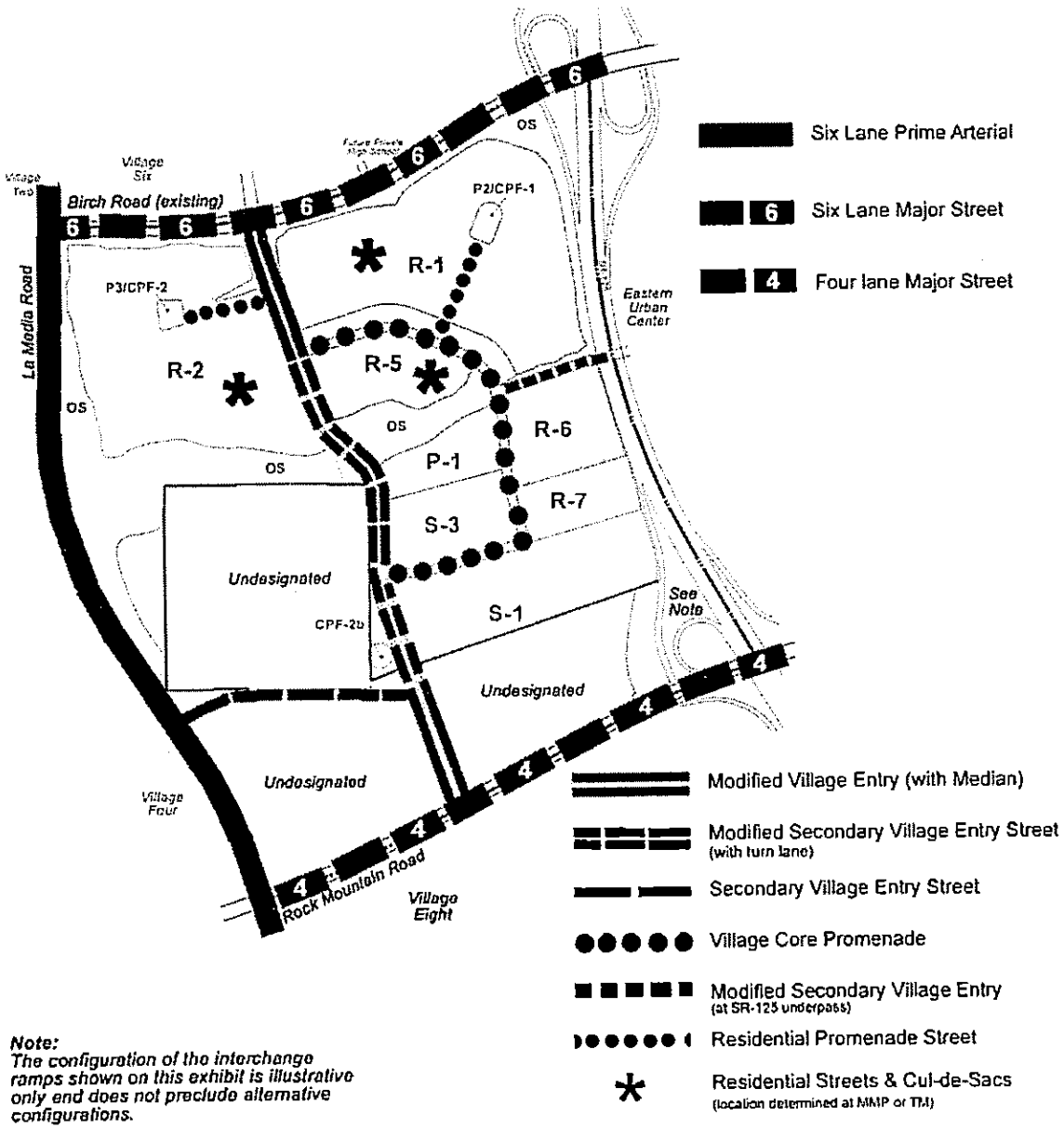
II.2.3.3 Project Circulation Network

The Otay Ranch sub-regional circulation system is based upon a hierarchy of streets and roads defined in the Otay Ranch General Development Plan. These facilities are designed to create an integrated system of roads, cart paths, bike lanes, trails and pedestrian ways. This system, as it applies to the Village Seven SPA is described below.

The perimeter and internal circulation network is conceptually shown on the Circulation Plan (Exhibit 3.1). On the western SPA boundary, La Media Road is designated Prime Arterial - Ranch Theme Street (streetscape design designation defined in the Otay Ranch Overall Design Plan). Birch Road (6 lane), the northern SPA boundary, and Rock Mountain Road (4 lane), the southern boundary, are designated Major Roads. This designation for Birch Road is consistent with the Village Six SPA approval. SR-125, on the eastern edge of the SPA is a future highway.

Project access is taken from each of the perimeter arterials. Each entry has a short segment designated as Village Entry Street which has an expanded cross-section to allow for turn movements at the entries. Entries from Birch Road and Rock Mountain Road are designated Village Entry Streets while that from La Media is a Secondary Entry. These entries then transition to Village Promenade Streets. Both the Rock Mountain Road and Birch Road entries lead directly to the Village Core, while the La Media entry intersects with the Magdalena Avenue, the north-south street which extends through Village Seven, in front of the high school site.

Circulation



Note:
The configuration of the interchange ramps shown on this exhibit is illustrative only and does not preclude alternative configurations.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Land Planning 9/2/04

Exhibit 3.1

A Village Core Promenade Street loops around the multi-family development neighborhoods. The core promenade street is expected to continue west of Magdalena Avenue into the mixed-use portion of the village core when that area is added to the approved SPA. A modified Secondary Village Entry extends east from the loop to provide access under SR-125 to the EUC. The Secondary Village Entry has a reduced section width where it actually passes under SR-125. A Residential Promenade Street also extends from the Core Promenade into the R-1 neighborhood. Internal streets within the individual development areas will be determined by future tract map and/or site plan approvals.

It is anticipated that each of the project entries will be signalized, as will the major arterial intersections. However, the final determination of which intersections are to be signalized and when signals are to be activated shall be made by the City Engineer.

II.2.3.4 Street Standards

This section describes in more detail each of the street types associated with the Village Seven SPA. The proposed right-of-way sizes and street sections are based on standards adopted in the Otay Ranch General Development Plan, previous Otay Ranch approvals and initial project level review by city staff. The final improvement designs will be determined as a part of the subdivision approval process.

Arterial Road Sections

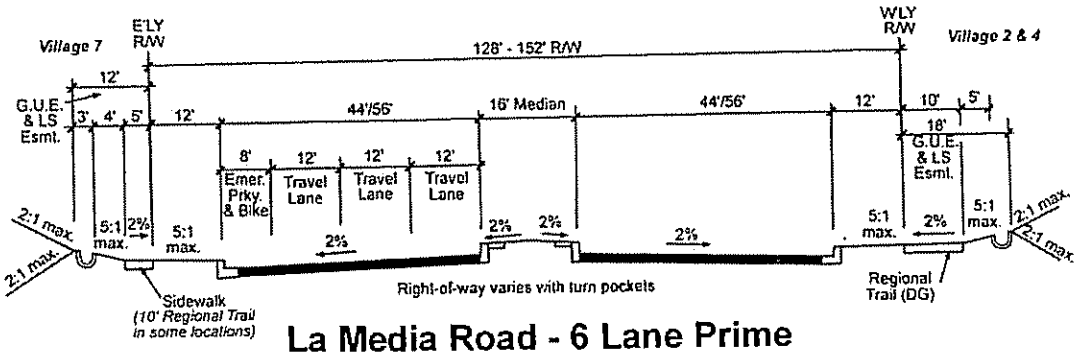
Street standards for the arterial roads at the periphery of the SPA have been established in the Otay Ranch General Development Plan, Circulation Element of the Chula Vista General Plan, Chula Vista Street Standards, and previous project development approvals. Roadway sections for the perimeter highways are shown in Exhibit 3.2.

Arterials and major roads provide for the completion of the regional transportation system. They are designed to operate efficiently and provide for automobile and bus access to regional destinations including freeways. Prime arterials and major roads cross each other at intervals of three-quarter miles or greater. Intersections on to these roads restricted to village entry streets. The following facilities within the Village Seven SPA project area are designated prime arterials or major roads:

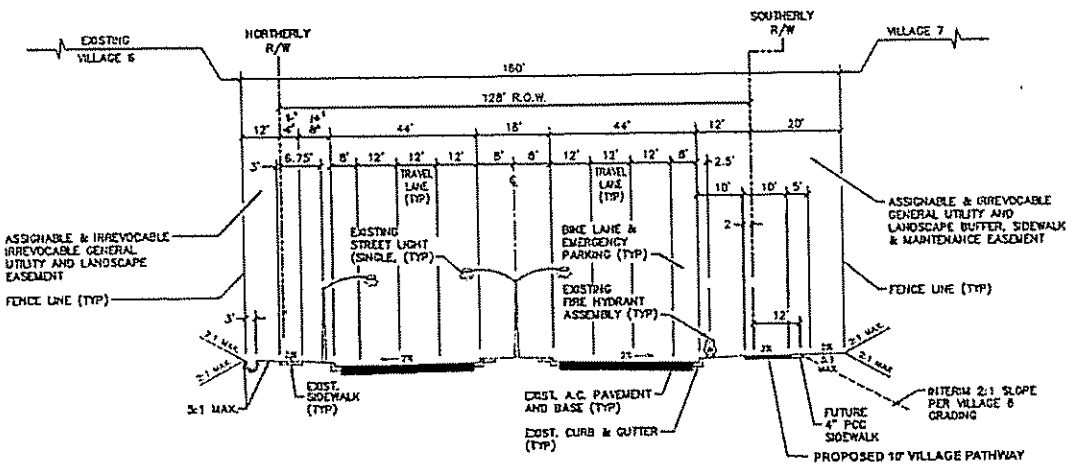
- La Media Road - 6-Lane (Prime) Arterial
- Birch Road - 6-Lane (Major) Street
- Rock Mountain Road - 4-Lane (Major) Street *(included for reference only).*

The proposed cross-sections within Village Seven for La Media Road and Birch Road are consistent with those approved for these streets in Village Six.

Arterial Highways



La Media Road - 6 Lane Prime



Birch Road - 6 Lane Major *(Existing)*

Exhibit 3.2

The Otay Ranch GDP recognizes two types of prime arterial/major roads:

- Scenic Corridor (road within an open space scenic corridor)
- Prime Arterial or Major Road (road outside of an open space corridor)

None of the Village Seven SPA arterials are designated scenic corridors in the GDP. Non-scenic Prime Arterials and Major Roads are similar in appearance to the scenic corridors in that they provide identity to Otay Ranch, and are dominated by native or naturalized vegetation and land forms. However, these roadways also provide a transition from the informal ranch-wide character to the more formal character typical of the urban villages. Landscape treatment and design elements of these roads are addressed more fully in the Village Seven Design Plan.

Village Entry Street Sections

Village Entry Streets form the gateway into a village. As a gateway, a Village Entry Street may be a short street section creating a welcoming statement. In Village Seven, each of the primary entries are designated Village Entry Streets for short distances near the village entries (see Exhibit 3.3 and 3.4).

Village Entry Streets introduce the village theme, identity and character. Entry streets provide a transition from the prime arterials/major roads to the village. Village Seven SPA Village Entry Streets will create a semi-formal appearance which transitions from the natural/informal character of the arterial streets to the formal appearance and character of the Village Core. The landscape treatment and design elements of Village Entry Streets are addressed more fully in the Village Seven Design Plan and Landscape Master Plan.

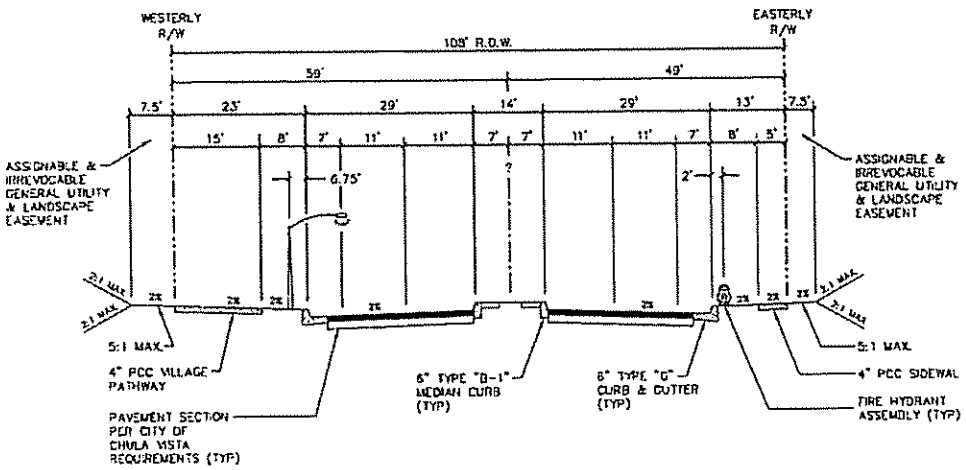
Promenade Street Sections

Promenade Streets provide the most direct route from residential areas to the village core. Promenade Streets serve automobile, cart, pedestrian and/or bike traffic. Promenade Streets create a semi-urban, formal atmosphere which contributes to a feeling of security and pedestrian safety. Promenade Streets are tree-lined with formal street tree patterns.

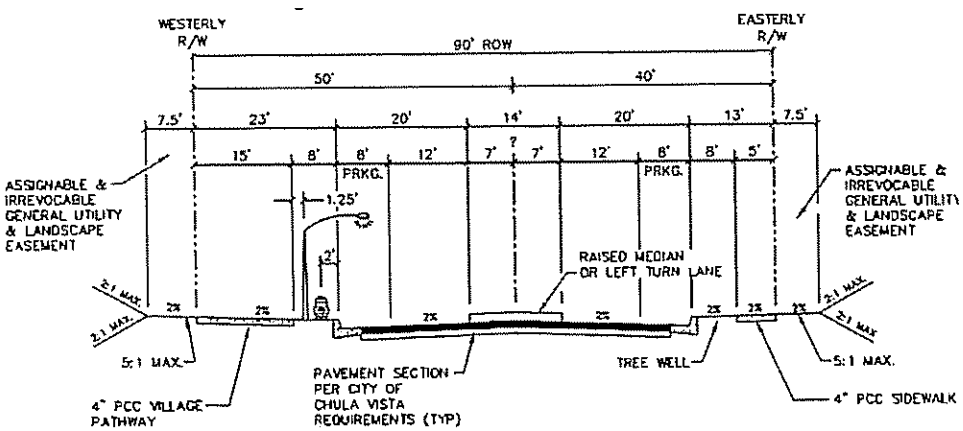
The Village Seven SPA contains four types of Promenade Streets: Village Promenade, Secondary Village Promenade, Core Promenade and Residential Promenade. Refer to Exhibit 3.5 for additional detail.

The landscape treatment and design of Promenade Streets are addressed more fully in the Village Seven Design Plan and the Landscape Master Plan.

Village Entry Streets

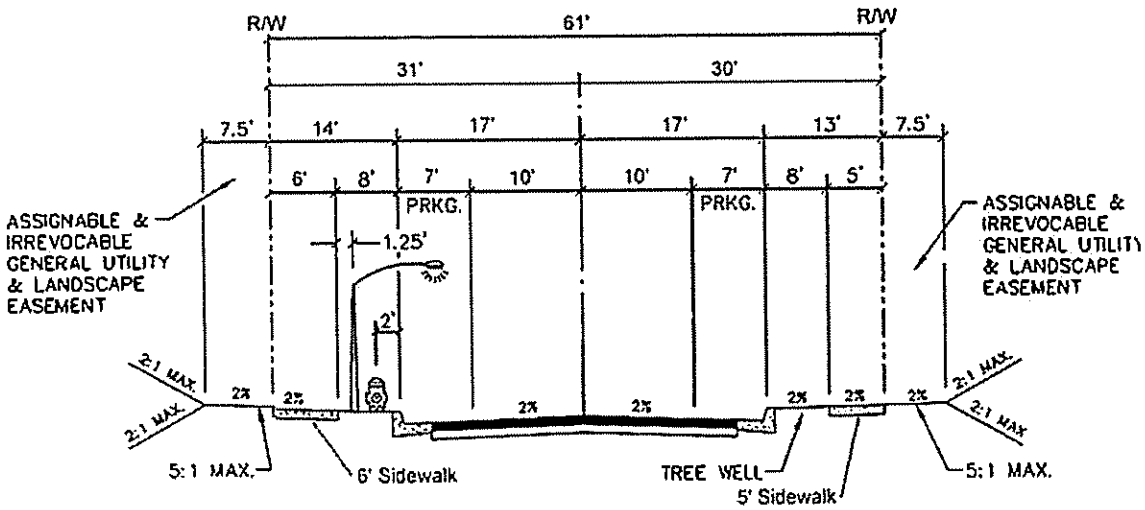


Modified Village Entry Street *(with Median)*
Magdalena Avenue at Entries

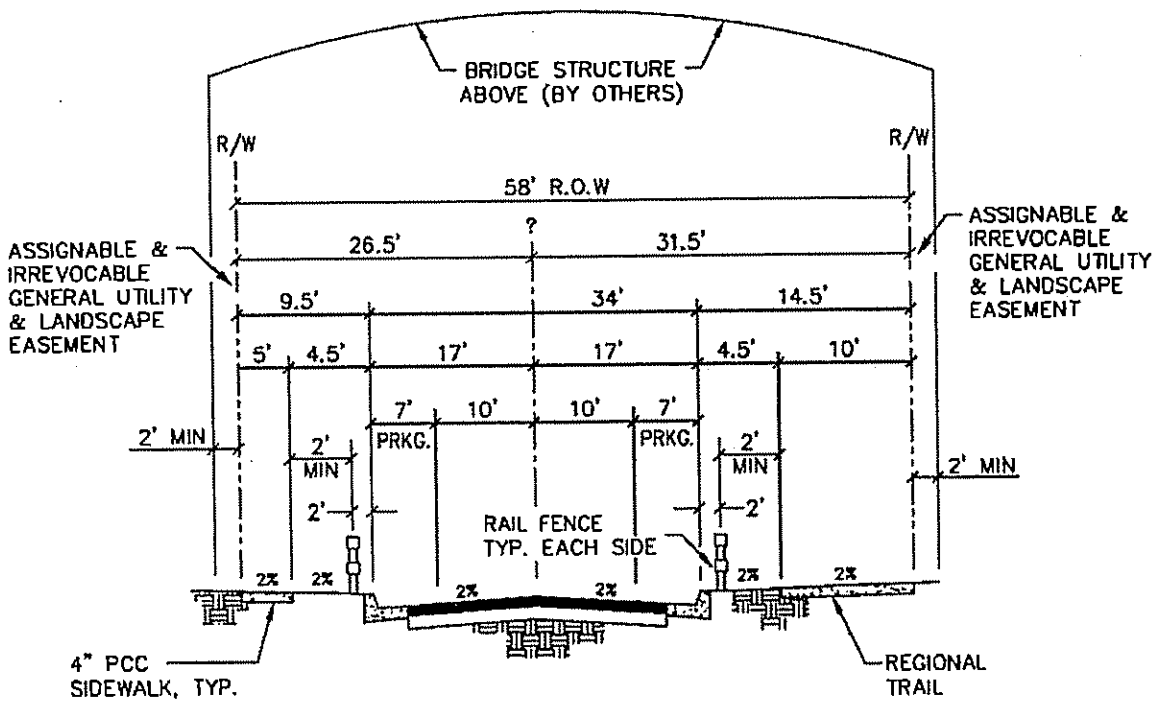


Modified Secondary Village Entry Street *(with Median)*
Magdalena Avenue except Entries

Exhibit 3.3



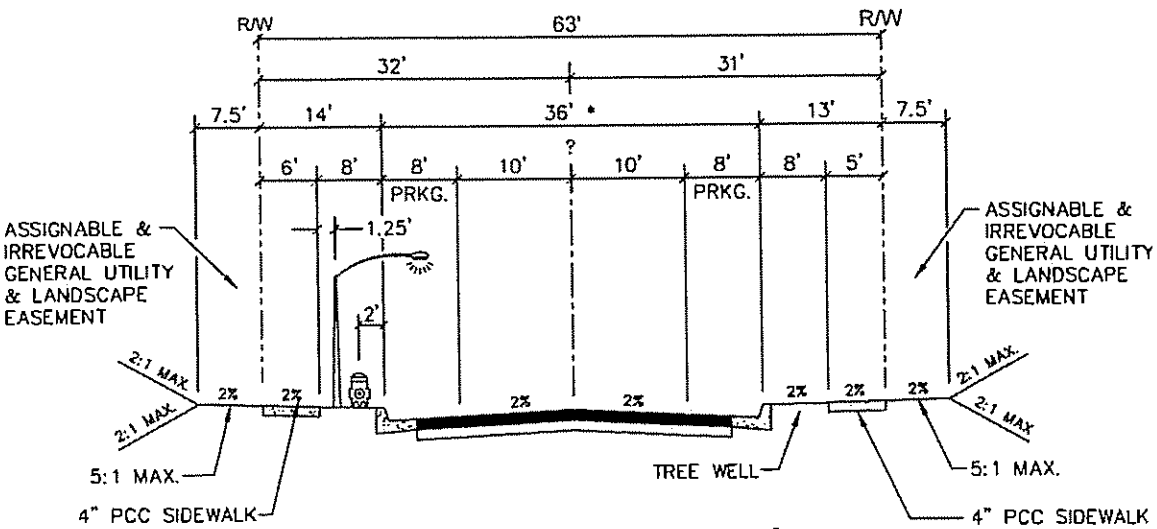
Secondary Village Entry Street



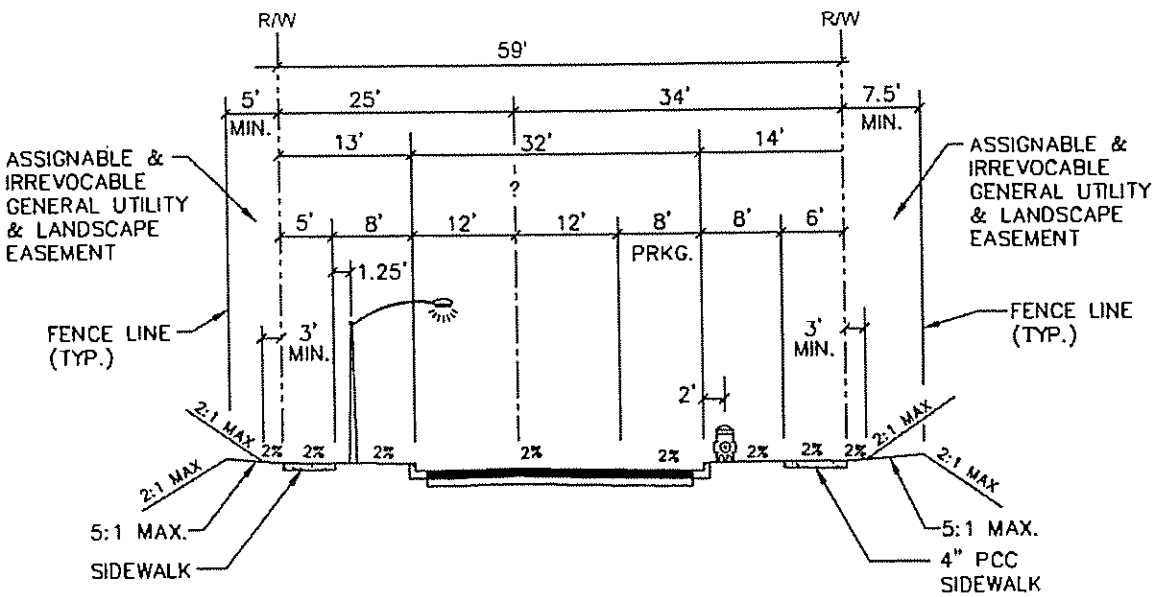
Modified Secondary Village Entry
(at SR-125 Underpass)

Exhibit 3.4

Village Promenade Streets



Village Core Promenade



Residential Promenade

Exhibit 3.5

Residential Street Sections

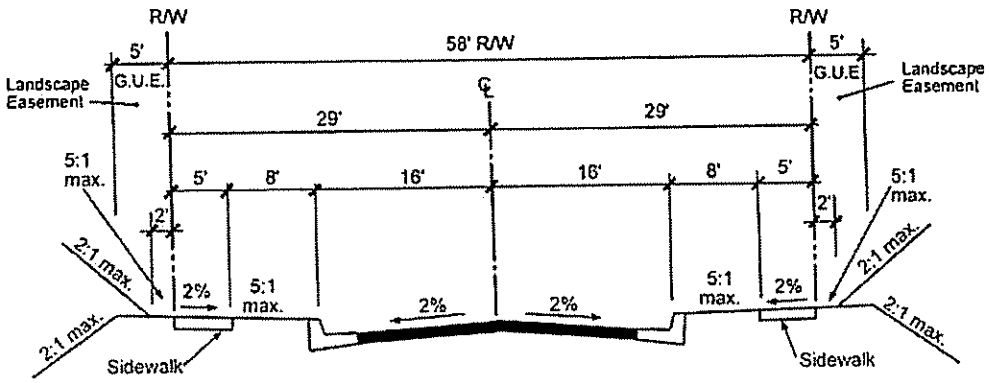
Residential Streets occur throughout each village. The streets have homes on one or both sides. Parking is provided along the sides of the streets. Cart and bike travel is permitted in the roadway without specially designated lanes. The Otay Ranch General Development Plan permits residential street cul-de-sacs, if at the end of the cul-de-sac where grades allow, pedestrian, bike and cart access remains open to link to the village core or other activity centers. Dead end cul-de-sacs are also permitted in perimeter areas.

Residential Streets are semi-urban streets with a pedestrian scale. Residential Streets reflect individual neighborhood character depending upon the nature of the adjacent residential development.

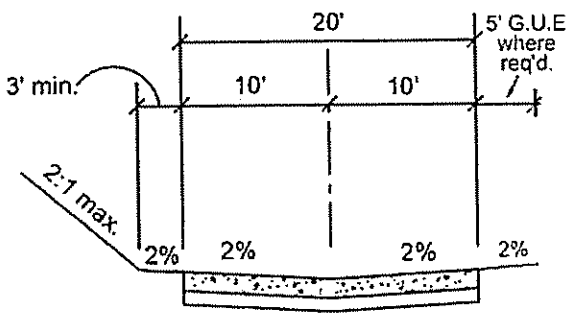
Village Seven contains only one type of residential street, the Parkway Residential Street. This street type is a residential streetscape with parkway plantings and contains an 8 foot parkway, with a 5 foot wide sidewalk. Parkway Residential, 58 foot ROW (see Exhibit 3.6), would be used predominately in single family residential areas as indicated on Exhibit 3.1. Other types of residential streets, may be approved with site plan approval where special conditions occur (*e.g.*, alley, shared driveways and small lot single-family products) as noted in Exhibit 3.1. In certain circumstances the up-slope may be within two feet from the right-of-way, subject to approval of the City Engineer. No street shall have a minimum unobstructed travelway width of less than twenty-feet.

In small lot single-family and mixed use areas, public alleys or private shared driveways may be appropriate. Alleys can provide rear entrances for vehicles, decrease intrusions onto the residential streets and enable homes to be placed closer to the street, creating a pedestrian-friendly environment. Separate pedestrian, bike and cart travel areas are not provided in alleys. Modified curb returns may be considered at the intersection of alleys and residential streets. Any alleys proposed with a site design/subdivision submittal shall have twenty feet concrete paving width plus five-foot general utility easements on both sides. The alley will be constructed to City standards and within a right-of-way dedicated to and maintained by the City. Alleys shall be constructed of concrete and marked as a fire lane..

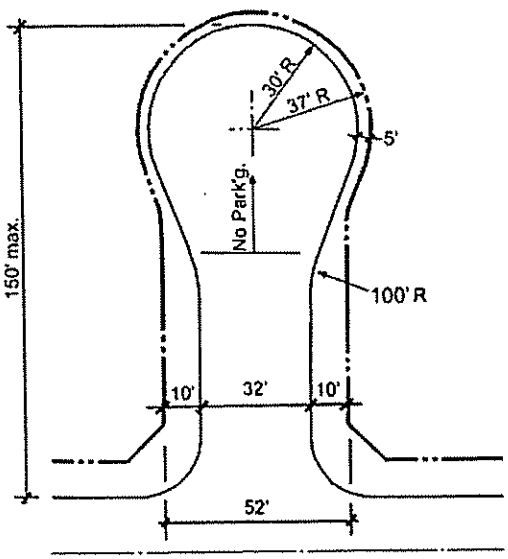
Residential Streets



Residential Street
(Non-Contiguous Sidewalk)



Public Alley



Modified Cul-De-Sac
(150' or less)

Exhibit 3.6

II.2.3.5 Phasing of Road Improvements

The phasing of community development concurrent with provision of adequate road capacity and access improvements is fully described in the Public Facilities Finance Plan (Chapter II, Section II.5 of the SPA Plan). These improvements have been phased and designed to maintain an adequate level of service in the circulation system serving the Otay Ranch Village Seven SPA throughout the development process. The provision of adequate internal circulation improvements shall be controlled via the subdivision map conditions of approval.

Streets shall be constructed to full planned improvements unless otherwise approved by the City Engineer. The required level of improvements and phasing is fully addressed in the Village Seven PFFP.

II.2.3.6 Transit Planning Principles

Villages Seven is designated by the Otay Ranch General Development Plan as an urban village to eventually be served by extension of the San Diego regional transit system to the adjacent Village Six and EUC. As specified in the Otay Ranch General Development Plan, the village core will reserve area for a local (bus) transit stop adjacent to the mixed use/commercial neighborhood. The General Development Plan and SPA plan concentrate higher density residential development and more intense land uses within the village core (generally within ½ mile of the transit stop) in order to make transit viable.

In addition to fixed route service, bus service is planned to be provided to the project area by Chula Vista Transit (CVT). Currently, CVT provides bus service throughout the Eastern Territories, including the EastLake Business Center and nearby Southwestern College. Expansion of CVT service into the Village Seven SPA project area is anticipated.

The planned transit system within Village Seven is shown in the Transit Plan, Exhibit 3.7. Bus stops are based on Green Car and Blue Car service concepts described in the recently adopted *TransitWorks* Strategic Plan by MTDB. The Green Car represents local circulators using mini to mid-size buses. The Green Car would act as a collector and provide feeder access to Blue Car and/or Red Car concepts. Bus stop facilities would be Low to Medium level with service provided on residential streets and major streets. The Blue Car provides short distance trips (1-5 miles) with frequent stops. This concept describes the current Chula Vista Transit service. Bus stop facilities would be at a Medium to High level. Service is provided on major streets and arterials. The Red Car concept in the strategic plan is the fixed route service with a stop in the Village Six Core and EUC described above.

CVT services will be developed based on demand for transit services and the following principles:

- Level of transit facilities: Low = bus stop sign/pole; Medium = bus stop sign/pole/bench; Medium-high = bus stop sign/pole/bench/shelter; and, High = bus stop/sign/pole/bench/ shelter/turnout.

- Where there are numerous major pedestrian generators, access to stops for transit vehicles moving in both directions is facilitated by locating transit stops near striped intersections.

- Transit stops should be located and walkways designed to provide access as directly as possible without impacting residential privacy.

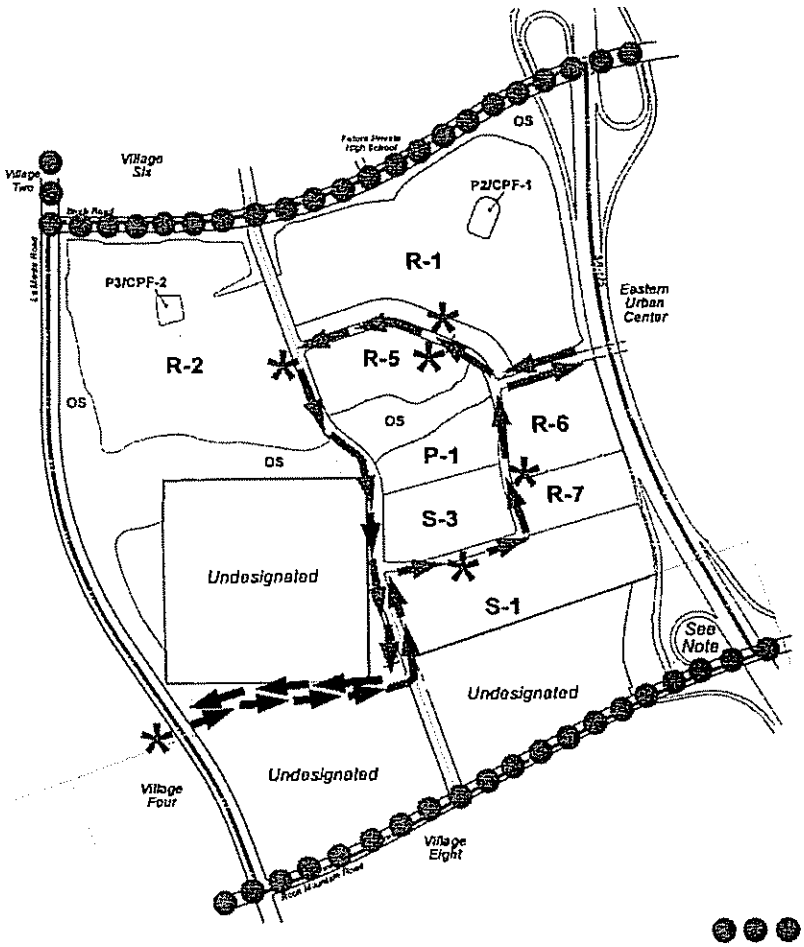
- At intersection points of two or more transit routes, stops should be located to minimize walking distance between transfer stops.

- Transit vehicle conflicts with automobile traffic can be mitigated by locating bus turnouts/bus stops at the far side of intersections in order to permit right-turning vehicles to continue movement.

- Transit stops should be provided with adequate walkway lighting and well-designed shelters.

- Walkway ramps should be provided at transit stops to ensure accessibility to the handicapped.

Transit Plan



City-wide Transit Routes *(Blue Car)*

Internal Transit Routes *(Green Car)*

Curbside Bus Stop

Note:
The configuration of the interchange ramps shown on this exhibit is illustrative only and does not preclude alternative configurations.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Land Planning
6/14/04

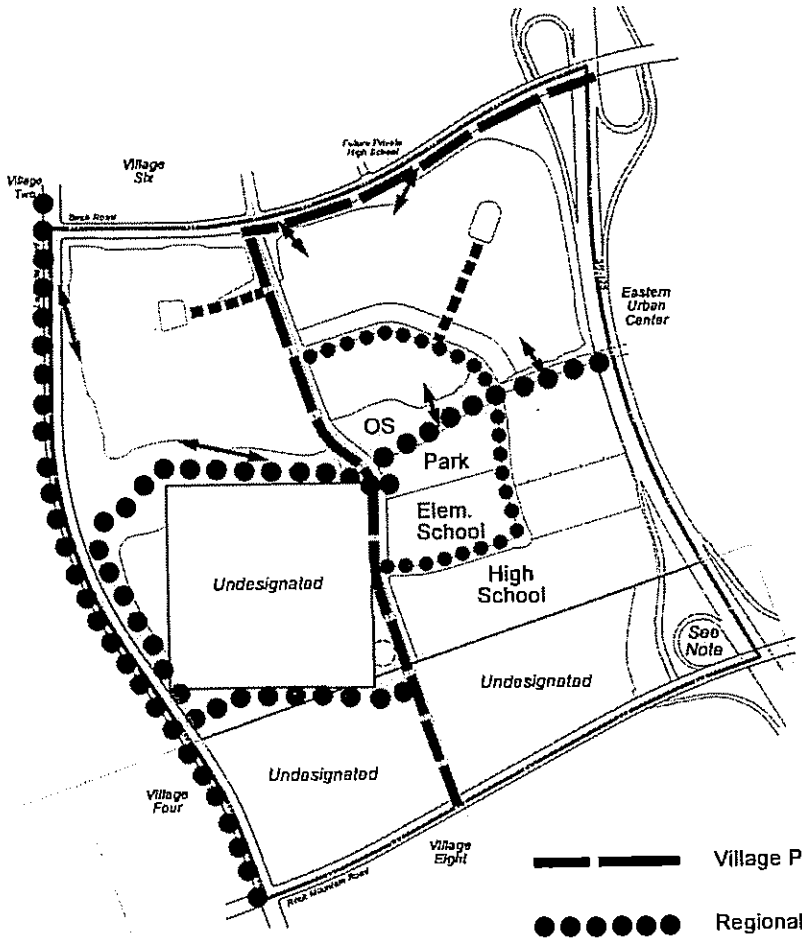
Exhibit 3.7

II.2.3.7 Bicycle Routes, Pedestrian Trails & Cart Paths

Off-street trail routes which connect to the community-wide trail system of Otay Ranch as well as the regional system described in the Circulation Element of the Chula Vista General Plan are included as components of the perimeter arterials of Village Seven. La Media Road includes a 10-foot off-street (Class I) trail for pedestrian and bicycle use within the ROW on the Village Two side. Birch Road and Rock Mountain Road include bike lanes (Class II) adjacent to the curb and a five-foot wide pedestrian path behind the curb on both sides of the street. Within the village, the 15-foot Village Pathway extends along Magdalena Street, connecting to the internal neighborhoods as well as the adjacent villages to the north and south. A similar, 10-foot wide regional trail extends along the Secondary Village Promenade from the SR-125 underpass to the Wolf Canyon Open Space Greenbelt. It will be decomposed granite within the Wolf Canyon Open Space area. Five-foot wide pedestrian trails are shown on the opposite side of the street from the Village Pathways. A six-foot wide walk (featured side) and a five-foot wide walk are provided on the Residential Promenade streets. (Refer also to Exhibit 2.2 for Feature side street tree planting).

Bicyclists will share the internal streets with motor vehicles due to the low traffic volume and limited speeds allowed on residential streets. The trails and bike lanes provided are indicated on the Street Sections Exhibits 3.2-3.6 and the Trails Plan, Exhibit 3.8. Generally, the pedestrian trails follow the bicycle routes. Where the trails are off-street, the pedestrian and bicycle facilities are shared. Where bicyclists share the roadway with other vehicles, sidewalks are provided exclusively for pedestrians. Bikeways shall be consistent with the City of Chula Vista Bikeway Master Plan (September 2003).

Trails



Village Pathway *(10' + 5')*

Regional Trail *(10' - D.G. in Wolf Canyon)*

Village Core Promenade *(6')*

Residential Promenade *(6')*

Potential Trail Connector to Residential
(To be established at Tentative Map level)

Trail Connection Notes:

1. The Village Pathway is intended to connect the existing Village Pathway in Village 6 to a future Village Pathway in Village 8.
2. The Regional Trail is intended to connect the trail in the EUC to the north-south Regional Trail along La Media Road to access Villages 1, 2, 4, 5, 6 & 8. It is also intended to provide access to the planned Community Park west of La Media Road.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Land Planning
8/24/04

Exhibit 3.8

II.2.4 Grading

II.2.4.1 Introduction

The Land Use Element of the Chula Vista General Plan states that the mesas, hilltops and gently rolling topography in the Chula Vista area offer the best conditions for development. Steeply sloped hillsides and valleys can serve as resources, linking the developed regions and the important natural features in the area. The goal of the Otay Ranch General Development Plan is to concentrate urban development on the flatter areas and retain the sensitive natural topographic features. For the Village Seven SPA, the arterial road corridors along the northern, western and southern edges of the project will have contoured slopes within the average 75-foot open space buffer. Development sites within the remainder of the SPA should be graded to blend with and create an aesthetically pleasing setting respecting these edges.

The Otay Ranch General Development Plan requires (Part II, Chapter 10, Subsection 3):

- *Provide geotechnical investigations with each SPA plan.*
- *Roadways shall be designed to follow the natural contours of hillsides and minimize visibility of road cuts and manufactured slopes.*
- *Natural buffering (e.g., undeveloped open space) shall be provided between development and significant existing landforms, including the Jamul and San Yisdro Mountains.*
- *Variable slope ratios not exceeding 2:1 shall be utilized when developing grading plans.*
- *Eighty-three percent of existing steep slopes greater than 25% shall be preserved.*
- *As development occurs on steep lands, as defined by the governing jurisdictions, contour grade to reflect the natural hillside forms as much as possible, and round the top and toe of slopes to simulate natural contours.*
- *Grade and rehabilitate graded areas in conformance with grading regulations of the governing jurisdiction. Ensure proper drainage, slope stability and ground cover re-vegetation in conformance with applicable land use regulations.*

II.2.4.2 Grading Concept

The SPA level grading plan for Village Seven is intended to provide a preliminary grading concept, identifying slope bank locations and necessary maintenance provisions. The plan also indicates grading in Wolf Canyon which will replicate the existing contours in the canyon area. The preliminary grading design is as indicated on the Grading Concept, Exhibit 4.1.

The Village Seven SPA earthwork is intended to be balanced with the inclusion of adjacent off-site areas for an equal amount of cut and fill. The estimated earthwork quantities for the Village Seven

SPA are shown along with the extent of grading in Exhibit 4.1. The Conceptual Grading Plan recognizes the various ownerships and construction phases within the SPA and balances grading quantities within each ownership/sector as shown on the exhibit. The exhibit illustrates the off-site areas included to allow for balancing of grading quantities during interim conditions, if necessary.

II.2.4.3 Steep Slope Analysis

The Otay Ranch General Development Plan (GDP) and Resource Management Plan (RMP) established a ranch-wide standard that required preservation of at least 83 percent of the steep slopes (slopes with gradients of 25% or greater) throughout the Otay Ranch. As an implementing action of the GDP/RMP, a steep slope allocation table (Exhibit 29) was provided as part of the Phase 2 RMP. This original steep slope tabulation assumed that approximately 1,301 steep slopes acres would be impacted, and specifically allocated 16.1 acres of steep slope impact to Village Seven.

In November 1998, the SPA One Plan revised the original steep slope allocations to Villages One, Five, Thirteen and Fifteen. Based on this reallocation, the total number of estimated steep slopes impacts in Otay Ranch was reduced to 1,281.5 acres. Overall, the SPA One revisions resulted in a net "surplus" of 18.8 acres of steep slope encroachment as compared to the originally forecasted GDP impact of 1,301 acres. In addition, based on a current tabulation for completed SPA plans (Villages One, Five, Six, Eleven, and the Freeway Commercial), it has been estimated that an additional 8.8 acres of steep slopes were not impacted as a part of the grading for these projects. The combination of both of these totals results in a total surplus of 27.6 (18.8 + 8.8) acres of steep slopes that can be disturbed, while still maintaining the 83% slope preservation standard.

The Phase 2 RMP requires that the application of the preservation standard must be reviewed and monitored as additional Otay Ranch villages are processed to ensure that the ranch-wide goal of steep slope preservation is maintained. While maintaining consistency with the GDP standard for steep slopes, the Phase 2 RMP further allows some flexibility on steep slope encroachment outside of the acreage allocated for each village if a justification is provided explaining why the excess encroachment would not jeopardize the ability to achieve the 83% slope preservation standard.

As depicted on Exhibit 4.2, the Village Seven SPA plan area includes approximately 21.39 acres of impacted steep slopes. This estimated impact to steep slopes within Village 7 would exceed the RMP steep slope allocation by approximately 5.3 acres. Although the Village 7 project is anticipated to exceed the allotted steep slope allocation for the village, the ranch-wide steep slope preservation standard would still be met given the additional surplus of 27.6 acres of steep slope allocation that has been generated from the SPA One revisions and the currently completed SPA plans.

II.2.4.4 Grading Policies

Grading for Village Seven includes on and off-site grading. On-site grading will create the proposed development areas for Village Seven uses. Off-site grading will include a borrow area in the Village

Four project area, interim grading related to SR-125, and grading required for construction of perimeter roads (see Exhibit 4.1). Off-site grading shall be conducted in accordance with established City policies and standards, and will be subject to conditions, including soil stabilization requirements, established with the issuance of a grading permit.

On-site grading includes larger manufactured and natural slopes generally occurring along and adjacent to the proposed arterial road system. In the Village Seven SPA, these include La Media Road, Birch Road and SR-125 (interim only) at the easterly boundary. The design of these major slopes, particularly in highly visible areas such as the Wolf Canyon Open Space corridor, will utilize landform grading techniques (grading which creates artificial slopes with curves and varying slope ratios which simulate the appearance of natural terrain), as defined in the Chula Vista General Plan, Otay Ranch General Development Plan and Village Seven Village Design Plan. The following guidelines shall be considered in implementation of the plan:

- With approval of the City Engineer, rounding of the tops and toes of slopes shall be accomplished. When slopes cannot be rounded, vegetation shall be used to alleviate sharp angular appearances.

- When significant landforms are modified for project implementation, the landform should be graded to blend with the natural grade.

- An average 75 foot buffer shall be maintained along prime arterials.

- Manufactured slope faces greater than 25 feet in height shall be varied or additional low slope area provided at the toe of the slope to avoid excessive "flat planed" surfaces.

- Grading shall be sensitive to significant and/or sensitive vegetation and habitat areas, if any are present.

- To complement landform grading, landform re-vegetation techniques shall be utilized. As in a natural setting, major element of the landscape are concentrated largely in the concave "drainages," while convex portions are planted primarily with ground cover and smaller materials. Vegetation should consist of drought-tolerant native or naturalized species, requiring little or minimal irrigation, deep rooted and well suited to the on-site soils. Final plans should be based on coordinated input from a licensed landscape architect.

- Based on actual field conditions encountered, the erosion potential of slopes should be reduced with berms at the tops of all slopes, paved interceptor ditches and terrace drains and vegetation. Spray-on applications and coatings, combined with jute or hemp mesh, or early installation of landscaping, can be effective methods for stabilizing soils.

Internal slopes within village core and secondary area are typically lower than the perimeter slopes due to the neo-traditional design. However, if at the tentative map stage, large slopes of 25 feet or

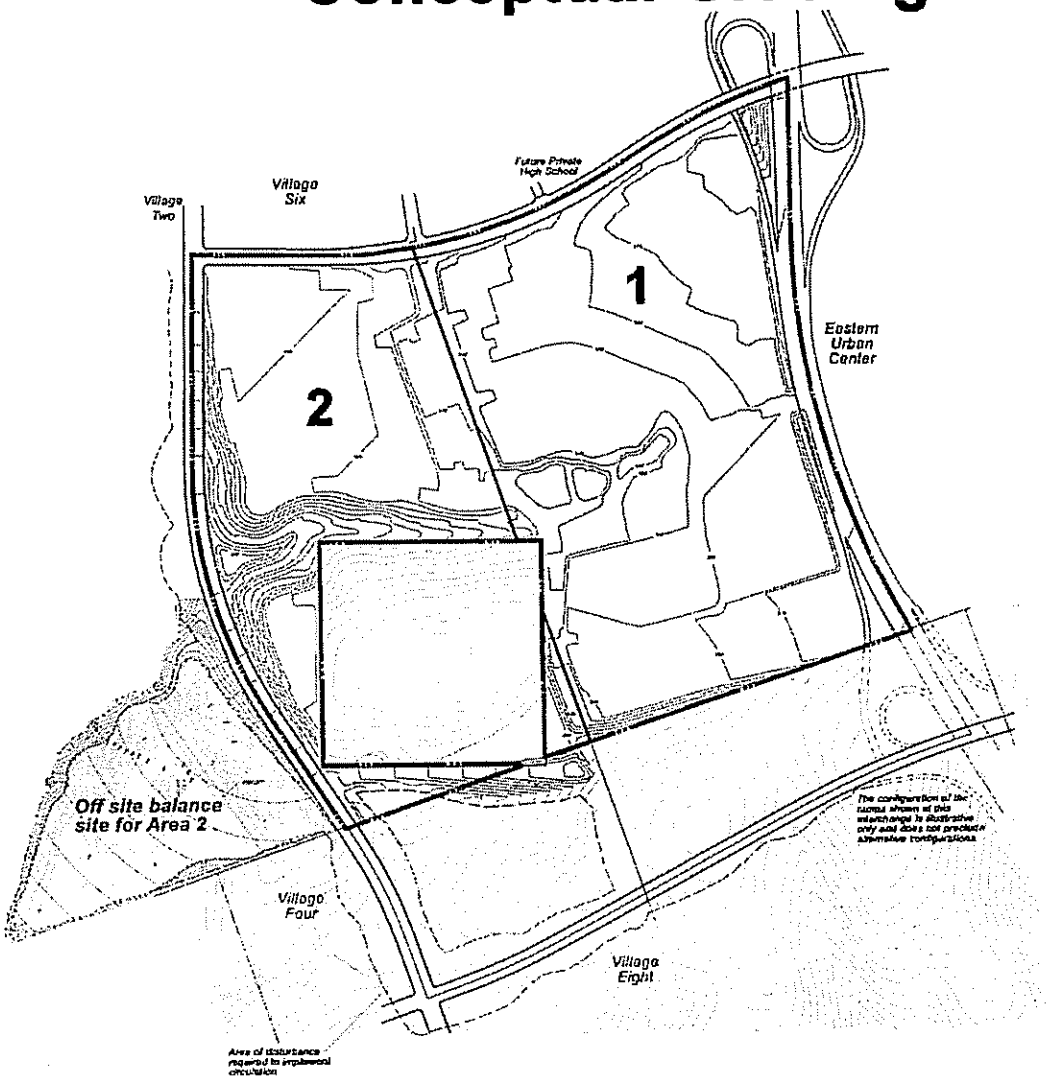
greater are proposed in highly visible locations, landform grading or special landscaping techniques should be considered on a case-by-case basis. Some varied slope ratios and multi-layered landscape planting along the sides of Wolf Canyon or varying top and toe of slope banks should be considered.

Slopes between residential development areas may range up to 35 feet or more. These slopes are not intended to use landform grading techniques, but will generally follow the standard engineering practices of 2:1 (horizontal to vertical) slopes. Where practical, slopes over 20 feet in height should be maintained by an Homeowners Association. Some varied slope ratios, rounding top and toes of slopes, and multi-layered landscape planting along the sides of Wolf Canyon should be considered. This will provide the maximum yard area for residential lots. Landform landscaping should be considered for use in the most visible of these areas, especially to conceal drainage ditches. Small interior slopes between lots less than four feet in height may be graded at 1.5 to 1, with approval of the City Engineer.

Slopes within the neighborhood park shall be consistent with the standards of the adopted Parks and Recreation Master Plan (Nov. 2002).

Preliminary soils and geotechnical reports have been prepared for the Village Seven EIR and have identified the site as being suitable for development. More detailed and refined studies will be provided at the final engineering stages of this project.

Conceptual Grading Plan



Notes:

1. *Grading for SR-125 is not a part of this project. SR-125 will be constructed by others and is shown only to provide context. The extent of grading between Area 1 and SR-125 will be determined by the sequence of the two grading operations.*
2. *Quantities indicated are within property boundaries. Grading beyond these boundaries will be required for infrastructure and roads.*

Planning Area	Estimated Balance (million cubic yards)
1	3.5
2*	4.0
Estimated Total	7.5

* *Balance requires import from Village Four*

Sources: P&D Consultants
Hunsaker & Assoc.
Cinti Land Planning
8/7/04

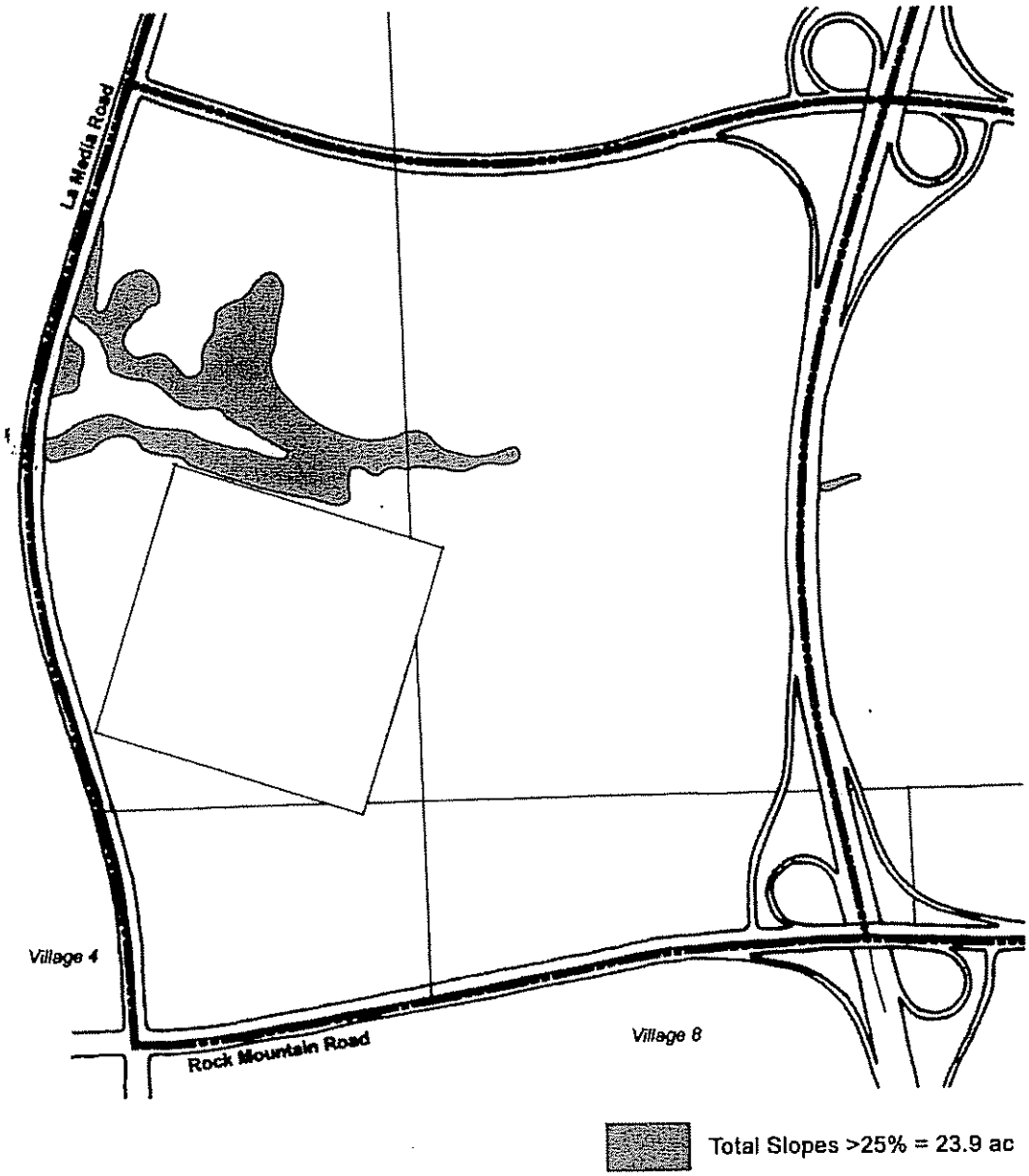
CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Exhibit 4.1

25% Slopes



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning

5/25/04

Exhibit 4.2

II.2.5 Parks, Recreation & Open Space

II.2.5.1 Introduction

The Otay Ranch General Development Plan establishes the following goal for parks and recreation facilities (Part II, Chapter 4, Section B):

> *GOAL: PROVIDE DIVERSE PARK AND RECREATIONAL OPPORTUNITIES WITHIN OTAY RANCH WHICH MEET THE RECREATIONAL, CONSERVATION, PRESERVATION, CULTURAL AND AESTHETIC NEEDS OF PROJECT RESIDENTS OF ALL AGES AND PHYSICAL ABILITIES .*

The Otay Ranch General Development Plan also establishes the following policies for parks and recreation facilities (Part II, Chapter 4, Section B):

> *Policy: Provide 15 acres of regional park and open space per 1,000 Otay Ranch residents.*
>
> *Policy: Provide a minimum of three acres of neighborhood and community park land (as governed by the Quimby Act) and 12 acres per 1,000 Otay Ranch residents of other active or passive recreation and open space areas.*

In order to achieve the goal and thresholds, the Otay Ranch General Development Plan establishes a four-tiered system of parks to be provided throughout the community. The four tiers are: 1) town square parks; 2) neighborhood parks; 3) community parks; and, 4) regional parks. Open space, community and regional parks are designated at the General Development Plan level and no facilities of this type are located in Otay Ranch Village Seven except the perimeter open space slopes/scenic corridors and Wolf Canyon Open Space. The Village Seven SPA Plan provides for a 7.6 acre neighborhood park in the Village Core as Neighborhood P-1 (refer to the Parks and Open Space Plan. Exhibit 5.1). The project will also contribute to the community park implementation program to meet the local park threshold, which will be located off-site. Two CPF sites, CPF-1 and CPF-2a, may also provide park or recreational facility opportunities within the two single family residential neighborhoods, although they will not count toward required parkland.

II.2.5.2 Required Park Land & Improvements

New development is required to provide public park land, improved to City standards, and dedicated to the City, based on established standards. The dedication requirements implement the 3 acre/1000 population standard noted above. They are specified in Section 17.10.040 of the Chula Vista Municipal Code.

In order to provide for both neighborhood and community parks, Village Seven is required to provide parks equivalent to 3 acres/1000 population including a contribution to the community park program. The projected dedication and/or fee requirement for the Village Seven SPA, based on the proposed target number of units and the assumed product types on the Site Utilization Plan is 11.49 acres. The proposed amount of park acreage eligible for credit and to be credited to the project is

7.6 acres in the Neighborhood Park (P-1). In addition to the provision of park land, the ordinance specifies a standard level of improvement to be provided to meet park provisions requirements.

As noted above, the remaining (community) park requirement will be met through the payment of parkland development fees and/or dedication of land elsewhere in Otay Ranch. These park acreage calculations are subject to refinement at more detailed levels of review, based on the Parkland Dedication Ordinance.

Table B
Improved Park Land Dedication Required

Dwelling Unit Type	Target Unit Count	Park Area/DU	Total
Single Family Detached	756	460.0 SQ FT/DU	7.98
Multiple Family/ Apartments	448	341.1 SQ FT/DU	3.51
TOTALS	**1,204**		**11.49***
* Actual park acres required shall be based on dwelling units approved in the Subdivision/Design Review process.			

Table C
Parks Provided and Eligible Credits

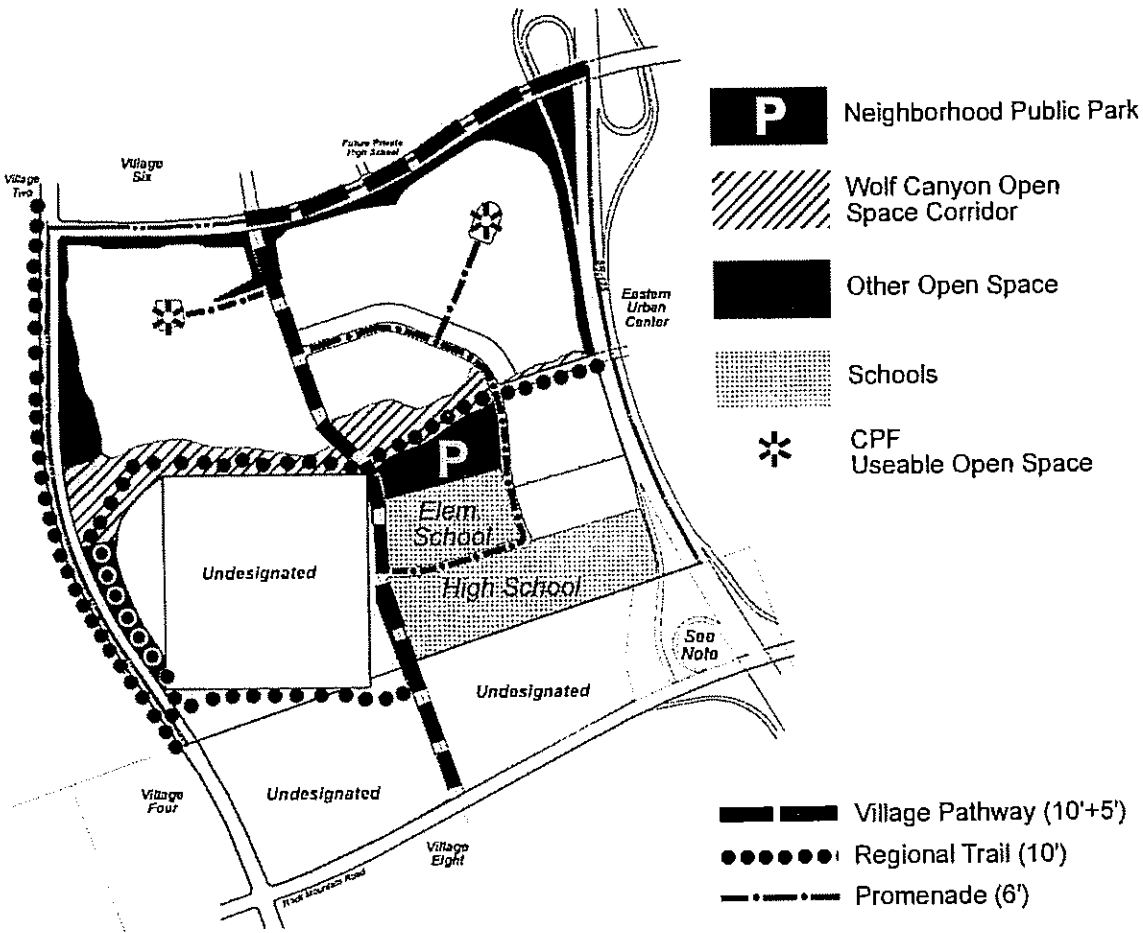
Park Neighborhood	Credit Acres (net)
Acreage Required	11.49
P-1 Public Neighborhood Park	7.60
Estimated Community Park Obligation	**3.89 ac**

II.2.5.3 Open Space

While generally accepted standards have been established for the provision of acreage and the function of a hierarchy of parks, the "need" for open space is more difficult to quantify. The Otay Ranch General Development Plan established a 12 acres per 1000 person standard, which is being met offsite by dedication of open space preserves (RMP) to the east. Village Seven includes approximately 47.8 acres of land designated for open space use. Based on an average of 3.036 persons per household the required open space would be 43.86 acres, less than the amount within the SPA area.

On-site the location and general extent of open space is determined at the General Development Plan level of planning. Open space within Village Seven is to be provided for buffer areas, slopes and scenic corridors as required by the Otay Ranch General Development Plan. Village Seven open space will implement the open space provisions of the Otay Ranch General Development Plan. The village open space areas fit into the overall regional/community-wide open space system.

Parks & Open Space



Note:
The configuration of the interchange ramps shown on this exhibit is illustrative only and does not preclude alternative configurations.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Land Planning
8/24/04

Exhibit 5.1

Open Space is included in the overall Land Use Plan to fulfill the following community goals:

- Promote a natural community greenbelt linkage between the Otay Ranch villages.
- Preserve, enhance and manage natural resources located within Otay Ranch.
- Preserve vistas and maintain viewshed areas for the future residents of the Otay Ranch community.
- Define edges to aid in the delineation of the various communities within Otay Ranch.
- Provide trails and pathways for public recreational opportunities.

The Otay Ranch General Development Plan classifies open space into two categories (Part II, Chapter 4, Section E):

- Natural Open Space: Natural open space can be classified as land that has not been disturbed by development. The bulk of the natural open space within Otay Ranch is included within the Resource Management Plan (RMP). The RMP establishes a Resource Preserve which does not include any of the Village Seven planning area.
- Other Open Space: The General Development Plan categorizes "other open space" as a mixture of neighborhood and community parks, bike trails, hiking trails, school playgrounds, utility easements, scenic corridors, pedestrian walkways, landscape buffers, and other public recreation areas. The other open space areas identified for Village Seven are the arterial highway corridors/development perimeter slopes.

Open space lands indicated on the Village Seven Site Utilization Plan will be provided and maintained through the dedication of open space easements and/or lots to the City, landscape maintenance district or other appropriate agency, or to a Master Community Association, which will be determined at the tentative tract map level of approval. Uses will be strictly controlled through zoning regulations (see Section II.3 PC District Regulations).

Landscaping within open space areas shall comply with all requirements of the City of Chula Vista Landscape Manual.

II.2.5.4 Edge Plan

Enhancement or preservation of sensitive habitat is not a significant issue for the Otay Ranch Village Seven SPA. There are no sensitive habitat areas requiring protection, preservation or enhancement in the Village Seven planning area. Because Village Seven is not located adjacent to any sensitive habitat, no "Edge Plan" for such a sensitive land use boundary is necessary.

II.2.5.5 Community Gardens

The Otay Ranch General Development Plan requires that policies and guidelines be developed at the SPA level for community gardens. Community garden guidelines regarding size, location, facilities and operations were prepared and adopted in conjunction with the Otay Ranch SPA One project (see SPA One Parks, Recreation, Open Space and Trails Master Plan). No community gardens are proposed within the Village Seven SPA.

II.2.5.6 Park & Open Space Implementation

All of the open space and public parks will be controlled through open space easements and/or dedication to the City, district or homeowners' association. Maintenance of the public neighborhood park will be provided by the city general fund. CFD, Open Space and/or Landscape Maintenance Districts may be established to ensure proper management and operation of public right-of-way improvements.

Private open space areas and slopes within "common interest" residential projects will be designated common areas and maintained by homeowners' associations. For detached residential projects, major open space slopes will be a single lot or lots, with open space easements protecting the slopes from development.

The phasing of community development concurrent with the provision of adequate park land and improvements is fully described in the Public Facilities and Finance Plan (Section II.5 of the SPA Plan). The schedule of improvements has been developed to maintain an adequate level of service for Otay Ranch Village Seven residents. The mechanism to provide actual dedication and improvement of public park areas is expected to be subdivision map conditions.

II.2.6 Development Phasing

The development of Otay Ranch Village Seven SPA will be completed in multiple, non-sequential phases to ensure construction of necessary infrastructure and amenities for each phase as the project progresses. The Phasing Plan (Exhibit 6.1) reflects public facility needs and anticipated market demand for a variety of housing types and commercial development. It also reflects the current ownership patterns within the SPA. The Phasing Plan is consistent with the Village Seven SPA Public Facilities Finance Plan (PFFP).

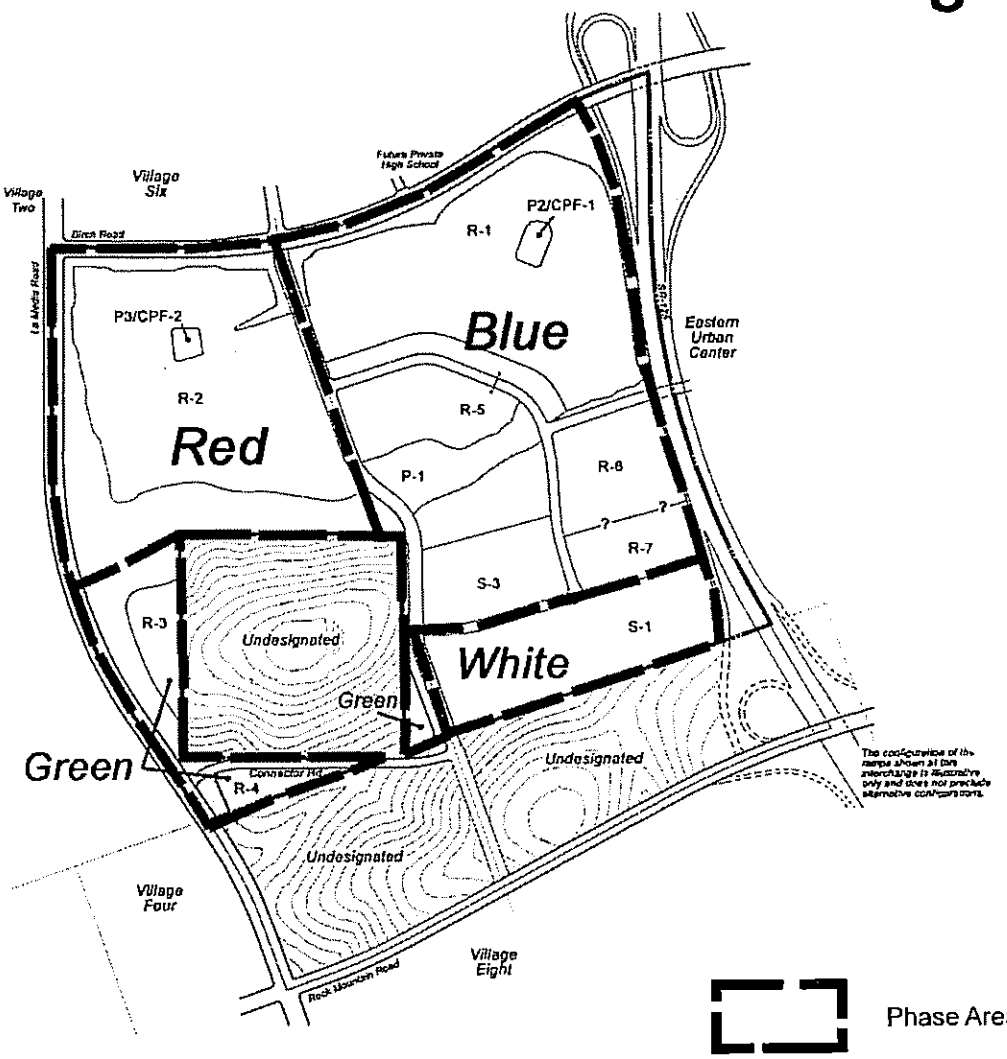
The Phasing Plan is non-sequential. This recognizes that sequential phasing is frequently inaccurate because of unforeseen market changes or regulatory constraints. Therefore, the Village Seven SPA PFFP permits non-sequential phasing by imposing specific facilities requirements, per the PFFP, for each phase to ensure that new Village Seven SPA development is adequately served and City threshold standards are met. The high school is expected to be developed initially while public parks and other schools shall be phased as needed per the PFFP. Needed public facilities may be constructed with any phase regardless of their location.

Table D
Anticipated Development Phasing

Neighborhood	Land Use	White	Blue	Red	Green
S-1	High School	X			
R-1	Single Family		X		
R-2	Single Family			X	
R-3	Single Family				X
R-4	Single Family				X
R-5	Multi-family		X		
R-6	Multi-family		X		
R-7	Multi-family		X		
CPF-1	CPF		X		
CPF-2a	CPF			X	
CPF-2b	CPF			X	

Note: Public Park and School phasing to be established by need and is linked to building permits in the Public Facility Finance Plan.

Phasing Plan



Note: Refer to the Village Seven PFFP for Phasing of Public Facilities and sub-phases.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Land Planning 5/25/04

Exhibit 6.1

II.2.7 Public Facilities

II.2.7.1 Introduction

The inclusion of public facilities issues is a distinguishing feature of SPA Plans. This portion of the plan outlines the public facilities which enable the community to function properly.

The Otay Ranch General Development Plan establishes the following goal regarding the provision of public facilities (Part II, Chapter 5, Section B):

> *GOAL: ASSURE THE EFFICIENT AND TIMELY PROVISION OF PUBLIC SERVICES AND FACILITIES TO DEVELOPABLE AREAS OF OTAY RANCH CONCURRENT WITH NEED.*

This chapter outlines the local and regional public facilities necessary to serve the Otay Ranch Village Seven SPA. The Public Facilities Finance Plan (Section II.5) provides additional descriptions of public infrastructure and financing mechanisms planned for each facility. The public facilities described in this section have been sized and designed in response to the planned distribution of land uses shown on the Village Seven Site Utilization Plan (Exhibit 1.7).

This section examines local facilities including water, water conservation, recycled water, sewer, drainage, urban runoff, schools, law enforcement, fire protection, animal control, civic, library and child care facilities.

This chapter is a summary of the information, recommendations and conclusions contained in other documents. All public services and facilities financing and phasing issues are addressed in the Village Seven Public Facilities Finance Plan (PFFP). Additionally, some facilities are the subject of separately prepared master plans which are included in the Technical Appendices.

II.2.7.2 Potable Water Supply & Master Plan

Water service and facilities are addressed in the Draft *Sub-Area Master Plan for Otay Ranch Villages 6 and 7, and PA-12, Volume 1 Conceptual Facilities Plan* prepared by Powell/PBS&J, 2001) and the Draft *Otay Water District Water Resources Master Plan* (2002). The phasing and financing of water facilities is more thoroughly addressed in the Otay Ranch Village Seven PFFP.

The Otay Ranch General Development Plan establishes the following goal for water service (Part II, Chapter 5, Section C, Subsection 5.c):

> *GOAL: ENSURE AN ADEQUATE SUPPLY OF WATER FOR BUILD-OUT OF THE ENTIRE OTAY RANCH PROJECT AREA; DESIGN THE OTAY RANCH PROJECT AREA TO MAXIMIZE WATER CONSERVATION.*

The Otay Ranch General Development Plan establishes the following threshold for water facilities (Part II, Chapter 5, Section C, Subsection 5.b):

Threshold: Ensure an adequate supply of water on a long-term basis, prior to the development of each Otay Ranch SPA.

The Metropolitan Water District and the County Water Authority plan to provide long term water supplies to member agencies to meet projected water demand based upon regional population forecasts. Development of the Otay Valley Parcel of Otay Ranch, including Village Seven, is included in the adopted Series 8 regional population forecast and in the long term water master plans for the water agencies.

Approximately 90% of the water used in the San Diego County Water Authority area is imported from the Metropolitan Water District. The Metropolitan Water District (MWD) transports its water supply through the State Water Project and the Colorado River Aqueduct. The San Diego County Water Authority (SDCWA) conveys water from the MWD to local water purveyors within San Diego County. Potable water will be supplied to the project by the Otay Water District (OWD).

Potable water is provided to the Central Service Area of the Otay Water District via the Second San Diego Aqueduct. Water is delivered at aqueduct connections No. 10 and No. 12 and is conveyed by gravity to the Central Service Area emergency/operating reservoirs at a grade of 624 feet. Water is then pumped to the existing 711 and 980 service zones.

The majority of Village Seven is located in the District's 711 service zone and will receive water from existing and planned transmission mains in La Media, Birch, and Rock Mountain Roads. A portion of the Village Seven SPA is located in the 980 service zone and will receive service via planned transmission mains in Birch and Rock Mountain Roads.

Operational and fire storage for the project will be provided in existing 711 and 980 zone reservoirs and emergency storage, in the event of a disruption to the SDCWA supply, will be provided in the existing 624 zone reservoirs.

II.2.7.3 Potable Water Demand

The Otay Water District has established criteria to determine pressure zone boundaries within new and existing developments. The criteria constitute minimum and maximum allowable pressures and maximum velocity thresholds within the distribution system piping under specified system operating conditions. These criteria were used to determine the recommended 711 and 980 pressure zone service area boundaries with in Village Seven. The 711 zone will typically provide service to areas with finished grades below 560 feet. The 980 zone will serve the remainder of the site.

The conceptual Domestic Water distribution system within each pressure zone is shown on Exhibit 7.1. These facilities were sized to meet the anticipated demand from the planned development incorporating average water demand, peak flows and fire flow requirements.

According to the 1991/1992 Capital Improvement Program for the San Diego County Water Authority (CWA), facilities planned by the CWA and Metropolitan Water District (MWD) will increase the filtered water conveyance capacity, permit raw water conveyance capacity within the aqueduct system and enable the CWA to meet projected demand through 2010. OWD will approve and verify the Water Supply Assessment supplied by the applicant. Based on the San Diego County Water Authority 1998 Treated Water Study: Options to Meet Near Term Need, the additional water supply made available from the recommended improvements will allow the Otay Water District to meet projected demands through 2010. Additional information regarding long-term water availability is provided in the Village Seven SPA PFFP and EIR. Estimated average daily Village Seven potable water demand is calculated in Table E, below.

Table E
Potable Water Demand

Land Use	Net Area (ac)	Dwelling Units	Unit Demand	Average Annual Day Demand (gpd)**
SF Residential	109.6	756	500 gpd/d	378,000
MF Residential	37.9	448	300 gpd/du	134,400
Elementary School	11.1		1,785 gpd/ac	19,814
High School	23.4		1,785 gpd/ac	41,769
Public Park	7.6		2,155 gpd/ac	16,378
CPF	2.8		893 gpd/ac	2,500
TOTAL				**0.593 mgd**

** gpd = gallons per day; mgd = million gallons per day Source: Powell/PBS&J (3/04)

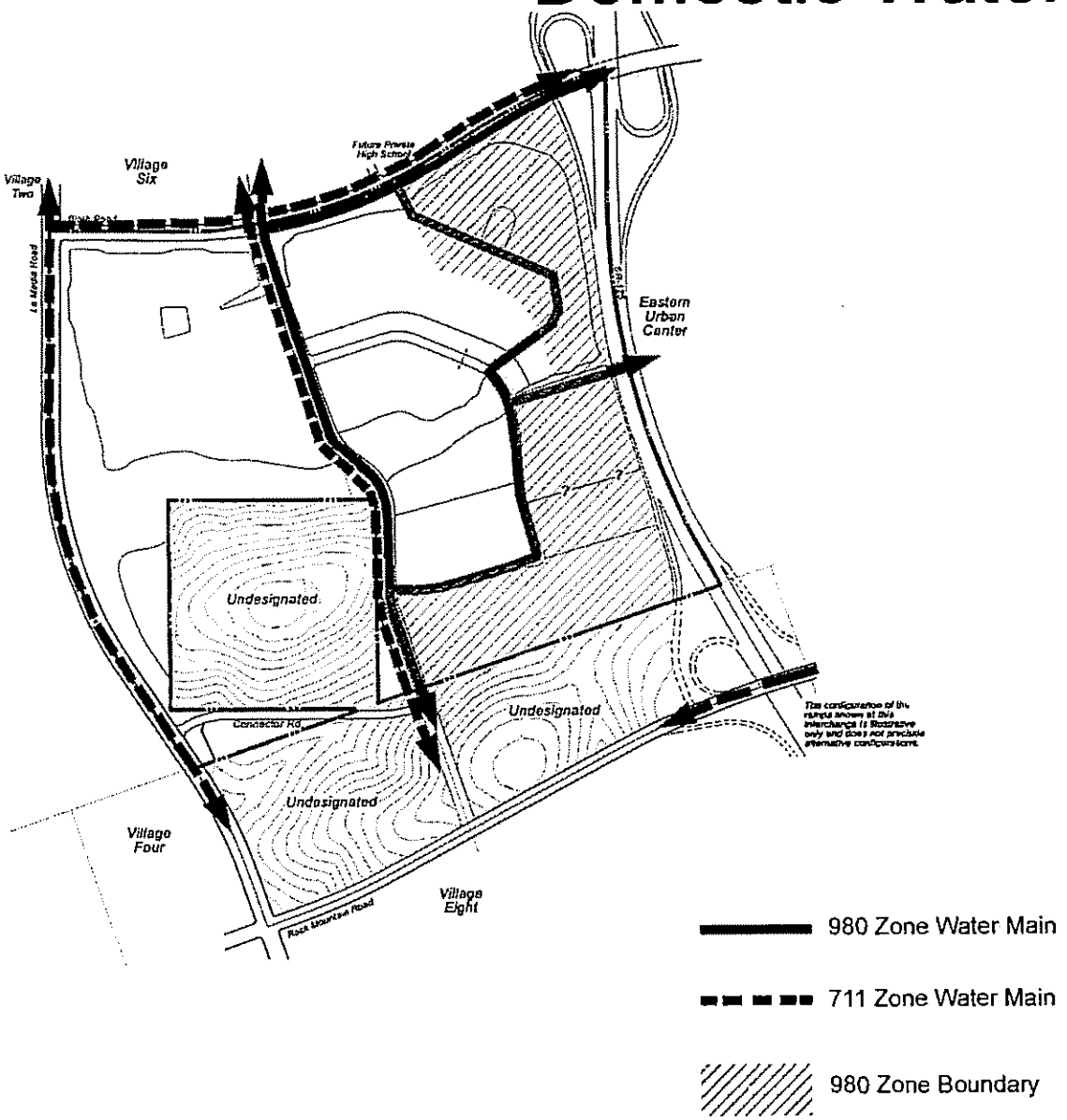
Water Conservation

The Otay Ranch General Development Plan establishes the following goal for water conservation (Part II, Chapter 10, Section F):

> *GOAL: CONSERVE WATER DURING AND AFTER CONSTRUCTION OF OTAY RANCH.*

The Otay Ranch General Development Plan and the Chula Vista Growth Management Program also require provision of a Water Conservation Plan concurrent with SPA approval. The City of Chula Vista has adopted standards and guidelines for the preparation and implementation of Water Conservation Plans. These require the inclusion of certain city-mandated conservation measures and

Domestic Water



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Source: PBS&J

Land Planning

6/14/04

Exhibit 7.1

II.2.7.4 Recycled Water Supply & Master Plan

Recycled water service and facilities are addressed in the Draft *Sub-Area Master Plan for Otay Ranch Villages 6 and 7, and PA-12, Volume 1 Conceptual Facilities Plan* prepared by Powell/PBS&J, 2001) and the adopted *Otay Water District Water Resources Master Plan* (2002). The phasing and financing of recycled water facilities is more thoroughly addressed in the Otay Ranch Village Seven PFFP.

The Otay Ranch General Development Plan provides the following goal for water reclamation (Part II, Chapter 5, Section C, Subsection 6.c):

> *GOAL: DESIGN A SEWERAGE SYSTEM WHICH WILL PRODUCE RECYCLED WATER. ENSURE A WATER DISTRIBUTION SYSTEM WILL BE DESIGNED AND CONSTRUCTED TO USE RECYCLED WATER. CONSTRUCTION OF A DUAL SYSTEM OF WATER SUPPLY WILL BE REQUIRED FOR ALL DEVELOPMENT WHERE RECYCLED WATER IS USED .*

The Otay Ranch General Development Plan establishes the following threshold relative to recycled water (Part II, Chapter 5, Section C, Subsection 6.b):

> *Threshold: Design a sewerage system which will produce recycled water. Ensure a water distribution system will be designed and constructed to use recycled water. Construction of a "dual system" of water supply will be required for all development where recycled water is used.*

Consistent with the Otay Ranch General Development Plan, a dual system for potable and recycled water will be constructed. Recycled water will be used to irrigate all landscaped areas except single-family residential parcels.

Recycled water supply is currently available to the Otay Ranch area from the 1.3 mgd capacity Ralph W. Chapman Water Recycling Facility (WRF) located near the intersection of Singer Lane and Highway 94. Supplemental recycled water supply will be available from the City of San Diego's South Bay Water Reclamation Plant (SBWRP), pending construction of planned transmission facilities to be built by the District.

The majority of Village Seven is located in the District's 944 recycled water service zone and will receive supply from planned transmission mains in Birch and Rock Mountain Roads. Portions of the project area along the western boundary are located in the 680 recycled water service zone and will receive service from existing and planned transmission mains in La Media Road. Operational storage for the project will be provided in the existing 944 zone ponds located in the District's Use Area and a planned 680 zone reservoir to be located in the EastLake Greens subdivision.

The recommended recycled water distribution system for Village Seven is shown in Exhibit 7.2 Recycled Water Plan. As specified in current District design criteria, all on-site pipelines will be 6-

inch minimum diameter. Recycled water pipelines will be installed concurrent with the phased construction of the potable water system. Recycled water demand within Village Seven is estimated in Table F below.

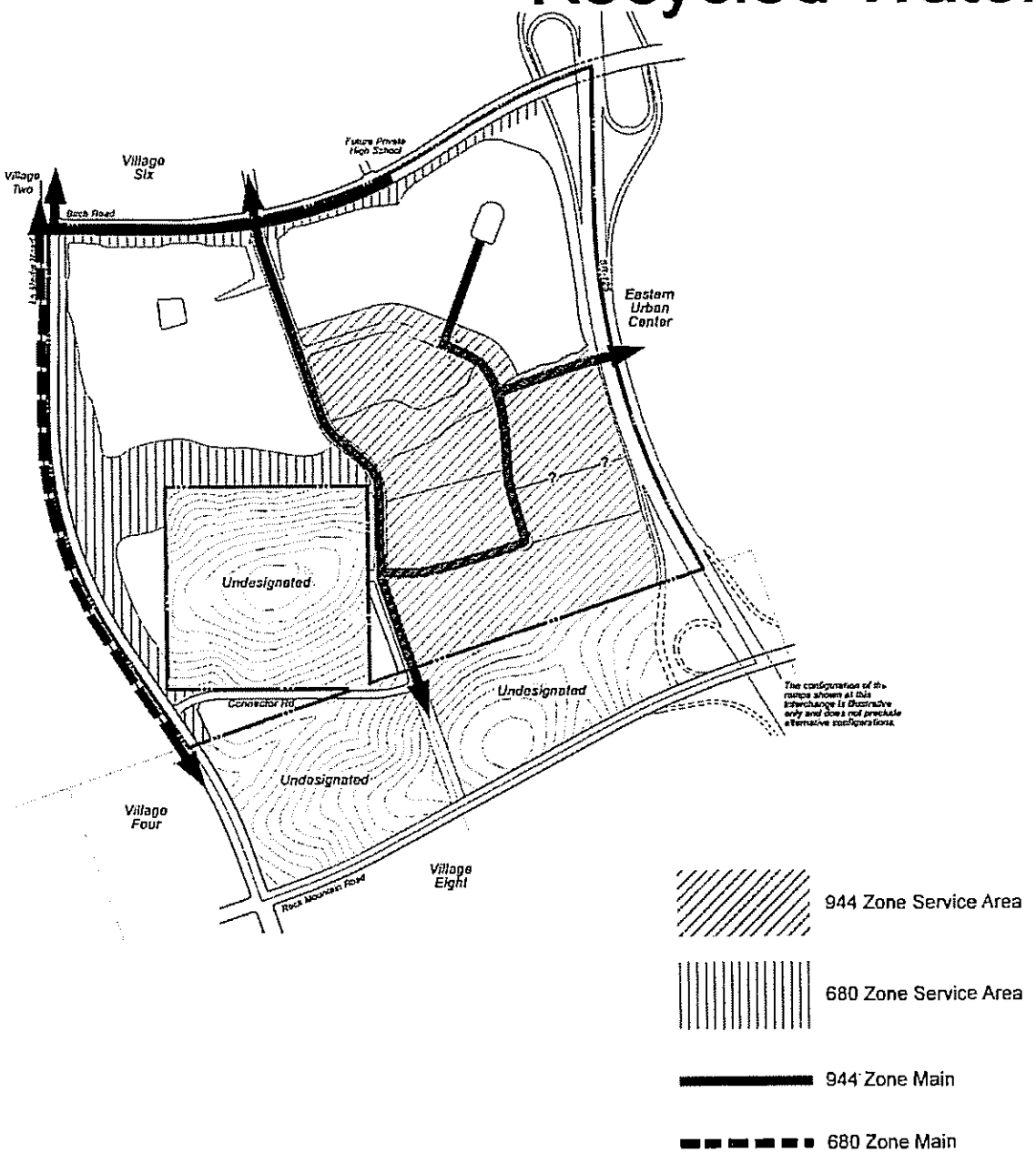
Table F
Recycled Water Demand

Land Use	Net Area (ac)	Percent Irrigated	Irrigated Area (ac)	Irrigation Rate (gpd/ac)	Average Day Demand (gpd)*
MF Residential	37.9	15%	5.7	2,152	12,234
Park	7.6	100%	7.6	2,152	16,355
Elementary School	11.1	20%	2.2	2,152	4,777
High School	23.4	20%	4.7	2,152	10,114
CPF	2.8	20%	0.6	2,152	1,291
Open Space	47.8	50%	23.9	2,152	51,433
Streets	62.9	10%	6.29	2,152	13,536
TOTAL					**0.110 mgd**

* gpd = gallons per day; mgd = million gallons per day

Source: Powell/PBS&J (3/04)

Recycled Water



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Source: PBS&J

City Land Planning

8/24/04

Exhibit 7.2

II.2.7.5 Sewer Service

Sewerage services and facilities are addressed in the *Otay Ranch Master Plan of Sewerage* prepared by Wilson Engineering, Inc. (1993) which documented the feasibility of providing sewer service to the project area. The phasing and financing of sewerage facilities is more thoroughly addressed in the Otay Ranch Village Seven PFFP.

The Otay Ranch General Development Plan establishes the following goal for sewerage facilities (Part II, Chapter 5, Section C, Subsection 2.c):

> *GOAL: PROVIDE A HEALTHFUL AND SANITARY SEWERAGE COLLECTION AND DISPOSAL SYSTEM FOR THE RESIDENTS OF OTAY RANCH AND THE REGION, INCLUDING A SYSTEM DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE USE OF RECYCLED WATER .*

The Otay Ranch General Development Plan establishes the following threshold relative to the sewerage system (Part II, Chapter 5, Section C, Subsection 2.b):

> *Threshold: Provide a healthful and sanitary sewerage collection and disposal system for the residents of Otay Ranch, including a system designed and constructed to use recycled water and ensure that sewer connections not exceed capacity.*

The City of Chula Vista provides wastewater services in the project vicinity. Chula Vista operates and maintains its own sanitary sewer collection system which connects to the City of San Diego's Metropolitan Sewer System.

Village Seven, based on the Site Utilization Plan and conceptual grading, will drain to two sewer basins. The northern portion of the project will drain to the Poggi Canyon Sewer Basin under permanent sewer conditions. This includes R-1, R-2, R-5 and P-1. Wastewater collected within this basin will be conveyed to existing and planned sewer mains in Birch Road and La Media Road that discharge to the existing Poggi Canyon Interceptor in Olympic Parkway. Neighborhoods R-6, R-7, S-1 and S-3 will be served by an interim sewer main that will flow to the Poggi Canyon Sewer Basin until the Wolf Canyon Sewer Main is available. These neighborhoods will then abandon the interim northern connection and use the permanent southwestern flowing sewer main.

All wastewater generated within the project will eventually be conveyed to the Salt Creek Interceptor west of I-805 which connects to the City of San Diego's South Metro Interceptor. The wastewater is eventually treated at the existing Point Loma Wastewater Treatment Plant.

Sewage generation from the developed uses within Village Seven are estimated in Table G below.

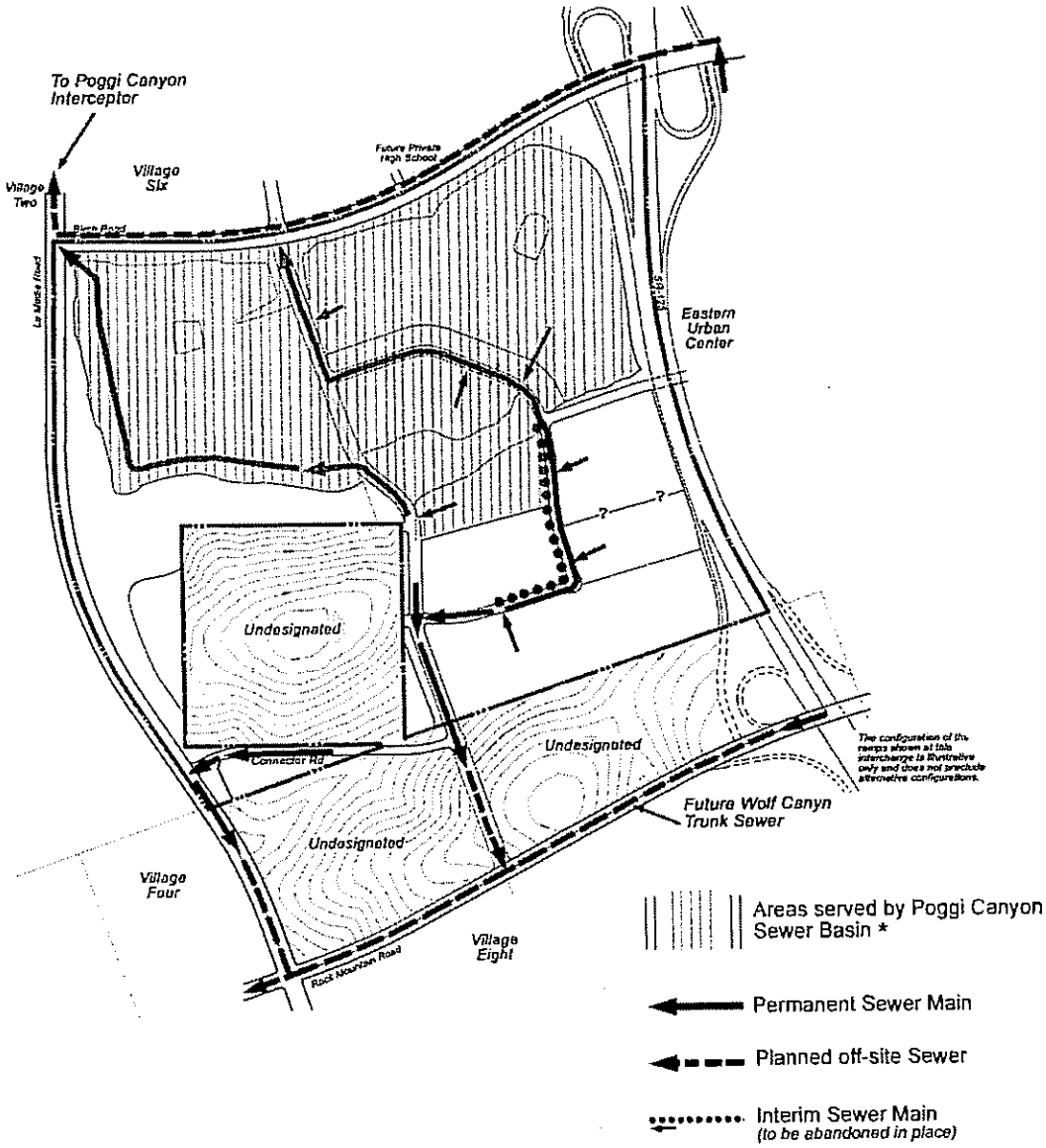
Table G
Sewage Generation

Land Use	Number	Units	Avg. Flow (gpd)/Unit	Average Day Flow (gpd)*
SF Residential	756	DU	265	200,340
MF Residential	448	DU	199	89,152
Park	7.6	AC	500	3,800
Elementary. School	800	Students	15	12,000
High School	2,950	Students	20	59,000
CPF	2.8	AC	2,500	7,000
TOTAL				**0.371 mgd**

* gpd = gallons per day; mgd = million gallons per day

Source: Powell/PBS&J (7/03)

Sewer Plan



* *Permanent sewer for remaining areas will be the future Wolf Canyon Trunk Sewer to be in Rock Mountain Road.*

Source: PBS&J

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Land Planning

6/14/04

Exhibit 7.3

II.2.7.6 Storm Water Drainage System

Drainage facilities are addressed in the *Otay Ranch Village Seven Preliminary Regional Drainage Patterns and Facilities* prepared by P&D Consultants, Inc. (Dated March 2004). The phasing and financing of drainage facilities is more thoroughly addressed in the Otay Ranch Village Seven PFFP.

The Otay Ranch General Development Plan establishes the following goal for drainage facilities (Part II, Chapter 5, Section C, Subsection 1.c):

> *GOAL: PROVIDE PROTECTION TO THE OTAY RANCH PROJECT AREA AND SURROUNDING COMMUNITIES FROM FIRE, FLOODING AND GEOLOGIC HAZARDS.*

The Otay Ranch General Development Plan establishes the following threshold for drainage facilities (Part II, Chapter 5, Section C, Subsection 1.b):

> *Threshold: Storm water flows and volumes shall not exceed Engineering Standards of the governing land use jurisdiction.*

The City of Chula Vista is the governing land use jurisdiction for the Village Seven project so the project drainage system will need to meet city standards for drainage.

Throughout the Village Seven hydrologic planning area, the landscape is predominantly rolling hills with arroyos draining to canyons that flow to the south and west, away from Salt Creek and the Otay Reservoir basins. These southerly unnamed branch canyons converge into one major canyon, Wolf Canyon, which ultimately discharges into the Otay River, two miles southwest of the Village Seven study area. This is the major drainage course for Village Seven. A small portion at the northern edge of Village Seven drains to Poggi Canyon

In the future, the village will be bounded by SR-125 on the east. The drainage from a portion of the EUC will be conveyed under SR-125 as part of the infrastructure associated with the Promenade Street undercrossing connecting Village Seven and the Eastern Urban Center (EUC).

According to the P&D report, the planned development of Village Seven will not adversely impact the existing natural drainage conditions. The limits of the proposed drainage basins of Village Seven and the EUC to the east are generally consistent with the natural drainage basins and, therefore, no significant diversion of runoff is proposed. The proposed development will result in an increase in runoff. The increased runoff, if shown to impact downstream infrastructure, will be mitigated by detention basins that will be located in Wolf Canyon or within individual development parcels.

To limit any increase in discharge to pre-development levels for the portions of the EUC and Village Seven, detention basins will be constructed in Wolf Canyon. To avoid the necessity of constructing small detention basins on individual parcels in the EUC to the east, the detention basins within Wolf

Canyon adjacent to the multi-family neighborhoods will be sized to retain peak runoff from portions of the EUC as well as Village Seven.

The study area is divided into three major drainage basins to establish general drainage patterns and define master drainage facilities. The northerly edge of Village Seven drains to master storm drainage facilities located in Birch Road. This storm drain will runs west under Birch Road to connect to the master facility in La Media Road. From La Media Road the master storm drainage facility connects north to the open channel along the north side of Olympic Parkway. The central portion of Village Seven drains to a master facility comprised of a system of open channels and detention/storm water quality management basins located in Wolf Canyon. These proposed master facilities connect to the natural drainage channel of Wolf Canyon near the La Media Road crossing of Wolf Canyon and continue south and west to the Otay River. The southern portion of Village Seven drains to a branch of Wolf Canyon. Master storm drainage facilities located in La Media Road and Rock Mountain Road will convey storm water to Wolf Canyon and the Otay River.

The onsite drainage facilities are not specifically addressed in the P&D study. However, these facilities, consisting of storm drain pipes, inlets, clean-outs, headwalls, drainage swales, *etc.*, will be designed in the future in accordance with City of Chula Vista standards.

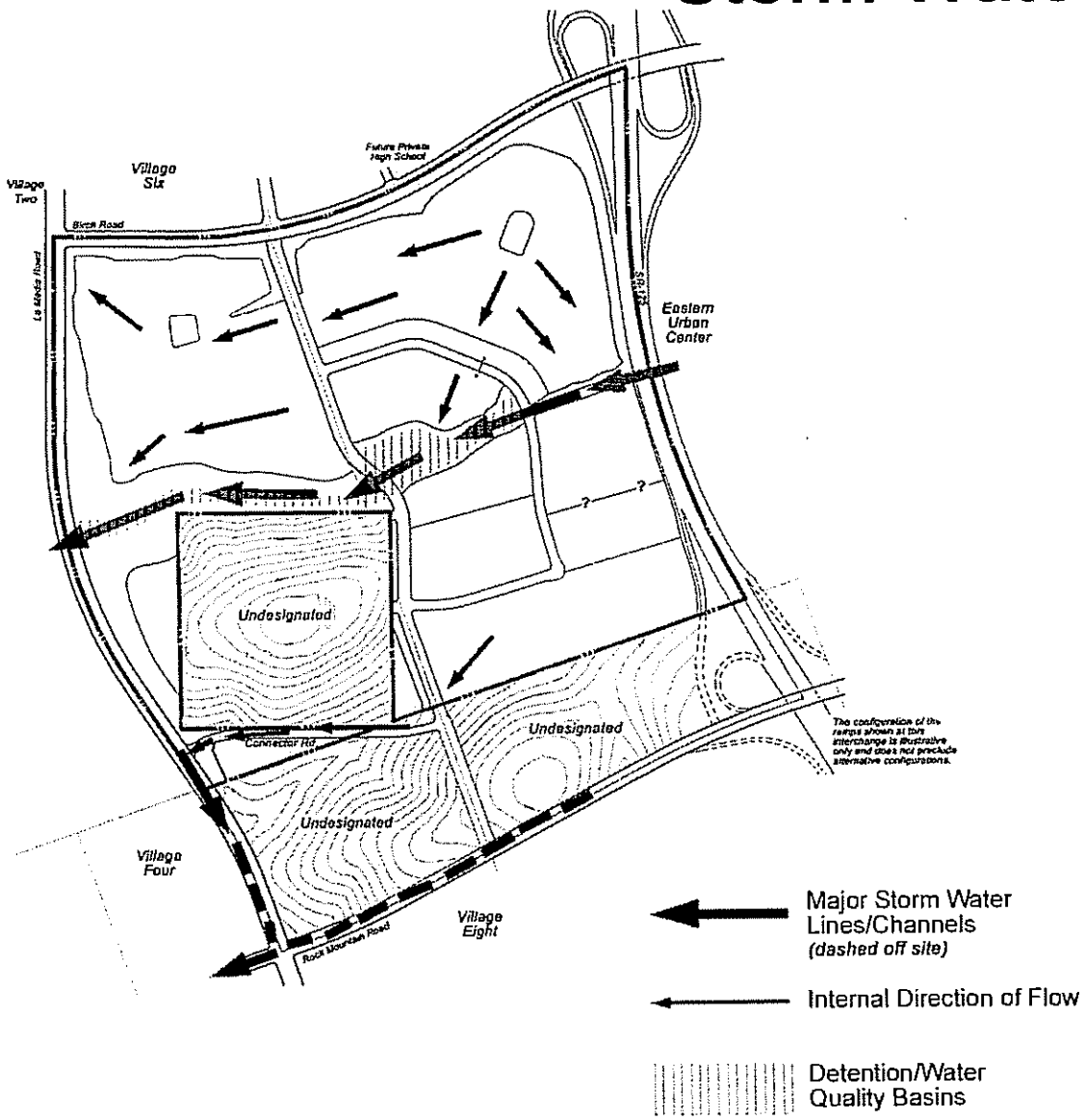
Drainage within Village Seven is conceptually depicted in the Storm Drainage Plan, Exhibit 7.4.

II.2.7.7 Urban Run-off

The Otay Ranch General Development Plan requires that applicants prepare an Urban Run-off Plan for the first SPA within the drainage area of the Otay Reservoir. Otay Ranch Village Seven SPA does not drain into the Otay Reservoir drainage basin, thus there is no requirement for additional Otay Reservoir urban run-off planning as a condition of this SPA.

The northernmost portion of Village Seven drains to Poggi Canyon, a regional detention basin located near Olympic Parkway west of Paseo Ranchero. The central portion of Village Seven drains to Wolf Canyon. Located in Wolf Canyon is a series of detention and filtration basins. The basins located between the Loop Street and Magdalena Avenue will be used for storm water draining to these areas from Parcels R-1, R-5, R-6, R-7, P-1, S-3 and portions of the EUC located east of SR-125. The basin(s) to be located westerly of Magdalena Avenue, south of Wolf Canyon and north of La Media Road will be used for storm water draining from R-3, R-4 and CPF-2b The remaining parcels, including the high school site, will manage storm water through a combination of active and passive facilities within their respective sites. Ultimately the southern portion of Village 7 drains to the southern tributary of Wolf Canyon. An ephemeral stream is proposed to be created in the eastern portion of Wolf Canyon in Village Seven.

Storm Water



Note:
Temporary facilities and treatment may be provided at the Tentative Map stage for interim conditions.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Source: P& D Consultants

Civil Land Planning

6/30/04

Exhibit 7.4

II.2.7.8 Roads

Roads and other circulation components of the Village Seven development plan are fully described in Chapter 3 of this SPA Plan. The phasing and financing of roads is more thoroughly addressed in the Otay Ranch Village Seven PFFP.

The Otay Ranch General Development Plan establishes the following goals for the transportation system (Part II, Chapter 2, Section B):

> *GOAL: PROVIDE A SAFE AND EFFICIENT TRANSPORTATION SYSTEM WITHIN OTAY RANCH WITH CONVENIENT LINKAGES TO REGIONAL TRANSPORTATION ELEMENTS ABUTTING THE OTAY RANCH.*
>
> *GOAL: ACHIEVE A BALANCED TRANSPORTATION SYSTEM WHICH EMPHASIZES ALTERNATIVES TO AUTOMOBILE USE AND IS RESPONSIVE TO THE NEEDS OF RESIDENTS .*

The roads and other components of the Village Seven transportation system described in Chapter 3 of this SPA Plan provides a variety of transportation alternatives consistent with these goals and other provisions of the Otay Ranch General Development Plan.

II.2.7.9 Schools

The Otay Ranch General Development Plan requires the preparation of a School Master Plan for each SPA. This section addresses and satisfies the requirements for such a plan. Additionally, the phasing and funding of school facilities is addressed in the Otay Ranch Village Seven PFFP.

The Otay Ranch General Development Plan establishes the following goals for school facilities (Part II, Chapter 5, Section E, Subsection 8.c):

> *GOAL: PROVIDE HIGH QUALITY K-12 EDUCATIONAL FACILITIES FOR OTAY RANCH RESIDENTS BY COORDINATED PLANNING OF SCHOOL FACILITIES WITH THE APPROPRIATE SCHOOL DISTRICT.*
>
> *GOAL: COORDINATE THE PLANNING OF ADULT EDUCATIONAL FACILITIES WITH APPROPRIATE DISTRICT.*

The Otay Ranch General Development Plan establishes the following threshold for school facilities (Part II, Chapter 5, Section E, Subsection 8.b):

> *Threshold: Additional facilities needed to serve children generated by the new development shall be provided concurrent with need, and shall be of the quality and quantity to meet, at a minimum, State Department of Education standards.*

Village Seven development includes 1,204 residential dwelling units. These units would generate approximately 788 students at full build-out according to Chula Vista Elementary School District and Sweetwater Union High School District student generation factors (see Table H below).

Table H
Student Generation

Grade	Generation Rate		Dwelling Units	Students
	SFD	MF		
K-6 - Elementary	0.0350	0.0350	1,204	421
7-8 - Middle School	0.1019	0.0526	1,204	101
9-12 - High School	0.1838	0.0853	1,204	177
TOTAL STUDENTS				699
				Source: CVESD & SUHSD

The Otay Ranch General Development Plan provides for the siting of one elementary school in each village on the Otay Valley Parcel, (except Village Three) including Village Seven. The Otay Ranch General Development Plan also plans for the location of two middle schools and two high schools on the Otay Valley Parcel. Middle schools are planned for Villages Seven and Eleven. High schools are planned for Villages Two and Seven.

The Village Seven Site Utilization Plan identifies an 11.1 (gross) acre elementary school site within the village core. As noted above, the build-out of Village Seven would generate the need to house approximately 403 elementary students. Generally, the Chula Vista Elementary School District prefers to construct schools which serve approximately 750 students, so the need is somewhat less than one school site. The elementary school site is located adjacent to a neighborhood park to facilitate joint use opportunities.

The Village Seven Overall Conceptual Village Plan identifies a 25.6 acre middle school site in the southwest corner of the village and a 55.8 acre high school site which fills the southeastern quadrant of the village.

The Otay Ranch General Development Plan School Facility Implementation Plan is based on the premise that schools will be constructed when half of the school's projected students reside in the community. The maximum middle school capacity is 1,500 students which would indicate a school construction trigger of approximately 750 students, to which the Village Seven project would contribute 101 students.

The maximum capacity of a high school is approximately 2,950 students. It is anticipated that the high school within Village Seven will be constructed in the first phase of village development to

meet demand from other approved projects within Otay Ranch. The SUHSD has determined that the school will be needed for the 2006-2007 school year. The 177 students generated from Village Seven will be served by this new facility.

Demand for adult school facilities will be satisfied within existing facilities in the Sweetwater Union High School District, until a new facility can be constructed in the Eastern Urban Center on a site reserved pursuant to the Otay Ranch General Development Plan.

II.2.7.10 Child Care Facilities

The Otay Ranch General Development Plan establishes the following goal for child care facilities (Part II, Chapter 5, Section D, Subsection 3.c):

> *GOAL: PROVIDE ADEQUATE CHILD CARE FACILITIES AND SERVICES TO SERVE THE OTAY RANCH PROJECT AREA.*

The Otay Ranch General Development Plan establishes the following threshold for child care facilities (Part II, Chapter 5, Section D, Subsection 3.b):

> *Threshold: Identify sites for child care and pre-school facilities adjacent to or as part of public and private schools, religious assembly uses, village center employment areas, residential areas, and other locations deemed appropriate.*

The City of Chula Vista adopted the Chula Vista General Plan Child Care Element in March, 1995. The purpose of the Child Care Element is "to provide comprehensive policy direction for the provision of adequate child care facilities necessary to serve existing and future developed areas in the City in a coordinated and effective manner."

As stated in the Child Care Element, "the highest priority child care needs, by age of child, are for infants (0-1 year old) and school age children (5-14)." In order to determine the demand for child care spaces within Village Seven, the criteria established in the Child Care Element were applied to the village statistics.

Village Seven generates a demand for approximately 39 child care spaces for infants. The foremost obstacle to providing infant care is higher costs due to lower child/adult ratios compared to preschool and school-age child care.

Village Seven generates a demand for approximately 34 child care spaces for preschool children. Most child care providers prefer to offer preschool care for children between the ages of 3 to 5 because of regular hours and costs which can be covered by reasonable tuition fees.

Village Seven generates a demand for approximately 102 child care spaces for school-age children. Serving this segment of the child population is challenging because of scheduling difficulties and securing sites close to elementary schools.

Village Seven may have a mix of child care providers, such as school, church, non-profit or commercial facilities. Child care facilities may be located within private homes, village centers, offices, government and industrial complexes, and/or adjacent to public and private schools when appropriate. Family day care homes and facility-based child care centers are discussed below.

Home-based child care includes small family day care homes (SFDCH) that serve up to 6 children and large family day care homes (LFDCH) that serve 7-12 children. The Otay Ranch Village Seven PC District Regulations allow the establishment of SFDCHs and LFDCHs within the SF3 and SF4 single family residential districts. A large family day care permit is required for all family day care homes within RM1 and RM2 multi-family residential districts. Based on the proposed zoning within Village Seven, family day care homes could potentially be located within all residential zones throughout Village Seven.

Village Seven includes 2.8 acres of Community Purpose Facility (CPF) zoned land. Non-profit child care facilities are considered an accessory land use to CPF and are conditionally permitted within the CPF zone. In addition to CPF land, commercial and/or mixed use development is anticipated in the village core, when it is added to Village Seven SPA approval. Commercial child care facilities are permitted within the village core commercial and mixed use areas.

Most lands designated for CPF are within or close to the village core, the transit station and the elementary school site. This land use configuration will make child care readily accessible to Village Seven residents.

II.2.7.11 Police and Fire Services

Law Enforcement

The Otay Ranch General Development Plan establishes the following goal for law enforcement facilities (Part II, Chapter 5, Section E, Subsection 6.c):

> *GOAL: PROTECTION OF LIFE AND PROPERTY AND PREVENTION OF CRIME OCCURRENCE .*

The Otay Ranch General Development Plan also establishes the following threshold for law enforcement services within urban areas which apply to the Village Seven area (Part II, Chapter 5, Section E, Subsection 6.b):

> *Threshold: Urban Service: Properly equipped and staffed law enforcement units shall respond to 84 percent of "Priority One" emergency calls within 7 minutes and maintain an average response time for all "Priority One" emergency calls of 4.5 minutes or less.*

Urban Service: Properly equipped and staffed law enforcement units shall respond to 62 percent of "Priority Two Urgent" calls within 7 minutes and maintain an average response time to all "Priority Two" call of 7 minutes or less.

The Chula Vista Police Department (CVPD) currently provides police service to the Village Seven project area.

The Otay Ranch Village Seven development will temporarily increase the demand for police service in the project area. According to the demand methodology identified in the Otay Ranch General Development Plan, the projected population increase generated by Village Seven will require an additional 4.6 officers at build-out to maintain current levels of police service. Approximately 935 sq. ft. of police facilities would be required to house the additional 4.6 officers. A new police facility has been constructed at Fourth Avenue and F Street in downtown Chula Vista to accommodate anticipated increased law enforcement services due to new development in the region, including the demand generated by this project.

Fire Protection & Emergency Medical Services

The Otay Ranch General Development Plan establishes the following goal for fire protection facilities and emergency medical services (Part II, Chapter 5, Section E, Subsection 4.c):

GOAL: PROVIDE PROTECTION TO THE OTAY RANCH PROJECT AREA AND SURROUNDING COMMUNITIES FROM LOSS OF LIFE AND PROPERTY DUE TO FIRES AND MEDICAL EMERGENCIES.

The Otay Ranch General Development Plan also establishes the following threshold for fire protection facilities and emergency medical facilities in urban communities which applies to the Village Seven area (Part II, Chapter 5, Section E, Subsection 4.b):

Threshold: Provide sufficient fire and emergency services facilities to respond to calls within the Otay Ranch urban communities within a 7 minute response time in 85% of the cases.

The Village Seven project area is within the City of Chula Vista and is served by the City of Chula Vista Fire Department (CVFD). The closest CVFD stations to the project site are: Fire Station 7 in Village Two on Santa Venetia, Fire Station 4, located at 850 Paseo Ranchero, north of East H Street; and, Fire Station 6, located in the EastLake Business Park.

The Otay Ranch General Development Plan plans for the location of fire stations in Otay Ranch Villages Two and Nine of the Otay Valley Parcel and within Village Thirteen of the Proctor Valley Parcel. Construction of the new station #7 in Village Two was completed in 2003.

The Otay Ranch General Development Plan requires that as a condition of SPA plan approval, the Fire Department review fuel modification plans. The Draft Brush Management Program, an

addendum to the City of Chula Vista's Landscape Manual, prepared by the Chula Vista Fire Department was the basis for information included in the Fuel Modification and Brush Management section of the SPA One Parks, Recreation, Open Space and Trails Master Plan, which will also be implemented as applicable in the Village Seven project. Fire Department standards will be incorporated into the landscape design for Village Seven.

A Fire Protection Plan (FPP) is required for this SPA as allowed by the California Fire Code 2001ed Article 86 - Fire Protection Plan Urban-Wildland Interface Area. The FPP will include a Brush Management Plan, provided from an approved list of consultants. Ultimately, fuel modification requirements will be decided by the Chula Vista Fire Department upon review of the Brush Management Plan. This plan will include all slopes within the village by ownership.

A fire department access and water supply plan, prepared by a licensed engineering consultant, shall be submitted to the City of Chula Vista Fire Department for approval prior to commencement of any construction activity involving combustible materials.

The Otay Ranch General Development Plan includes the following requirement related to residential fire sprinklers (Part II, Chapter 5, Section E, Subsection 4.c):

> *Policy: Otay Ranch shall evaluate the provision of fire suppression sprinkler systems for residential development within the project area as part of SPA plans.*

In response to this requirement, a SPA One Residential Fire Sprinkler Analysis was prepared which reviewed fire incidents in Chula Vista, information related to the age of homes involved in fire incidents throughout California and improved construction and building codes and standards. The report found that the age of homes has a direct correlation to fire safety and fire fatalities.

The analysis concluded that the City of Chula does not currently have an ordinance requiring residential sprinklers. However, fire sprinklers are required in all buildings four stories or 40 feet in height. Continued demand for swift medical responses requires the provision of fire stations, equipment and personnel at current levels. Improved building standards (including smoke detector requirements) for new construction was found to ensure fire safety for Otay Ranch SPA One residents, and will for Village Seven as well. Based on that analysis, a residential fire sprinkler program need not be implemented within Village Seven. However, the provision of residential fire sprinklers in future SPAs in the rural areas of Otay Ranch should be evaluated when those SPA plans are developed and processed.

Emergency medical services are provided by American Medical Response on a contract basis for the City of Chula Vista, National City and Imperial Beach. There are five American Medical Response South County paramedic units. Two are located in Chula Vista, two in National City and one unit serves Imperial Beach. Otay Ranch Village Seven will be served by these existing fire and emergency service facilities as it develops.

II.2.7.12 Library Services

The Otay Ranch General Development Plan establishes the following goal for library facilities Part II, Chapter 5, Section E, Subsection 7.c):

> *GOAL: SUFFICIENT LIBRARY FACILITIES TO MEET THE INFORMATION AND EDUCATION NEEDS OF OTAY RANCH RESIDENTS.*

The Otay Ranch General Development Plan establishes the following threshold for library facilities (Part II, Chapter 5, Section E, Subsection 7.b):

> *Threshold: 500 square feet (gross) of adequately equipped and staffed regional library facilities per 1,000 population.*

Based on the threshold of providing 500 square feet of library facilities per 1,000 residents, the Village Seven population of 3,624 generates a demand for 2,537 sq. ft. of library facilities. Existing city library facilities currently exceed the 500 square feet per 1,000 population standard.

The Otay Ranch General Development Plan plans for the location of an approximately 36,750 sq. ft. "main library" in the Eastern Urban Center and/or one or more village libraries, reducing the size of the "main library" in the EUC. The Village Seven demand for 1,810 sq. ft of library facilities generated by the build-out of Village Seven will be satisfied by the large main library in the EUC. The final location of libraries may change as overall public facility planning evolves.

II.2.7.13 Community Purpose Facilities (CPF)

The Otay Ranch General Development Plan establishes the following goal for community and regional purpose facilities (Part II, Chapter 5, Section D, Subsection 5.c).

> *GOAL: DESIGNATE AREAS WITHIN THE OTAY RANCH PROJECT AREA FOR RELIGIOUS, ANCILLARY PRIVATE EDUCATIONAL, DAY CARE, BENEVOLENT, FRATERNAL, HEALTH, SOCIAL AND SENIOR SERVICES, CHARITABLE, YOUTH RECREATION FACILITIES AND OTHER COUNTY FACILITIES.*

The Otay Ranch General Development Plan establishes the following threshold for community and regional purpose facilities (Part II, Chapter 5, Section D, Subsection 5.b):

> *Threshold: Implement a Community Purpose Facility zone and a Regional Purpose Facility zone to provide land for religious, day care, health, social, and senior and youth recreation facilities.*

The Community Purpose Facility (CPF) zone is implemented in the Village Seven PC District regulations which includes a CPF zone which corresponds to the CPF land use designation on the

Site Utilization Plan. The Regional Purpose Facility zone is expected to be implemented in the Eastern Urban Center SPA where regional purpose facilities are to be clustered per the Otay Ranch General Development Plan.

The Otay Ranch General Development Plan establishes the following SPA processing requirement for community and regional purpose facilities.

- Specific acreage requirements identified and land designated for Community Purpose Facility and Regional Purpose Facility uses. (Land Plan)

The City of Chula Vista Community Purpose Ordinance requires that new planned communities identify 1.39 acres of net usable land per 1,000 proposed residents for community purpose facilities. The Village Seven SPA population generates a demand for 5.03 acres of Community Purpose Facility sites, as shown in Table I below.

Table I
Required Community Purpose Facility Acres

Unit Type	Units	Persons/DU *	Population	CPF Acres Required
Single Family	756	3.01	2,276	3.16
Multi-family	448	3.01	1,348	1.87
TOTALS	**1,204**	--	**3,624**	**5.03**
Sites Provided				**CPF Credit/Acres Provided**
CPF-1				1.1
CPF-2a				0.7
CPF-2b				1.0
Transfer of credit from excess CPF in Village Six				2.2
TOTAL PROVIDED				**5.0**

** Projected based on City-wide average. May vary.*

The following criteria have been employed during the SPA land planning process to locate Community Purpose Facility uses within the Village Seven project area:

- Some facilities shall be located near the village core.
- Facilities shall be encouraged to share parking with adjacent public and private uses.
- Facilities and corresponding parking within village cores shall be located and sized to avoid obstruction of pedestrian circulation.

- Facilities and other public structures may exceed height, bulk or set back requirements generally applicable to private uses if such deviations are necessary to enable the structure to become the focal point, "signature piece" or "point of ceremony" of a given village.

- Facilities may also locate in traditional commercial and retail facilities.

Three CPF sites are shown on the Site Utilization Plan, CPF-1 and 2a are located in the center of the R-1 and R-2 single family residential neighborhoods, CPF-2b is located at the intersection of Magdalena Avenue and the secondary village entry street in front of the high school site.

II.2.8 Appendix A - GDP Compliance

The adopted Otay Ranch General Development Plan establishes goals and objectives for land use; mobility; housing; parks, recreation, open space; public facilities; safety; phasing; and resource protection, conservation and management. This chapter provides a re-statement of the GDP goals and objectives followed by an explanation of how they are implemented by the plan for Village Seven.

II.2.8.1 Land Use

GOAL: DEVELOP COMPREHENSIVE, WELL INTEGRATED AND BALANCED LAND USES WHICH ARE COMPATIBLE WITH THE SURROUNDINGS . (Page 64)

Objective: Provide a well-integrated land use pattern which promotes both housing and employment opportunities, while enhancing the unique environmental and visual qualities of the Otay Ranch.

Objective: Provide a wide range of residential housing opportunities, from rural and estate homes to high-density multi-family projects. Provide a balanced and diverse residential land use pattern for the Otay Valley Parcel, which promotes a blend of multi-family and single-family housing styles and densities, integrated and compatible with other land uses in the area.

Objective: Provide development patterns complementary to the adopted plans and existing development of the adjacent communities.

Implementation:

The land use plan for Village Seven supports these GDP goals and objectives by providing a range of housing and employment opportunities. The plan adheres to the GDP specific directives for Village Seven that create a village core (composed of commercial, community purpose, elementary school, high school, neighborhood park, town square and residential land uses) and residential neighborhoods that offer a variety of housing styles and densities.

The organization of the land uses within Village Seven meets the objectives of integration and compatibility of land uses within the village and with adjacent communities. Adjacent land uses are additional future urban development, Villages Two and Four to the west, Village Six is located to the north and contains residential uses including a private School, proposed Eastern Urban Center (EUC) and University Site to the east, and proposed community park and Wolf Canyon to the west. The land uses within Village Seven transition from the village core mixed use and higher density residential uses in the central area of the village, to lower density residential uses on the edges of Wolf Canyon to the west.

The Village Seven plan supports the objective of enhancing the unique environmental and visual qualities of Otay Ranch. The village conforms to the

natural topography of the site and maintains views into the upper reaches of Wolf Canyon, and distant views to the mountains to the east and northeast.

GOAL: ENVIRONMENTALLY SENSITIVE DEVELOPMENT SHOULD PRESERVE AND PROTECT SIGNIFICANT RESOURCES AND LARGE OPEN SPACE AREAS . (Page 64)

Objective: Provide land use arrangements which preserve significant natural resource areas, significant landforms and sensitive habitat.

Implementation:

These goals and objectives will be met through the conveyance of land to the Preserve Owner Manager, the City of Chula Vista and County of San Diego in accordance with the requirements of the RMP. Village Seven is sited within land area designated for development and the plan provides for protection of the adjacent environmentally sensitive areas through appropriate design of landscaping, drainage and other features.

GOAL: REDUCE RELIANCE ON THE AUTOMOBILE AND PROMOTE ALTERNATIVE MODES OF TRANSPORTATION . (Page 64)

Objective: Develop villages which integrate residential and commercial uses with a mobility system that accommodates alternative modes of transportation, including pedestrian, bicycle, bus, light rail, and other modes of transportation.

Objective: Develop residential land uses which encourages the use of alternative modes of transportation through the provision of bus and light rail right-of-way, and the inclusion of a bicycle and pedestrian network.

Objective: Commercial uses should be sized to meet the needs of the immediate and adjacent villages. Village commercial land uses preempt large regional commercial opportunities within villages and relegate them to the EUC or freeway commercial areas.

Objective: Develop the Eastern Urban Center to promote alternative modes of transportation. Specifically, through the provision of light rail right-of-way and the incorporation of multi-modal access from residential neighborhoods and villages.

Implementation:

Land uses within Village Seven, including a Town Center, park and school uses, are designed to provide for the daily needs of the residents. Provision of land uses that minimize the need for automobile travel coupled with the pedestrian-oriented design of the village are two ways the plan meets the GDP goals and objectives. The village core is located in the central portion of the village to provide synergism between neighborhood commercial uses in the village with community-serving commercial uses in the EUC. This area of the village is also designed with the greatest residential density in closest proximity to the regional transit-way in t he EUC and FC. Throughout the village, a system of paseos and landscaped streets link residential neighborhoods, the village core, parks, and schools to encourage walking, rather than driving. These paths are designed with parkway separations between walkways and streets, landscaping, lighting and furnishings to make the pedestrian experience pleasant and promote safety. Convenient support features, such as bus stops, bicycle racks and cart parking spaces are also provided. A bus route can be accommodated around and through the village with strategically located stops. The village trail system also connects to the surrounding community trail system. Village Seven will be developed with an advanced wiring telecommunications and information technology system. Availability of these facilities will encourage telecommuting and accommodate home-based businesses.

GOAL: PROMOTE VILLAGE LAND USES WHICH OFFER A SENSE OF PLACE TO RESIDENTS AND PROMOTES SOCIAL INTERACTION . (Page 65)

Objective: Organize Otay Ranch into villages, each having its own identity and sense of place.

Objective: The design of the Otay Ranch should promote variety and diversity at the village scale, while providing a sense of continuity through the use of unifying design elements.

Objective: Promote a diverse range of activities and services to encourage a mixture of day/night and weekday/weekend uses.

Implementation:

Village Seven meets these goals and objectives by providing a village core surrounding a town square. Land uses within the village core include commercial/mixed use, community purpose facilities, elementary school, park and a variety of residential housing types. The land uses, coupled with a village design theme create the village identity and sense of place. The village incorporates Ranch-wide design elements such as signage and landscaping to connect it with the other villages of Otay Ranch.

GOAL: DIVERSIFY THE ECONOMIC BASE WITHIN OTAY RANCH. (Page 65)

Objective: Create an economic base that will ensure there is adequate public revenue to provide public services.

Objective: Create an Eastern Urban Center within the Otay Valley Parcel and encourage the development of a retail base for the planning area, but not to the detriment of existing regional and local commercial centers.

Objective: Create employment opportunities for area residents which complements, rather than substitutes for industrial development on the Otay Mesa.

Implementation:

The village core mixed use development contributes to the economic base with neighborhood-serving uses that will complement the viability of the FC and the EUC. The advanced system wiring will provide telecommunications support to businesses within the village.

GOAL: PROMOTE SYNERGISTIC USES BETWEEN THE VILLAGES OF THE OTAY RANCH TO PROVIDE A BALANCE OF ACTIVITIES, SERVICES AND FACILITIES. (Page 65)

Objective: Develop individual villages to complement surrounding villages.

Objective: Select villages to provide activities and uses which draw from surrounding villages. Uses serving more than one village, such as a cinema complex, should be located in a village core that has convenient access to adjacent villages.

Implementation:

Village Seven provides neighborhood-serving commercial uses that complement the community and regional-serving commercial uses of the FC and EUC. Village Seven's core will provide an intimate-scale village that can serve the needs of University and Eastlake residents.

GOAL: ORGANIZE LAND USES BASED UPON A VILLAGE CONCEPT TO PRODUCE A COHESIVE, PEDESTRIAN FRIENDLY COMMUNITY, ENCOURAGE NON-VEHICULAR TRIPS, AND FOSTER INTERACTION AMONGST RESIDENTS. (Page 95)

Implementation:

All areas of Village Seven are connected by an extensive trail and pathway system. These trails and pathways reinforce a pedestrian friendly concept as well as promote the use of alternative modes of transportation. By reducing the need for an automobile, people will have opportunities to interact with their neighbors and other

residents of the village as they walk or ride to their destinations. The location of medium and high-density residential, elementary school and neighborhood park uses near the village core will also encourage non-vehicular trips.

II.2.8.2 Mobility

GOAL: PROVIDE A SAFE AND EFFICIENT TRANSPORTATION SYSTEM WITHIN OTAY RANCH WITH CONVENIENT LINKAGES TO REGIONAL TRANSPORTATION ELEMENTS ABUTTING THE OTAY RANCH. (Page 217)

Objective: Ensure timely provision of adequate local circulation system capacity to respond to planned growth, maintaining acceptable levels of service (LOS).

Objective: Plan and implement a circulation system such that the operational goal of Level of Service "C" for circulation element arterial and major roads and intersections can be achieved and maintained. Internal village streets/roads are not expected to meet this standard.

Objective: Encourage other transportation modes through street/road design standards within the village, while accommodating the automobile. Design standards are not focused on achieving LOS standards or providing auto convenience.

Objective: Provide an efficient circulation system that minimizes impacts on residential neighborhoods and environmentally sensitive areas.

Implementation:

Streets surrounding and internal to Village Seven are designed in compliance with the goals and objectives of the GDP. Street design and phasing strives to provide efficient and appropriate level of service. The village circulation system provides for connections to the regional transit-way to the east. Internal streets have been designed to accommodate bicycles and carts, and a series of pedestrian paths are provided throughout the village to provide alternatives to automobile travel.

GOAL: ACHIEVE A BALANCED TRANSPORTATION SYSTEM WHICH EMPHASIZES ALTERNATIVES TO AUTOMOBILE USE AND IS RESPONSIVE TO THE NEEDS OF RESIDENTS . (Page 218)

Objective: Study, identify, and designate corridors, if appropriate, for light rail and transit facilities.

Objective: Promote alternative forms of transportation, such as bicycle and car paths, riding and hiking trails, and pedestrian walkways as an integral part of the circulation system.

Implementation:

A wide variety of alternative forms of transportation, including trails, paths and paseos, are provided within Village Seven. This alternative transportation network addresses the needs of residents by offering different routes to uses within and outside of the village.

II.2.8.3 Housing

GOAL: CREATE A BALANCED COMMUNITY EXEMPLIFIED BY THE PROVISION OF A DIVERSE RANGE OF HOUSING STYLES, TENANCY TYPES AND PRICES. (Page 239)

Objective: Provide a variety of housing opportunities sufficient to meet a proportionate share of the Regional Share allocation of housing.

Objective: Each Otay Ranch Village will proportionately assist the appropriate land use jurisdiction to meet or exceed Otay Ranch's share of the five-year Regional Share allocation as provided by each jurisdiction's Housing Element.

Implementation:

The Village Seven plan meets these goals and objectives by providing a wide variety of housing types, including affordable housing. Proposed housing includes apartments, townhouses, condominiums, attached housing (duplexes and/or triplexes), and small lot single-family residential.

GOAL: THE PROVISION OF SUFFICIENT HOUSING OPPORTUNITIES FOR PERSONS OF ALL ECONOMIC, ETHNIC, RELIGIOUS AND AGE GROUPS, AS WELL AS THOSE WITH SPECIAL NEEDS SUCH AS THE HANDICAPPED, ELDERLY, SINGLE PARENT FAMILIES AND THE HOMELESS. (Page 244)

Objective: Ensure that the Otay Ranch provides housing opportunities sufficient to meet a proportionate share of identified special housing needs, and applies fair housing practices for all needs groups in the sale, rental, and advertising of housing units.

Implementation:

Village Seven will contain a wide variety of housing types ranging in density from low-medium to high. The variety of housing types will accommodate families, singles and those with special housing needs, including the handicapped and the elderly. Fair housing practices will be employed in the sale, rental and advertising of all units.

II.2.8.4 Parks, Recreation, Open Space

GOAL: PROVIDE DIVERSE PARK AND RECREATIONAL OPPORTUNITIES WITHIN OTAY RANCH WHICH MEET THE RECREATIONAL, CONSERVATION, PRESERVATION, CULTURAL AND AESTHETIC NEEDS OF PROJECT RESIDENTS OF ALL AGES AND PHYSICAL ABILITIES . (Page 247)

Objective: Identify park, recreational and open space opportunities, where appropriate, to serve the South County region and San Diego County as a whole.

Objective: Maximize conservation, joint uses and access and consider safety in the design of recreational facilities.

Objective: Provide neighborhood and community park and recreational facilities to serve the recreational needs of local residents.

Implementation:

A neighborhood park and town center will provide residents of all ages and physical abilities with both active and passive recreational opportunities. The location of the neighborhood park adjacent to the elementary school provides an opportunity for shared use. Within the "Village Greenway" located within the open space corridor defined within Wolf Canyon, the greenway provides east-west circulation through Village 7. Village 7 will contribute its share of the cost of community and/or regional park facilities.

II.2.8.5 Capital Facilities

GOAL: ASSURE THE EFFICIENT AND TIMELY PROVISION OF PUBLIC SERVICES AND FACILITIES OF DEVELOPABLE AREAS OF OTAY RANCH CONCURRENT WITH NEED . (Page 262)

Objective: Ensure that the pace and pattern of residential, commercial and other non-residential development is coordinated with the provision of adequate public facilities and services.

Objective: Permit development only through a process that phases construction with the provision of necessary infrastructure prior to or concurrent with need.

Objective: Development projects shall be required to provide or fund their fair share of all public facilities needed by the development.

Objective: "Enhanced Services" may be provided to specified geographic areas of the Otay Ranch. These are services that exceed the normal or standard level of services provided to the jurisdiction as a whole.

Objective: The City of Chula Vista and the county of San Diego shall enter into a Master Property Tax Agreement covering all annexations within an agreed-upon geographic area in Otay Ranch. That Agreement shall consider the distribution of property tax revenues, as well as the allocation of total project revenues between the City and the County in accordance with the following policies.

Objective: As a general guideline, efforts should be made to keep the effective tax rate (ETR), including all property taxes and special assessments, not to exceed 2.00 percent of the assessed value of the property.

Objective: Monitor the impacts of growth and development on critical facilities and services to ensure that necessary infrastructure is provided prior to or concurrent with need.

Implementation:

Village Seven meets these goals and objectives through a plan that phases development with infrastructure improvements. The developer will participate in fair-share funding of facilities.

Drainage Facilities

GOAL: PROVIDE PROTECTION TO THE OTAY RANCH PROJECT AREA AND SURROUNDING COMMUNITIES FROM FIRE, FLOODING AND GEOLOGIC HAZARDS. (Page 267)

Objective: Individual projects will provide necessary improvements consistent with the National Flood Insurance Program, Drainage Master Plan(s) and Engineering Standards.

Objective: Development within floodplains will be restricted to decrease the potential for property damage and loss of life from flooding and to avoid the need for channels and other flood control facilities.

Objective: Preservation of the floodplain environment from adverse impacts due to development.

Objective: Require onsite detention of storm water flows such that existing downstream structures will not be overloaded.

Implementation:

The grading and drainage plans for Village Seven meet these goals and objectives by providing several alternatives controlling and detaining run-off. The plans provide for protection of adjacent, lower elevation sensitive habitats

Sewerage Facilities

GOAL: PROVIDE A HEALTHFUL AND SANITARY SEWERAGE COLLECTION AND DISPOSAL SYSTEM FOR THE RESIDENTS OF OTAY RANCH AND THE REGION, INCLUDING A SYSTEM DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE USE OF RECLAIMED WATER . (Page 270)

Objective: The ongoing planning, management and development of sewerage conveyance, treatment and disposal facilities to adequately meet future demands.

Objective: Assure that wastewater treatment plants are consistent with sewerage master plans.

Objective: Sewage disposal systems should maximize the provision and utilization of reclaimed water.

Implementation:

The sewerage system for Village Seven is designed in compliance with the Otay Ranch master plans for sewer and reclaimed water.

Integrated Solid Waste Management Facilities

GOAL: PROVIDE SOLID WASTE FACILITIES AND SERVICES WHICH EMPHASIZE RECYCLING OF REUSABLE MATERIALS AND DISPOSAL OF REMAINING SOLID WASTE SO THAT THE POTENTIAL ADVERSE IMPACTS TO PUBLIC HEALTH ARE MINIMIZED . (Page 274)

Objective: Reduce the volume of waste to be landfilled by 30% by 1995 and by 50% by 2000.

Implementation:

During construction, solid waste disposal and recycling of materials will adhere to best management practices and City standards. A recycling/drop-off center will be located within the mixed-use area of the village core. This central location will encourage residents and businesses in the village to participate in recycling programs.

Urban Runoff Facilities

GOAL: ENSURE THAT WATER QUALITY WITHIN THE OTAY RANCH PROJECT AREA IS NOT COMPROMISED. (Page 277)

GOAL: ENSURE THAT THE CITY OF SAN DIEGO'S WATER RIGHTS WITHIN THE OTAY RIVER WATERSHED SHALL NOT DIMINISH. (Page 277)

Implementation:

The drainage plan for Village Seven provides for management and containment of urban runoff in conformance with City and regional environmental protection standards.

Water Facilities

GOAL: ENSURE AN ADEQUATE SUPPLY OF WATER FOR BUILD-OUT OF THE ENTIRE OTAY RANCH PROJECT AREA; DESIGN THE OTAY RANCH PROJECT AREA TO MAXIMIZE WATER CONSERVATION. (Page 280)

Objective: Ensure an adequate supply of water on a long-term basis prior to the development of each phase of the Otay Ranch Project Area.

Objective: Ensure infrastructure is constructed concurrently with planned growth, including adequate storage, treatment, and transmission facilities, which are consistent with development phasing goals, objectives and policies, and the Service/Revenue Plan.

Objective: Ensure that water quality within the Otay Ranch Project Area is not compromised, consistent with NPDES Best Management Practices, and the RWQCB Basin Plans

Objective: Promote water conservation through increased efficiency in essential uses and use of low water demand landscaping.

Objective: Encourage suppliers to adopt a graduated rate structure designed to encourage water conservation.

Implementation:

Water facilities will be phased in conformance with street improvements and sewer facilities. A water conservation plan will be finalized and incorporated as part of the SPA Plan and Tentative Map approval process.

Water Reclamation Facilities

GOAL: DESIGN A SEWERAGE SYSTEM WHICH WILL PRODUCE RECLAIMED WATER. ENSURE A WATER DISTRIBUTION SYSTEM WILL BE DESIGNED AND CONSTRUCTED TO USE RECLAIMED WATER. CONSTRUCTION OF A "DUAL SYSTEM" OF WATER SUPPLY WILL BE REQUIRED FOR ALL DEVELOPMENT WHERE RECLAIMED WATER IS USED. (Page 283)

Objective: Encourage development of public and private open space and recreational uses that could utilize reclaimed water.

Implementation:

A reclaimed water plan has been prepared and is incorporated as part of the SPA approval process. A SAMP will be prepared which will include reclaimed water facilities.

Arts and Cultural Facilities

GOAL: PLAN SITES FOR FACILITIES DEDICATED TO THE ENHANCEMENT OF THE ARTS AT THE COMMUNITY LEVEL THAT CAN CONTAIN INDOOR AND OUTDOOR FACILITIES CAPABLE OF SUPPORTING COMMUNITY THEATER, TRAINING AND EXHIBITION OF ART AND SCULPTURE, MUSICAL TRAINING AND CONCERTS, FILM AND CULTURAL FESTIVALS, PUBLIC MEETINGS, AND OTHER COMMUNITY EVENTS. (Page 283)

Implementation:

Village Seven provides a town center, neighborhood park, elementary school, high school, community purpose facility, and mixed use center which could accommodate arts and cultural facilities. Paseos and landscaped traffic circles at strategic street intersections provide opportunities for sculpture display.

Cemetery Facilities

Objective: Identify and preserve adequate cemetery sites to serve the Otay Ranch Project Area (Page 289).

Implementation:

A cemetery site is not proposed in Village Seven.

Child Care Facilities

GOAL: PROVIDE ADEQUATE CHILD CARE FACILITIES AND SERVICES TO SERVE THE OTAY RANCH PROJECT AREA. (Page 290)

Objective: Identify sites for childcare and pre-school facilities adjacent to or part of public and private schools, religious assembly uses, employment areas, and other locations deemed appropriate.

Implementation:

Childcare facilities can be accommodated in the mixed use, community purpose facility, elementary school, high school, and neighborhood park land use areas. Small family day care is also an allowable use within residential areas, provided adequate outdoor play area and other design guideline and development regulations criteria can be met.

Health and Medical Facilities

GOAL: ENSURE PROVISION OF AND ACCESS TO FACILITIES WHICH MEET THE HEALTH CARE NEEDS OF OTAY RANCH RESIDENTS. (Page 294)

Objective: Identify a general location within Otay Ranch for public and private health service organizations, charities, and private adult care and mental care facilities.

Implementation:

Senior congregate care and health care offices and clinics are allowable uses within the mixed use area of Village Seven. The community purpose facility land use also allows health care uses.

Community and Regional Purpose Facilities

GOAL: DESIGNATE AREAS WITHIN THE OTAY RANCH PROJECT AREA FOR RELIGIOUS, ANCILLARY PRIVATE EDUCATIONAL, DAY CARE, BENEVOLENT, FRATERNAL, HEALTH, SOCIAL AND SENIOR SERVICES, CHARITABLE, YOUTH RECREATION FACILITIES, AND OTHER COUNTY REGIONAL SERVICES. (Page 299)

Implementation:

A specific site has been designated within the village core for community purpose facilities which will meet this goal. The mixed use area can also accommodate community purpose facilities. The elementary school, high school and parks may also be available to share facilities with community-serving organizations.

Social and Senior Services Facilities

GOAL: ENSURE THAT OTAY RANCH PROJECT AREA RESIDENTS HAVE ADEQUATE ACCESS TO SOURCES OF GOVERNMENTAL AND PRIVATE SOCIAL AND SENIOR SERVICE PROGRAMS . (Page 302)

Objective: Social and senior service facilities should be sited within Otay Ranch to either provide direct service access or to provide community service information to each village to educate the public regarding available services.

Objective: Siting of new facilities and expansion of existing social or senior services facilities will be planned to most effectively serve the clients of each social and senior service activity as part of a comprehensive social and senior service delivery system.

Implementation:

Social and senior service needs can be met within allowable use areas including the mixed use, community purpose facility and park land uses. Shared use may be available with the schools.

Animal Control Facilities

GOAL: ENSURE THAT THE COMMUNITY OF OTAY RANCH IS SERVED BY AN EFFECTIVE ANIMAL CONTROL PROGRAM THAT PROVIDES FOR THE CARE AND PROTECTION OF THE DOMESTIC ANIMAL POPULATION, SAFETY OF PEOPLE FROM DOMESTIC ANIMALS, AND THE EDUCATION OF THE PUBLIC REGARDING RESPONSIBLE ANIMAL OWNERSHIP . (Page 306)

Objective: Participate in programs to provide animal control facilities sufficient to provide adequate shelter space per Otay Ranch dwelling unit.

Implementation:

Village Seven will participate in City programs for provision of animal control.

Civic Facilities

GOAL: ASSURE THE EFFICIENT AND TIMELY PROVISION OF PUBLIC SERVICES AND FACILITIES TO DEVELOPABLE AREAS OF THE OTAY RANCH PROJECT AREA CONCURRENT WITH NEED, WHILE PRESERVING ENVIRONMENTAL RESOURCES OF THE SITE AND ENSURING COMPATIBILITY WITH THE EXISTING CHARACTER OF SURROUNDING COMMUNITIES. INTEGRATE DIFFERENT TYPES OF PUBLIC FACILITIES WHERE SUCH FACILITIES ARE COMPATIBLE AND COMPLEMENTARY . (Page 308)

Implementation:

This goal will be met through implementation of the Village Seven Public Facilities Finance Plan.

Correctional Facilities

GOAL: PREVENT INJURY, LOSS OF LIFE AND DAMAGE TO PROPERTY RESULTING FROM CRIME OCCURRENCE THROUGH THE PROVISION OF JUSTICE FACILITIES . (Page 310)

Objective: Make provisions for justice facilities, including jails, courts, and police facilities adequate to serve the Otay Ranch Project Area.

Implementation:

Village Seven will not contain justice facilities. The goal can be met through implementation of the Pubic Facilities Finance Plan.

Fire Protection and Emergency Services Facilities

GOALS: PROVIDE PROTECTION TO THE OTAY RANCH PROJECT AREA AND SURROUNDING COMMUNITIES FROM THE LOSS OF LIFE AND PROPERTY DUE TO FIRES AND MEDICAL EMERGENCIES. (Page 312)

Objective: Provide sufficient fire and emergency service facilities to respond to calls within the Otay Ranch urban communities within a 7-minute response time in 85% of the cases.

Implementation:

This goal will be met through implementation of the Public Facilities Finance Plan. Additionally, the circulation design of Village Seven facilitates emergency vehicle access to all areas of the village.

Justice Facilities

GOAL: PREVENT INJURY, LOSS OF LIFE AND DAMAGE TO PROPERTY BY HAVING ADEQUATE CRIMINAL JUSTICE FACILITIES TO SERVE OTAY RANCH RESIDENTS. (Page 316)

Objective: Cooperate with the County to identify an equitable funding method for the development of justice facilities based on the needs of Otay Ranch and their benefit to Otay Ranch residents.

Objective: Justice facilities serving Otay Ranch residents will be sited in appropriate locations and in a timely manner, irrespective of jurisdictional boundaries.

Objective: Enhance public safety by utilizing land use and site design techniques to deter criminal activity.

Implementation:

Village Seven will not contain justice facilities. The design of Village Seven fosters community interaction and awareness which deters criminal activity. Design techniques include "eyes on the street' orientation of commercial and residential uses towards the street and placement of parks and paseos as focal points in the community. These techniques minimize hidden locations where criminal activity can occur. The Village Design Plan provides landscape techniques such as open view fencing and barrier plantings to foster safety in an aesthetic manner.

Law Enforcement Facilities

GOAL: PROTECTION OF LIFE AND PROPERTY AND PREVENTION OF CRIME OCCURRENCE. (Page 319)

Objective: Make provisions for criminal justice facilities, including jails, courts, and police facilities adequate to serve the Otay Ranch Project Area.

Objective: Enhance conditions for public safety by utilizing land use and site design techniques to deter criminal activity and promote law enforcement.

Objective: Site law enforcement facilities to appropriate locations in order to serve the population.

Implementation:

Village Seven will not contain justice facilities. Village Seven utilizes design techniques to deter criminal activity and promote law enforcement.

Library Facilities

GOAL: SUFFICIENT LIBRARIES TO MEET THE INFORMATION AND EDUCATION NEEDS OF OTAY RANCH RESIDENTS. (Page 322)

Objective: Provide high quality and contemporary library facilities and services which meet the needs of the entire Otay Ranch Project Area.

Objective: Five hundred square feet (gross) of adequately equipped and staffed library facilities per 1,000 population.

Objective: Otay Ranch libraries will be equitably financed by all new development that will benefit from the facilities.

Implementation:

Village Seven will contribute an equitable financial share to the Otay Ranch library facilities.

School Facilities

GOAL: PROVIDE HIGH QUALITY, K-12 EDUCATIONAL FACILITIES FOR OTAY RANCH RESIDENTS BY COORDINATED PLANNING OF SCHOOL FACILITIES WITH THE APPROPRIATE SCHOOL DISTRICT. (Page 325)

GOAL: COORDINATE THE PLANNING OF ADULT EDUCATIONAL FACILITIES WITH APPROPRIATE DISTRICT. (Page 325)

Objective: School facilities shall be provided concurrently with need and integrated with related facility needs, such as childcare, health care, parks, and libraries, where practical.

Objective: Provide school district with 12 to 18 month development plan and 3 to 5 year development forecasts so that they may plan and implement school building and/or allocation programs in a timely manner.

Implementation:

An elementary school, middle school, and a high school site are provided within Village Seven. Adult education facilities could be accommodated in the mixed use and community purpose facility sites or as a shared use with the public schools.

II.2.8.6 Air Quality

GOAL: MINIMIZE THE ADVERSE IMPACTS OF DEVELOPMENT ON AIR QUALITY . (Page 332)

Implementation:

The Village Seven Air Quality Improvement Plan provides measures to meet this goal. The plan addresses improvement measures including job/housing balance, transit access, alternative travel modes, building construction methods and educational programs. Village Seven has been designed to offer residents numerous alternative methods of transportation, including public transit and pedestrian trails which connect to the village core as well as to other areas outside of the village.

Commuter Trip Management

GOAL: CREATE A SAFE AND EFFICIENT MULTI-MODAL TRANSPORTATION NETWORK WHICH MINIMIZES THE NUMBER AND LENGTH OF SINGLE PASSENGER VEHICLE TRIPS . (Page 332)

Objective: Minimize the number and length of single passenger vehicle trips to and from employment and commercial centers to achieve an average of 1.5 persons per passenger vehicle during weekday commute hours.

Implementation:

Village Seven is located in proximity to planned regional transit-way, accommodates a bus line and stops, provides an extensive pedestrian path system and has been designed to accommodate bicycles and carts on all internal village streets. Employment and commercial centers are located within the village and in the adjacent EUC.

Capacity Improvements

Objective: Expand the capacity of both the highway and transit components of the regional transportation system to minimize congestion and facilitate the movement of people and goods (Page 333).

Implementation:

Village Seven will contribute to highway and transit improvements through the Public Facilities Finance Plan.

Bicycle System Design

Objective: Provide a safe, thorough and comprehensive bicycle network which includes bicycle paths between major destinations within, and adjacent to, Otay Ranch (Page 334).

Implementation:

The Village Seven design provides for bicycle access to all internal village streets. A network of bicycle lanes along major perimeter roads offer routes to destinations outside of the village such as the community park, university, and Eastern Urban Center.

Road Design

Objective: Design arterial and major roads and their traffic signals to minimize travel time, stops and delays (Page 334).

Implementation:

The major roads surrounding Village Seven have been designed in accordance with City standards. Traffic signals have been located to facilitate traffic flow and to provide access to Village Seven and neighboring land uses.

Planning and Land Development

GOAL: LAND DEVELOPMENT PATTERNS WHICH MINIMIZE THE ADVERSE IMPACTS OF DEVELOPMENT ON AIR QUALITY . (Page 335)

Objective: Encourage mixed use development to promote linking of trips, reduce trip length and encourage alternative mode usage.

Implementation:

Village Seven has been designed with a mixed-use core to encourage availability of goods and services within the village. The village is in proximity to the EUC, FC and transit rail line, which will encourage linked trips and reduced trip length. The convenient village pedestrian path system and internal streets designed to accommodate carts and bicycles will encourage alternate modes of travel.

Transit Route and Facility Design

Objective: Facilitate access to public transit (Page 336).

Implementation:

Pedestrian and bicycle paths link Village Seven to the regional transit-way. Bus stops will be provided around and/or within Village Seven to offer residents an alternative mode of transportation.

Pedestrian Design

Objective: Encourage pedestrian traffic as an alternative to single vehicle passenger travel (Page 336).

Implementation:

The extensive system of trails and pathways throughout the village to destinations such as the village core, schools and parks, the neighboring land uses, will encourage residents to walk rather than drive.

Building Design

Objective: Locate and design buildings within village cores to facilitate transit and pedestrian access (Page 337).

Implementation:

Buildings within the Village Seven core are clustered to minimize walking distances and oriented to the street to encourage pedestrian access. Paths within the core link to public transit stations.

Parking Management

Objective: Manage parking facilities to facilitate transit, ridesharing and pedestrian access (Page 337).

Objective: Manage parking facilities to encourage a reduction in the number of single vehicle trips (Page 337).

Implementation:

Parking areas within the village core will be located at the rear and sides of buildings to maintain a pedestrian-oriented village streetscape. Joint parking use will be encouraged in the village core.

Street Configuration

Objective: Configure internal village streets to give pedestrian traffic a priority (Page 337).

Implementation:

Multiple routes, including pedestrian paths and paseos are provided to the village core. Cul-de-sacs connect to paseos to provide pedestrian connections throughout the village. Village streets are designed for pedestrian comfort with sidewalks, landscaping and furnishings.

Particulate Emissions

Objective: Minimize particulate emissions, which are the result of the construction process (Page 338).

Implementation:

This objective will be met through construction practices that control fugitive dust, minimize simultaneous operation of construction vehicles and equipment, and use low-polluting equipment.

Energy Conservation

Objective: Minimize fossil fuel emission by conserving energy (Page 338). [See Energy Chapter 10. Section E.]

Implementation:

The village is designed to provide alternate modes of travel and reduce vehicle trips to reduce fossil fuel emissions.

II.2.8.7 Noise

GOAL: PROMOTE A QUIET COMMUNITY WHERE RESIDENTS LIVE WITHOUT NOISE WHICH IS DETRIMENTAL TO HEALTH AND ENJOYMENT OF PROPERTY . (Page 340)

GOAL: ENSURE RESIDENTS ARE NOT ADVERSELY AFFECTED BY NOISE . (Page 340)

Objective: Otay Ranch shall have a noise abatement program to enforce regulations to control noise.

Implementation:

The design of Village Seven separates higher noise generating land uses from more sensitive residential land uses. Sound abating features, such as masonry walls and dual-glazed windows, will be provided as needed. City standards for noise regulation and abatement shall be enforced.

II.2.8.8 Safety

GOAL: PROMOTE PUBLIC SAFETY AND PROVIDE PUBLIC PROTECTION FROM FIRE, FLOODING, SEISMIC DISTURBANCES, GEOLOGIC PHENOMENA AND MAN MADE HAZARDS IN ORDER TO :

- Preserve Life, Health and Property;
- Continue Government Functions and Public Order;
- Maintain Municipal Services; and
- Rapidly Resolve Emergencies and Return the Community Normalcy and Public Tranquility. (Page 341)

General Public Safety

Objective: Provide for the continuity of government and public order (Page 342).

Objective: Maintain public services and ensure the rapid resolution of emergencies (Page 342)

Objective: Minimize social and economic dislocations resulting from injuries, loss of life and property damage (Page 342).

Implementation:

The Village Seven design has utilized the recommendations of technical studies, City codes and ordinances, and other policies and regulations to plan for development that will promote the protection of life and property.

Seismic Disturbances

Objective: Provide public protection from earthquakes, rockslides, and liquefaction in order to minimize loss of life, injury, property damage and disruption of community social and economic activity (Page 343).

Implementation:

Site grading and construction shall be in accordance with the Uniform Building Code and the Association of Structural Engineers of California to reduce the effects of seismic shaking to the extent possible.

Floods

Objective: Prevent property damage and loss of life due to seiches, dam failure and heavy rains (Page 343).

Objective: Preservation of the floodplain environment from adverse impacts due to development (Page 343).

Implementation:

Village Seven is not located within a floodplain. Storm water flows shall be controlled and conveyed in accordance with the Master Drainage Plan for the village.

Geologic Phenomena

Objective: Prevent property damage and loss of life due to landslides, rock falls, and erosion (Page 344).

Implementation:

Village Seven development shall utilize grading practices that are consistent with this objective.

Fire, Crime, Health Emergency, and Hazardous Substances

Objective: Prevent property damage and loss of life due to fire, crime or hazardous substances (Page 344).

Implementation:

Village Seven is planned to reduce potential affects of fire through adequate water supply, street design that facilitates emergency vehicle access, and fuel-modification landscape techniques. Crime prevention is addressed through optimization of community interaction and street activity and a minimization of secluded areas that could foster crime. City codes and policies will be implemented and enforced to minimize potential affects of hazardous substances.

II.2.8.9 Growth Management

GOAL: DEVELOP OTAY RANCH VILLAGES TO BALANCE REGIONAL AND LOCAL PUBLIC NEEDS, RESPOND TO MARKET FORCES, AND ASSURE THE EFFICIENT AND TIMELY PROVISION OF PUBLIC SERVICES AND FACILITIES CONCURRENT WITH NEED . (Page 349)

Objectives: Coordinate the timing of the development of Otay Ranch villages to provide for the timely provision of public facilities, assure the efficient use of public fiscal resources and promote the viability of the existing and planned villages.

Implementation:

Village Seven will be developed in phases that balance market forces with implementation of the facilities, as identified by the Public Facilities Finance Plan.

II.2.8.10 Resource Protection, Conservation & Management

GOAL: ESTABLISHMENT OF AN OPEN SPACE SYSTEM THAT WILL BECOME A PERMANENT PRESERVE DEDICATED TO THE PROTECTION AND ENHANCEMENT OF THE BIOLOGICAL, PALEONTOLOGICAL, CULTURAL RESOURCES (ARCHAEO-LOGICAL AND HISTORICAL RESOURCES), FLOOD PLAIN, AND SCENIC RESOURCES OF OTAY RANCH, THE MAINTENANCE OF LONG-TERM BIOLOGICAL DIVERSITY, AND THE ASSURANCE OF THE SURVIVAL AND RECOVERY OF NATIVE SPECIES AND HABITATS WITHIN THE PRESERVE, AND TO SERVE AS THE FUNCTIONAL EQUIVALENT OF THE COUNTY OF SAN DIEGO RESOURCE PROTECTION ORDINANCE (RPO). (Page 359)

Objective: Identify sensitive and significant biological, cultural, paleontological, agricultural, and scenic resources within Otay Ranch that require protection and/or management (Page 359).
Objective: Preserve sensitive and significant biological, cultural, paleontological, flood plain, visual, and agricultural resources (Page 361).

Implementation:

These goals and objectives will be met through compliance with the Otay Ranch RMP and RMP 2, by conveyance of property within the preserve to the Preserve Owner Manager.

Enhance and Restore Sensitive Resources

Objective: Enhance, restore, and re-establish sensitive biological resources (species and habitats) in disturbed areas where the resources either formerly occurred or have a high potential for establishment (Page 368).

Implementation:

Disturbed areas within Wolf Canyon may be enhanced and restored if required as mitigation by State and Federal resource agencies.

Wildlife Corridors

Objective: Establish functional connections for onsite resources and integrate the Preserve into a larger regional system (Page 371).

Implementation:

The village Seven project does not propose on-site preservation of open space and therefore, no wildlife corridor connection to the large Otay Valley Preserve is proposed.

Preserve Management and Maintenance

Objective: Effectively manage the Preserve to protect, maintain, and enhance resources in perpetuity (Page 372).

Implementation:

Village Seven will participate in the Preserve Management program.

Resource Preserve Land Uses

Objective: Identify permitted land uses within the Preserve (Page 380).

Implementation:

The Otay Ranch RMP, as incorporated into the proposed City of Chula Vista MSCP Subarea Plan identifies permitted land uses within the preserve.

Resource Preserve - Adjacent Land Uses

Objective: Identify allowable uses within appropriate land use designations for areas adjacent to the Preserve (Page 383).

Implementation:

The MSCP opens space preserve land is located westerly off-site within Village 2. Village Seven proposes to re-contour the Wolf Canyon east of La Media. Residential uses will be separated from the Preserve by la Media.

Regulatory Framework for Future Uses

Objective: Provide a regulatory framework for future permitting by resource agencies and amendments to the RMP (Page 385).

Implementation:

Village Seven will adhere to the regulatory framework established in the RMP and MSCP Subarea Plan.

Physical Resources

Mineral Resources

GOAL: ENCOURAGE THE COMPLETION OF THE EXTRACTION OF MINERAL RESOURCES BEFORE CONFLICTS WITH PLANNED DEVELOPMENT COULD OCCUR . (Page 389)

Objective: Extract mineral resources so as not to impair other conservation efforts.

Implementation:

Mineral extraction does not occur in Village Seven.

Soils

GOAL: MINIMIZE SOIL LOSS DUE TO DEVELOPMENT . (Page 389)

Objective: Identify development activities which present a large potential to create excessive runoff or erosion.

Implementation:

Land form grading, slope stabilization, vegetation protection, revegetation and other techniques will be employed to meet these goals and objectives.

Steep Slopes

GOAL: REDUCE IMPACTS TO ENVIRONMENTALLY SENSITIVE AND POTENTIAL GEOLOGICALLY HAZARDOUS AREAS ASSOCIATED WITH STEEP SLOPES . (Page 389)

Objective: Research existing slope conditions prior to land development activities.

Implementation:

The grading plan for Village Seven is based on a geotechnical study. The site grading terraces the property to follow the natural grade elevation change. Manufactured slope heights and forms are in conformance with City ordinances and policies.

Floodways

GOAL: PRESERVE FLOODWAYS AND UNDISTURBED FLOOD PLAIN FRINGE AREAS. (Page 390)

Objective: Restore and enhance highly disturbed floodways and flood plains to regain former wildlife habitats and retain/restore the ability to pass 100-year flood flows.

Objective: Preserve floodways and undisturbed flood plain fringe areas in their natural state where downstream development will not be adversely affected.

Implementation:

No Floodways or Flood Plains exist within Village Seven. A portion of Wolf Canyon's blue line stream will be re-located and enhanced.

Visual Resources

GOAL: PREVENT DEGRADATION OF THE VISUAL RESOURCES . (Page 391)

Objective: Blend development harmoniously with significant natural features of the land.

Implementation:

The re-contoured manufactured slopes of Wolf Canyon will be vegetated to minimize visual impacts. The landscape plan for Village Seven provides a transition between the landscapes and the development area.

Energy Conservation

GOAL: ESTABLISH OTAY RANCH AS A "SHOWCASE" FOR THE EFFICIENT UTILIZATION OF ENERGY RESOURCES AND THE USE OF RENEWABLE ENERGY RESOURCES . (Page 391)

Objective: Reduce the use of non-renewable energy resources within Otay Ranch below per capita non-renewable energy consumption in San Diego County.

Implementation:

The design of Village Seven encourages walking, bicycling, cart and public transit use to lower energy consumption.

Land Use

Objective: Provide land use patterns and project features which result in the conservation of non-renewable energy resources (Page 393).

Implementation:

The village land use pattern and relationship to surrounding land uses promotes walking and cycling as alternatives to more energy consumptive automobile use. The terraced design of neighborhoods provides opportunities for solar management to lessen heating and cooling fuel consumption. The water conservation plan and landscape design promote efficient water use.

Water Conservation

GOAL: CONSERVE WATER DURING AND AFTER CONSTRUCTION OF OTAY RANCH. (Page 394)

Objective: Reduce CWA water use within Otay Ranch to a level that is 75% of County-wide, 1989 per capita levels.

Objective: Create a comprehensive framework for the design implementation and maintenance of water conserving measures, both indoor and outdoor.

Objective: Develop an extensive water restoration and recycling system throughout the developed areas of Otay Ranch.

Objective: Investigate traditional and non-traditional uses for reclaimed water and identify potential restraints for reclaimed water use.

Objective: Comply with the water conservation standards and policies of all applicable jurisdictions.

Implementation:

Village Seven will adhere to the provisions of the Water Conservation Plan prepared for the project.

Astronomical Dark Skies

GOAL: PRESERVE DARK-NIGHT SKIES TO ALLOW FOR CONTINUED ASTRONOMICAL RESEARCH AND EXPLORATION TO BE CARRIED OUT AT THE COUNTY'S TWO OBSERVATORIES, PALOMAR MOUNTAIN AND MOUNT LAGUNA. (Page 397)

Objective: Provide lighting in heavily urbanized areas of the Otay Valley Parcel which ensures a high degree of public safety.

Objective: Provide lighting in less urbanized areas, which helps to preserve county-wide dark-night skies, and is consistent with more rural lighting standards prevalent in non-urbanized areas of San Diego County.

Implementation:

Lighting within Village Seven will adhere to City and County ordinances and standards.

Agriculture

GOAL: RECOGNIZE THE PRESENCE OF IMPORTANT AGRICULTURAL SOILS BOTH IN AREAS SUBJECT TO DEVELOPMENT AND WITHIN THE PRESERVE . (Page 398)

Objective: Encourage effective utilization of agricultural soils located within the Preserve.

Implementation:

The property will continue as agricultural use until development commences. A site for a community garden will be identified and provided within the village in accordance with the GDP policies for implementing these goals and objectives.

Appendix B - Index of SPA Requirements

INTRODUCTION

The Otay Ranch GDP, Environmental Impact Report and attendant Findings of Fact impose numerous requirements which must be addressed at the SPA level of planning. Because of the size of Otay Ranch, the manner in which the Otay Ranch G D P was approved and the fact that the plan was jointly processed by two jurisdictions, the number of SPA level planning requirements imposed far exceeds the number typically contained in other SPA level planning documents. This is particularly true for the first Otay Ranch SPA Plan.

The following Index of SPA Requirements is provided to assist the reader in determining where the various SPA requirements are addressed. Major topics of study are organized alphabetically. The nature of the SPA requirement is summarized along with the page reference to the General Development Plan and/or Findings of Fact requirement. The index then identifies within which SPA One related document the specific SPA requirement is addressed.

Appendix B - Index of SPA Requirements

TOPIC	TASK/REQUIREMENT	GDP	FOF	PERFORMANCE
Accessory Units	Support the Use of Accessory Units	243		Otay Ranch-Wide Affordable Housing Plan
Acoustical Analysis	Prepare Site-Specific Acoustical Analysis		122	Environmental Impact Reports, Traffic Analysis
Affirmative Fair Marketing Plan	Prepare Affirmative Fair Marketing Plan	244		Ranch-Wide Affordable Housing Plan
Agricultural Plan	Prepare Range Management Plan/Agricultural Plan			RMP, SPA Section
Air Quality Plan	Prepare SPA One Air Quality Plan	338	118	Environmental Impact Reports, SPA
Animal Control Plan	Prepare SPA One Animal Control Plan	307	138	SPA, No facilities in Village 7
Architectural Plans	Prepare SPA One Architectural Guidelines	115	23	Village Design Plans
Arts & Cultural Facilities	Establish Design Guidelines for Arts & Cultural Facilities	288		Village Design Plans
Bicycle Plan	Prepare SPA One Phased Bicycle Plan	237		Village Design Plans
Biological Resource Study	Perform Biological Resources Study for SPA One		25-87	RMP
Biota Monitoring Program	Prepare Biota Monitoring Program	375-382	27-65	RMP
Capital Facilities Plan	Prepare SPA One Capital Facilities Plan	351		Public Facilities Finance Plan
CCS & MSS Management Program	Prepare CCS & MSS Management Program	368	25-27	RMP.
Cemetery Plan	Prepare SPA One Cemetery Plan	289	52	Regional Facility Report, , No facilities in Village 7
Child Care Guidelines	Develop Family Home Child Care Guidelines	292		SPA One

Appendix B - Index of SPA Requirements

TOPIC	TASK/REQUIREMENT	GDP	FOF	PERFORMANCE
Child Care Plan	Prepare SPA One Child Care Plan	292	128	SPA Section II.2.7.10
Circulation Element	Update General Plans Update if needed		112	Environmental Impact Reports, None Needed
Civic Plan	Prepare SPA One Civic Plan	309		SPA, No facilities in Village 7
Community Purpose Facility Report	Identify land for Community and Regional Purpose Facility uses	300		SPA One
Community Gardens	Review Community Garden Requirement	368		SPA Section II.2.5.5
Community Gardens Policies	Prepare Policies and Guidelines for Community Gardens	398		Parks, Recreation. Open Space and Trails Plan.
Correctional Plan	Prepare SPA One Correctional Plan	310		Regional Facility Report, SPA
Criminal Activity Deterrence	Develop SPA One Site Design Guidelines to Deter Criminal Activity	320		Village Design Plans
Cultural Resource Site Testing	Perform Cultural Resource Site Testing	359	91-93	RMP
Cultural Resources Survey	Perform Cultural Resources Survey	359	94-95	RMP
Demonstration Agriculture	Provide Demonstration Agricultural Area	398	98	RMP
Design Review Process	Identify SPA One Design Review Process	116		Village Design Plans
Develop Regional Share Allocation	Develop Regional Share Allocation	241-42		Ranch-Wide Affordable Housing Plan
Drainage Improvement Plan	Prepare Basin Specific Drainage Improvement Plan	269	101	Public Facilities Finance Plan, Master Drainage Plan
Drainage Master Plan	Prepare SPA One Drainage Master Plan	269		Public Facilities Finance Plan, Master Drainage Plan
Edge Plan	Prepare SPA One Edge Plan	383		RMP

Appendix B - Index of SPA Requirements

TOPIC	TASK/REQUIREMENT	GDP	FOF	PERFORMANCE
Emergency Disaster	Plan Prepare SPA One Emergency Disaster Plan	313, 342		SPA One
Emergency Medical Services Plan	Prepare SPA One Emergency Medical Services Plan	131		SPA One
Energy Conservation	Prepare SPA One Non-Renewable Energy Energy Conservation Plan	391		SPA Non-Renewable Conservation Plan,
Evacuation Routes	Determine the Need for Evacuation Routes		139	N/A
Final Resource Maps	Approve Final Resource Maps	386-87		RMP
Fire Protection Plan Fire Protection and Emergency Medical Services Plan	Prepare SPA One	315	129	SPA One
Fire Suppression Analysis	Provide SPA One Fire Suppression Analysis(Sprinkler Plan)	315		SPA One
Fiscal Analysis	Perform Fiscal Analysis (FIND Model)	351		Public Facilities Finance Plan
Freeway Signage Program	Prepare Village Five Freeway Signage Program	109		Village Design Plans SPA section II.2.2.7
Freeway, Segment & Intersection Capacities	Increase Freeway, Segment & Intersection Capacities	112		Environmental Impact Reports, Traffic Analysis
Fuel Modification Plan	Prepare SPA One Fuel Modification Plan	315		Parks, Recreation, Open Space and Trails Plan, SPA section II.2.7.11
Geotechnical	Prepare SPA One Geotechnical Investigations Report, Appendix J	344	94-95	SPA, Geotechnical Reconnaissance Reconnaissance Investigations
Gnatcatcher and Cactus Wren Study	Perform Gnatcatcher and Cactus Wren Study	359	51,53	RMP

Appendix B - Index of SPA Requirements

TOPIC	TASK/REQUIREMENT	GDP	FOF	PERFORMANCE
Grading Plan	Prepare SPA One Grading Plan	115, 391	15, 19-21	SPA Section II.2.4
Grasslands	Perform SPA One Native Grassland Restoration Program	370	28	RMP
Health and Medical Plan	Prepare SPA One Health and Medical Plan	298	136	Regional Facility Report, SPA One
Housing for Special Needs Groups	Identify Housing Opportunities for Special Needs Groups	244		Ranch-Wide Affordable Housing Plan
Housing Plan	Prepare SPA One Housing Plan			SPA One Affordable Housing Plan,
Housing Plan Ranch-Wide	Prepare Ranch-Wide Housing Plan	391		Ranch-Wide Affordable Housing Plan
Inventory Facilities	Inventory Existing & Proposed Facilities	351		Public Facilities Finance Plan
Justice Plan	Prepare SPA One Justice Plan	317		Regional Facility Report, SPA One
Landforms	Identify and Map Floodplains/Landforms			RMP
Landscaping Plans	Prepare SPA One Landscaping Plans	115	16	Village Design Plans
Law Enforcement Plan	Prepare SPA One Law Enforcement Plan	320		SPA One
Least Bells Vireo Plan	Prepare Least Bells Vireo Plan For River Valley			RMP
Library Plan	Prepare SPA One Library Plan	324	132	SPA One
Master Property Tax Agreement	Negotiate Master Property Tax Agreement	264		
Memorial Garden	Determine Desirability of Memorial Garden	289		Regional Facility Report, SPA One

Appendix B - Index of SPA Requirements

TOPIC	TASK/REQUIREMENT	GDP	FOF	PERFORMANCE
Mitigation Activities Feasibility	Demonstrate Financial Feasibility of Mitigation Activities	379		Environmental Impact Reports
Nature Interpretative Center	Identify Potential Nature Interpretative Center Sites	378-79		RMP
Noise Study	Prepare SPA One Noise Study	340	16	Environmental Impact Reports
Overall Design Plan	Prepare Overall Design Plan	114-117		Overall Design Plan
Paleontological Resources Mitigation Plan	Prepare SPA One Paleontological Resources Mitigation Plan		96-97	Environmental Impact Reports
Park Use	Limit Active Use in Preserve To 400 Acres	380		RMP -Pending JEPA Otay Valley Regional Park Plan
Parks Master Plan	Prepare SPA One Parks Master Plan	255	133	Parks, Recreation, Open Space and Trails Plan
Phasing Plan	Prepare SPA One Phasing Plan			SPA One
Planned Community Regulations	Prepare Planned Community Regulations	CV		Muni Ord. Planned Community Regulations
Preserve Conveyance Schedule	Identify Conveyance Schedule	376		RMP
Preserve Funding Plan	Prepare Preserve Funding Plan	383		RMP, CFD 97-2
Preserve Infrastructure Plan	Prepare Preserve Infrastructure Plan	383		RMP
Preserve Owner Manager	Identify Preserve Owner Manager	372		RMP
Preserve Permitted Use Plan	Prepare Preserve Permitted Use Plan	380		RMP

Appendix B - Index of SPA Requirements

TOPIC	TASK/REQUIREMENT	GDP	FOF	PERFORMANCE
Public Facilities Finance Plan	Prepare SPA One Public Facility Financing Plan	351	125-26, 132	Public Facilities Finance Plan
Range Management Plan	Prepare Range Management Plan/Agricultural Plan	385, 398	98	RMP
Raptor Study	Prepare Raptor Study	359		RMP F
Reclaimed Water Uses & Restrictions	Identify Reclaimed Water Uses & Restrictions		125	Public Facilities Finance Plan, OWD SAMP,
Recreation Access Plan	Prepare Recreation Access Plan		134	RMP
Rec. Master Plan	Prepare SPA One Recreation Master Plan	255		Parks, Recreation. Open Space and Trails Plan
Regional Purpose Facility Plan	Identify land for Community and Regional Purpose Facility Uses	300		Regional Facility Report, SPA
Reserve Fund Program	Establish Reserve Fund Program	265		Chula Vista Ordinance
Resource Agencies	Consult with Resource Agencies	385		RMP
Riparian Restoration	Perform SPA One Riparian Restoration Program	370		RMP
River Valley Management	Evaluate Otay River Valley Management	379		RMP
River Valley Park	Review Active Uses in Otay River Valley Park	380		RMP
RMP Amendments	Develop Regulatory Framework For RMP Amendments	385		RMP
School Fac. Financing	Provide School Facility Financing Program	328		Public Facilities Finance Plan

Appendix B - Index of SPA Requirements

TOPIC	TASK/REQUIREMENT	GDP	FOF	PERFORMANCE
School Financing Agreement	Negotiate School Financing Agreement			School Mitigation Agreement
School Plan	Prepare SPA One School Plan	328	131	Public Facilities Finance Plan, SPA Section II.2.7.9
Sewer Master Plan	Prepare SPA One Sewer Master Plan	272	127	Public Facilities Finance Plan, SPA Section II.2.7.5, Sewer Study
Social & Senior Services Plan	Prepare SPA One Social & Senior Services Plan	304	137	Regional Facility Report, SPA One
Solid Waste Management Plan	Prepare SPA One Integrated Solid Waste Management Plan	276		Regional Facility Report, SPA One
Street Standards	Provide SPA One Standards for Public& Private Streets	114		SPA Section II.2.3
Traffic Control Strategies	Implement Traffic Control Strategies		112	Environmental Impact Reports, Traffic Analysis
Trail Plan	Prepare SPA One Phased Trail Plan	237		Parks, Recreation, Open Space & Trails Master Plan
Transit	Work with MTDB regarding fair share facility financing plan		111	Public Facilities Finance Plan
Transit Alignment Study	Prepare SPA One Transit Alignment Study	124, 143		Environmental Impact Reports
Transit Plan	Prepare SPA One Phased Transit Plan	237		SPA Section
Transportation Demand Management (TDM) Strategies	Provide Transportation Demand Management (TDM) Strategies		112	Environmental Impact Reports, Traffic Analysis
Transportation Model Analysis	Perform Build-out Transportation Model Analysis	237	109	Environmental Impact Reports, Traffic Analysis
Transportation Phasing Plans	Provide Transportation Phasing Plans		112	Environmental Impact Reports, Traffic Analysis

Appendix B - Index of SPA Requirements

TOPIC	TASK/REQUIREMENT	GDP	FOF	PERFORMANCE
Urban Runoff Plan	Prepare Urban Runoff Plan in Otay Reservoir Basin	278	102	N/A
Vernal Pool Management Plan	Prepare Vernal Pool Management Plan	365	29-36	RMP
Vernal Pool Study	Prepare Vernal Pool Study	359	29	RMP
Village Design Plan	Prepare Village Design Plan	114-116		Village Design Plans
Village Phasing Plan	Update Village Phasing Plan	354		N/A
Village Viability Analysis	Prepare Village Viability Analysis	353		N/A
Visual Study	Prepare SPA One Visual Study	116	21-22	Environmental Impact Report
Water Conservation Plan	Prepare SPA One Water Conservation Plan	282, 394	125	Public Facilities Finance Plan, Water Conservation Plan
Water Master Plan	Prepare SPA One Water Master Plan	284	125	Public Facilities Finance Plan, OWD SAMP
Water Reclamation Plan	Prepare SPA One Water Reclamation Plan	284	125	Public Facilities Finance Plan, OWD SAMP
Watershed Impact and Protection	Prepare Watershed Impact and Protection Reports	278	101, 108	Public Facilities Finance Plan, Master Drainage Plan, Appendix (C.4)
Wetland Delineation	Perform SPA One Wetland Delineation Study	366		RMP
Wildlife Corridor Study	Implement Wildlife Corridor Study	371	87	RMP
Wildlife Corridor Study	Prepare Wildlife Corridor Study	359	87	Wildlife Corridor Study RMP.3

Appendix B - Index of SPA Requirements

This page left blank intentionally.

VILLAGE DESIGN PLAN

Village Seven Sectional Planning Area (SPA)
Otay Ranch GDP

Adopted October 12, 2004

by Resolution No. 2004-329

Project Sponsor

McMillin Otay Ranch, LLC
2727 Hoover Avenue
National City, CA 91950
Contact:Todd Galarneau
(619) 336-3959

Prepared by

Cinti Land Planning
2932 Poinsettia Drive
San Diego, CA 92106
Contact: Gary P. Cinti
(619) 223-7408

SECTION II.4
VILLAGE DESIGN PLAN

TABLE OF CONTENTS

SECTION PAGE

II.4.1 Introduction II.4.1-1
- II.4.1.1 Background/Purpose
- II.4.1.2 Related Documents/Design Framework
- II.4.1.3 Otay Ranch Village Development Concept
- II.4.1.4 Village Structure
- II.4.1.5 Site Ownership & Project Implementation

II.4.2 Design Review Process II.4.2-1
- II.4.2.1 Introduction
- II.4.2.2 Administrative Design Review
- II.4.2.3 Design Review Committee
- II.4.2.4 Appeals
- II.4.2.5 Special Review Processes

II.4.3 Community Design Concept II.4.3-1
- II.4.3.1 Village Identity & Character
- II.4.3.2 Landscape Concept
- II.4.3.3 Community Fencing
- II.4.3.4 Community Signing
- II.4.3.5 Community Lighting
- II.4.3.6 Community Trails
- II.4.3.7 Community Entries
- II.4.3.8 Street Utilities
- II.4.3.9 Pedestrian Orientation

II.4.4 Residential Design Guidelines: Single Family - Secondary Area II.4.4-1
- II.4.4.1 Site Planning
- II.4.4.2 Grading & Landform
- II.4.4.3 Streetscape Design
- II.4.4.4 Visual Aspect
- II.4.4.5 Architecture
- II.4.4.6. Signage
- II.4.4.7 Lighting
- II.4.4.8 Parking
- II.4.4.9 Landscaping Requirements
- II.4.4.10 Individual Neighborhood Design Criteria

TABLE OF CONTENTS

SECTION PAGE

II.4.5 Residential Design Guidelines: Multifamily II.4.5-1
- II.4.5.1 Pedestrian-oriented Design
- II.4.5.2 Façade Elements
- II.4.5.3 Parking, Carport & Garage Design
- II.4.5.4 Site Planning & Building Plotting
- II.4.5.5 Building Design Concepts
- II.4.5.6 Architecture & Building Design
- II.4.5.7 Landscape
- II.4.5.8 Individual Neighborhood Design Criteria

II.4.6 Non-Residential Design Guidelines II.4.6-1
- II.4.6.1 Architecture, Building Siting, Color & Materials
- II.4.6.2 Screening
- II.4.6.3 Site Furnishings
- II.4.6.4 Lighting & Signage
- II.4.6.5 Individual Neighborhood Design Criteria

II.4.7 Village Core Concept II.4.7-1
- II.4.7.1 Village Core Planning & Design
- II.4.7.2 Village Core Design & Implementation
- II.4.7.3 Village Core Site Planning
- II.4.7.4 Architectural Design Guidelines
- II.4.7.5 Landscape
- II.4.7.6 Lighting
- II.4.7.7 Street Furnishings
- II.4.7.8 Signage
- II.4.7.9 Individual Neighborhood Design Criteria

LIST OF EXHIBITS

EXHIBIT		PAGE
1.1	Overall Conceptual Village Plan	II.4.1-8
1.2	Community Structure	II.4.1-9
1.3	Ownerships	II.4.1-10
1.4	Site Utilization Plan	II.4.1-11
3.1	Design Influences	II.4.3-3
3.2	Sample Architectural Elements	II.4.3-6
3.3	Landscape Concept	II.4.3-8
3.4	La Media Road Streetscape	II.4.3-9
3.5	Rock Mountain Road Streetscape	II.4.3-9
3.6	Birch Road Streetscape	II.4.3-10
3.7	Village Entry Street	II.4.3-11
3.8	Promenade Streets	II.4.3-12
3.9	Conceptual Street Tree Plan	II.4.3-13
3.10	Primary Entry Streetscape	II.4.3-14
3.11	Secondary Village Entry	II.4.3-15
3.12	SR-125 Landscape Buffer	II.4.3-16
3.13	Wolf Canyon Concept Sketches	II.4.3-17
3.14	Landscape Buffer	II.4.3-19
3.15	Fencing Types	II.4.3-28
3.16	Fencing & Entries Plan	II.4.3-29
3.17	Combination Wall & Fence	II.4.3-30
3.18	SR-125 Sound Wall	II.4.3-31
3.19	Signing Guidelines	II.4.3-33
3.20	Major Kiosk Directional Sign-Temporary	II.4.3-34
3.21	Community Facility Signs-Temporary	II.4.3-34
3.22	Sign Lighting	II.4.3-35
3.23	Trails Plan	II.4.3-36
3.24	Project Entry Monument	II.4.3-38
3.25	Pedestrian Orientation	II.4.3-40
4.1	3 Car Garage Configurations	II.4.4-3
4.2	Typical SF3 Lotting	II.4.4-4
4.3	Typical SFD Lotting	II.4.4-5
4.4	Typical SFD Lotting	II.4.4-6
4.5	SF4 Lotting Concept	II.4.4-7
4.6	Major Slope Contouring	II.4.4-8
4.7	Typical Neck Down	II.4.4-10
4.8	Veranda Concept	II.4.4-11
4.9	General Architectural Guidelines	II.4.4-14
4.10	Single Family Detached Locations	II.4.4-16
4.11	Neighborhood R-1 Design Issues Map	II.4.4-18
4.12	Neighborhood R-2 Design Issues Map	II.4.4-20

EXHIBIT		PAGE
5.1	Courtyard Housing	II.4.5-6
5.2	Townhomes with Pedestrian Orientation	II.4.5-7
5.3	Making High Density Multi-family Accessible	II.4.5-8
5.4	Multi-family Housing Locations	II.4.5-11
5.5	Neighborhood R-5 Design Issues Map	II.4.5-13
5.6	Neighborhood R-6 Design Issues Map	II.4.5-15
5.7	Neighborhood R-7 Design Issues Map	II.4.5-17
6.1	Non-Residential Location Map	II.4.6-5
7.1	Village Core Location Map	II.4.7-7
7.2	P-1/S-3 Elementary School/Park Concept Sketch	II.4.7-10

SECTION II.4
VILLAGE DESIGN PLAN

II.4.1 Introduction

II.4.1.1 Background/Purpose

This document is a manual to guide the design of site plans, architecture, and landscape architecture within the Village Seven Sectional Planning Area (SPA) of the Otay Ranch Planned Community. This document meets the requirements set forth in the Otay Ranch General Development Plan/Subregional Plan (GDP) adopted by the City of Chula Vista and the County of San Diego.

The concept for development of Otay Ranch is a carefully fashioned series of "villages," blending neighborhoods, shops, and employment opportunities with parks, schools and other civic facilities to create a community with a shared sense of pride and place. Since the village development concept is essential to the Otay Ranch community vision, Village Design Plans are intended to address the special design considerations which will arise over time with development of each village.

The GDP requires that a Village Design Plan be prepared for each village at the SPA level of planning. The design plan guides development and building/site design by defining the intended character of the village. It is provided to ensure that the quality and fundamental concepts established at the master planning stage are maintained in the final phase of detailed planning and design. The design plan includes guidelines for specific areas of consideration, but more importantly it establishes a design context within which each element contributes to the success of the entire program.

The purpose of this Village Design Plan is to ensure that all development within Village Seven will maintain a high standard of design through consistency with these published guidelines and standards. The requirements of this design plan are consistent with those established for the community as a whole in the Otay Ranch GDP and Overall Design Plan approvals, as well as those approved and implemented in previous development phases of the Otay Ranch Community.

II.4.1.2 Related Documents/Design Framework

The GDP-defined "village" also serves as an implementation tool. The GDP requires that a village or logical combination of adjacent villages be subject to Sectional Planning Area (SPA) Plan approval prior to development. The SPA Plan is intended to provide an increased level of detail to implement the goals, objectives and policies of the GDP for the individual village site and provide the specific development standards. This Village Design Plan is a component of the Village Seven SPA Plan package which also includes the Village Seven SPA Plan, PC District Regulations, Public Facilities and Finance Plan and other submittals, together which detail the development proposed for Village Seven within Otay Ranch.

While the GDP establishes community-wide land use designations and policies, it does not address design issues in any detail. The Otay Ranch GDP in Part II Chapter 1 Section D Land Use Design, Character and Policies provides a foundation and policy direction for the design of all urban villages, including Village Seven. This section of the GDP includes policies which affect village design including village land use, village core, residential and mixed-uses in the village core, secondary areas, transit, street system, parking and parks. The GDP supplements these general policies with specific policies for each village Section F of Part II Chapter 1. These policies have been implemented in the basic land use configuration of Village Seven, as described in the SPA Plan, and will be extended to the site plan/individual building level of project design through use of this design plan.

While the policies of the GDP generically address intended design solutions, the Village Design Plan addresses the diversity and individual design elements which will distinguish each village within the larger community. The Village Design Plan delineates the intended identity of each village by addressing setting, character, sense of place, and pedestrian and transit orientation features, particularly in the Village Core.

As a part of the design implementation process, the GDP also required preparation of a ranch-wide Overall Design Plan to provide the community-wide design context for the various villages and development areas which will comprise the community. This was completed with SPA One, the initial implementation phase for Otay Ranch.

The Overall Design Plan identifies the major design influences which shaped the project, as described in the GDP, and establishes general design guidelines and standards for the community as a whole. The summary below conveys the design approach/philosophy which is to be implemented at the village level through this Village Design Plan.

Overall Design Plan Summary

The overriding design theme for Otay Ranch is to integrate developed areas within the natural environment; creating a network of natural spaces separating and surrounding the villages, while forming the basic structure for the community. The unifying design elements repeat and reinforce the natural landforms and landscapes of the Otay Ranch. These elements are primarily found within open space areas. The transitional environment between the natural areas and the developed villages will reflect a contemporary agrarian theme, more structured than the natural/naturalized areas, yet very appropriate for the region. The village areas will each reflect an individual character and theme, with a more ornamental and urban landscaping theme than the surrounding areas of the Ranch.

1. Overall Design Elements

Design elements are the component parts which can be assembled to create the overall community design framework. Design elements for the Otay Ranch and their role in the Overall Design Plan are (from Chapter III of Overall Design Plan):

- *Riparian Meander - Develop a strong physical and visual relationship with the watercourse system (valleys, lakes, ravines) which courses throughout the Ranch, forming edges, boundaries and open space.*

- *Mountain Landforms - Recognize setting and utilize the mountain landforms to form a dramatic eastern boundary for the Ranch, and on a smaller scale, separate some village areas.*

- *Dominant Skyline Landscape Treatment - Create a landscape-dominant skyline at selected locations to enhance the visual cohesiveness of the Ranch.*

- *Major Streetscapes - Create a streetscape system to provide visual continuity between the three major parcels that compose Otay Ranch. Include variations on a basic theme to respond to street hierarchy and specific site conditions while providing a unifying design element.*

- *Landscape Palette - Formulate and apply a landscape palette of natural, naturalized or indigenous materials, patterns and forms which relate to the region and/or a ranch-like character to open areas and development transition edges.*

- *Signage - Create a signage system that unifies the Ranch and responds to identification needs, yet does not limit individual expression within the villages.*

- *Furnishings - Provide community fixtures and furnishings to complement and reinforce the cohesive community character established by larger scale design elements.*

- *Linkages - Establish a comprehensive regional trail system to accommodate walking, riding, hiking, biking and equestrian uses, as appropriate.*

- *Pedestrian Design - Emphasize pedestrian access and involvement at all levels.*

The Otay Ranch Overall Design Plan should be consulted for further information regarding these design elements and their application within the Otay Ranch project as a whole. The Plan should also be consulted to determine the applicable elements to be considered at any particular location within the Ranch.

2. Grading Guidelines

Although Otay Ranch will be highly urbanized in the Otay Valley Parcel, with significant grading occurring to create developable areas, the setting within which development will occur will remain largely rolling, hilly, open and natural. As outlined in the Overall Design Plan, the landscape concepts are designed to enhance this natural character and integrate it with the development areas. The following grading standards and guidelines from the Overall Design Plan are intended to respect the natural contours and landforms of the area, while recognizing the need to meet efficient, engineered grading standards (from Chapter V Special Design Criteria, A. Grading Guidelines):

- *Where grading for roads or development occurs in any of the defined scenic corridors, contours should be carefully modulated and softened to blend with existing natural slopes to create a more natural and irregular appearance. Excessively long, uniform slopes shall be avoided.*

- *Where cut or fill slopes intersect a natural canyon or slope, contours should be radiused and blended without sharp or unnatural corners.*

- *In all areas where manufactured cut or fill slopes intersect with natural slopes, the transition should be made by rolling the top or bottom of the new slope to integrate the two conditions.*

- *In all areas where grading for development or roadways intersects a natural slope without cut or fill slopes (daylight condition) a rounded top or bottom of slope should be retained to blend the natural slope with the building or road pad. Minimum building setback from natural slopes will take fire protection standards into consideration.*

- *Roadways - Siting of roadways, particularly in scenic corridors, will follow the standards listed above. Additionally, creating road alignments to meet natural contours with minimal grading and blending cut/fill slopes with natural topography will be required. When feasible, divided roads will be split vertically to soften the impact of grading and to maximize potential scenic views.*

- *Landscape - Planting of graded slopes with native and indigenous plant materials will be designed to blend with existing planting when adjacencies occur. The careful massing of the understory and tree forms, both in naturalized and more ornamental zones will visually soften the appearance of graded slopes.*

3. Viewshed Development Guidelines

The Overall Design Plan also includes guidelines which address development visible from the Otay River Valley, Salt Creek and the Otay Lakes. These guidelines do not apply to the Village Seven site because it is not adjacent to any of these natural features.

The unifying, community-wide design elements of the Overall Design Plan provide a framework for the design direction for each village, which is expected to have its own individual identity and sense of place. This Design Plan for Village Seven identifies the applicable provisions of the GDP and Overall Design Plan at the beginning of Chapter 3 Community Design Concept, to establish the framework for the more detailed design provisions to be implemented within the village boundaries.

II.4.1.3 Otay Ranch Village Development Concept

The GDP designates future land uses for the entire Otay Ranch within a framework of open space and major circulation corridors. It also defines the "village" as the fundamental building block for organizing land use within this community framework. The Otay Ranch GDP identifies urban villages, specialty villages, and rural estates areas. Village Seven is an urban village. These villages are transit oriented, with higher densities and mixed uses in the Village Cores. An emphasis is placed on transportation and circulation alternatives to the automobile, including transit (bus and light rail), electric carts, and pedestrian and bicycle facilities.

Roadways and land use connections facilitate bus service to the core and fixed route transit stations. Villages One and Five (comprising SPA One), Village Six, Planning Area Twelve/Eastern Urban Center (EUC) and Village Nine are located on the proposed fixed transit route, and include the highest residential intensities and commercial uses to enhance transit use. Village Seven is not on the fixed route but will include a transit station in the village core, at the heart of the village which will provide connecting service to the fixed route system.

Urban villages are comprised of two basic components: a central area of more intense uses, the Village Core; and, surrounding areas of lower density residential uses, the Secondary Area. The Village Core contains mixed-use, public/quasi-public and medium-high residential land uses and is to serve as the focal point and commercial hub of the village. Village Cores are centered around a main street or plaza, surrounded by retail commercial, residential, or mixed-use buildings. Neighborhood parks and other civic or community uses, such as churches, child care or senior centers are also typically located within the Village Core. The Secondary Area typically contains a series of residential neighborhoods, providing a range of predominately single-family housing opportunities.

This urban, transit village development concept will be implemented in the Village Seven SPA, incorporating specific features and uses as determined by the GDP, project setting, land use commitments and other design determinants.

II.4.1.4 Village Structure

The community structure of the Otay Ranch Village Seven neighborhood, at the broadest level, is established by the Otay Ranch GDP. Village Seven is one of eleven "urban villages" identified in the Otay Ranch GDP for areas located adjacent to existing urban areas. Each urban village includes a man-made or natural feature which provides a unique focus to create a sense of identity. For Village Seven, the focal point is the Wolf Canyon Greenbelt which is adjacent to the commercial hub in the Village Core located in the center of the planning area. This greenbelt implements the Village Greenway identified in the Overall Design Plan as a community-wide open space/trail linkage through the Otay Valley Parcel of Otay Ranch. The Village Greenway is to be located in Wolf Canyon, between Villages Three and Four, extend east through Village Seven, through the Eastern Urban Center (EUC) and Village Eleven to Salt Creek.

The village core is planned to be centered on a mixed use parcel and town square area, including a transit station which will provide transit service which connects to the fixed route system in SPA One (Villages One and Five), Village Six and the Eastern Urban Center, immediately to the east. The fixed route system is to connect to the regional system which currently serves the San Diego metropolitan area, providing an alternative to the automobile for commuting and regional transit. The mixed-use (commercial/residential) area adjacent to the transit station and "town square" will serve as the village focal point. The Neighborhoods (parcels) shown on the Overall Conceptual Village Plan (see Exhibit 1.1) place the mixed-use area (Neighborhood MU-1) and town square (Neighborhood TS-1) within a 5.6 acre square block defined by village streets. A public park, elementary school and multi-family housing sites complete the village core area (see Community Structure Exhibit 1.2).

The Village Seven secondary area is comprised of single family residential areas, a public high school site in the southeastern quadrant, a middle school site in the southwestern corner and three CPF sites between them , at the corner of the intersection of the southern and western village entry streets. Two additional small CPF/park sites are located within the larger single family areas (Neighborhoods R-1 and R-2).

II.4.1.5 Site Ownership & Project Implementation

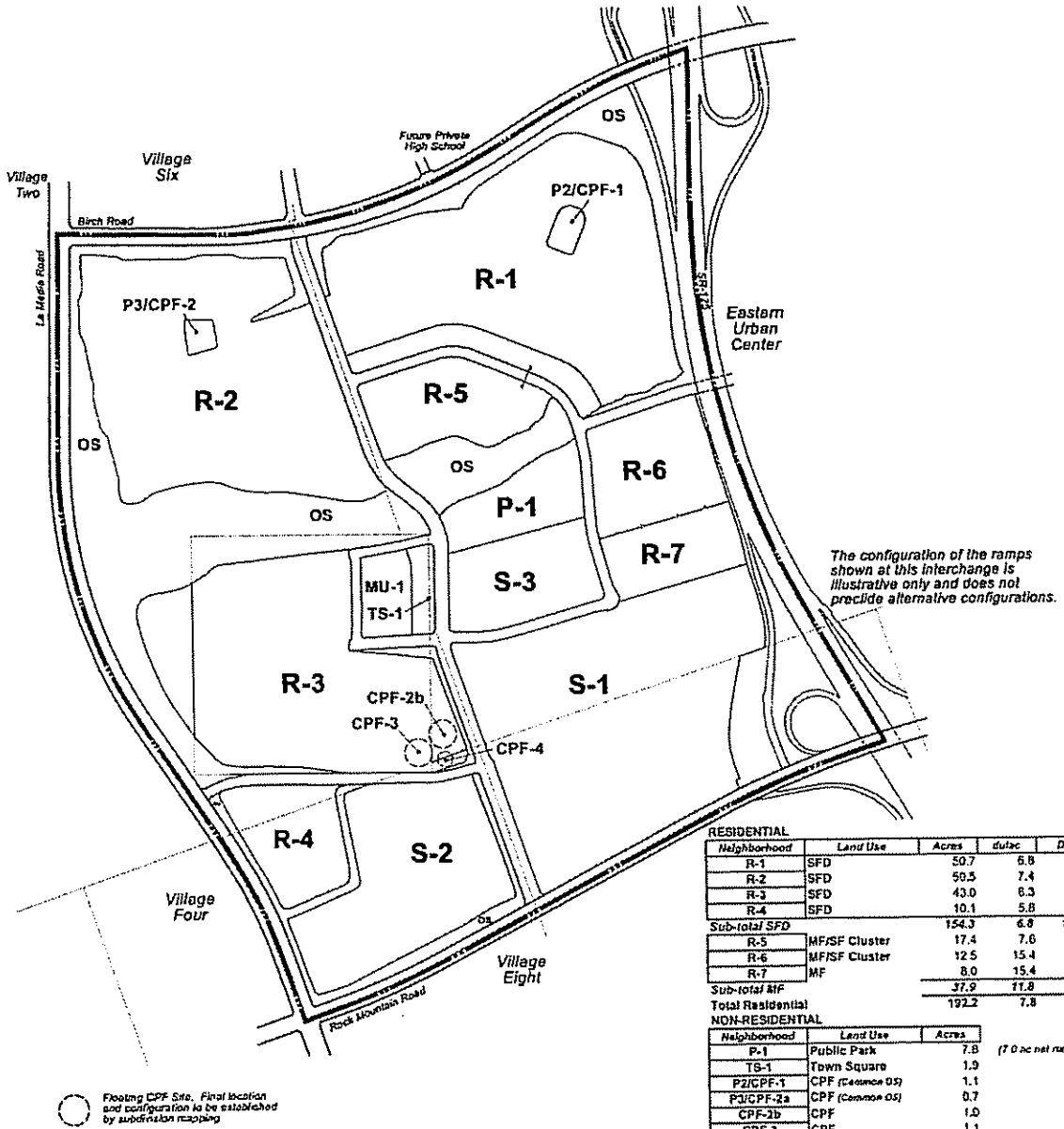
The Village Seven site is comprised of five separate ownerships (see Exhibit 1.3). The Village Seven SPA Plan which includes this Village Design Plan has been cooperatively prepared by the two majority landowners, Otay Project, L.P. (Otay Ranch Company) and McMillin Otay Ranch, LLC. Adoption of the SPA Plan and Village Design Plan will grant development approval only to that property owned by the applicants, as shown on the Site Utilization Plan, Exhibit 1.4. Inclusion of other ownerships will require amendment(s) of this initial SPA approval, as required by the amended Otay Ranch GDP Implementation provisions (Otay Ranch GDP/SRP, Part II, Chapter 1, Section E). Although, the SPA approval is for and focus of this Village Design Plan is on the applicant's portion of the village, some planning issues, particularly context and consistency with other adopted plans, community structure and infrastructure, are more appropriately discussed considering the entire

village. Hence, this Village Design Plan will address some issues with respect to the entire village and others with respect to only the applicant's property. Descriptions of facilities and features outside of the applicant's ownership are provided as conceptual plans which demonstrate how a coherent village as a whole could be implemented. These concepts are subject to revision when the additional landowners' SPA amendment(s), including amendments to this Village Design Plan, are processed.

The primary design issue created by this ownership pattern is providing design guidance for the mixed-use/town square focal point planned within the Village Core. This site is not within the applicants' ownership and hence is not addressed beyond the conceptual level in this plan. Site specific design guidance for these sites, as well as other areas, shown as "undesignated" of the Site Utilization Plan shall be included in the future amendment(s) to include those sites in the approved SPA. Such amendments shall also establish procedures and submittal requirements for any specialized design review/planning approval process proposed for the essential village core component(s).

Overall Conceptual Village Plan

(in Site Utilization Plan format)



RESIDENTIAL

Neighborhood	Land Use	Acres	du/ac	DU
R-1	SFD	50.7	6.8	346
R-2	SFD	50.5	7.4	375
R-3	SFD	43.0	6.3	273
R-4	SFD	10.1	5.8	59
Sub-total SFD		154.3	6.8	1,053
R-5	MF/SF Cluster	17.4	7.6	132
R-6	MF/SF Cluster	12.5	15.4	193
R-7	MF	8.0	15.4	123
Sub-total MF		37.9	11.8	448
Total Residential		192.2	7.8	1,501

NON-RESIDENTIAL

Neighborhood	Land Use	Acres	
P-1	Public Park	7.8	(7.0 ac net req'd)
TS-1	Town Square	1.9	
P2/CPF-1	CPF (Common OS)	1.1	
P3/CPF-2a	CPF (Common OS)	0.7	
CPF-2b	CPF	1.0	
CPF-3	CPF	1.1	
CPF-4	CPF	0.2	
S-1	High School	55.8	(50.0 ac net req'd)
S-2	Middle School	25.6	(25.0 ac net req'd)
S-3	Elem. School	11.1	(10.0 ac net req'd)
MU-1	Mixed Use/Comm.	3.7	
OS	Open Space	60.5	
Cir.	Circulation	62.9	
Total Non-Residential		233.2	
VILLAGE TOTAL		424.4	3.5 1,501

CITY OF CHULA VISTA

Vista Verde

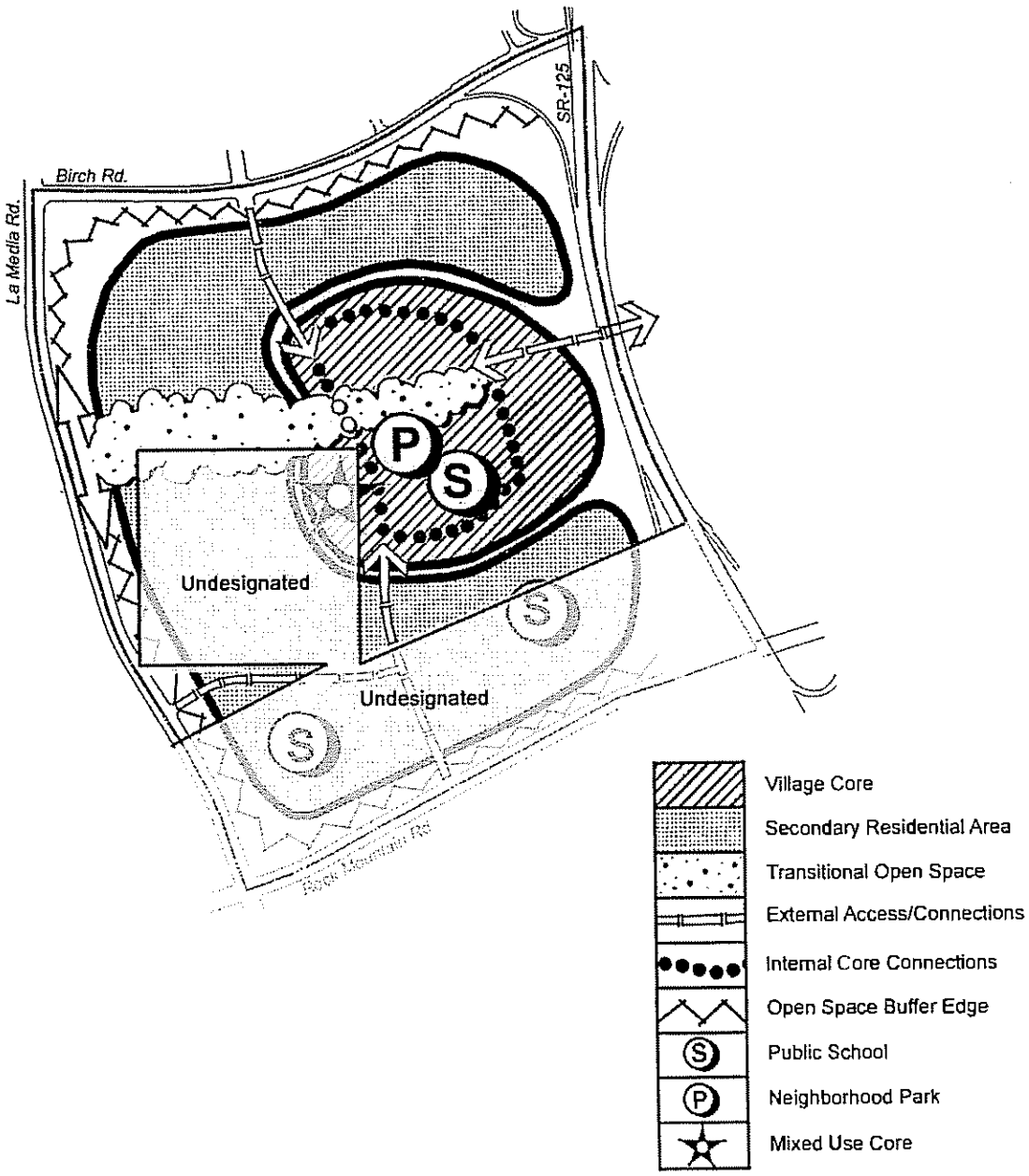
Village Seven - Otay Ranch

Civil Land Planning

8/24/04

Exhibit 1.1

Community Structure



CITY OF CHULA VISTA

Vista Verde

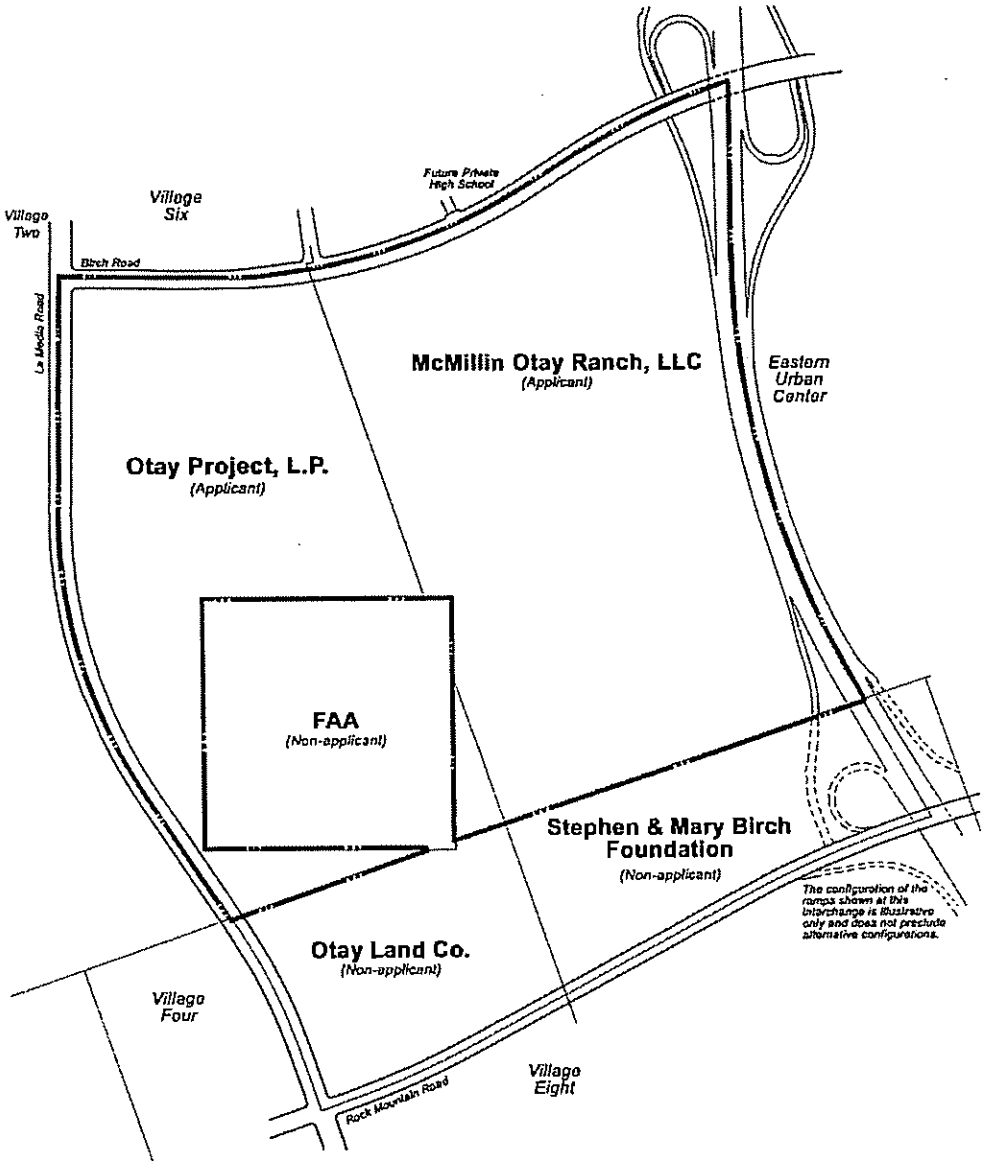
Village Seven - Otay Ranch

Cinti Land Planning

8/14/04

Exhibit 1.2

Ownerships



CITY OF CHULA VISTA

Vista Verde

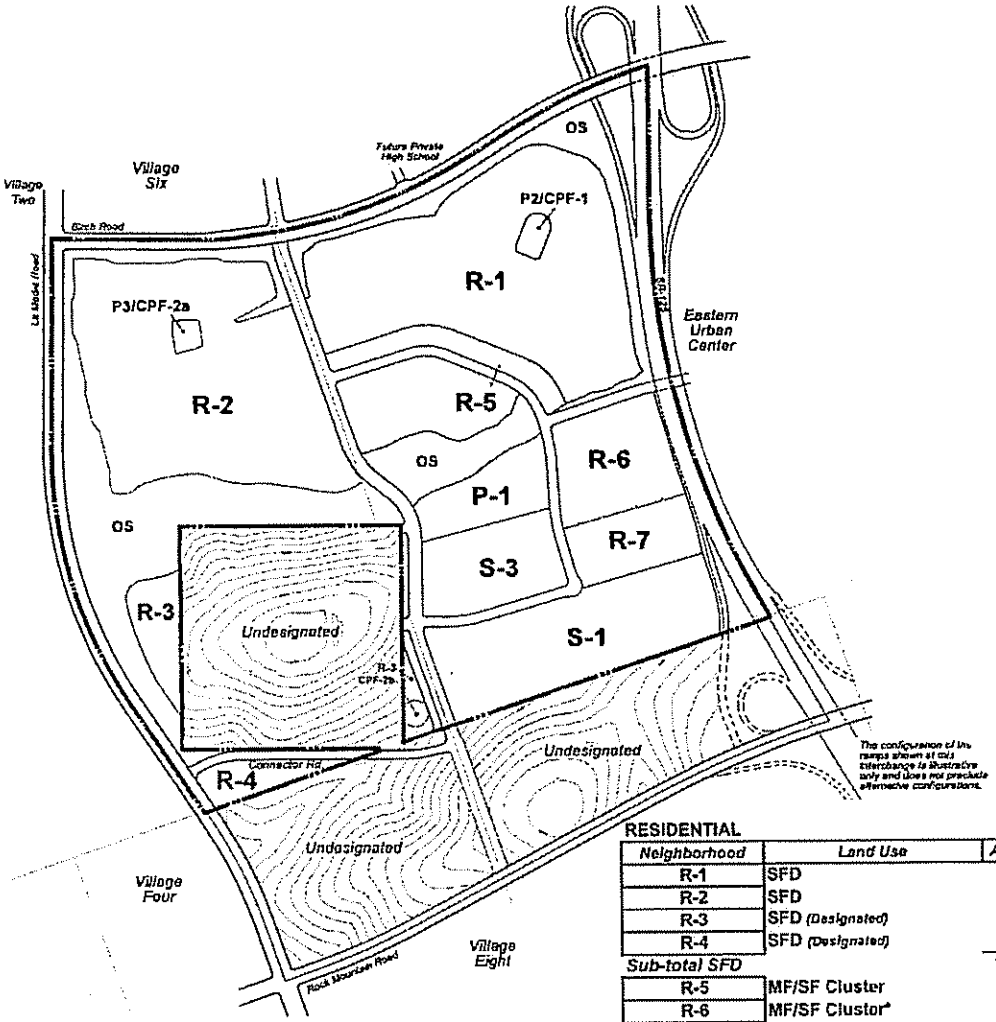
Village Seven - Otay Ranch

Land Planning

5/24/04

Exhibit 1.3

Site Utilization Plan



RESIDENTIAL

Neighborhood	Land Use	Acres	du/ac	DU
R-1	SFD	50.7	6.8	346
R-2	SFD	50.5	7.4	375
R-3	SFD *(Designated)*	5.3	4.2	22
R-4	SFD *(Designated)*	3.1	4.2	13
Sub-total SFD		*109.6*	*6.9*	*756*
R-5	MF/SF Cluster	17.4	7.6	132
R-6	MF/SF Cluster*	12.5	15.4	193
R-7	MF*	8.0	15.4	123
Sub-total MF		*37.9*	*11.8*	*448*
Total Residential		**147.5**	**8.2**	**1,204**

NON-RESIDENTIAL

Neighborhood	Land Use	Acres
P-1	Public Park	7.6 *(7.0 ac not req'd)*
P2/CPF-1	CPF *(Common OS)*	1.1
P3/CPF-2a	CPF *(Common OS)*	0.7
CPF-2b	CPF	1.0
S-1	High School *(Designated)*	23.4
S-3	Elem. School	11.1
OS	Open Space *(Designated)*	47.8
Undesignated	Undesignated Uses	121.3
Cir.	Circulation	62.9
Total Non-Residential		**276.9**
VILLAGE TOTAL		**424.4**

** Refer to SPA Text for provisions to blend these two parcels.*

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Citi Land Planning

8/24/04

Exhibit 1.4

II.4.2 Design Review Process

II.4.2.1 Introduction

The design review process includes two integrated procedures: design review and approval by the master developer and review and approval by the City of Chula Vista. Essentially the process requires the builder to formulate the design for his Neighborhood and review it with the master developer prior to formal application and review of final designs by the City. The City of Chula Vista development standards are provided in the Village Seven Planned Community (PC) District Regulations. Standards and regulations for residential uses are in Section II.3.3, those for mixed-use/commercial uses in Section II.3.4 and Administrative Procedures, including those for Design Review, are in Section II.3.9. The City's Park and Recreation Department shall review all public and private parks for conformance with all applicable City of Chula Vista standards.

A. Master Developer Review Process

The review requirements of the master developer are intended to ensure that the builder's proposed product and designs meet the standards and criteria for the village and the entire planned community. The items to be included in the builder's design submittal package to the Master Developer are covered by private agreements between the builder and developer.

Following acceptance of the builders schematic design, a continuing exchange of information will be expected as the design is finalized and the City's review process begins. Final, approved plans shall be provided to the master developer for his records.

B. City of Chula Vista Design Review Process

The requirements of the City are fairly typical and are further detailed below, but each builder should contact the City for current, specific requirements. The design review process with the master developer should be initiated prior to formal review by the City.

The standards and requirements for Site Plan, Architectural Approval and Design Review shall be as provided for in the Otay Ranch Village Seven PC District Regulations. Additional, specific requirements for application and review procedures are published in the City's Zoning Ordinance.

The City has also published a "Landscape Manual" which describes the landscape review process and provides some guidelines for landscape design from the City's perspective. The Manual also includes specific standards for landscape and irrigation improvements which shall be implemented in Village Seven.

II.4.2.2 Administrative Design Review

The Zoning Administrator is authorized to consider and approve, disapprove or modify applications on several subjects as provided in Section II.3.9 of the Village Seven PC District Regulations and

Section 19.14.030 of the Chula Vista Zoning Code, specifically including: site, architectural, and landscape plan approval.

II.4.2.3 Design Review Committee

The Design Review Committee shall review plans as required by Section II.3.9 of the Village Seven PC District Regulations, and as generally provided for herein unless otherwise specified in the Village Seven SPA Plan. They shall base their findings on the City's Design Manuals and this Village Design Plan. Refer to the Village Seven PC District Regulations and Sections 19.14.581 through 19.14.600 of the City's Zoning Ordinance for additional information.

II.4.2.4 Appeals

A decision of the Design Review Committee or Zoning Administrator may be appealed to the Planning Commission. Such an appeal shall be filed within ten days after the decision as provided for in Section 19.14.583 of the City's Zoning Ordinance.

II.4.2.5 Special Review Processes

In addition to the individual neighborhood review, there is a requirement for coordinated planning of neighborhoods R-6 and R-7, as depicted on the Site Utilization Plan. The first Design Review submittal for either neighborhood shall include a conceptual coordinated site plan for both neighborhoods. The boundary between these two parcels shall then be established by the first Design Review approval. Dwelling units may be transferred between the two neighborhoods, providing it does not exceed the combined total units permitted.

Also, the Site Utilization Plan only provides development designations for portions of Neighborhoods R-3 and R-4. The bulk of these neighborhoods are located adjacent to "undesignated" property which must be added to the approved SPA Plan prior to development. Because of this, no specific design guidance is provided for these sites. Future Village Design Plan amendments shall provide design guidance for these entire neighborhoods when the complete neighborhood becomes a part of the approved SPA Plan.

II.4.3 Community Design Concept

The character of the Otay Ranch Village Seven neighborhood at the broadest level is established by the Otay Ranch General Development Plan and the design framework of the Overall Design Plan. The GDP designates future land uses for the entire Otay Ranch within a framework of open space and major circulation corridors. It also defines the "village" as the fundamental building block for organizing land use within this community framework. Villages are comprised of two basic components; a central area of more intense uses, the Village Core, and surrounding areas of typically residential uses, the Secondary Area.

The Village Core contains commercial, public/quasi-public, mixed-use and medium-high residential land uses and serves as the focal point and commercial hub of the village. Village Cores are centered around a main street or plaza, surrounded by retail/commercial, residential, or mixed-use buildings. Neighborhood parks and other civic or community uses, such as churches, child care or senior centers are also located within the village core. The Secondary Area contains a series of residential neighborhoods located outside of the Village Core, providing a range of predominately single-family housing opportunities.

During the preparation of these ranch-wide plans, numerous community design features and policies were established or considered. As individual villages are developed, attention to these pre-established criteria is necessary to successfully execute the intended design. The design concept for Village Seven begins with the framework of the Overall Design Plan. The applicable provisions of that plan are noted in the discussion below.

II.4.3.1 Village Identity & Character

Village Seven is located within the Otay Valley Parcel framed by regional arterial roads, Birch Road on the north, SR-125 on the east, Rock Mountain Road on the south and La Media on the west. Design concepts, including landscape palettes, have been established for each of these routes, except Rock Mountain Road, with previous studies and approvals. Village Seven is the first development area to border on Rock Mountain Road and hence a future SPA segment of Village Seven approval will establish the design for this road. La Media, Rock Mountain Road and Birch Road are "Ranch Theme Streets." The SR-125 freeway has its own landscape/design concept. These streetscape designs serve as "Unifying Elements" which reinforce the regional setting of the Otay Valley Parcel and create a consistent community level design framework. Village Seven will implement these established designs at its perimeter.

The Overall Design Plan also identifies the location of community and village entries as well as trail and greenbelt connections to adjacent villages. The "Village Greenway" is designated as an open space/trail connection through Village Seven. The Village Greenway is a community-wide open space/trail linkage through the Otay Valley Parcel of Otay Ranch. It is to be partially located in Wolf Canyon, extending east from Village Four through Village Seven, through the Eastern Urban Center (EUC) and Village Eleven to Salt Creek. Trail connections are to be provided from the Village Seven Core to the cores of each of the adjacent villages, including Village Four to the west and the Eastern Urban Center (EUC) to the east.

The design influences on Village Seven are detailed in Section II.2.2.1 of the SPA Plan. The primary influences are the physical characteristics of the site and planned or developing uses on adjacent sites (see Design Influences, Exhibit 3.1).

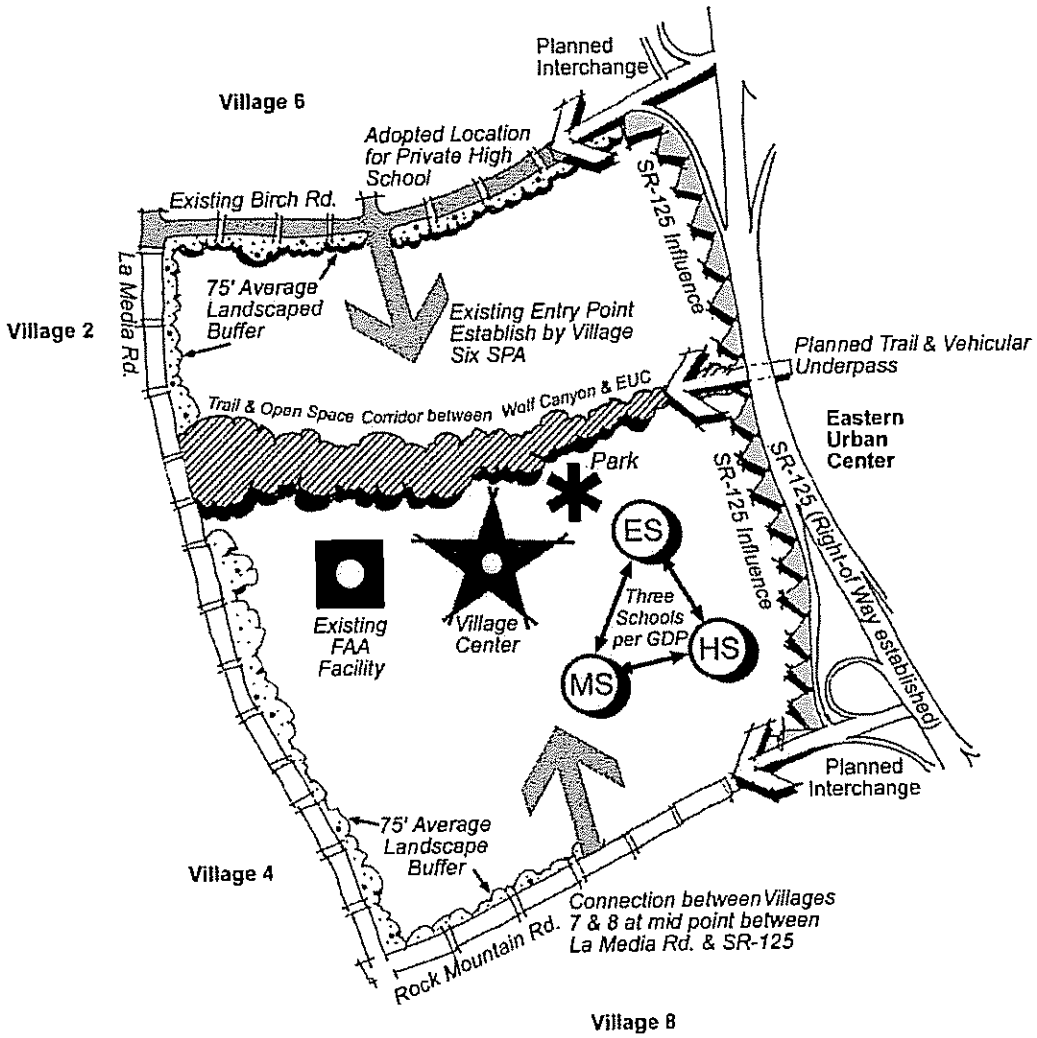
Village Seven is an urban village. The village core is located in the central portion of the village and includes multi-family residential units, an elementary school, a neighborhood park site, and, eventually, mixed-use/town square sites. As noted earlier, the town square and mixed-uses sites are not included in the initial SPA approval, nor are other "undesignated" areas on the Site Utilization Plan (Exhibit 1.4), and will need to be added via a formal SPA amendment. They are discussed here as future features within the village, as depicted on the Overall Conceptual Village Plan, Exhibit 1.1. The town square feature would provide a focal point for the village center and reflect a pedestrian orientation and urban character due to its proximity to higher-density residential and commercial uses. The Core is connected to the village entries by promenade streets. A promenade street also serves the multi-family neighborhoods within the village core. The secondary area includes single-family residential neighborhoods, with a range of lot sizes and product types, two school sites, high school and middle school, and three CPF sites located at the intersection of the southern village entry street and western village entry street (see Exhibits 1.1, 1.2 and 1.4).

The land use plan for Village Seven is consistent with the pedestrian and transit oriented guidelines provided in the Otay Ranch GDP. The plan includes a more intense Village Core area which includes a commercial area proximate to a transit stop. The surrounding Secondary Area includes a range of housing.

The intent of the GDP village concept land use goals are to "produce a cohesive pedestrian friendly community that encourages non-vehicular trips and fosters interaction amongst residents." To implement this goal, the land use policies encourage a pedestrian scale and a pedestrian friendly village environment.

Pedestrian-oriented development in residential neighborhoods has several basic components. In single-family neighborhoods, homes are located closer to the sidewalk and have pedestrian-oriented features such as porches to promote interaction between neighbors and encourage safer neighborhoods. "Veranda" style porches on corner lots, balconies and semi-private courtyards further promote this interaction. Garages doors fronting on the street are limited and have a greater required setback (recessed) from the street so that the pedestrian experiences the architectural design of the building, not the garage door. The pedestrian street experience is enhanced by limiting curb cut widths, thereby reducing driveway paving and increasing landscaping across the front of the residential lots. "Hollywood" driveways are recommended design solutions. Front doors should be visible from the street and must have strong entry features facing the street that enhance the pedestrian experience. Walkways that go directly from the front door to the sidewalk instead of the driveway emphasize the pedestrian orientation of the house to the street. Side street entry garages separate the pedestrian-oriented front of the house from the auto entrance.

Design Influences



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

6/14/04

Exhibit 3.1

Multi-family neighborhoods are within the Village Core and should be designed to discourage use of automobiles and create a "walkable" inviting environment, both within and outside the boundaries of the development. Pedestrian-oriented features include orienting the front doors toward the streets, paseos and pathways; plotting the buildings such that garages are generally not visible from the public or commonly used streets; integrating strong, well designed pedestrian connections to the public or commonly used streets and adjacent trail systems via an inner trail/sidewalk network; the inclusion of well designed, inviting common usable open space areas; and, unique, yet compatible, architectural styles that implement the concepts in this Village Design Plan.

Consistent with the design objective of accentuating the relationship of Otay Ranch with its natural setting and the character of the region, a community design theme of "California Heritage" will be continued from SPA One (Villages One and Five to the north) and Village Six, also to the north. This theme is consistent with the ranching and agrarian images described in the Overall Design Plan. It is also compatible with the new urbanism community design concepts promoted in the village development concept of the GDP. As detailed below, this design theme is not a specific style of architecture which can be strictly interpreted. It is purposely more of a character statement which encompasses a wide range of styles appropriate for the Otay Ranch setting.

The California Heritage theme is based on several presumptions. First is that California, specifically Southern California, has a unique historical context which can be expressed in building design and is worth replicating. This theme will embrace the past and adopt basic principles from successfully built examples in the region, historic Southern California communities such as portions of Los Angeles, Santa Barbara, and San Diego. This theme can provide flexibility in design while allowing the community to age gracefully and accommodate changing land uses. Lastly, this design theme builds on the setting, landscape and other community framework elements from the Overall Design Plan, and provides a synergy of aesthetic elements - location, landscape, and high visibility buildings - to make a statement greater than the individual elements.

As with intensity of development, there will be a range in execution of the design theme. The strongest interpretation and highest level of detailing should occur at the Village Core and greater range of design interpretation within the Secondary Area. The most visible and intensive uses, commercial and civic buildings at the Village Core, should most strongly convey the community design theme. Core residential uses would reflect the theme but be less strict in its execution, especially smaller buildings and lower density product types. Low density single family development and other uses in the Secondary Areas should have styles complementary to the theme but need not implement any specific requirements.

While not a specific architectural style, the California Heritage design theme can embrace a variety of specific styles: Spanish Colonial, Mission, Ranchouse, Bungalow, Moorish, Agrarian, *etc.* In general, California Heritage architecture will reflect the climate and materials indigenous to Southern California. The architectural feeling should be relaxed, simple and somewhat rustic. Building massing should be generally horizontal and "rambling" in feeling. In larger buildings or groups of buildings, horizontal massing should be interspersed with vertical elements such as two story

components and towers. Larger towers should signify focal elements and meeting/activity places. The accompanying sketches in Exhibit 3.2 depict how various elements from a few specific styles can be adapted to be consistent with the California Heritage community design theme.

The following guidelines summarize the principles of design for architecture:

- The architecture should be responsive to the hot dry climatic conditions of Otay Ranch. Shade should be an important element for building design, indoor and outdoor spaces, and people-gathering areas. Buildings should be constructed using materials of good insulating value.

- A variation of building height and massing, whether in groups of buildings or within individual buildings, should be achieved.

- All buildings should be composed of a base, middle and cap.

- Roof forms should reflect the historical heritage architectural vernacular.

- Windows, entries and doors should vary in size shape and detail.

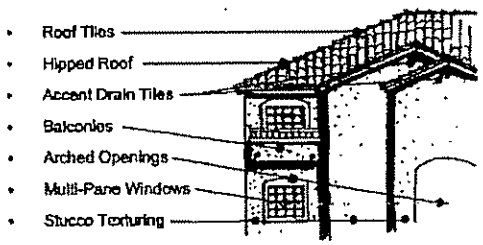
- Second floor, pedestrian used spaces should be opened up to view as much as possible for easy access and convenient identification and, where possible, to provide second floor connections to other buildings by use of bridges.

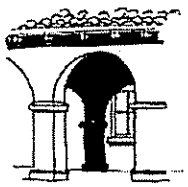
- Certain standardized architectural elements should be required in all buildings within a individual Core area or complex. A building need not exactly copy the style of its neighbors but it should address and/or share certain fundamental architectural characteristics. Architectural style along the same street or within a complex should include buildings of similar height and share one or more distinctive elements: materials, window style, door style, detailing, porches, arcades, overhangs, roofing, color, *etc.* These design components will be defined in the Master Precise Plan process for the Village Core.

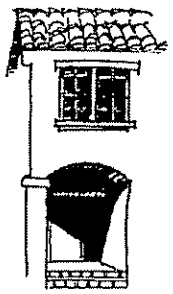
- The highest use pedestrian areas should have the highest level of design detail (*e.g.*, courtyards and plazas).

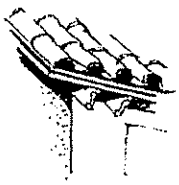
Sample Architectural Elements
California Heritage

Elements of "Spanish Colonial"

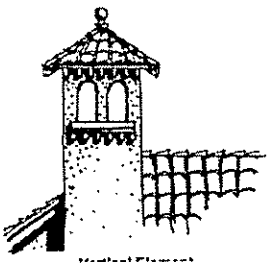


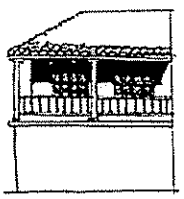


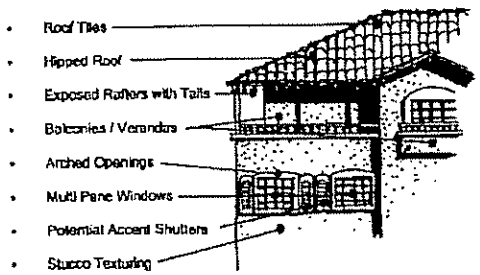




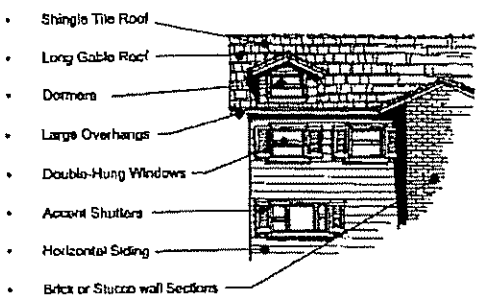
Elements of "Mission" Style







Elements of "Ranch" Style



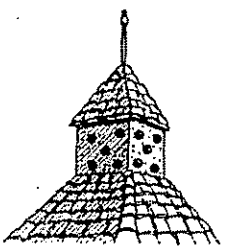


Exhibit 3.2

The following site planning principles relate to the California Heritage theme and good design practice:

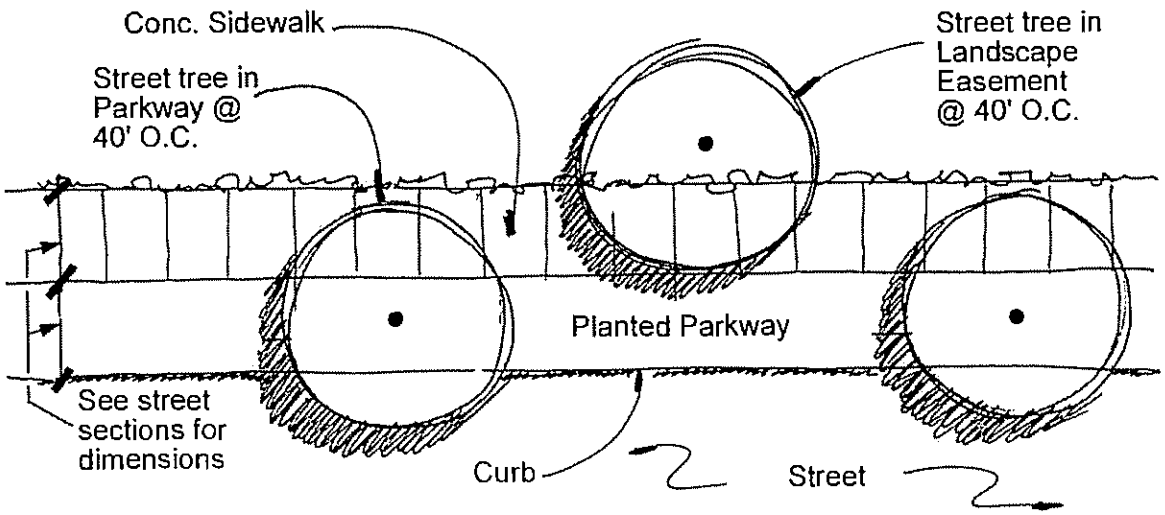
- Projects should promote the design theme by utilizing courtyards or plazas as focal points.
- Parking lots, walkways and courtyards should be designed at a scale that provides value in close proximity, and does not overwhelm pedestrian users. This is intended to promote pedestrian and bicycle movement and reduce the impersonal expansiveness of large spaces.
- Each project should provide a well articulated, identifiable entry sequence for the pedestrian and vehicular user, from street to building. Project entries and connections to and into buildings should be enhanced with landscaping, hardscape detail and accented architectural design.
- All service and loading areas should be accessed from an alley or rear parking area. No loading should occur on the street or pedestrian oriented sides of a building. No garage type loading doors shall be located on a building facade directly facing a public street.
- Outdoor refuse or storage containers shall be completely screened with walls, trellis, gates and/or planting that is consistent with the design of the surrounding development. No refuse collection or storage areas shall be located between a street and the front of a building.
- Mechanical and electrical equipment, utility connections, and antennas should be mounted within the interior of a building whenever practical. When interior mounting is not practical, equipment shall be screened from public view with landscaping.

II.4.3.2 Landscape Concept

The purpose of the General Landscape Plan is to establish the overall landscape theme of the Otay Ranch Village Seven community. Since multiple property owners will be responsible for the planning and implementation of landscape improvements, this information will provide the general guidance necessary to implement a consistent landscape appearance on key streets, entries, open spaces and slopes, and to achieve a visually compatible landscape that is well balanced in water and maintenance demands. All developers will create a unified landscape theme with seamless transitions between landscape elements at the boundaries of land ownership in conjunction with an approved landscape master plan..

The Landscape Concept Plan (Exhibit 3.4) provides a design framework, which provides some latitude and flexibility to individual projects while maintaining the community's overall landscape goals and objectives. Landscape will be used to reinforce the design patterns established by the land use plan. These patterns include the definition of neighborhood, streetscapes, entries, community landmarks and any special landscape areas that are required. The two landowners shall strive for seamless transitions between landscape elements at their ownership boundaries.

The Promenade Streets, the Entry Streets, and Arterial Highways have a featured side of the street intended for pedestrians. This side of the street, which shall be identified during the Tentative Map process, shall have a staggered double row of street trees on one side to shade pedestrians. Exhibit 3.3 illustrates this concept. Parkway and sidewalk dimensions may vary with the particular street.

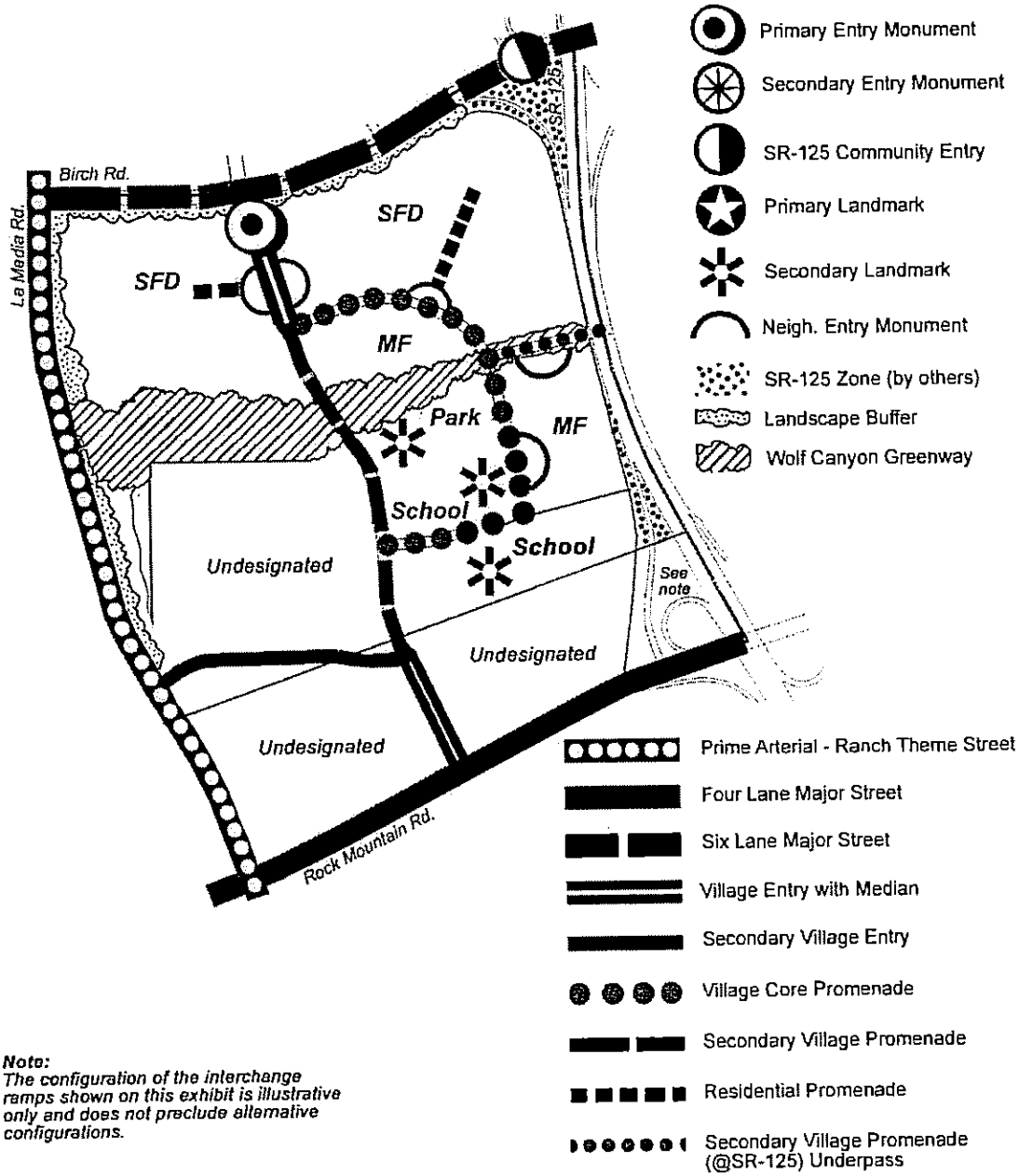


Staggered Double Row of Trees on Featured Side of Street

(Applies to featured side of Promenade, Entry Streets, and Arterial Highways)

Exhibit 3.3

Landscape Concept



Note:
The configuration of the interchange ramps shown on this exhibit is illustrative only and does not preclude alternative configurations.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning
8/14/04

Exhibit 3.4

Note: Refer also to the Trails Plan, Exhibit 3.24.

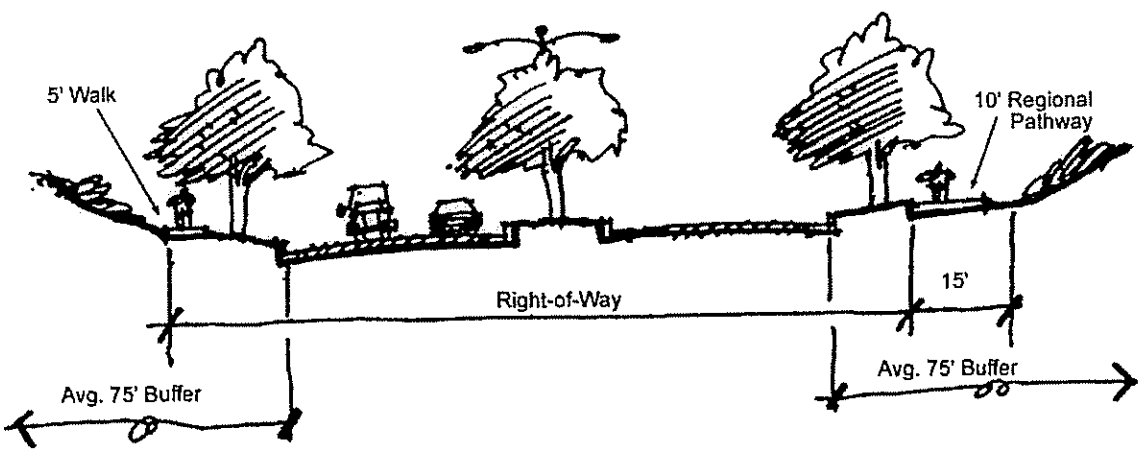
All development in Otay Ranch Village Seven shall comply with all the requirements stated in the Chula Vista Landscape Manual adopted by Resolution No. 17735 in November 1994 and the City of Chula Vista "Landscape Plan Review Checklist" dated November 2003.

Elements of the Landscape Concept include:

Prime Arterial Streets: A theme tree shall be used along the entire street and within the median. The tree shall conform to the existing Otay Ranch Theme on the adjacent properties.

La Media Road: Theme trees shall be located along both edges of the street and within the median. The palette shall be as follows:

Theme Tree:	*Schinus molle* - California Pepper Tree - (24" box minimum at 40' O.C. maximum - Formal rows)
Groundcover:	*Rosmarinus officinalis* - 'Collingwood Ingram' and 'Huntington Carpet'



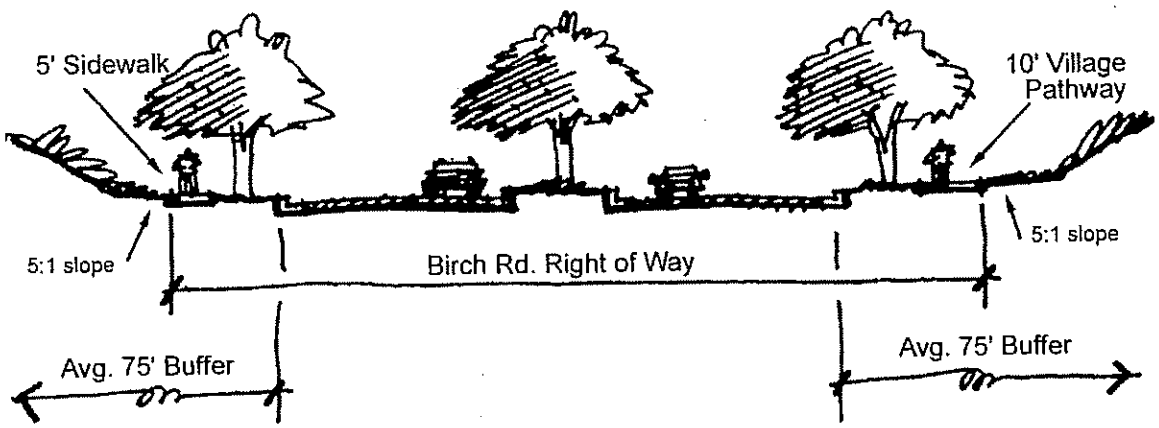
La Media Road Streetscape

Exhibit 3.5

Note: Refer to SPA Plan Street Sections for dimensions. Landscape Master Plan shall set locations for tree setbacks from curb.

Major Streets (Birch Road): The major street, shall have evergreen trees running along both sides of the street and within the median. These trees shall blend with SR-125 intersection landscape design at Birch Road and Rock Mountain Road, and the Eastern Urban Center (EUC) landscape design. The palette is as follows:

Trees:	*Schinus molle* - California Pepper Tree (24" box minimum size at 40' O.C. maximum)
Shrubs:	*Ceanothus* species - Wild Lilac
	Cotoneaster parneyi - Cotoneaster
	Grevillea noellii - Grevillea
	Rhaphiolepis indica - India Hawthorn
Groundcover:	*Lantana montevidensis* - Trailing Lantana
	Rosmarinus officinalis 'Collingwood Ingram' - Rosemary
	Rosmarinus officinalis 'Huntington Carpet' - Rosemary



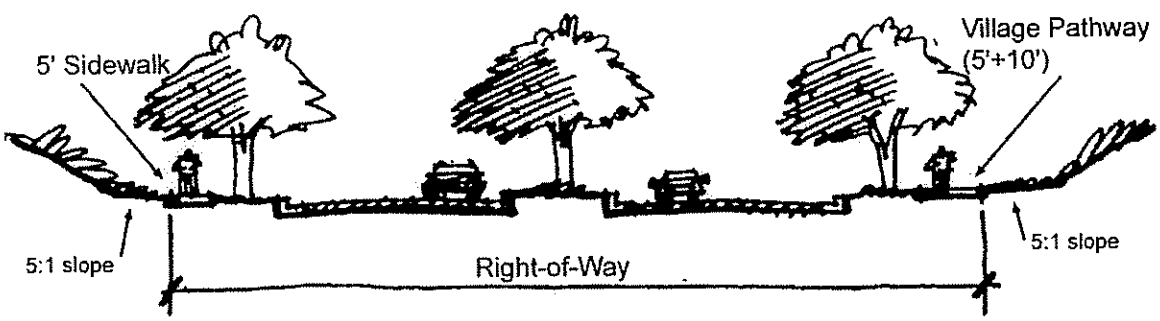
Birch Road Streetscape

Exhibit 3.6

Note: Refer to SPA Plan Street Sections for dimensions

Primary Village Entry, Secondary Village Entry, Core Promenade, Village Promenade, and Residential Promenade Streets: Canopy trees shall be used along the entire length of the street to add pedestrian scale and provide shade for all users. The design will have three forms: 1) in the Core area, tree wells at the curb will be used; 2) a parkway adjacent to the curb shall be used in residential area; and, 3) village entry areas shall have medians incorporated into the design. Designs call for a double row of canopy trees on one side of the road and a single row of trees on the opposite side. The third form incorporates median tree, shrubs, and ground covers. The palette is as follows:

Trees:	See Conceptual Street Tree Plan
Shrubs:	Per Landscape Master Plan
Groundcovers:	Turf (Marathon III at accent areas only)
	Myoporum species - Myoporum
	Lantana species - Lantana
	Gazania Hybrid - Gazania
	Pelargonium peltatum Balcon (at accent areas only)

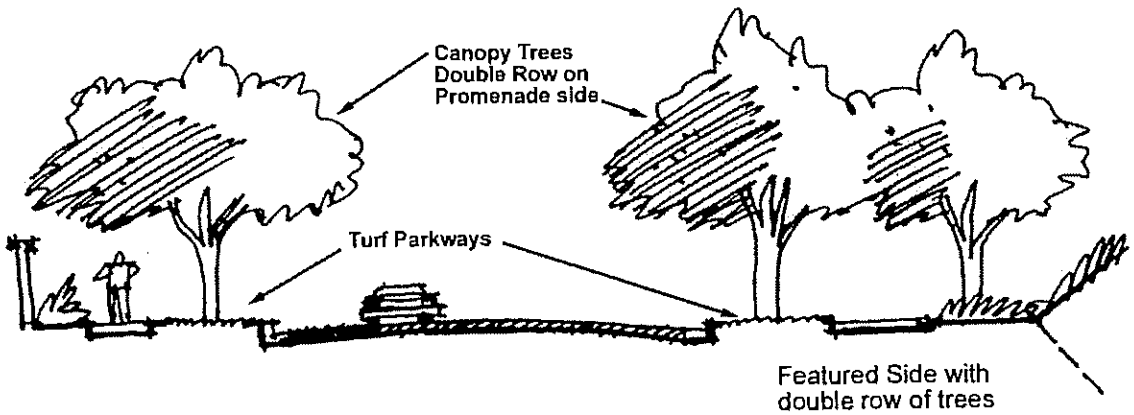


Village Entry Streetscape

Exhibit 3.7

No *te*

: Refer to SPA Street Sections Plan for dimensions



Note: *Refer to Sections in SPA PLan for dimensions*

Source: ONA

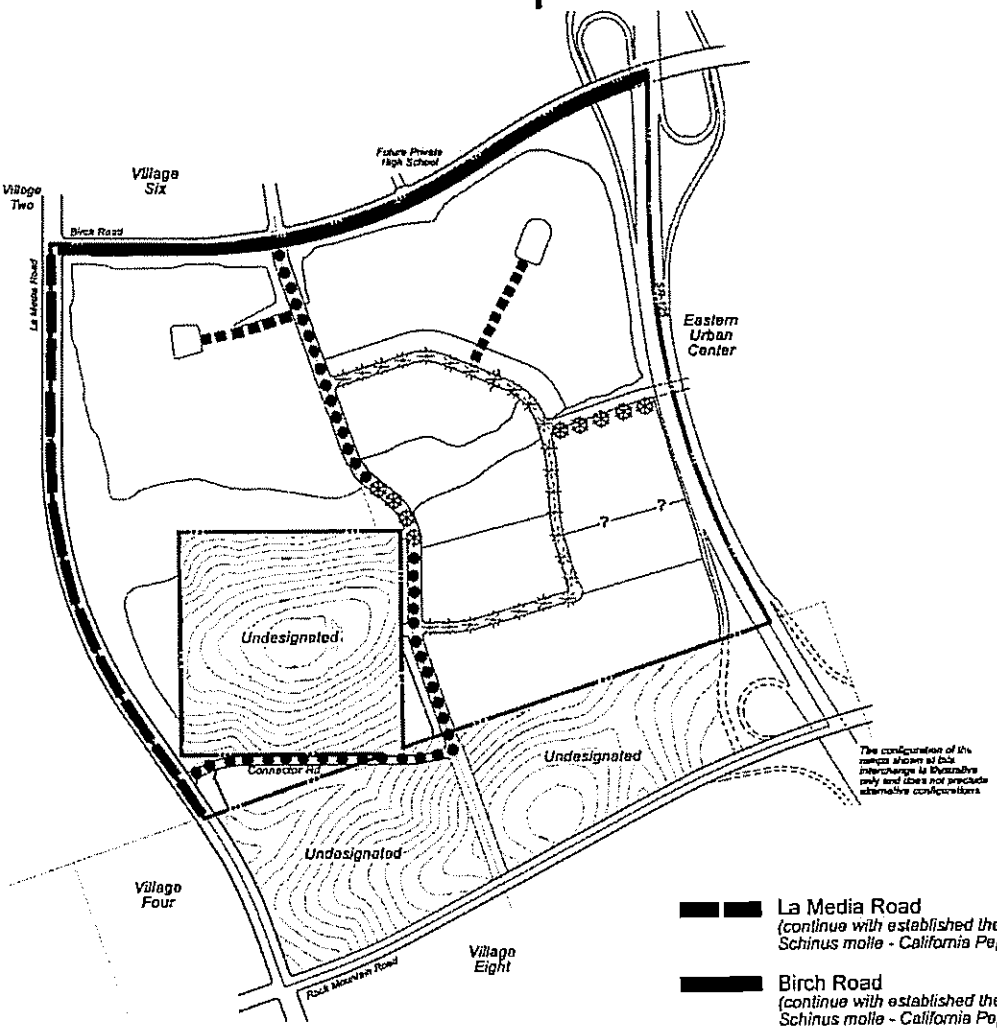
Promenade Streets

Note: Village Promenade and Residential Promenade Streets have variation in widths, but are conceptually equivalent. Refer to SPA Plan for dimensions.

Exhibit 3.8

Note: Village Promenade and Residential Promenade Streets have variation in widths, but are conceptually equivalent. Refer to SPA Plan Street Sections for dimensions.

Conceptual Street Tree Plan



La Media Road
(continue with established theme)
Schinus molle - California Pepper Tree

Birch Road
(continue with established theme)
Schinus molle - California Pepper Tree

Village Entry Street
Koelreuteria bipinnata - Chinese Flame Tree

Core Promenade Street
Podocarpus gracilior - Fern Pine

Residential Promenade
Pyrus calleryana 'Aristocrat' - Ornamental Pear

Special Landscape Zone
(Streets related to Wolf Canyon)
Platanus racemosa-Western Sycamore

Note: *All trees to be at 40' O.C. max. in formal rows. Feature side of streets to have second row of trees, staggered, also at 40' O.C. max.*

CITY OF CHULA VISTA

Vista Verde

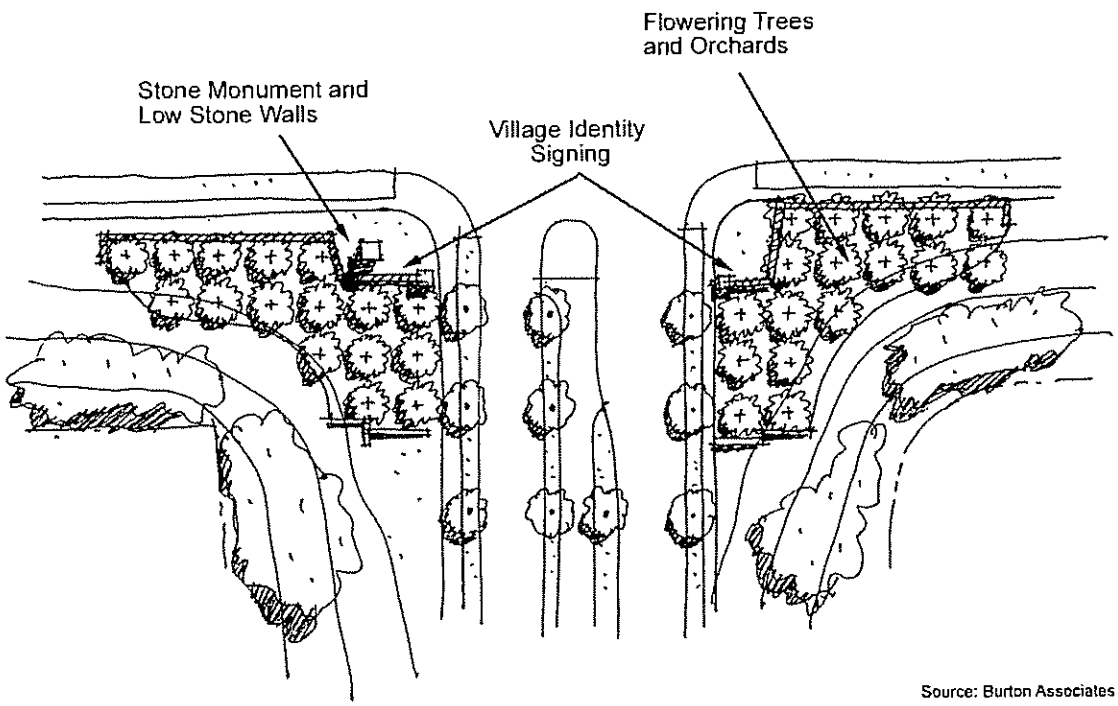
Village Seven - Otay Ranch

Source: ONA, Inc.
Cert. Land Planning
6/30/04

Exhibit 3.9

Entries: These areas are the main points of entry to Village Seven. A tree that differs from the surrounding entry area will provide a unique accent statement and feeling of arrival at this entry point. The landscape design for the Village Entries shall provide enhanced plantings that will provide a focal point. The palette is as follows:

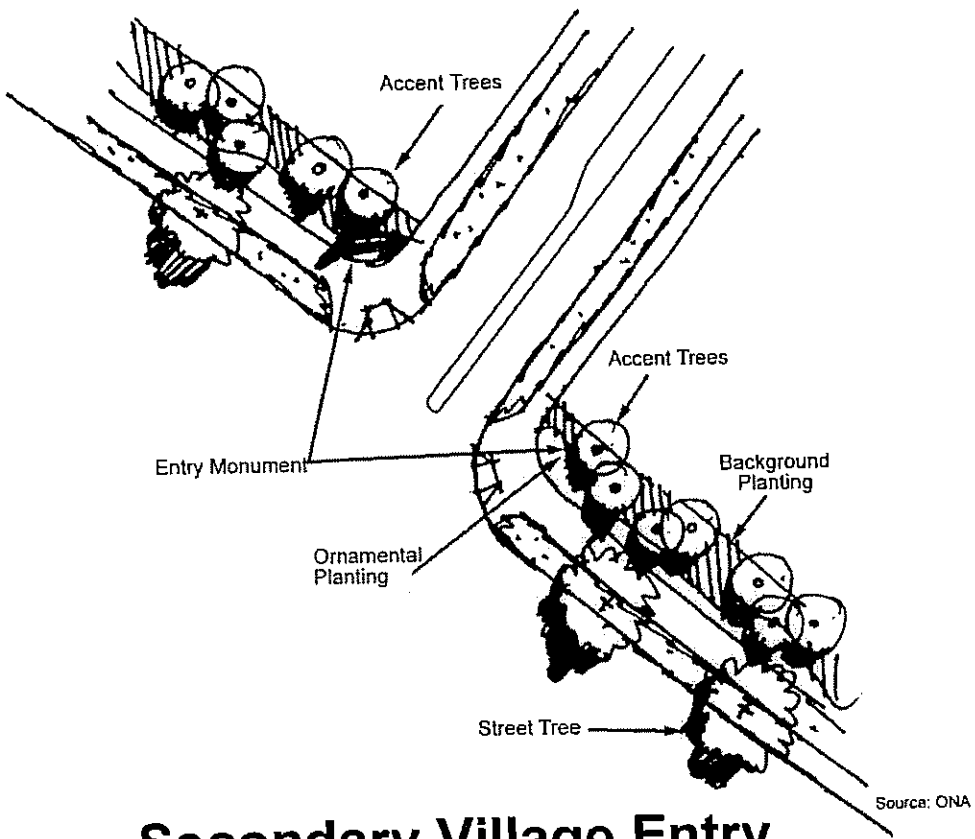
Trees:	*Jacarandas acutifolia* - Jacaranda - 24" -36" box
Shrubs:	*Agapanthus africanus* - Lily-of-the-Nile - 1 gallon
	Hemerocallis hybrid - Evergreen Daylily - 1 gallon
	Phormium tenax 'Bronze Baby' - New Zealand Flax - 5 gallon
	Phormium tenax 'Tom Thumb' - New Zealand Flax - 5 gallon
Groundcover:	*Myoporum species* - Myoporum - size and spacing dependent on species
	Gazania hybrids - flats @ 12" O.C.
	Pelargonium peltatum Balcon - flats @ 12" O.O.



Source: Burton Associates

Primary Entry Monument

Exhibit 3.10



Secondary Village Entry

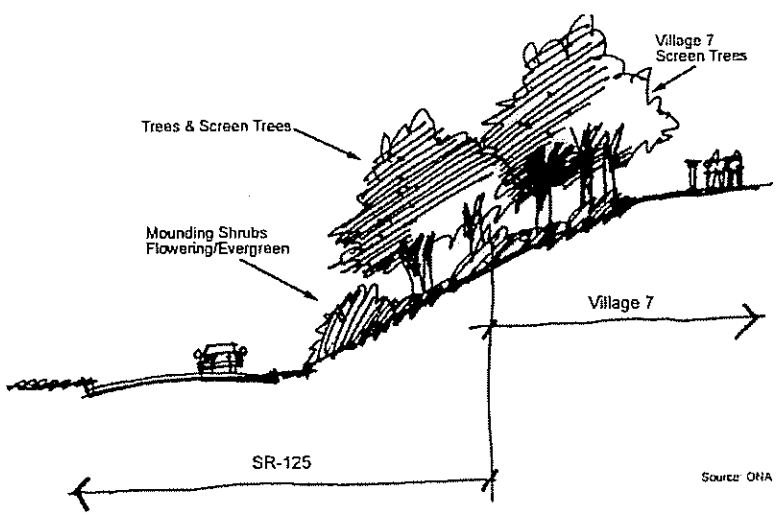
Exhibit 3.11

Note: Refer to Section II.4.3.7 Community Entries for additional detail on Entry Elements

Special Landscape Zones (SR125): This area will act as a buffer zone between the residential homes, schools, park and the freeway. It will screen the view of the freeway and somewhat attenuate the traffic noise The design for landscaping in this area must follow the criteria stipulated in the "State Route 125 Design Guidelines" prepared by DeLorenzo Inc. (dated June 21, 1999).

Trees:	*Eucalyptus sideroxylon* - Red Iron Bark - 15 gallon
	Pinus halepensis - Aleppo Pine - 15 gallon & 24" box
	Populus nigra 'Italica' - Lombardy Poplar - 15 gallon & 24" box
Shrubs:	*Abelia grandiflora* - Glossy Abelia - 5 gallon
	Cotoneaster parneyi - Cotoneaster - 5 gallon
	Grevillea noellii - Grevillea - 5 gallon
	Pittosporum tobira - Mock Orange - 5 gallon
	Raphiolepis indica - India Hawthorn - 5 gallon
Groundcover:	*Bacharis pilularis* - Dwarf Coyote Brush - flat @ 15" O.C.
	Myoporum species - Myoporum - flats @ 3' O.C.

Where SR125 intersects with Birch Road and Rock Mountain Road, blend the landscape plant materials to avoid - a distinct line between the different landscape zones.



SR-125 Landscape Buffer

Exhibit 3.12

Wolf Canyon Landscape: Wolf Canyon is the most significant open space in Village Seven and is a crucial component of the Chula Vista Greenbelt. This greenbelt is a system of connected open space that surrounds the entire City.

The landscaping at Wolf Canyon will provide an interesting contrast within Village Seven. While most of the streets reflect a ranch theme with a formal arrangement of trees. Wolf Canyon will be developed into a rustic, natural, informal setting.

Conceptual Landscaping plans for Wolf Canyon are provided as Exhibits 3.13 and 3.14. These concepts may be refined during coordination with Federal, State, and local agencies. A Wolf Canyon Landscape Master Plan, covering an applicants entire ownership, shall be a required component of their Landscape Master Plan requirement.

The canyon will include landscaping with native and drought tolerant plants. The canyon bottom will have landscaped drainage basins with native riparian plants. The immediate adjacent slopes will include native Western Sycamore trees, Coast Live Oak trees, and native shrubs and ground covers. The higher slopes will be planted with native and drought tolerant plants. These slopes adjacent to residences will be planted in fire resistant plants and in accordance with the City of Chula Vista Fire Department requirements.

A decomposed granite trail/service drive on the southern edge will provide recreation and maintenance access. It will be a critical link in the Chula Vista Greenbelt trail system.

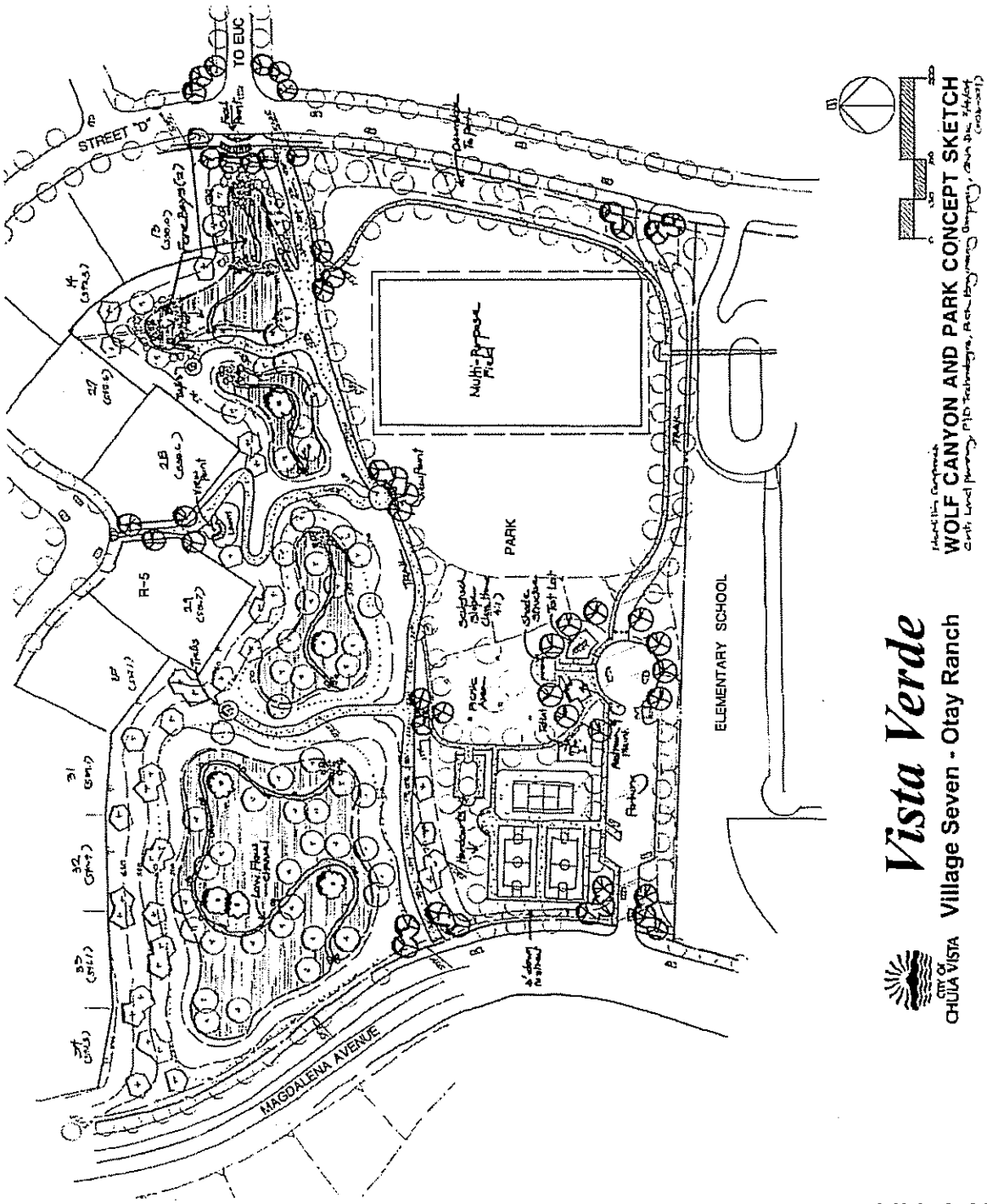


Exhibit 3.13
Wolf Canyon (Eastern Portion)

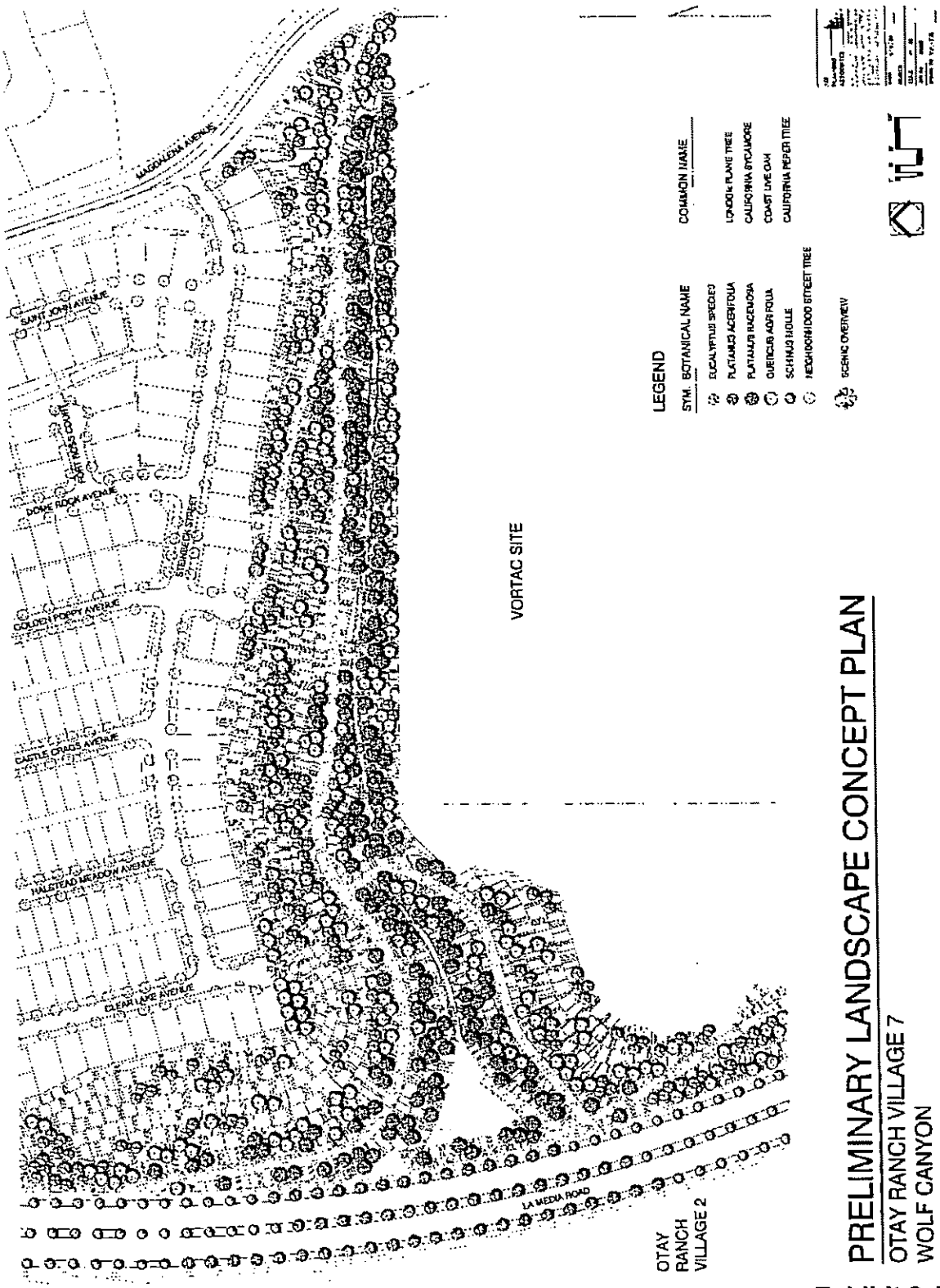


Exhibit 3.14
Wolf Canyon (Western Portion)

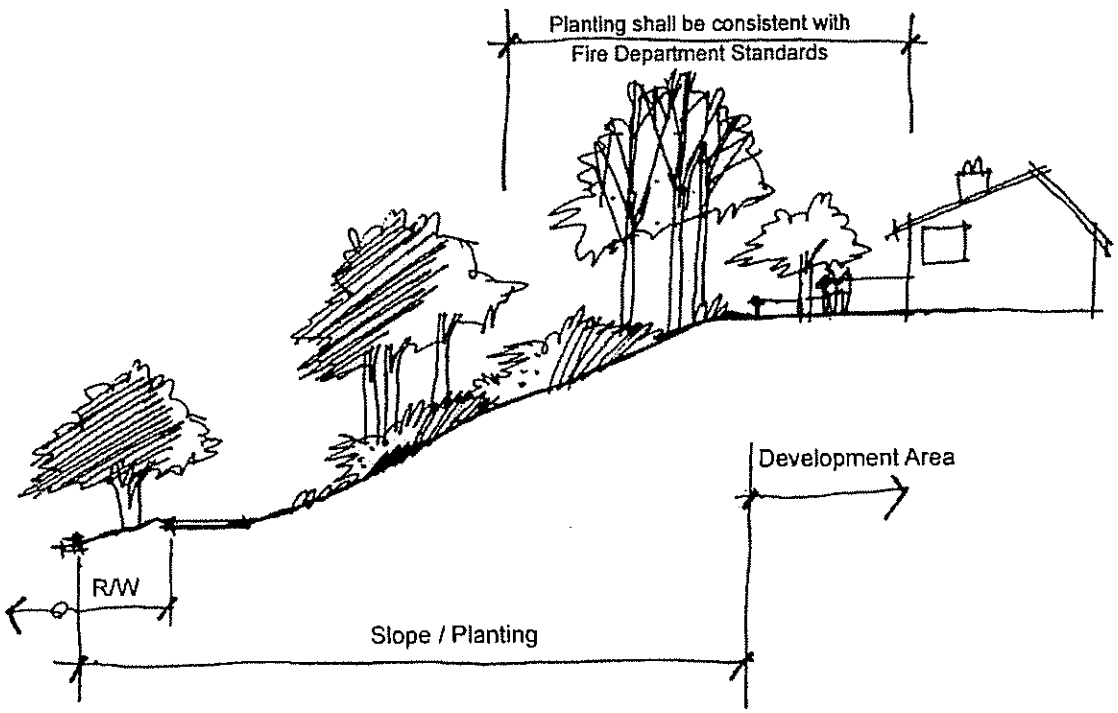
Landscape Buffer: The buffer is open space landscaping that surrounds Village Seven. It provides a landscape screen between the residents and the busy Prime Arterial and Major Streets. The buffer will be within the view corridor for travelers along the arterial streets. The buffer will also act as a transition area between the manufactured open space within the development area and any native or naturalized areas. The palette is as follows:

La Media Road

Trees:	*Albizzia julibrissin* - Silk Tree - 15 gallon
	Eucalyptus nicholii- Nichol's Willow Leafed Peppermint - 15 gallon
	Melaleuca quinquenervia - Cajeput - 15 gallon
	Quercus agrifolia - Coast Live Oak - 15 gallon - 24" box
	Tristania conferta - 15 gallon-24" box
Shrubs:	*Ceanothus 'Concha'* - Wild Lilac - 1 gallon
	Cistus purpureus - Orchid Rockrose - 1 gallon
	Cotoneaster species - Cotoneaster - 1 gallon
	Heteromeles arbutifolia - Toyon - 1 gallon
	Melaleuca nesophila - Pink Melaleuca - 1 gallon
	Rhaphioepis indica 'Ballerina' - India Hawthorn - 1 gallon
	Rhaphioepis indica 'Clara' - India Hawthorn - 1 gallon
Groundcover:	*Myoporum species* - Myoporum - flats @ 3' O.C.
	Lantana montevidensis - Lantana - 1 gallon @ 10' O.C.
	Hydroseed mix - As determined by Landscape Master Plan

Birch Road

Trees:	*Eucalyptus sideroxylon* - Red Iron Bark - 15 gallon
	Koelreuterria bipinnata - Chinese Flame Tree - 15 gallon
	Melaleuca quinquenervia - Cajeput - 15 gallon
	Pinus eldarica - Afghan - 15 gallon - 24" box
Shrubs:	*Ceanothus 'Concha'* - Wild Lilac - 1 gallon
	Cistus purpureus - Orchid Rockrose - 15 gallon
	Cotoneaster parneyii - Cotoneaster - 1 gallon
	Grevillea noellii - Grevillea - 1 gallon
	Rhaphioepis indica 'Clara' - India Hawthorn - 1 gallon
Groundcover:	*Myoporum species* - Myoporum - flats @ 3' O.C.
	Lantana montevidensis - Lantana - 1 gallon @ 10' O.C.
	Hydroseed mix - As determined by Landscape Master Plan



Landscape Buffer

Exhibit 3.15

Plant Materials List/Type of Landscaping (Landscape Codes)

Landscape areas will be planned coded to create a community landscape that is sensitive to visual impacts, water conservation and maintenance requirements. For example, entries which are visibly prominent, will require higher water and maintenance levels, while landscape buffers will require less. For purposes of consistency, the codes for landscape areas are similar to the City of Chula Vista's open space coding system. There is some variation for suitability to the project. The Landscape Master Plan shall include a plan that uses the following codes.

Code 1: Ornamental or high maintenance landscape - Areas containing permanent irrigation planted in ground cover, shrubs, and trees shall be kept weed free. Any areas not fully covered with planted groundcover are to be replanted and grown to fully cover the area during the normal growing season. Weeding is necessary to create a well manicured appearance.

Code 2: Lawn Areas - Lawn areas with automatic irrigation systems. Maintenance is necessary to create a well manicured appearance.

Code 3: Irrigated and Erosion Control Slopes and Other Area - Areas containing permanent irrigation systems initially planted with groundcover or hydroseed mix, shrubs, and trees from containers, shall be kept weed free as required. The intent is to maintain healthy, weed free, vegetation for slope stabilization, landscape buffers and transitions, and other landscape areas.

Code 4: Non-irrigation or temporary irrigated native or drought tolerant areas - Areas containing plant materials to be naturalized. Temporary irrigation may be required for establishment. Vegetation may be selectively cut back as appropriate to the plant species. Not to exceed twice per year.

Code 5: Undisturbed open space.

A recommend list of plant materials follows. Species are broken down by plant type and landscape code. Additional plants, as listed in the City of Chula Vista Landscape Manual - Appendix "A" and other plants, may be added in the Landscape Master Plan, subject to approval.

Otay Ranch Village Seven Plant Materials List						
TREES		**LANDSCAPE CODES**				
BOTANICAL	**COMMON**	**1**	**2**	**3**	**4**	**5**
Albizia julibrissen	Silk Tree	X		X		
Arbutus unedo	Strawberry Tree			X	X	
Cassia leptophylla	Gold Medallion Tree	X		X		
Cercis occidentalis	Western Redbud				X	
Cinnamomum camphora	Camphor Tree	X		X		
Chitalpa tashkentensis	Tashkent Chitalpa	X		X		
Eucalyptus species	Eucalyptus			X	X	
Geijera parvifolia	Australian Willow	X		X		
Jacaranda acutifolia	Jacaranda	X		X		
Koelreuteria bipinnata	Chinese Flame Tree	X		X		
Lagerstroemia hybrids	Crape Myrtle	X		X		
Lyonothamnus floribundus asplenifolius	Catalina Ironwood			X	X	
Melaleuca linarifolia	Flaxleaf Paper Bark	X		X		
Melaleuca quinquenervia	Cajeput Tree	X		X		
Metrosideros excelsus	New Zealand Christmas Tree	X		X		
Olea europaea 'Wilsonii', 'Swan Hill'	Olive	X		X		
Palms	Various Types	X		X		
Pinus species	Pine	X		X	X	
Pistachia chinensis	Chinese Pistache	X		X		
Platanus racemosa	California Sycamore			X	X	
Podocarpus gracilior	Fern Pine	X		X		
Populus nigra 'Italica'	Lombardy Cottonwood			X		
Prunus lyonii	Catalina Cherry			X	X	
Pyrus calleryana "Aristocrat", 'Bradford'	Ornamental Pear	X		X		
Quercus agrifolia	Coast Live Oak				X	
Quercus engelmanni	Engelmann Oak				X	
Salix goodlingii	Goodlingii Black Willow				X	
Salix lasiolepis	Arroyo Willow				X	
Salix lucida ssp. lasiandra	Lance Leaf Willow				X	
Tabebuia avellandae	Pink Trumpet Tree	X		X		
Tristania conferta	Brisbane Box	X		X		
Ulmus parvifolia	Evergreen Elm	X		X		
Washingtonia robusta	Mexican Fan Palm	X		X		

Otay Ranch Village Seven Plant Materials List

SHRUBS		LANDSCAPE CODES				
BOTANICAL	COMMON	1	2	3	4	5
Abelia grandiflora	Glossy Abelia	X		X		
Agapanthus africanus	Lily-of-the-Nile	X				
Arbutus unedo 'Compacta'	Dwarf Strawberry Tree			X	X	
Arctostaphylos species	Manzanita				X	
Artemisia californica 'Grey Canyon'	Canyon Grey Sage Brush				X	
Baccharis pilularis	Coyote Brush			X	X	
Ceanothus species	Wild Lilac			X	X	
Cistus species	Rockrose			X	X	
Cotoneaster species	Cotoneaster	X		X		
Eriogonum species	Buckwheat				X	
Escallonia species	Escallonia	X		X		
Fremontodendron species	Flannel Bush				X	
Grevillea noellii	Grevillea	X		X		
Hemerocallis hybrids	Daylily	X		X		
Heteromeles arbutifolia	Toyon			X	X	
Lantana montevidensis	Lantana	X		X		
Leptospermum scoparium	New Zealand Tea Tree	X		X		
Limonium perezii	Statice	X		X		
Melaleuca nesophila	Pink Melaleuca	X		X		
Myrica californica	Pacific Wax Myrtle				X	
Nandina domestica	Heavenly Bamboo	X		X		
Phormium tenax	New Zealand Flax	X		X		
Prunus ilicifolia	Hollyleaf Cherry				X	
Raphiolepis indica	India Hawthorn	X		X		
Rhamnus californica	Coffeeberry				X	
Rhus integrifolia	Lemonade Berry				X	
Salvia species	Sage			X	X	
Simmondsia chinensis	Jojoba			X	X	
Tecomaria capensis	Cape Honeysuckle			X		
Xylosma congestum	Xylosma			X		

Otay Ranch Village Seven Plant Materials List						
GROUNDCOVERS		**LANDSCAPE CODES**				
BOTANICAL	**COMMON**	**1**	**2**	**3**	**4**	**5**
Arctostaphylos species	Manzanita				X	
Baccharis pilularis 'Twin Peaks'	Dwarf Coyote Brush			X	X	
Baccharis pilularis 'Pigeon Point'	Dwarf Coyote Brush			X	X	
Bougainvillea species	Bougainvillea	X		X		
Gazania hybrid	Gazania	X		X		
Hydroseed Mixes (vary)					X	
Iceplant species	Iceplant	X		X		
Lantana montevidensis	Trailing Lantana	X		X		
Marathon III or approved equal	Various lawn types		X			
Myoporum species	Myoporum	X		X		
Pelargonium peltatum 'Balcon'	Ivy Geranium	X				
Ribes species	Currant				X	
Rosmarinus officinalis 'Collingwood	Rosemary	X		X		
Rosmarinus officinalis 'Huntington Carpet'	Roesemary	X		X		

Other plants listed in "Appendix A" of the Chula Vista Landscape Manual may be added. Additional plants may be added, subject to approval, of the Landscape Master Plan.

Slope/Erosion Control

The general intent of the slope erosion control program is to protect newly created slopes or denuded areas from erosion or unsightliness. Dust abatement is also a concern. All slope erosion control planting shall conform to the requirements of the City of Chula Vista Landscape Manual, Chula Vista Municipal Code, and the Planning and Building Department Standards.

Generally, five types of erosion control planting may exist subject to the direction and approval of the City of Chula Vista:

Type 1 - Permanent slope areas where permanent automatic irrigation systems, trees, shrubs and groundcovers are required.

Type 2 - Permanent individual homeowner lots slopes where permanent manual irrigation systems, trees, shrubs and/or ground covers are required.

Type 3 - Permanent slope areas to be naturalized. One-gallon trees and shrubs with hydroseeded groundcover will be required. Irrigation requirements will be at the direction of the City of Chula Vista. Options area as follows:

No irrigation, install during the rainy season
Permanent automatic irrigation systems
Temporary automatic or manual systems

Type 4 - Fire retardant slopes where fire retardant plant materials are used between structures and native or naturalized slopes.

Type 5 - Temporary slopes or flat areas where hydroseed shall be installed during the rainy season. No irrigation is required. Plant materials should vary in height and be planted informally to soften the slope and avoid a hard edge.

Landscape and Irrigation Standards

Standards have been established for the planning of irrigation systems and landscaping. Some of these are municipal standards, while others are specific to the Otay Ranch Community. The City of Chula Vista has specific standards in its Landscape Manual, which must be met on all projects. Additionally, the City may have specific standards related to each individual project. The city and Master Developer also have specific standards in those common areas where the Otay Ranch Community Association will assume eventual maintenance responsibility. Trees will be staked in accordance with industry standards or the San Diego Regional Standard Drawings.

Streetscape and common area landscape shall be planted to the following minimum standards:

- Groundcovers shall be used to eventually cover the entire planting area (flatted material at the appropriate spacing or hydroseed at naturalized or drought tolerant areas, with City and Landscape Master Developer approval).

- Spreading shrubs shall be used to eventually cover a minimum of fifty percent (50%) of the area at mature growth. Shrub and groundcovers shall be selected subject to approval.

- Tree plantings shall consist of the trees designated herein and other approved trees (subject to City and Master Developer approval).

- All trees will be staked in accordance with industry standards or San Diego County Regional Standards. Type, size and installation of trees in the City right-of-way are subject to City approval.

- All irrigation systems shall conform to the requirements of the City of Chula Vista, Otay Water District, County of San Diego - Department of Environmental Health, and the Master Developer.

- Irrigation systems shall be designed to allow separate areas of maintenance responsibility. For example, separate systems and meters for:

  -Private entity or association
  -Governmental agency
  -Community Facilities District (CFD)
  -Private individual
  -Other

- Open space maintenance district and privately maintained landscape within the City right of way irrigation shall be coordinated with the City of Chula Vista. The system shall conform to standard equipment and installation techniques. This shall also apply to privately maintained landscape within this right-of-way.

- Equipment shall be located and installed to minimize negative visual impact. Low precipitation sprinkler heads should be utilized for optimum coverage and maximum water conservation.

- All irrigation systems shall be fully automatic with the exception of individual homeowner properties.

- All landscape maintenance shall conform to the City Landscape Manual, community requirements and project CC&R's (if any).

- Maintenance is divided into the following categories of responsibility:

-Individual property ownership
-Governmental agency
-Community Facilities District
-Owner's Association

II.4.3.3 Community Fencing

One of the most dominant visual elements of a community is its fencing. It is essential for this element to be aesthetically pleasing and provide continuity in design to unify the various architectural styles within individual neighborhoods into a single community theme.

Fences and walls can serve many functions including security, identity, enclosure, privacy, noise attenuation, *etc*. However care must be exercised in the design of fencing in order to avoid long, boring or awkward sections of fencing. It is intended that the available fencing types be combined to attract interest and provide variety. Using a combination of open and solid styles, changing angles and directions is encouraged. Long straight runs of a single fence style is monotonous and inappropriate.

The Ranch-wide theme will be maintained through a comprehensive system of walls and fences. Community theme walls provide screening, sound attenuation, security and neighborhood identity. The perimeter wall theme continues the ranch identity at project edges and entryways which will be carried throughout Otay Ranch. The elevations of the community fencing program are illustrated in Exhibit 3.15. These are to be used for all fencing indicted on the Fencing Plan. Fencing for town-home and multi-family projects are not specified on the Fencing/Entries Plan (Exhibit 3.16), because the placement of such fences will be a design detail of each individual site plan in these areas. However, any fencing proposed in these attached residential neighborhoods shall use the same fencing style as indicated for the single family detached areas.

Each type of fence serves a particular purpose. The sound wall is a masonry wall intended to provide noise mitigation and privacy. An open wall is used where a physical barrier is needed, but a view needs to be preserved. Within Otay Ranch, wrought iron fencing between the theme pilasters is proposed as the open wall. Pilasters should be provided at each property line intersection for internal fencing within twenty-five feet of a promenade street. Along the Village perimeter fronting arterials, pilasters should be placed at all grade beaks and to break up straight runs exceeding 150 feet.

Exterior fences should be designed and placed according to the following guidelines:

1. Walls should be made of a textured surface material that is compatible with the design of the neighborhood area.

2. The monotony of a long wall should be broken by visual relief through periodically recessing the wall or constructing pilasters.

3. Landscaping, such as trees, shrubs or vines, should be used to soften the appearance of the wall.

4. Walls which serve as a subdivision exterior boundary should be limited to six feet in height from the highest finished grade, unless otherwise required by the Environmental Impact Report.

5. Walls used as rear or side yard walls should be constructed up to six feet in height depending upon the conditions that exist, unless otherwise required by the Environmental Impact Report.

6. Combined solid fencing, walls and open fencing may be used to create interest. Masonry walls are required only where necessary for noise attenuation.

7. Fencing design should avoid long continuous runs. Jogging the fence line to avoid monotony is encouraged.

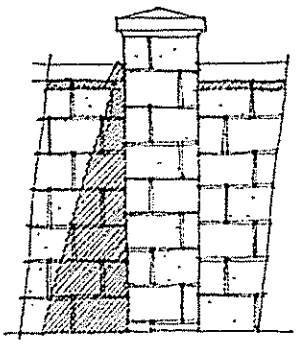
8. Sound wall fencing, where required, should be used to mitigate adverse noise impacts on residential units and be built to the height specified in the Noise Analysis.

9. Landscape planting should be used to supplement and soften fencing and obscuring long lengths of fence with vines and shrubs is encouraged.

10. Open fencing should be used in the rear or side yard between homes when privacy is not a consideration and the fence is visible from the street (*i.e.*, rear slope fencing).

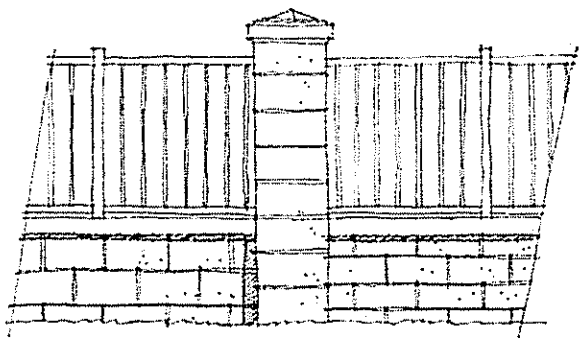
11. Where side or rear yard fencing abuts a promenade street, changes in plane and/or elevation are encouraged.

Fencing Types

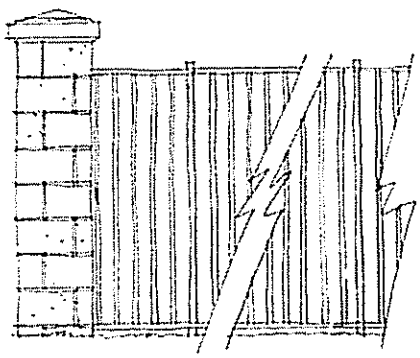


Solid Split Face Block Theme Wall/Pilaster

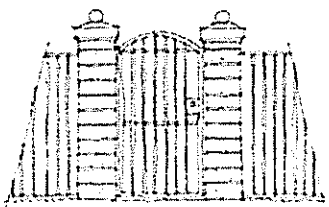
Notes:
1. Split Face Block Walls and Pilasters shall be consistent with the existing walls used in adjacent Village Six.
2. Fencing shall have maximum height of 6' except where required for noise attenuation, where the maximum height may be increased to 8 1/2'.
3. Wood Fencing shall not be used for any fencing with significant public exposure.



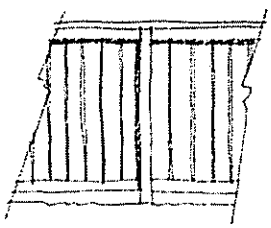
Partially Open Theme Wall



Open View Fence



Gated Fence



Internal Wood Fence

CITY OF CHULA VISTA

Vista Verde

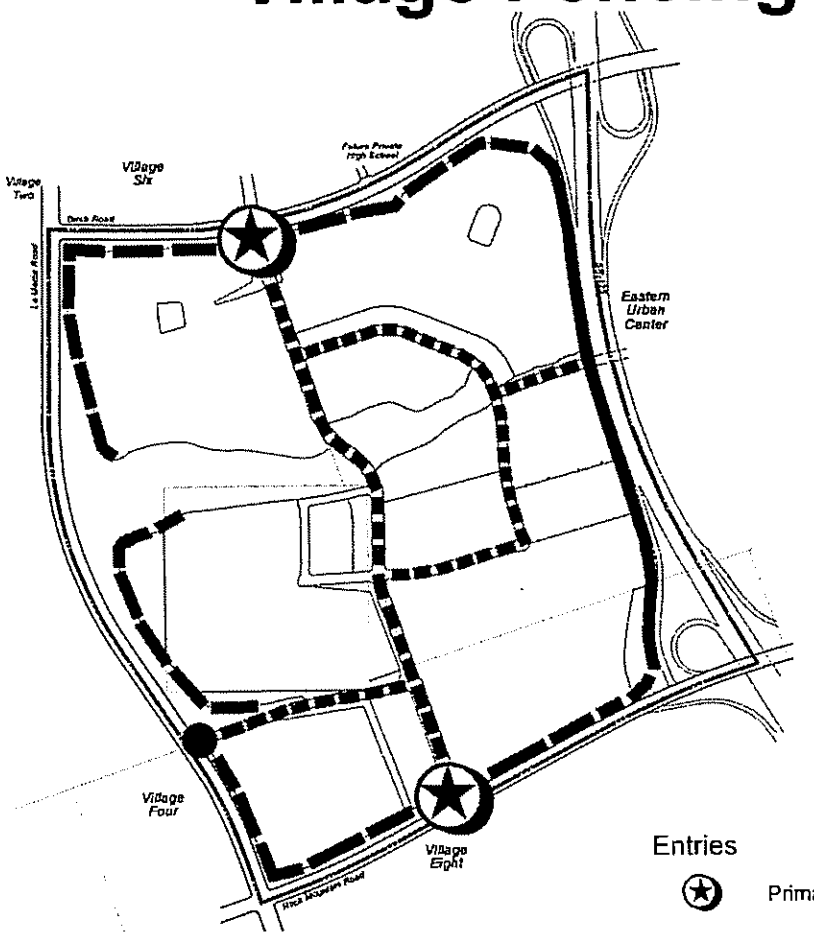
Village Seven - Otay Ranch

Cinti Land Planning

7/31/03

Exhibit 3.16

Village Fencing & Entries



Entries

Primary Entry

Secondary Entry

Community Fencing

SR-125 Sound Wall/Berm

Village Perimeter Fencing
(Sound wall where required)

Internal Streets requiring any adjacent fencing *(where used)* to be theme fencing.

Note:
Fencing indicated should be solid masonry, except where a noise analysis and views permit open fencing to be used.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civic Land Planning

3/22/04

Exhibit 3.17

Combined Wall and Fence Guidelines

The combining of a conventional fence on top of a retaining wall can result in combined wall height that is not desirable. The combining of walls is generally discouraged. Where necessary, it shall be within the combined limits indicated in the sketch below.

Combination Wall & Fence

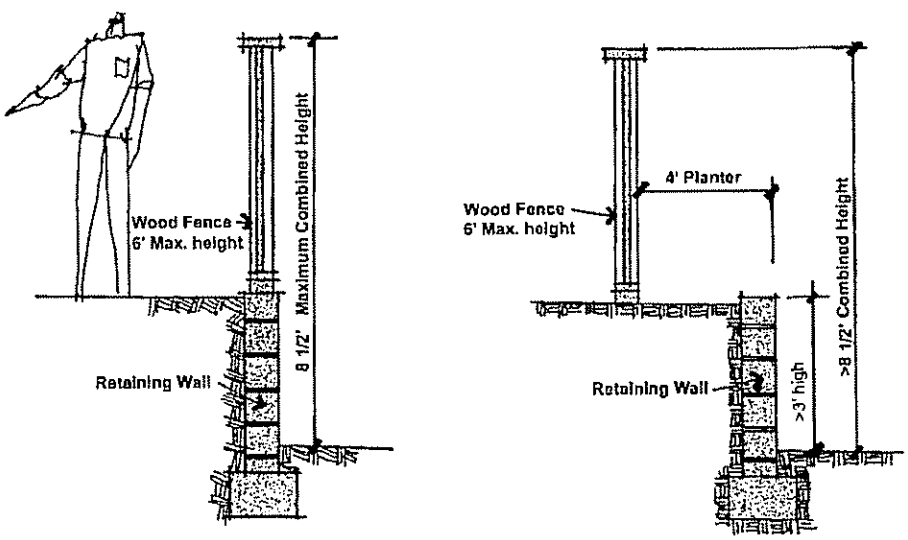
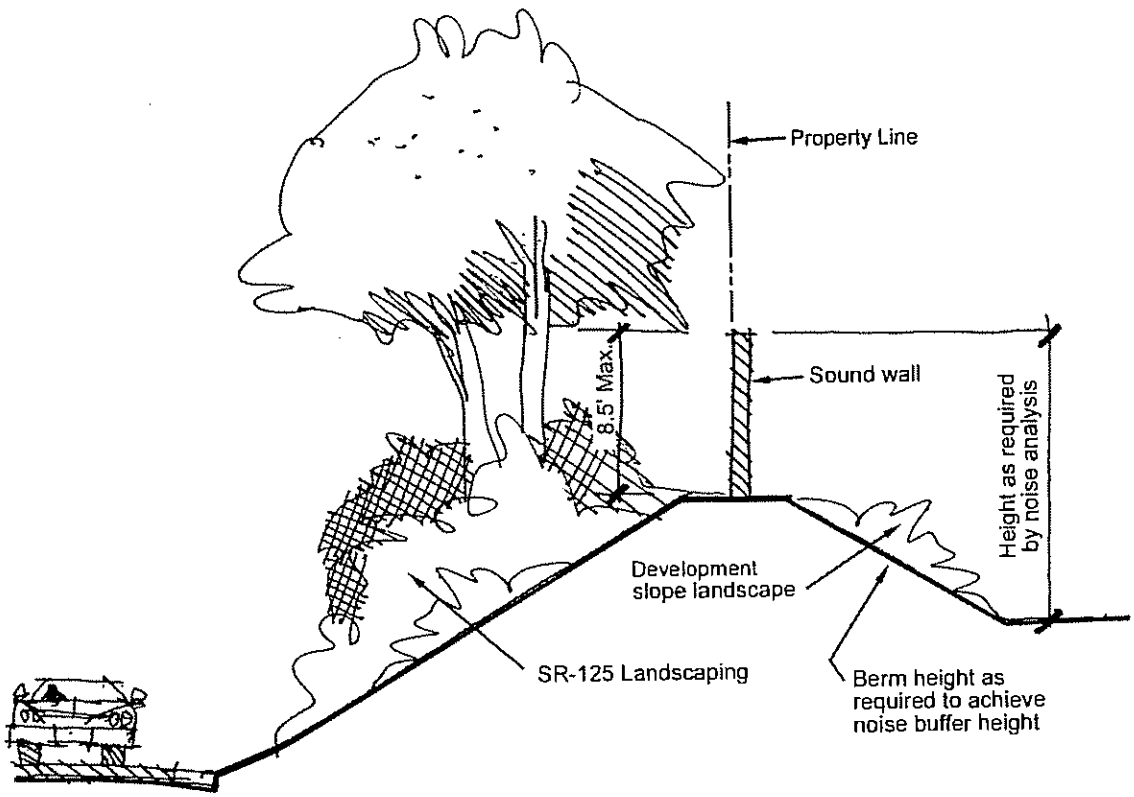


Exhibit 3.18

A special condition of combined berm and wall is proposed for noise attenuation along the SR-125 village edge. This design concept is depicted in Exhibit 3.18 below.



SR-125 Sound Wall

SR-125 Sound Wall Exhibit 3.19

II.4.3.4 Community Signing

The purpose of a planned sign program is to provide a continuity of design which will contribute to an integrated, well-planned, high quality environment. Community and neighborhood entry sign locations are identified on the Fencing & Entries Plan, Exhibit 3.16.

Permanent signs include:

1. Community Entry - Entry sign should be a large scale, monument type sign, creating a major statement. Materials used should be compatible with landscape and hardscape elements. Entry sign could be illuminated.

2. Neighborhood Entry - Neighborhood entry sign should relate its use of materials and styling to the neighborhood thematic treatment.

3. Identification Sign (for parks, libraries, schools, *etc.*) - Sign should be low key, monument type sign, with single or double face. Materials will be consistent with the thematic treatment for the major neighborhood or district in which it exists.

4. Street Name Sign - A sign to identify street names and inform the viewer shall be provided consistent with the standards of the City of Chula Vista.

5. Community Trail Sign - A sign to identify and direct traffic, vehicular and pedestrian, to special community trails such as bicycling and jogging. Form should be small scale, freestanding, consistent with community signs.

Temporary signs will be used to identify and direct traffic to specific neighborhoods and products during construction and sales periods. These signs will be subject to permit approval for specified periods of time.

Temporary signs include:

1. Village Entry/Identification Sign - A sign to identify the village/entry during residential sales period when permanent signs may not be constructed due to multiple landowner/phasing issues.

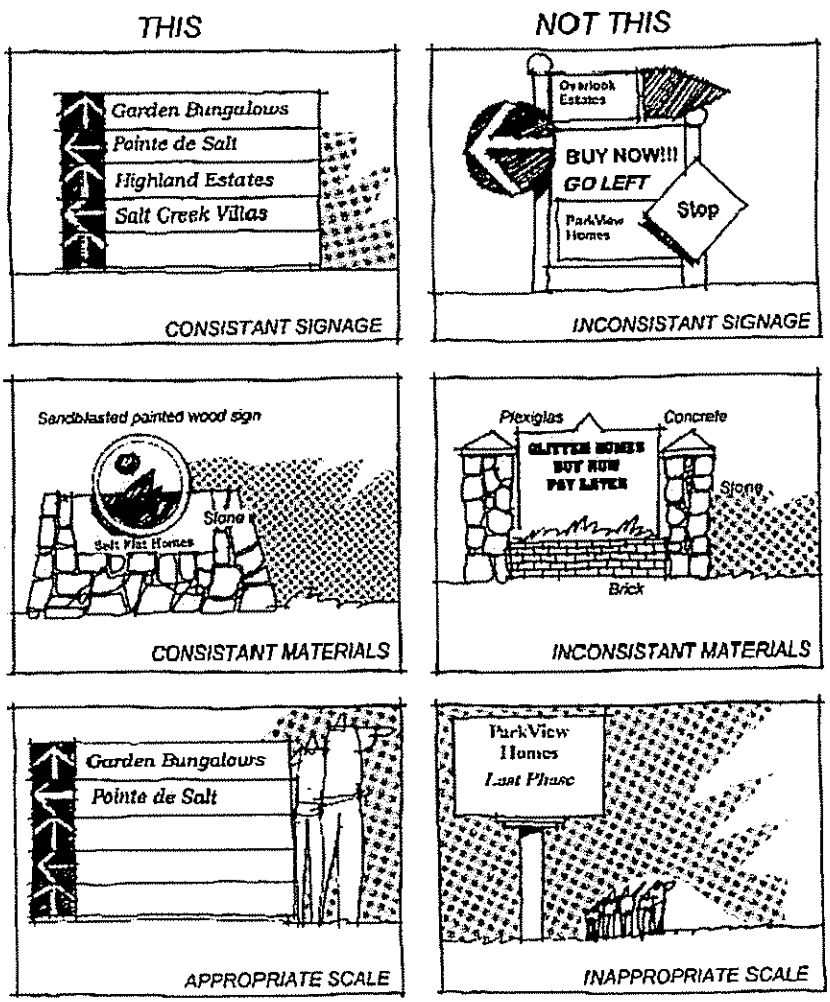
2. Neighborhood/Product Directional Sign - A sign to direct vehicular traffic to specific neighborhoods and/or products in the context of the merchandising program. Constructed of painted plywood panels on wood support posts.

3. Product Identification Sign - A sign to identify a specific residential product, sales complex or information center.

4. Secondary Directional Sign - A small sign to direct the viewer to specific areas within a product such as parking, sales office and models.

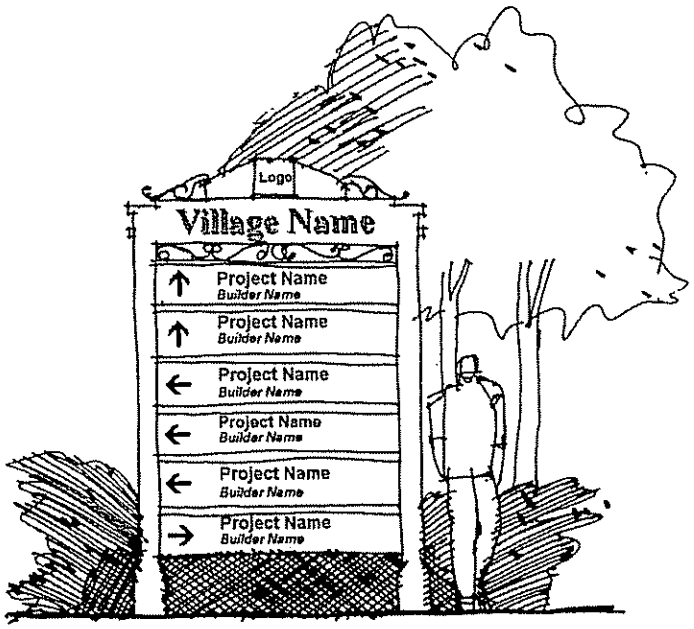
5. Future Facility Sign - A sign which informs the viewer, through symbol and verbal reinforcement, of the various future building sites in Otay Ranch indicating opening dates, building names and phone numbers, consisting of painted plywood sign panels supported on wood posts.

The following illustrations provides some guidance in the design of signs; additional, more specific sign regulations will be implemented by the master developer. Signs are addressed in the Otay Ranch Village Seven PC Regulations, which should be consulted for specific sign restrictions (*e.g.*, sizes, permit requirements, prohibitions, *etc.*). A sign program for the Village Core will be included in the Master Precise Plan for that area. Signs directed to pedestrians should be appropriately located and scaled to pedestrian routes.



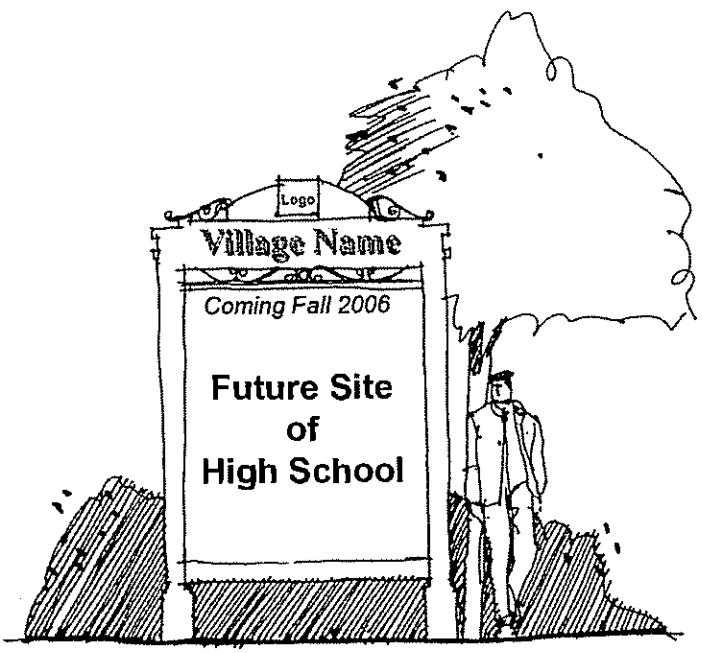
Signing Guidelines

Exhibit 3.20



Major Kiosk Directional Sign - Temporary
(10.5'h x 6.5'w max.)

Exhibit 3.21



Community Facility Signs - Temporary

Exhibit 3.22

II.4.3.5 Community Lighting

The design issue of "lighting" includes street lighting, as well as, building and landscape accent lighting, and sign illumination. Three basic principals should be considered in the provision of lighting:

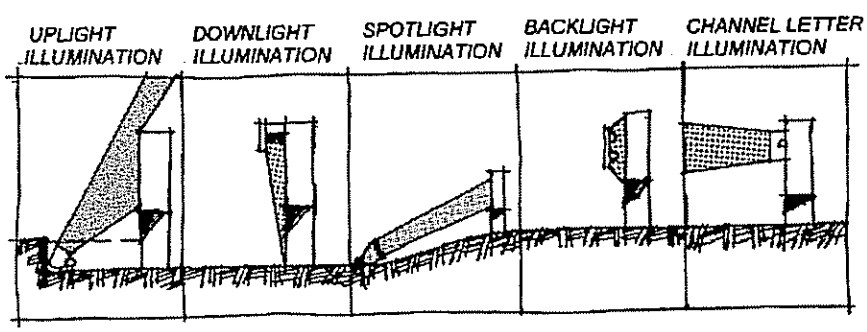
1. Street lights should provide a safe and desirable level of illumination for both motorists and pedestrians without intruding into residential areas.

2. Lighting fixtures should relate to the human scale especially in pedestrian areas.

3. Lighting and lighting fixtures should complement the design and character of the environment in which they are placed.

All street lighting shall conform to City standards or an approved theme lighting program, and shall be approved by the City Engineer.

Lighting for community facilities and recreation areas shall be considered as an element of Site Plan Review. Any such lighting which will illuminate a residential area past the hour of 10:00 p.m. shall be clearly identified on the site plan. Lighting standards and fixture design determinations for the Village Core will be addressed in the Master Precise Plan prepared for that area. Lighting in pedestrian areas should be appropriately scaled.



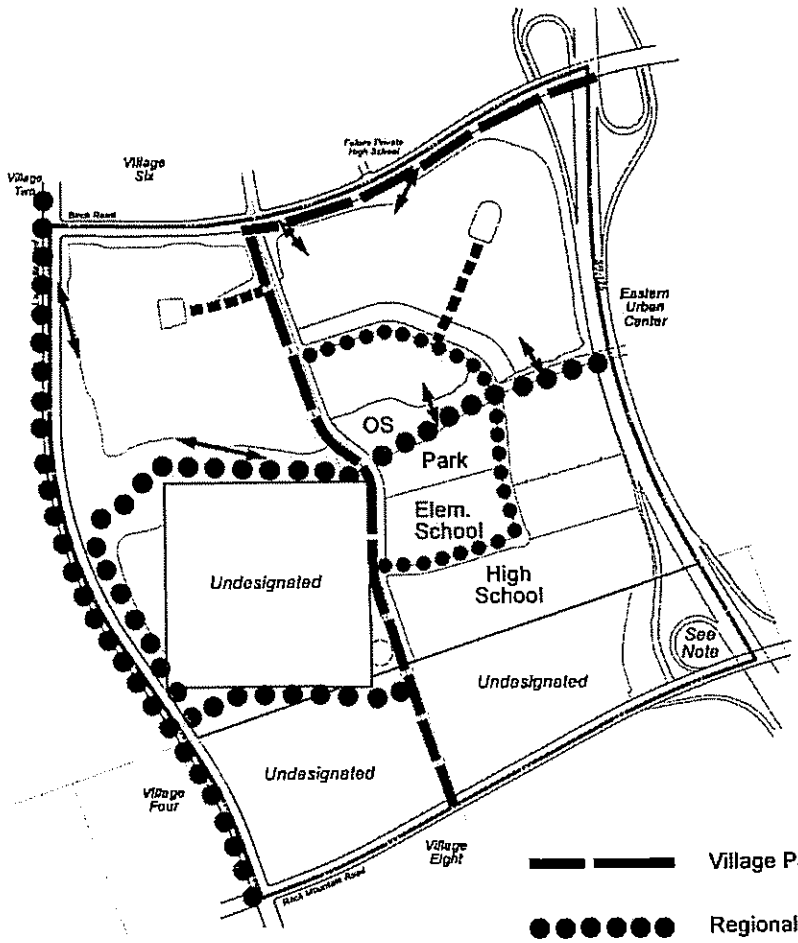
Sign Lighting

Exhibit 3.23

II.4.3.6 Community Trails

Off-street trail routes connect to the community-wide trail system of Otay Ranch as illustrated in Exhibit 3.23, Trails Plan. The placement of trails adjacent to streets is illustrated in the street sections plans provided in Chapter 3, Circulation, of the Village Seven SPA Plan and the streetscape sketches in the previous Landscape Concept portion of this chapter.

Trails



Village Pathway *(10' + 5')*

Regional Trail *(10' - D.G. in Wolf Canyon)*

Village Core Promenade *(6')*

Residential Promenade *(6')*

Potential Trail Connector to Residential
(To be established at Tentative Map level)

Trail Connection Notes:

1. The Village Pathway is intended to connect the existing Village Pathway in Village 6 to a future Village Pathway in Village 8.
2. The Regional Trail is intended to connect the trail in the EUC to the north-south Regional Trail along La Media Road to access Villages 1, 2, 4, 5, 6 & 8. It is also intended to provide access to the planned Community Park west of La Media Road.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning
6/30/04

Exhibit 3.24

II.4.3.7 Community Entries

Entries serve two primary purposes. The first is informational; they identify the community or neighborhood. To this end, entry signs must be clearly readable to the motorists and not so overly sculpted and landscaped that their basic message becomes obscured.

The second purpose is to provide unifying design accents throughout the community. If each project or neighborhood attempted to compete for attention via their entries, the overall unity of the community would be decreased. Therefore, there will be a common design treatment for all entries to reinforce the overall sense of community.

Entry monumentation will be provided by both the master developer and individual builders. There are two primary types: major entries and minor entries. The approximate location of these entries is depicted on the Fencing & Entries Plan, Exhibit 3.16.

Primary Entry

Primary entries are those which are identified in the overall Design Plan and provide primary access to the Village. These entries are located along Birch Road and Rock Mountain Road. These entries should be designed to convey a sense of arrival. Each should clearly state that "This is the entrance to Village Seven." The entry will include design features that are consistent with community wall materials. Entry design should flow with the terrain and appear to be an extension of adjacent landforms. The entry shown is an example of an appropriate entry, the actual entry design will be determined through a cooperative effort between the two property owners within the initial SPA approval area.

Secondary Entry

Secondary entries also provide access to Village Seven but are of a smaller magnitude than the primary entry. A typical entry with special monumentation and landscape planting, is illustrated below. These entries should be designed to create a portal and convey a sense of arrival. They will be located at the village entries from La Media Road. These entries will identify the specific village within the overall community. A typical minor entry illustration follows. The entry shown is an example of an appropriate entry, the actual entry design will be determined through a cooperative effort between the two property owners within the initial SPA approval area.

Project Entry Monument

(Primary: 6.5' h x 18' w max.)
(Secondary: 5' h x 14' w max.)

Exhibit 3.25

NOTE:
This exhibit depicts the general character and scale of the Entry Monument. The final design of the monument will be established as a part of the Landscape Master Plan.

II.4.3.8 Street Utilities

Street utilities include all of the various objects generally found adjacent to the street such as: fire hydrants, post boxes, bus benches, utility company boxes, trash receptacles, sprinkler and traffic signal control boxes, *etc.* Two principal design issues should be considered in regard to these objectives. The first is their overall aesthetic appeal or their contribution to the overall design of the community. The second issue is the location of street furniture in relation to the sidewalk.

In the majority of cases, street furniture is designed for basic utility, ease of maintenance, and service longevity. Because of this, and the fact that they are located for easy service access, street furniture can be intrusive and detract from the aesthetic quality created by other design elements. The often conflicting requirements of the project designer and service provider necessitate close coordination and cooperation between the builder and service company in regard to the installation of such items.

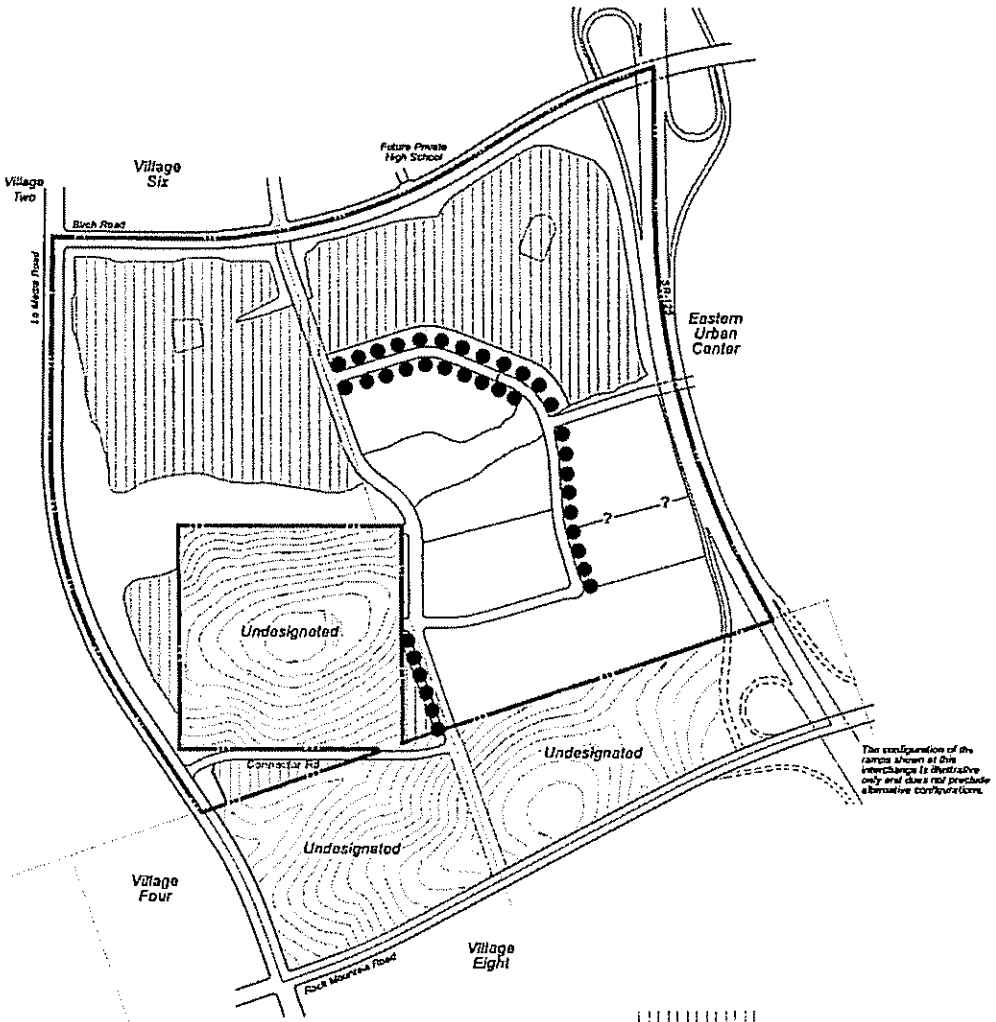
Design standards vary with the various street furniture items and the agencies involved. In some cases the standards are fairly strict, while in others, ample room exists for negotiation. As an example, the Postal Service requires ganged, curb-side post boxes for new single family detached developments. This may be provided by several rural-type boxes at a single location, or the installation of Neighborhood Delivery Collection Box Units (NDCBU) supplied by the Post Office. However, the facade or structure surrounding these boxes can be designed to suit any motif, allowing the designer to integrate the required unit into the character of the neighborhood. Similar post box standards have been established for other residential and commercial/industrial uses. As an example of rigid requirements, the standards for fire hydrants are strictly applied due to their importance to the safety of residents.

When designing for street utilities, every effort should be made to reduce potential adverse aesthetic impacts. Techniques to be considered include landscape screening, construction of a facade, use of neutral or complimentary colors, and undergrounding, where possible. Screening shall be approved by the Chula Vista Planning and Building Department.

II.4.3.9 Pedestrian Orientation

One key design element in Village Seven is pedestrian orientation. Pedestrian orientation means that wherever possible, the residents of the homes should have access, both visual and physical, to the pedestrian trails and walks. And, conversely, the pedestrians should have a connection to access the entry to the homes. Home entries should not be hidden along a narrow side passage, but be clearly accessible to pedestrians. For most residential streets this is a simple matter of placing the home entry in a location that is visible from the sidewalk, but where these streets are steep or heavily traveled this may not always be possible. This is particularly true for primary internal circulation streets, many of which function similar to a collector. The exhibit, Pedestrian Orientation, on the following page indicates the "front door access" should be provided on these primary internal streets.

Pedestrian Orientation



Single Family Detached Locations with Local Street Pedestrian Orientation

Core Area & SFA or MF Housing with Front Entry Edge where feasible.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning
6/14/04

Exhibit 3.26

II.4.4 Residential Design Guidelines: Single Family - Secondary Area

This chapter addresses the design issues associated with typical single family residential development. Such uses are typically located in the Secondary Area of the village, away from the Village Core, per the GDP village development concept. The design topics addressed in this chapter are applicable to all single family projects and shall be implemented in unless superseded by special features noted in Section II.4.6, Village Core guidelines.

II.4.4.1 Site Planning

Tract subdivision construction in single-family detached areas should be based upon the following criteria:

1. A minimum of three housing plans should be provided each with a minimum of three facade treatments which vary entry, window type and treatment, exterior materials and color.

2. Roof style, material and height should be varied.

3. Single-family detached residential lots and setbacks should encourage variety in the design, orientation and placement of homes, wherever practical.

4. Front yard building setbacks should be varied to avoid a monotonous pattern of houses.

5. Side yard setbacks should be varied to create greater solar access, provide more useful private open space in side yards, and avoid monotonous pattern of houses.

6. The appropriateness of lots backing to other than major arterials will be reviewed with individual tract maps or site plans. When deemed appropriate, lots backing up to collector streets should be set back from the street right-of-way to permit adequate landscaped buffers along the street frontage.

Building Placement

Building placement on a lot is to a large extent controlled by the setbacks established for each of the residential land use districts within Village Seven. These standards are found in Section II.3.3 of the Village Seven PC District Regulations. It should be stressed that the standards are based on prototypical lotting concepts and are not intended to constrain more creative solutions to spatial relationships (*e.g.*, non-perpendicular lot lines, open space easements, *etc.*) that may be approved at the Tentative Map stage. Small lot and cottage products (potentially in SF4 and RM1 land use districts) which are subject to Site Plan and Design Review are not required to meet the criteria applied to standard subdivisions outside the PC District. Additional flexibility for reduced street frontage, lot depth and width, *etc.* are appropriate within the context of the transit oriented planned community as long as the spirit and intent of the SPA Plan and PC Regulations are met and the

quality of development is not adversely affected. The evaluation of these criteria by City staff will be accomplished during Site Plan and Design Review.

Building siting guidelines for SF3 and SF4 products are provided on the following pages in Exhibits 4.1 - 4.5. Important architectural considerations are also noted on the sketches.

Three Car Garages

Three car direct entry garages are limited by the following criteria:

1. Only one model in a single family detached project may offer a three car direct entry garage.

2. Front loaded three car garages allowed on minimum 60 foot wide lots only.

3. Front loaded three car garages shall not occur on adjacent lots or in a repetitive pattern within the project.

4. Driveway width for a front loaded three car garage is 16 feet or the minimum required for adequate turning movements, subject to Design Review. (Refer also to PC Regulations, Section II.3.3.4)

5. The single car garage door in front loaded three car garage situations shall be offset from the two car garage door by three feet and a turf or enhanced paving stip shall be located between the doors. The single car garage shall have a Hollywood driveway with turf or enhanced paving.

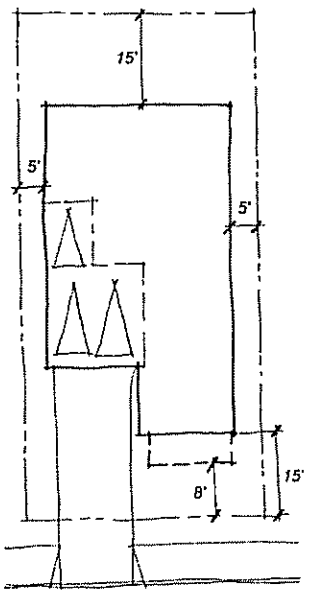
6. The garage doors shall include glass and a coach light shall be provided at the garage entry.

7. Living space should extend 4½ feet in front of the garage facade and a porch is required on the house.

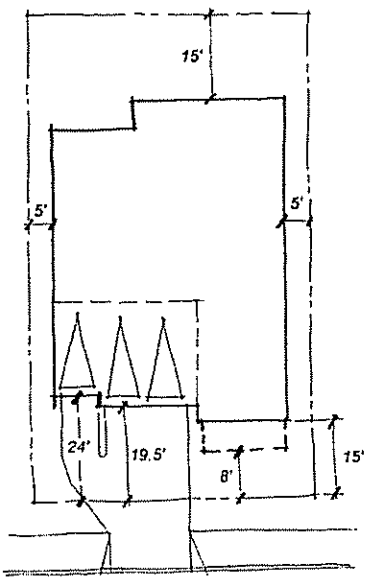
8. No three car side entry garages.

3 Car Garage Configurations

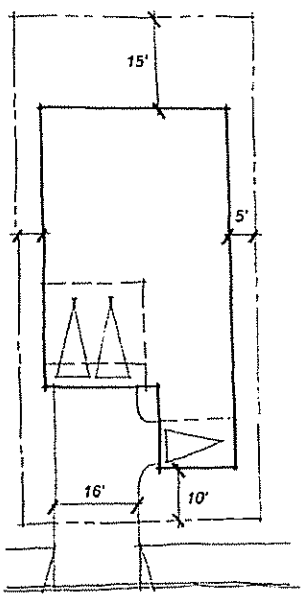
***Note:** Refer to PC District Regulations for detailed setback regulations by Land Use District*



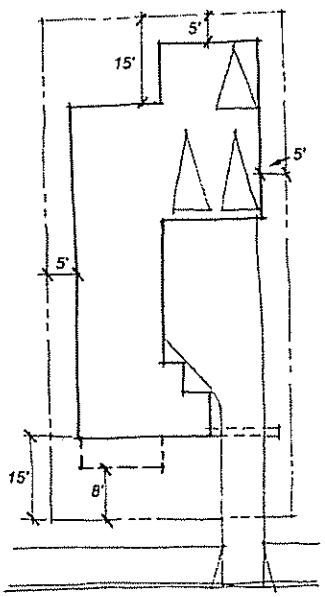
3-Car Direct Entry Tandum



3-Car Direct Entry
(with required Hollywood Drive)

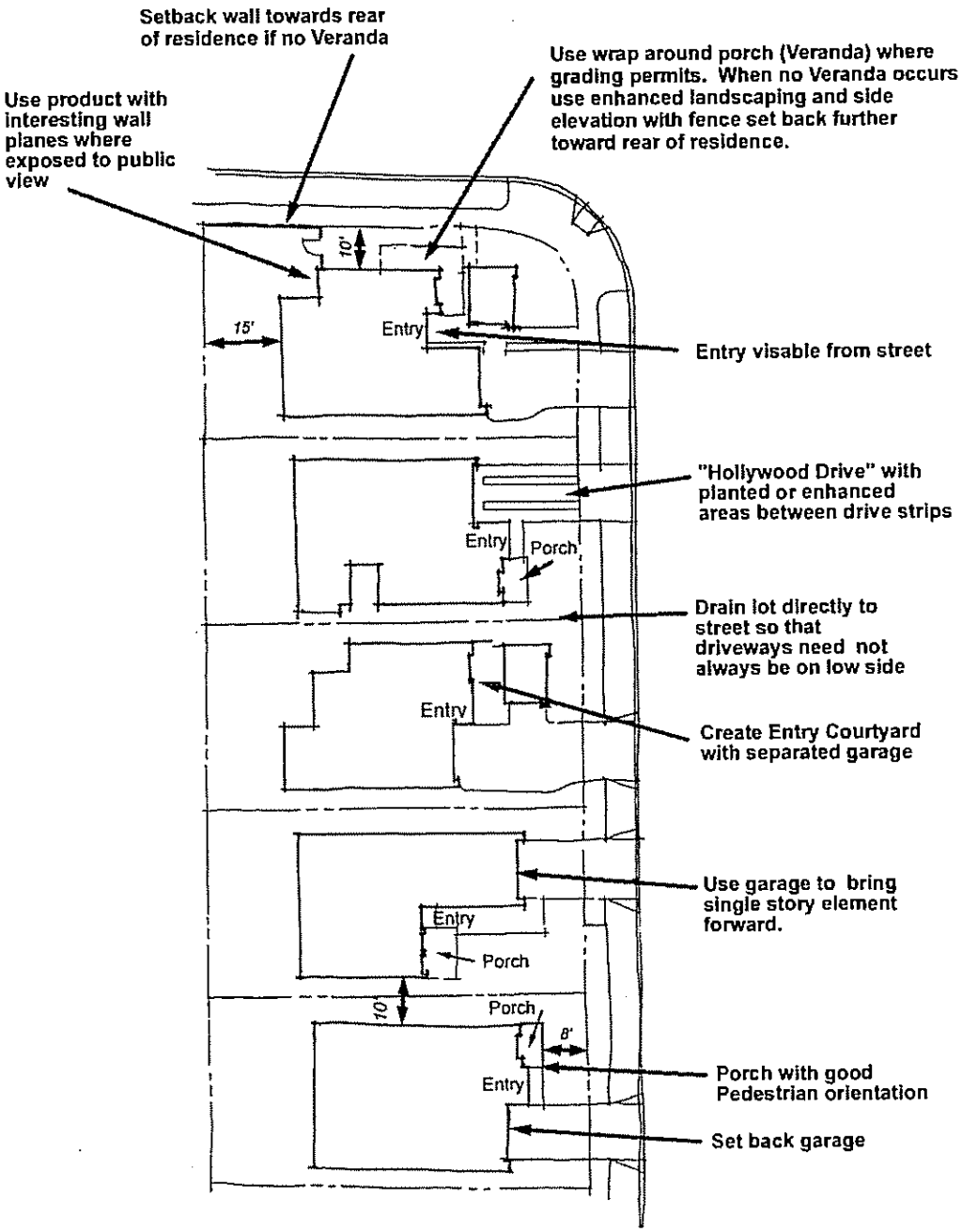


3-Car Split with Side-on



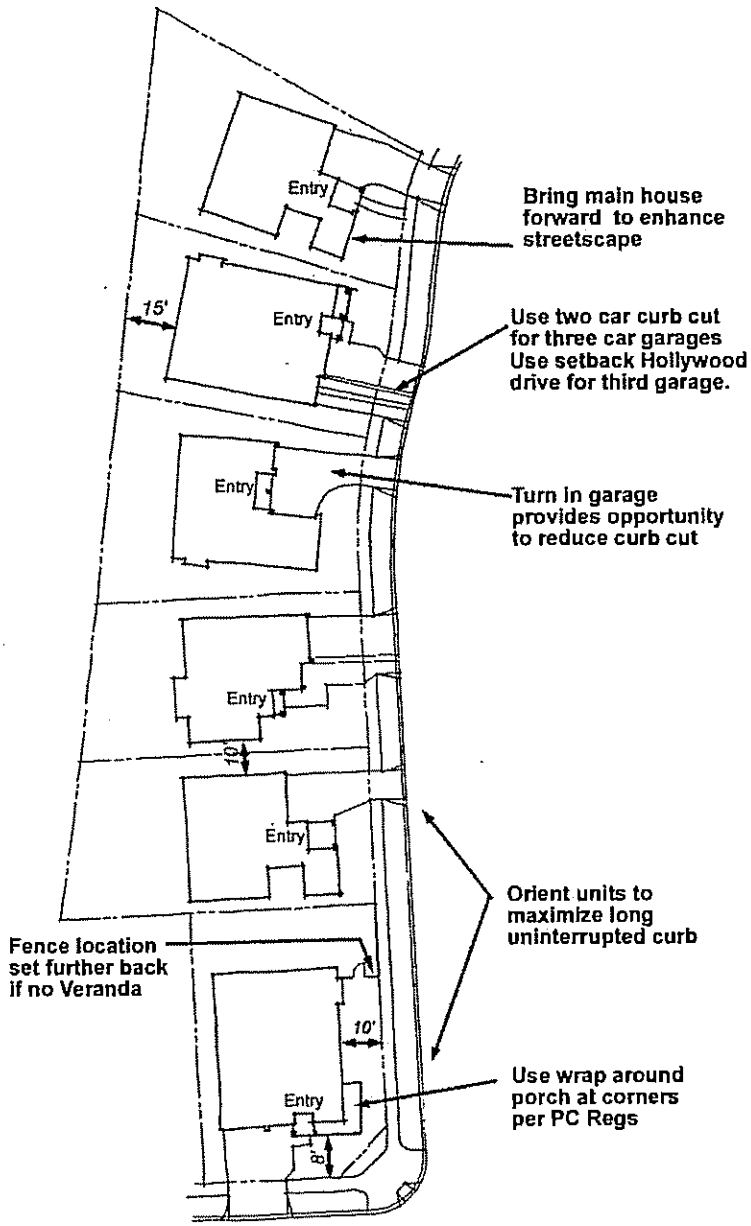
3-Car Deep Setback Tandum

Exhibit 4.1



Typical SF3 Lotting *(60' wide pads shown)*

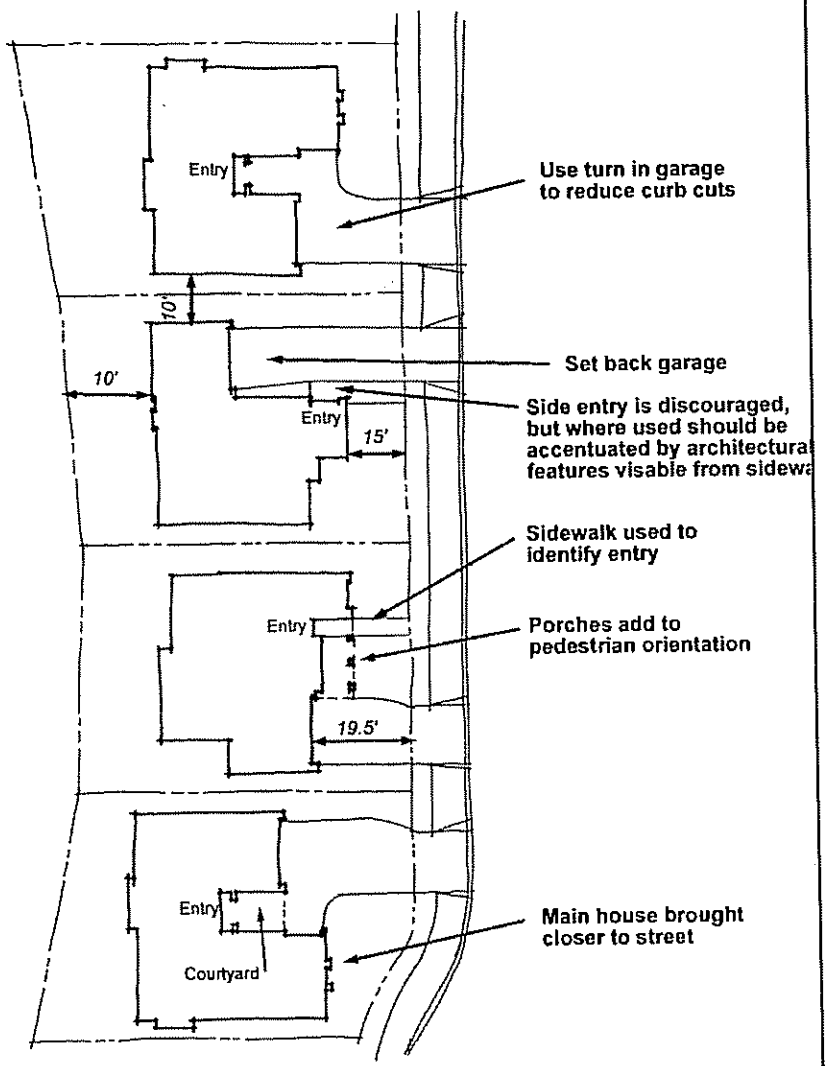
Exhibit 4.2



Note:
No 3 car direct entry garages on lots <60' wide.

Typical SFD Lotting *(50' wide pads shown)*

Exhibit 4.3



Typical SFD Lotting *(65'x85' pads shown)*

Exhibit 4.4

Single Family Detached < 50' Lot Width

(Two Variations)

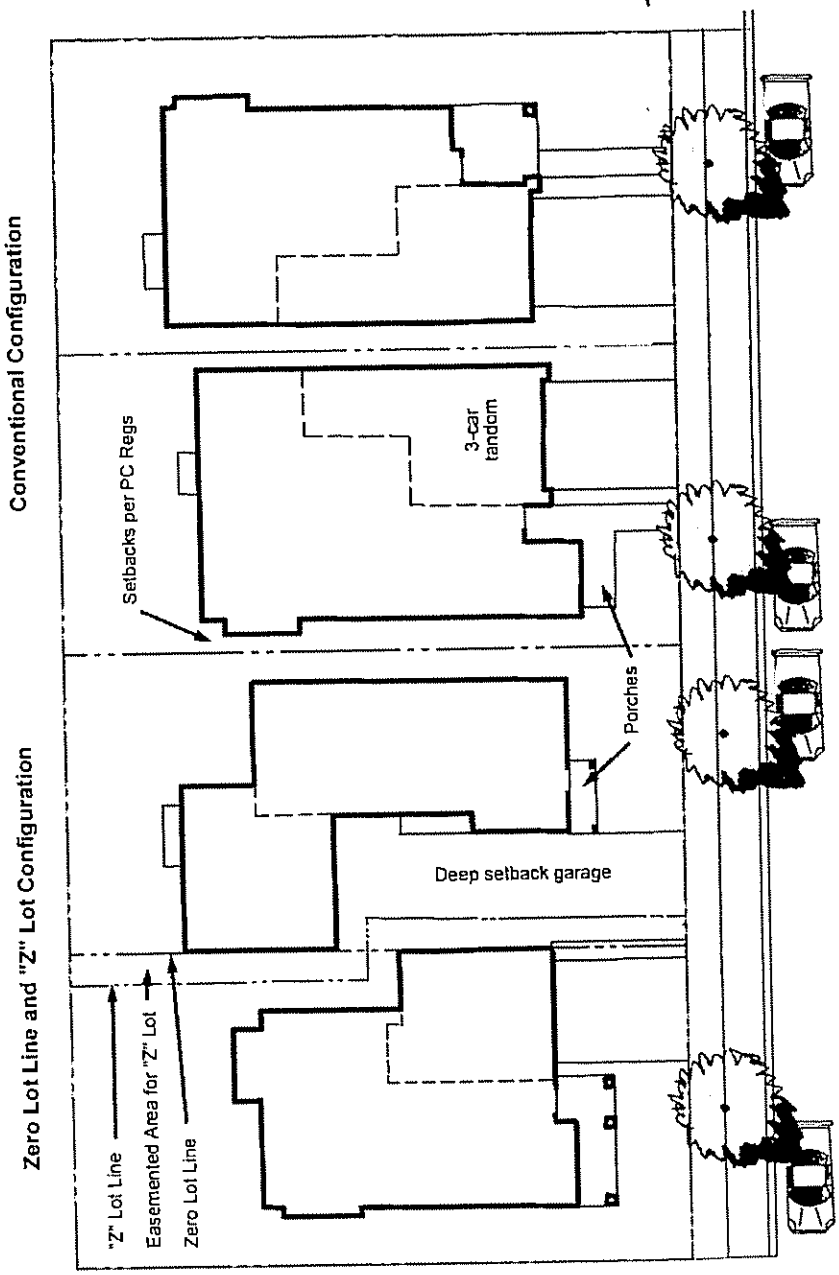


Exhibit 4.5

Yard Restrictions

Careful attention to maintaining continuity of design during initial construction can be negated by subsequent individual homeowner improvements. Enclosed additions, patio structures, decks, storage sheds, fencing and other similar homeowner improvements are of particular concern. Yet, restrictions such as setbacks, coverage, materials, *etc.* must relate to the particular type of lot and residence involved. In order to both control these homeowners improvements and, at the same time, relate the restrictions to the particular characteristics of the housing/lot type involved, a "Homeowner Improvements Manual" shall be a required component of mandated Design Review for small lot single family projects (lots less than 5,000 sf). This supplement will detail for each housing type, the specific restrictions on the size and location of balconies, covered patios, enclosed additions, or storage buildings. In addition, specific guidance and restrictions shall be provided for materials, colors and design characteristics. This supplement shall be officially adopted as a component of the Design Review approval. And to insure continued conformance, it will also become a component of the recorded CC&R's given to each new home purchaser.

II.4.4.2 Grading & Landform

Attention to detail in the execution of grading is important at both the mass grading and detail grading levels. The Village Seven SPA Plan includes design standards for grading (see Section II.2.4 of the SPA Plan). Exhibit 4.6 below illustrates two contour grading techniques which can be implemented along significant slope banks, particularly on the perimeter slopes adjacent to community level roads and trails.

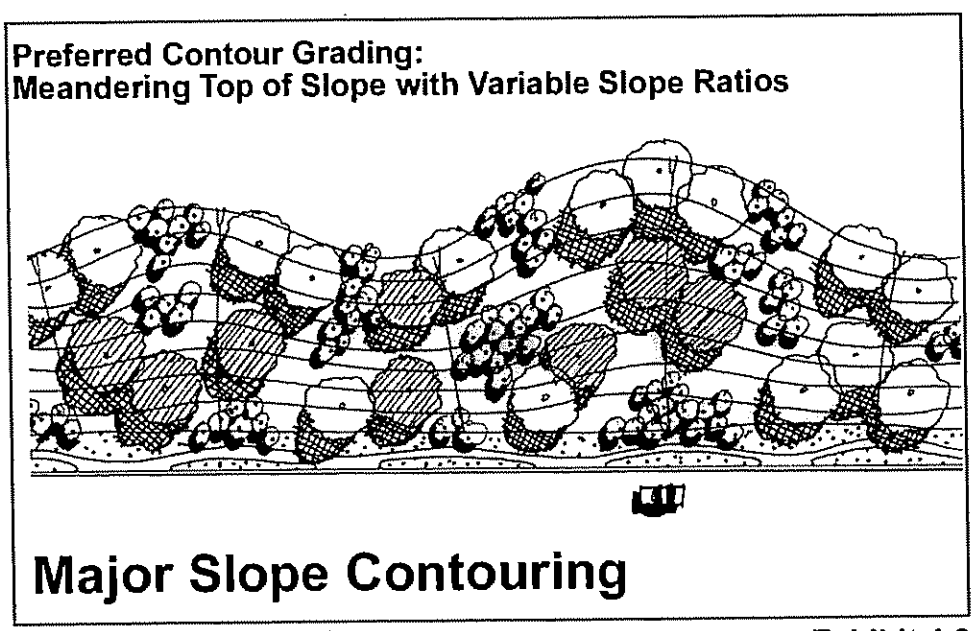


Exhibit 4.6

II.4.4.3 Streetscape Design

See Landscaping Concept Section II.4.3.2 for landscape and street furnishing elements of the streetscape design. The building component of the streetscape should incorporate pedestrian oriented features since the residential street is also the pedestrian way in the Secondary Area. Pedestrian oriented design includes attractive architecture, pedestrian oriented features (particularly entries and porches) and a minimization of utilitarian areas at the street (see also Visual Aspect, below). In addition, traffic calming measures such as the "neck down" illustrated in Exhibit 4.7 should be considered to improve pedestrian comfort at major internal street intersections.

Sixty-six percent (66%) of all single-family detached houses shall have at least one of the following pedestrian oriented features: porch, veranda, porch/veranda combination, semi-private courtyard, and/or balcony, gateways, trellises, porte-cocheres, large picture windows, or any combination thereof. Porches, verandas, semi-private courtyards, gateways, trellises, porte-cocheres, large picture windows, and/or balconies shall be required on all single-family detached houses. Alternative pedestrian oriented features may be substituted with Design Review approval. Guidance for a wrap-around porch is sketched on the Exhibit 4.8.

II.4.4.4 Visual Aspect

Buildings within the development should have a variety of sizes, shapes, colors and materials used to promote interest in the built environment. However, the densities designated for the SPA will generally promote one and two story single family homes. These structures placed within the planned community design structure (see Chapter II.4.3 for community design concepts) will promote a high quality suburban appearance.

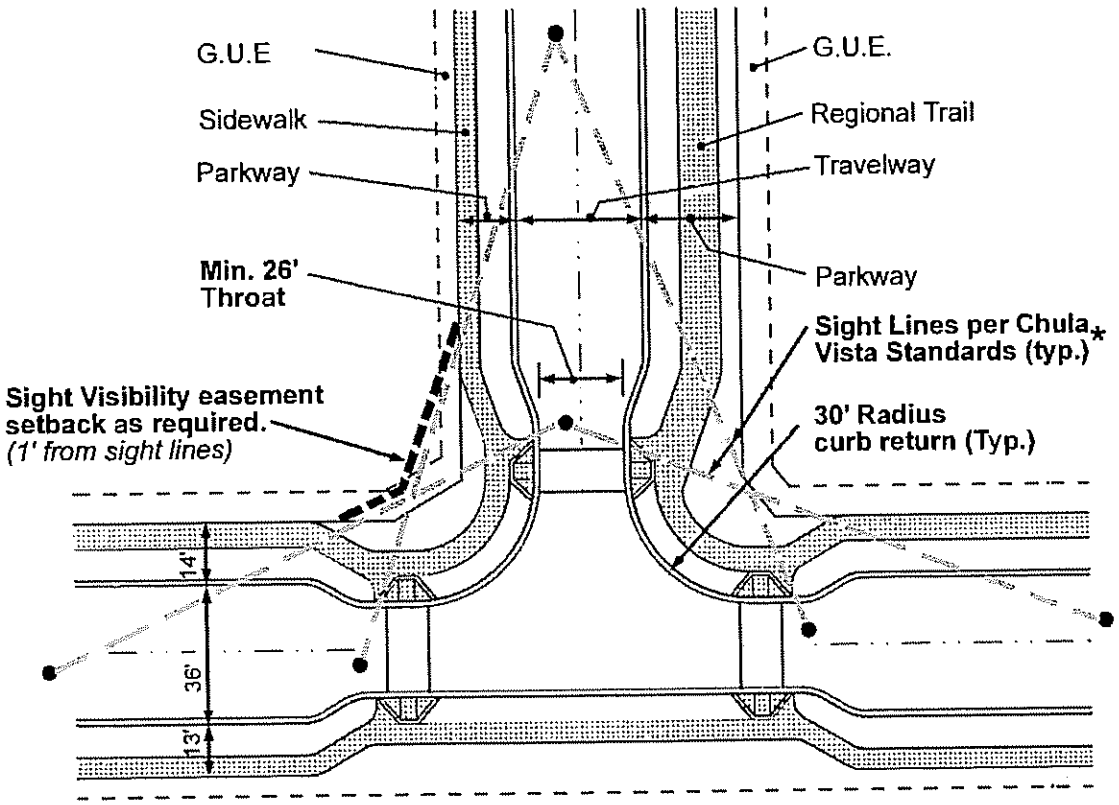
As noted previously, pedestrian orientation is to be emphasized. The three primary areas of design which affect pedestrian orientation are building facade and garages.

The building facade should be designed to provide a connection between the public area, street and sidewalk, and private residence. Appropriate building characteristics include:

- Variations in architectural style
- Undulating building mass and roof planes
- Vertical and horizontal stepped massing
- Visually reduced garages
- Detailed entry features such as doors, windows, porches, patois, courtyards, and trellises oriented toward the street

Typical Neck Down

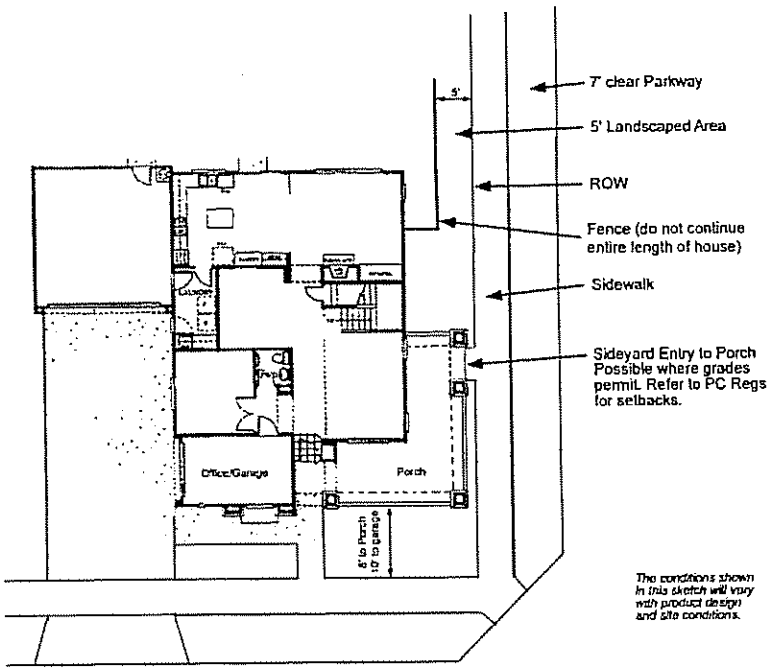
Example shown: Promenade Street (SR-125 Underpass) at Core Area Loop Road



* 25 mph stopping sight distance = 150'

Note: *The dimensions for the General Utility Easement, widths of walks, and other street dimensions will vary with the particular street intersection. This exhibit only establishes the dimensions for the throat width, curb returns, and sight distance standards for neck down intersections. Refer to the street sections in the SPA Plan and Otay Ranch Street Standards for other specific street dimensions.*

Exhibit 4.7



Veranda *(Wrap Around Porch)* **Concept**

Exhibit 4.8

Pedestrian orientation also emphasizes the front yard and front of the home over the garage. The following guidelines should be considered in garage design (see also Three Car Garage criteria in preceding Building Placement discussion):

- Reduce visual impact of garages facing the street by varying garage door colors, textures or patterns, utilizing deep recessed doors, and using two single car door in place of one double door
- Use alternative configurations such as split, swing-in and mid to deep recess
- Vary front facing garage door setbacks
- Avoid front-facing garage doors forward of the front building wall

II.4.4.5 Architecture

While the landscaping, fencing, and signing will have a common design throughout the entire community, some variety in architectural styles is envisioned for structures within the community. Although various architectural styles are intended to coexist in the overall community, they should not be mixed within a single project. Each Neighborhood on the Site Utilization Plan shall have internal consistency which is, in turn, consistent with the architectural style of the community described in Section II.4.3.1. And, of particular importance, architecture should not be a hybrid style, such as "Spanish Cape Cod.".

Architectural detailing is typically emphasized on front elevations, which is the "public" side of the building. In some locations, the side or rear elevation also becomes "public" due to its exposure to a street or trail. Enhanced detailing to the side or rear elevation should be provided in these circumstances.

Enhancement of Side & Rear Elevations

Special attention is required to be paid to the appearance of rear and side elevations in areas that are exposed to the public view. In those conditions where the front or side elevation is exposed to public view enhancement is required. Enhancement should not solely consist of plant-on elements to the exterior, rather the whole elevation and building massing should be considered.

A. Primary Enhancement Areas. The following is a list of siting considerations that *require* enhancement of building elevations:

1. All elevations visible from a Scenic Highway;
2. All elevations visible from a public park,
3. All building elevations (not blocked by foreground buildings) along the top of slopes that can be seen from any major roadway (more than 4 lanes), and;
4. Any side elevation on a corner lot.

B. Secondary Enhancement Areas. The following is a list of site conditions that *should* include enhancement of building elevations:

1. Side or rear elevations, other than corner lots that can be clearly seen from internal promenade streets.
2. Any other side or rear elevation that is sited in a way that makes it clearly visible from the public's short range view.

C. Enhancement Techniques. The following is a partial list of techniques that shall be employed for enhancing elevations. Consistently using a single technique should be avoided.

1. Enhanced elevations: Each elevation requiring enhancement shall include one or more of the following structural elements. No single element shall be used on more then 66% of the plans in any single Neighborhood.

    a. At least two different roof planes, intersecting at right angles. Such as: Dormers and Cross Gables.
    b. A single story element the width of which would be no less than 20% of the rear/side elevation width.
    c. Offset planes. A vertical or horizontal offset of at least 18 inches on the elevation plane.

2. Enhanced elevations: In combination with requirement C-1 each elevation requiring enhancement shall include one or more of the following architectural features:

    a. Balconies
    b. Bay window or window pop-outs
    c. Recessed windows (minimum 6 inches)
    d. Accent or enhanced window surrounds
    e. Window shutters
    f. Cornices at rear eaves
    g. Use of wrought iron window enhancement (where style appropriate)
    h. Any other enhancement element treatment, that in the judgment of the Zoning Administrator, is equal to or superior to those above.

General Architecture Guidelines

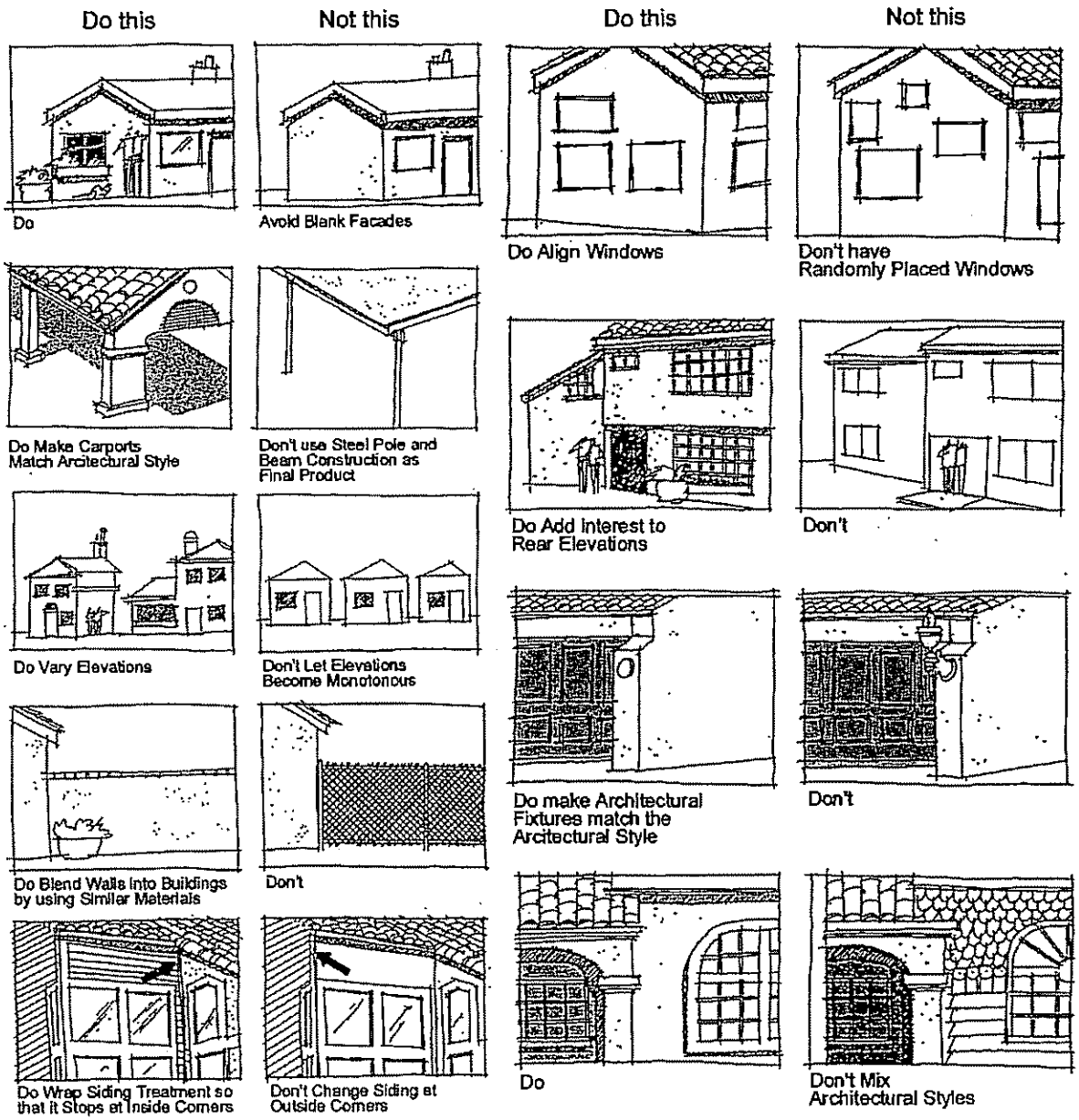


Exhibit 4.9

II.4.4.6. Signage

Signage within single family detached districts is regulated by the sign provisions of the Village Seven PC District Regulations. Signs are not an important design issue within such neighborhoods and no specific design guidance is required. See Section II.4.3.4 for Community Signing.

II.4.4.7 Lighting

Lighting is not anticipated to be a significant design issue in single family residential areas (see Section II.4.3.5 for community lighting)

II.4.4.8 Parking

The amount of parking required within each residential district is specified in the Village Seven PC District Regulations. Requirements for sizing and spacing are provided in the PC Regulations. Beyond providing the number of spaces required, the design of common parking areas for attached and multi-family neighborhoods is an important element in site planning. However, within single family neighborhoods, parking is provided in individual garages, driveway spaces (between back of sidewalk and garage face) and guest parking on-street. Beyond the pedestrian oriented guidance for garages provided above, no special design criteria are required for these areas.

II.4.4.9 Landscaping Requirements

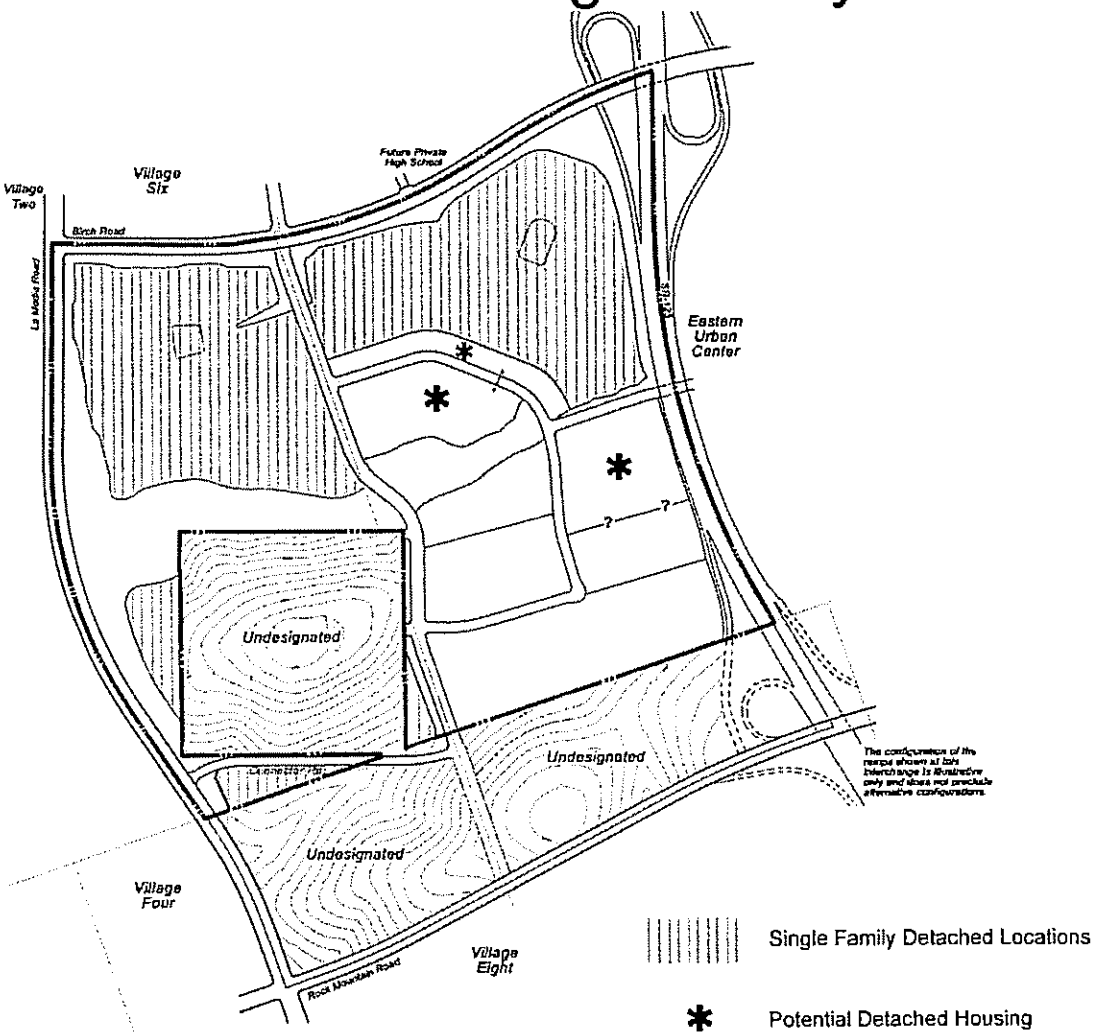
Common area landscaping shall conform to the community design standards in Chapter II.3. Individual lot landscaping within the Neighborhood is at the discretion of each property owner.

II.4.4.10 Individual Neighborhood Design Criteria

The product descriptions and Neighborhood plan features described in this section are those envisioned at the time of SPA Plan preparation. These designs and specifications are subject to change and refinement in conjunction with the tentative tract map approval, and are subject to such approval. All Neighborhood plans which are prepared should respond to the listed planning and design criteria, implementing the techniques and solutions described in the previous sections of this text. All Neighborhood plans shall conform to the development standards and other provisions of the Otay Ranch Village Seven PC District regulations adopted by the City of Chula Vista. Some Neighborhood descriptions also include a lotting concept exhibit which identify the location of special design issues/responses. In other Neighborhoods, lotting concepts will be developed as a part of the required Master Precise Plan Process.

The following are guidelines for site planning each of the residential Neighborhoods designated for single family detached products within Village Seven (refer to the Single Family Detached Product Locations Map, Exhibit 4.10 on the following page, for the location of each Neighborhood).

Single Family Detached



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning
8/14/04

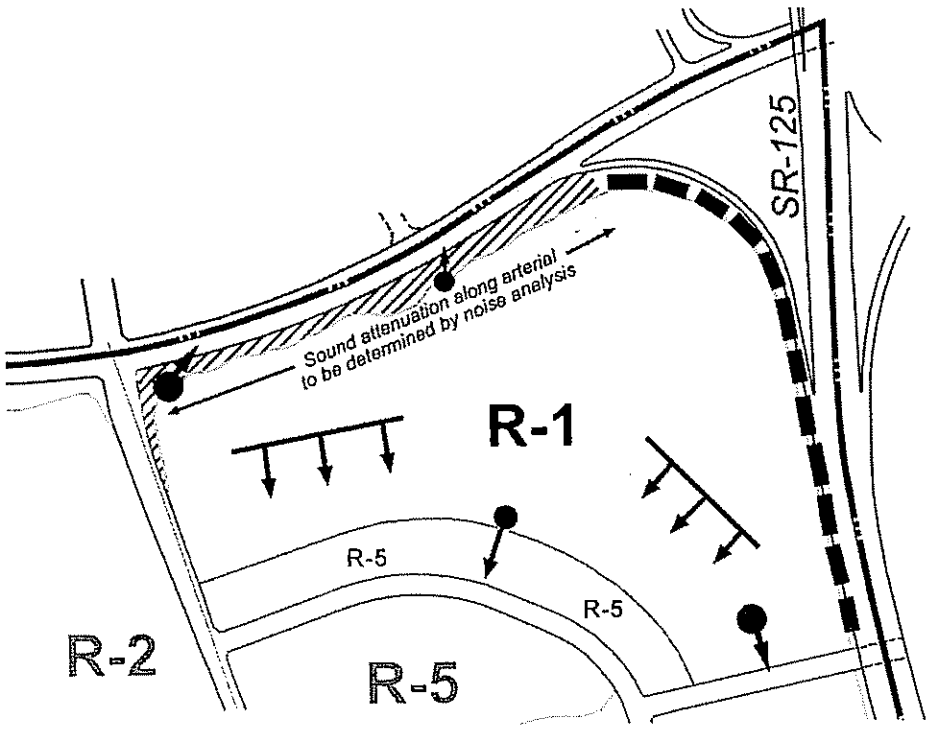
Exhibit 4.10

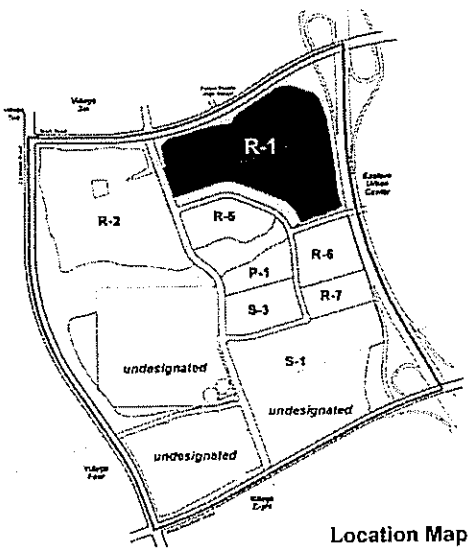
Neighborhood R-1
Design Issues Summary

Description: This is the lowest density housing area in Village Seven. It is in the northeastern portion of the village. Approximately one-half of the Neighborhood perimeter is slope area down to arterial or village entry streets. Off-site views are available from lots along this perimeter. Open cul-de-sacs at could provide visual and trail access to the greenbelt/trails along Birch Road. Similar treatments along the Ssecondary Village Entry Street which includes the VillageGreenway at the south edge of the nieghborhood would provide trail access to the EUC, to the east, and Wolf Canyon, to the west.

Product:	Single Family Detached Residential
Views:	Views to and from Birch Road along perimeter
Circulation/Entry:	Connection to village core; secondary connections to village entry street off of Birch Road
Fencing:	Off-site views; consistency with community theme fencing on edges
Edges:	Arterial streetscape/slope landscaping along north and west edges; buffer SR-125 edge on east edge; Neighborhood/product transition to R-5 along southwestern edge; P1/CPF-1 focal point
Landscaping:	Slopes adjoining arterials (consistent with community design); entry street streetscape
Pedestrian Orientation Issues:	Orientation to P1/CPF-1 and internal circulation; connection from Birch Road to village core; connection to Village Greenway; rear elevation of lots backing to entry streets

Neighborhood R-1





Location Map

Primary Pedestrian Edge

Sound Attentuation

View Orientation

Landscape Buffer

Pedestrian Connection

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

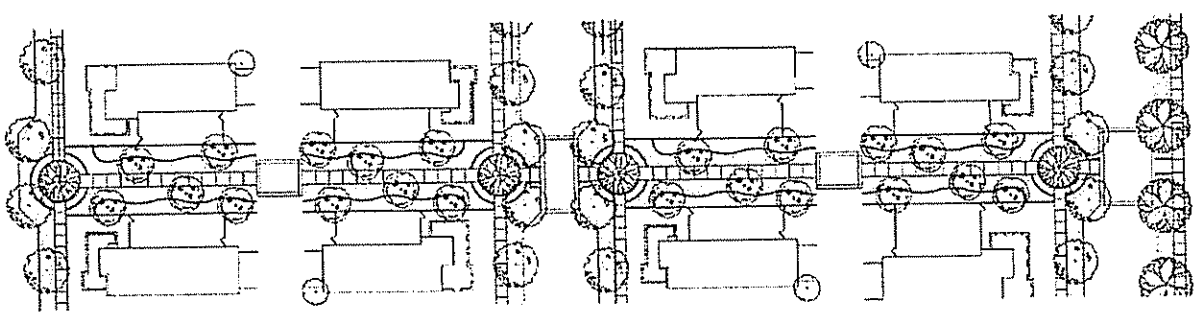
8/24/04

Exhibit 4.11

Neighborhood R-2
Design Issues Summary

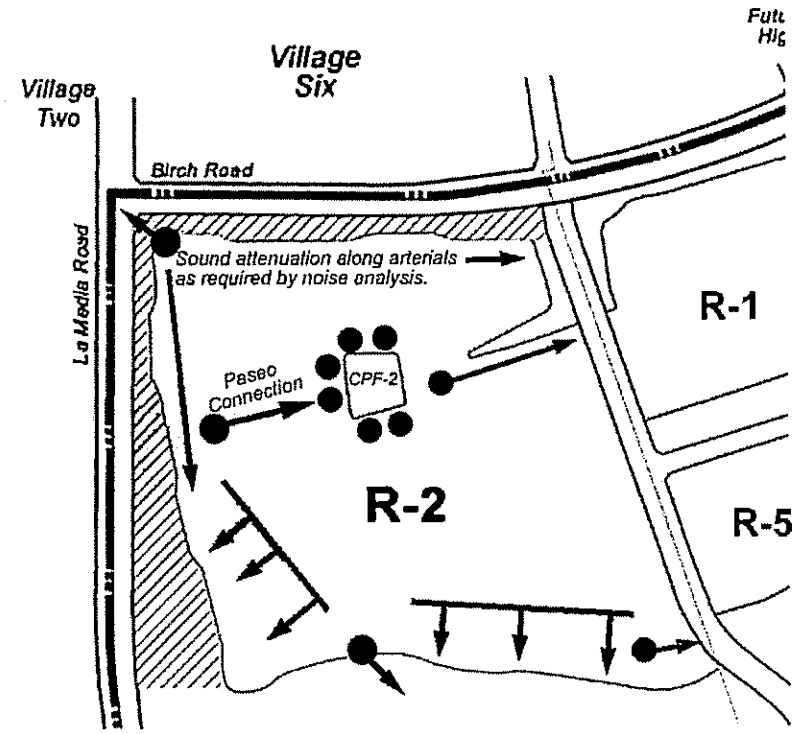
Description: This Neighborhood is located in the northwestern portion of the village overlooking La Media Road and Birch Road. As with Neighborhood R-1, off-site views are available for the perimeter of the Neighborhood. The Wolf Canyon Greenbelt is located along the south side of the Neighborhood. Strong connections should be provided to the Village Greenway trail and this adjacent Neighborhood.

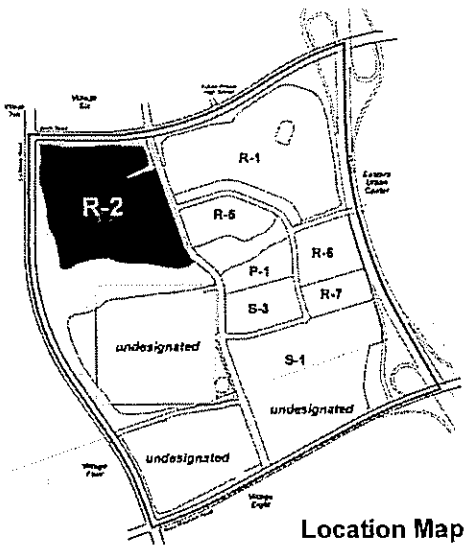
Product:	Single Family Detached Residential
Views:	Views to and from La Media Road, Birch Road and Wolf Canyon along perimeter
Circulation/Entry:	Neighborhood access from village entry street off of Birch Road
Fencing:	Off-site views; consistency with community theme fencing adjacent to entry street and open space edges
Edges:	Arterial streetscape; village entry street streetscape and trail; lots backing on to entry street and Wolf Canyon
Landscaping:	Streetscapes; transition to Wolf Canyon Greenbelt and arterials
Pedestrian Orientation Issues:	Connection to Village Greenway and Village Pathway trails along perimeter; rear elevation of lots backing on to entry street. Use paseo connection (see below) to connect to Common Useable Open Space (CPF-2).



Concept for a Paseo Linkage to Common Useable Open Space.

Neighborhood R-2





Location Map

Primary Pedestrian Edge

Sound Attentuation

View Orientation

Landscape Buffer

Pedestrian Connection

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

8/24/04

Exhibit 4.12

Neighborhood R-3
Design Issues Summary

Description: This bulk of this Neighborhood is not located within the current development phase area on the Site Utilization Plan for the Village Seven SPA. Design guidance will be provided when this area is planned with the surrounding area.

Neighborhood R-4
Design Issues Summary

Description: This bulk of this Neighborhood is not located within the approved area on the Site Utilization Plan for the Village Seven SPA. Design guidance will be provided when this area is planned with the surrounding area.

II.4.5 Residential Design Guidelines: Multi-family

The Village Seven Site Utilization Plan identifies three Neighborhoods for multifamily or single family clustered residential development. All of these Neighborhoods are located within the Village Core, one is adjacent to the Wolf Canyon Greenbelt, and all are near the planned mixed-use/town square focal point.

Since this type of development is addressed in the City's Design Manual, detailed design guidance is not provided in these guidelines. The most important issue will be the integration of pedestrian orientation features into typical multifamily development concepts. In addition, careful consideration should be given to possible density/activity level conflicts which could arise at the edge of a multi-family Neighborhood which abuts a single family Neighborhood, although no such edge exists in the current Site Utilization Plan (see Exhibit 1.1). Designing to avoid conflicts with adjacent non-residential uses, such as a school or park, will also be important.

As a part of the Village Core, multi-family residential sites will be subject to preparation of a site specific Precise Plan/Design Review approval. In addition to the individual neighborhood review, there is a requirement for coordinated planning of neighborhoods R-6 and R-7, as depicted on the Site Utilization Plan. The first Design Review submittal for either neighborhood shall include a conceptual coordinated site plan for both neighborhoods. The boundary between these two parcels shall then be established by the first Design Review approval. Dwelling units may be transferred between the two neighborhoods, providing it does not exceed the combined total units permitted.

II.4.5.1 Pedestrian-oriented Design

The pedestrian-oriented village concept is enhanced by the intensity of multi-family development in the village core located in proximity to public transit, shopping, and community facilities. The significant number of residents will be able to take advantage of the proximity of neighboring shops, and social/community activity sites within walking distance within the village core. Pedestrian access and amenities are fundamental components of the village core. The siting, access, entries and architecture of multi-family development should complement the pedestrian orientation of the village.

Multi-story attached developments, such as townhomes and apartments are the primary focus of the guidelines in this section. The small lot, detached residential products which could be developed within the multi-family category shall adhere to the guidelines for single family residential development. However, examples of site planning for small lot residential development are included in this section to identify the particular pedestrian-oriented site requirements of that type of housing.

II.4.5.2 Façade Elements

Multi-family residential development should be designed to promote variety and enhance the human-scaled pedestrian activity of the village. The following guidelines suggest methods for creating vital, interesting architecture:

- Projects should be unique, but share fundamental architectural characteristics consistent with the village theme styles.
- Building elevations that are visible from all village and major roadways shall be articulated with elements such as wall offsets, balconies, and windows, appropriate to the architectural style.
- The architectural style along the same street or within an individual development shall be compatible through the use of similar building heights, materials, window or door style, detailing, porches, arcades, overhangs, roofing or color.
- Varied building elements and roof pitches should be employed to avoid monotony.
- Each development shall provide a well-articulated, identifiable pedestrian entry oriented towards the village street.
- Distinctive building elements shall be oriented towards the comers of prominent village core and entry street intersections.
- Street facing facades shall incorporate a range of scale-defining elements that relate larger building masses to the scale of the pedestrian. Elements may include trellises, columns, archways, doorways, porches or patios and upper floor balconies and windows.
- Individual residential unit entries shall be oriented towards the village streets wherever possible.
- Internal residential units shall be connected to the village streets by courtyards or landscaped walkways wherever possible.
- Stairs shall be sensitively designed and integrated into the overall building design.
- Utilitarian areas, including parking, loading, mechanical equipment and trash enclosures, shall be screened from view from village streets to the extent possible.

II.4.5.3 Parking, Carport & Garage Design

Views of parking areas, carports and garages should be minimized to create the pedestrian-oriented village. Section II.4.4, Single Family Residential, provides guidelines for the design of garage facades that may also be applied to multi-family garages. The following guidelines provide direction for location and design of multifamily parking facilities and illustrate some design options:

- Parking and vehicular access shall be located to the rear or within each development and separated from the pedestrian-oriented street frontage.
- Site planning and architectural treatments, such as offsets, should be used to minimize the appearance of garage corridors.
- Carports and freestanding garages shall be architecturally treated and designed to match. the, architectural style of residential buildings.
- All surface and covered parking within multi-family areas shall be separated from village streets, tops or toes of slopes, patios or courtyards with a landscaped buffer. The buffer, the size of which shall be functionally established, shall include screening elements such as low walls or masses of shrubs to screen headlights and glare from reflective car surfaces.

II.4.5.4 Site Planning & Building Plotting

The site planning and plotting of multi-family residential buildings will contribute to the pedestrian-oriented village concept. Site planning which focuses on the pedestrian includes design that orients entries towards village core streets and minimizes views to garages and parking areas. The following guidelines are provided for siting and building plotting of multi-family developments.

- Developments fronting on to village core streets shall be oriented towards the street with reduced setbacks, multiple entries and pedestrian connections to ground floor units.
- Buildings should be oriented to create outdoor rooms, such as courtyards, connected by landscaped walkways.
- Building orientation should consider indoor and outdoor privacy, noise, solar access and overall aesthetic appearance.
- Where grade differentials occur between the street and a development, the differential may be used to create separation between the public street and private living space. Interesting entries incorporating steps, porches or landings may be integrated into the design.
- Developments adjacent to major streets surrounding the village and adjacent to village entry streets may be buffered with sound and privacy walls. Walls and view fences located along village entry streets shall incorporate inviting entry openings for both pedestrians and cars. The building architecture that is visible beyond sound and privacy walls shall be well-articulated with pedestrian-oriented features, such as second story windows and balconies.
- On village core streets, the use of solid masonry walls should be minimized and used primarily between buildings to screen parking areas or to enclose private entries and courtyards.

II.4.5.5 Building Design Concepts

A wide variety of housing types are suitable for Village Seven and creative site planning solutions are encouraged. Following are some generic product types, including description of the characteristics and plotting options, but multi-family housing is constantly evolving and these examples are not intended to be all-inclusive or restrictive. Following these descriptions examples of multi-family, Exhibits 5.1 through 5.3, illustrate multi-family site planning and building concepts. Some of the concepts list minimum setbacks or dimensions where applicable, however, these may be reduced or modified through the Design Review process which provides for consideration of unique site planning and architectural solutions for multifamily housing.

A. 12.5 - 15 du/ac Townhomes

Characteristics:

- Optimizes architecture on the street frontage.
- Garages located in alleys or parking courts.
- Provides for undulated building massing and varied setbacks appropriate to architectural styles.
- Provides for varied roof pitches and directions.
- Orients entries toward street or interior pedestrian courtyards or walkways.
- Provides for private open space.

Garage Plotting Options

- Alley entry
- Internal street
- Tandem
- Carport

B. 15 -18 du/ac Two and Three-Story Townhomes with Carriage Units or Flats

Characteristics:

- Optimizes architecture on the street frontage.
- Garages located in alleys or parking courts.
- Provides for undulated building massing and varied setbacks appropriate to architectural styles.
- Provides for varied roof pitches and directions.
- Orients entries toward street or interior pedestrian court-yards or walkways.
- Provides for private open space.

Garage Plotting Options

- Alley entry
- Court entry
- Internal street
- Tandem
- Carport

C. 18 - 25 +du/ac Two, Three and Four Story Townhomes and Stacked Flats

Characteristics

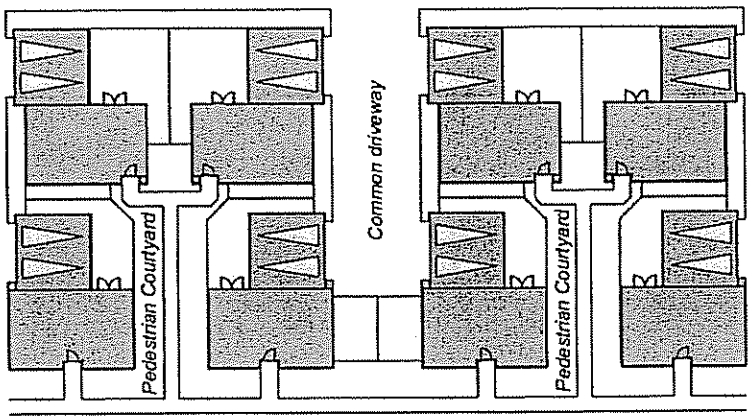
- Optimizes architecture on the street frontage.
- Garages located in alleys or parking courts.

- Provides for undulated building massing and varied setbacks appropriate to architectural styles.
- Provides for varied roof pitches and directions.
- Orients entries toward street or interior pedestrian courtyards or walkways.
- Provides for private open space.

Garage or Carport Plotting Options

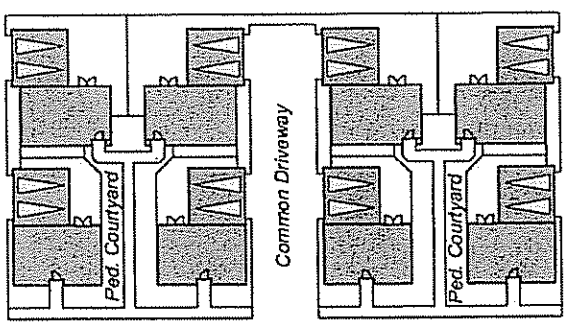
- Alley entry
- Court entry
- Internal street
- Tandem
- Carport

Courtyard Housing



Public Street Side with Pedestrian Orientation

Typical Courtyard Housing Module

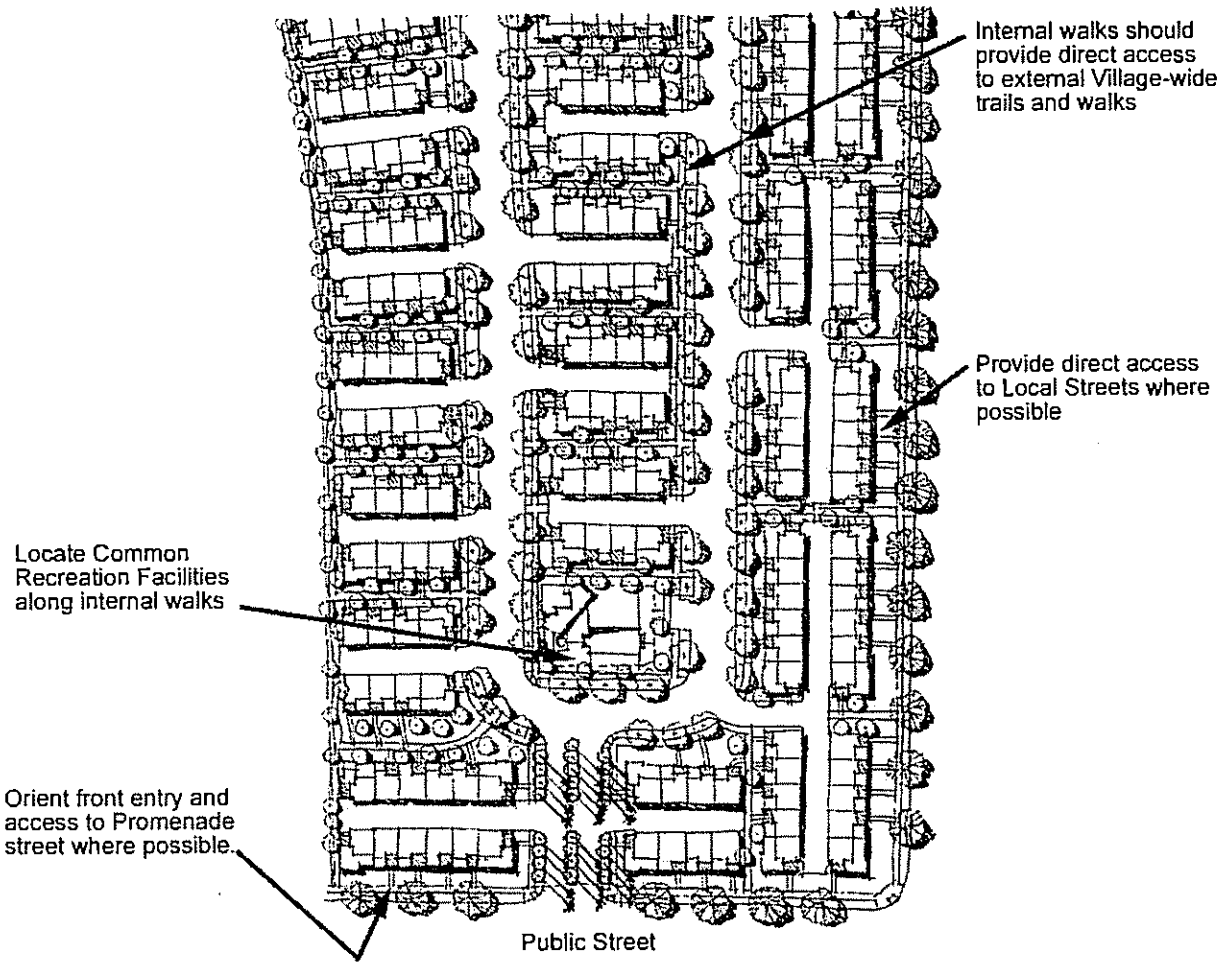


Courtyard Module with no Alley (Used Internally)

Variations on the Typical Courtyard Module

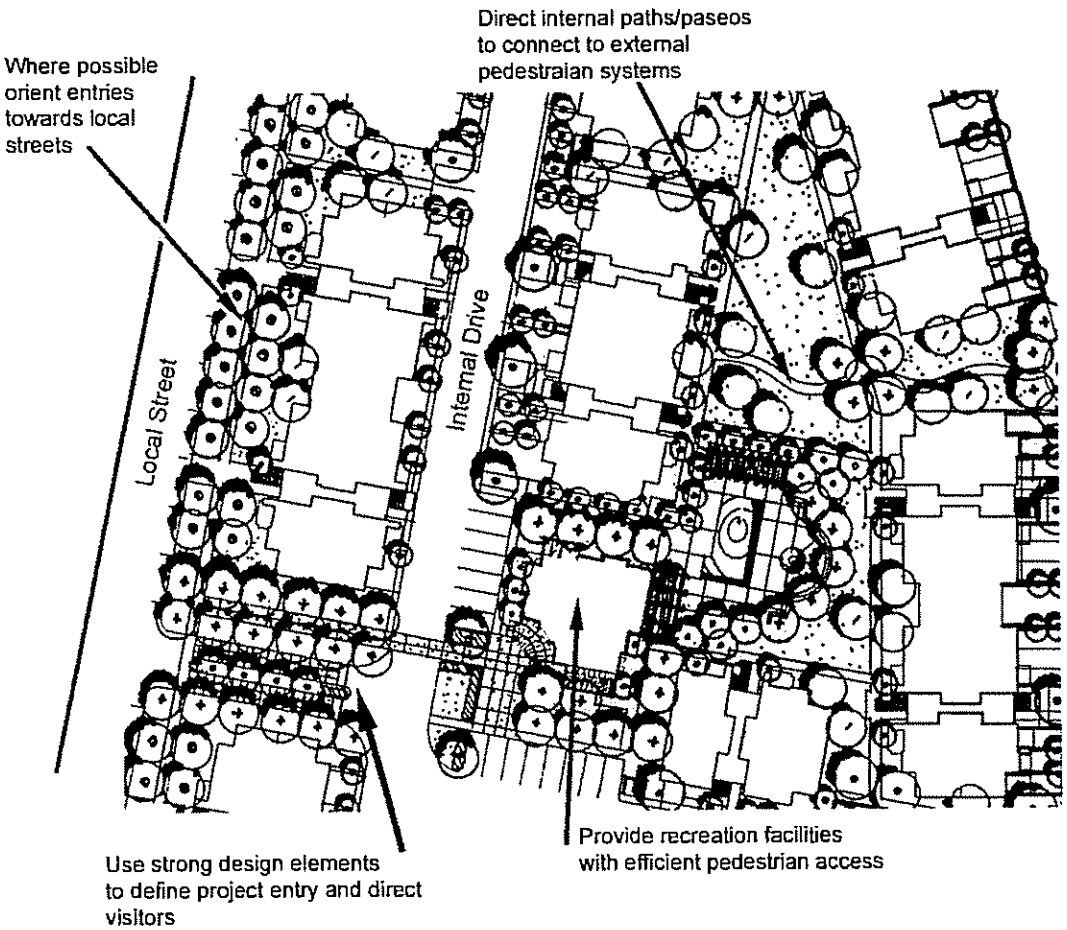
Source: McKinley Associates, Inc.

Exhibit 5.1



Townhomes with Pedestrian Orientation

Exhibit 5.2



Making High Density Multi-family Accessible

Exhibit 5.3

II.4.5.6 Architecture & Building Design

Multifamily projects should be designed to represent high quality development, appear interesting to the eye and reflect human-scaled pedestrian activity. The following guidelines should be applied to building design in multi-family projects.

- Projects should have individual style but share fundamental architectural characteristics.
- Building elevations visible from streets or pedestrian paths should be articulated with elements such as wall offsets, balconies and windows.
- Architectural style along a single street or within a project should be unified with the use of similar building heights, building materials, window or door styles, detailing, arcades, overhangs, roofing or color.
- Each project should have a well identified pedestrian entry oriented to the street.
- Buildings should include distinctive elements oriented toward prominent corners of core streets.
- Facades along the street should include a range of scale-defining components which relate larger structures to the scale of a pedestrian. These may include trellises, columns, archways, doorways, porches, patios, and balconies.
- The entries to individual units should be oriented to the street whenever practical.
- Stairs should be integrated into the overall structure and not appear "added on."
- Utilitarian areas such as parking, loading, trash and service areas, utility and mechanical equipment should be screened from view from village streets to the greatest extent possible.

II.4.5.7 Landscape

The streetscapes surrounding multi-family developments shall be implemented as described and illustrated in Section II.4.3. Landscape in multifamily developments shall adhere the to Chula Vista Design Manual and Landscape Manual. The front and side yard landscaping shall be complementary to the streetscape and adhere to the overall village design theme. The interiors of multi-family residential projects shall provide for common and private outdoor spaces that are functional and aesthetically pleasing. Interior landscapes are encouraged to maintain the tranquil, courtyard style landscapes established by the village design theme. Individual developments may provide common amenities as desired, however, the neighborhood park is intended to meet most of the needs for active recreation area. The following guidelines are for multi-family landscapes:

- All of the front, side, and rear yard areas and all interior common area landscapes are to be installed by the builder and commonly maintained by a homeowner's association (HOA). Private patios and courtyards, if provided, may be landscaped and maintained by the individual homeowners.
- The landscape is to be comprised of trees, shrubs, vines, and ground covers that are consistent with the overall village theme.
- Tree plantings in the front yard areas shall be varied to provide interest in the landscape.
- Side and rear yard areas shall be landscaped to soften the architecture and provide privacy for residential units.

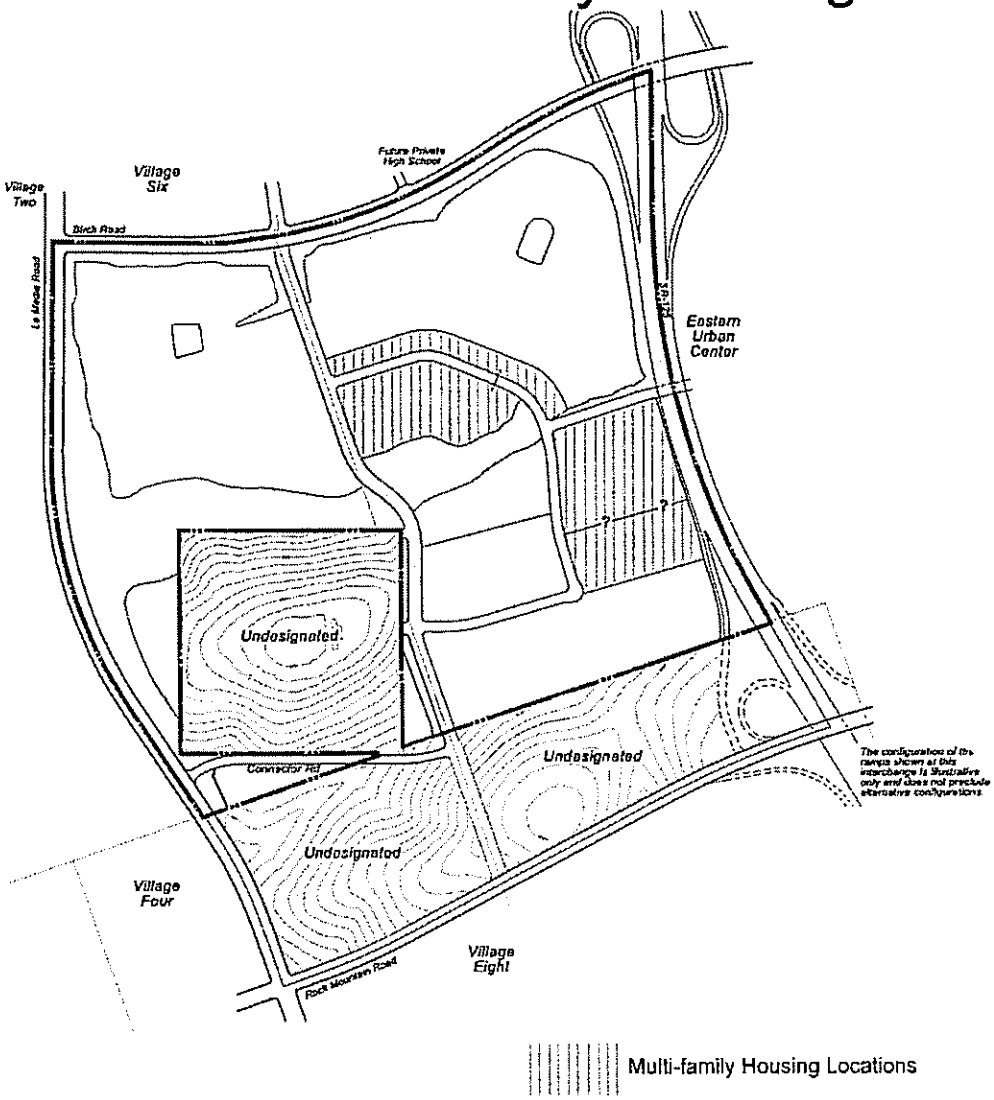
- All planting areas are to be permanently irrigated and use low water consumptive plant material wherever practical.
- Slope areas shall be planted with drought tolerant trees, shrubs and groundcover.
- Trees planted on slope areas shall be arranged in such a manner as to allow for some vistas to distant hills where practical and to screen undesirable visual sight lines to streets, buildings, or other features.
- Landscape and irrigation plans shall be prepared by a licensed landscape architect.
- Utility box locations are to be carefully planned and coordinated with the both the utility company and the landscape architect. Equipment and access boxes should be located to be unobtrusive and screened from view with plantings where possible.
- Mailboxes and mail box structures are to be designed to complement the architectural style of the development for which they are intended. Ganged mail boxes are to be used with a maximum of 4 boxes per cluster. Only Postmaster approved boxes will be allowed.
- Trash enclosures shall be designed to complement the architectural style of the development for which they are intended.
- Large expanses of asphalt paving shall be avoided and the appearance softened by landscape screening where possible.

II.4.5.8 Individual Neighborhood Design Criteria

Individual neighborhood design criteria are included in Section II.4.7 which addresses the Village Core as a whole. The product descriptions and neighborhood plan features described in this section are those envisioned at the time of SPA Plan preparation. These designs and specifications are subject to change and refinement in conjunction with the tentative tract map approval, and are subject to such approval. All neighborhood plans which are prepared should respond to the listed planning and design criteria, implementing the techniques and solutions described in the previous sections of this text. All neighborhood plans shall conform to the development standards and other provisions of the Otay Ranch Village Seven PC District regulations adopted by the City of Chula Vista. Each neighborhood description also includes a siting concept exhibit which identifies the location of special design issues/responses.

Refer to the Multifamily Product Location Map, Exhibit 5.4, for the location of each multi-family neighborhood. All of these neighborhoods are located within the area requiring the Village Core Master Precise Plan. The Village Core and these neighborhoods are presented in Section II.4.7 Village Core Concepts, herein.

Multi-family Housing Locations



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

City Land Planning
6/14/04

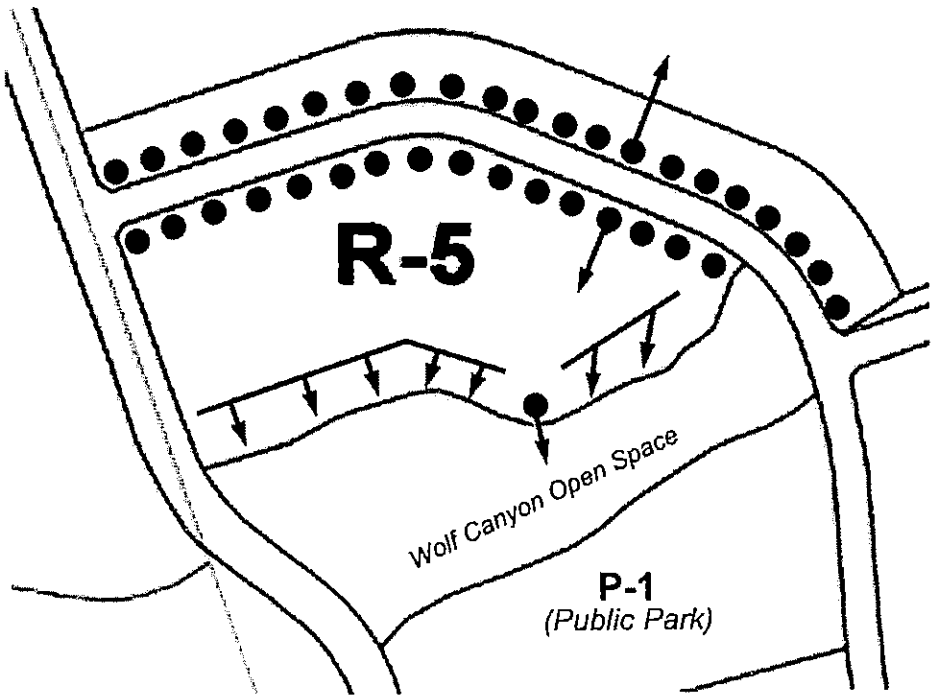
Exhibit 5.4

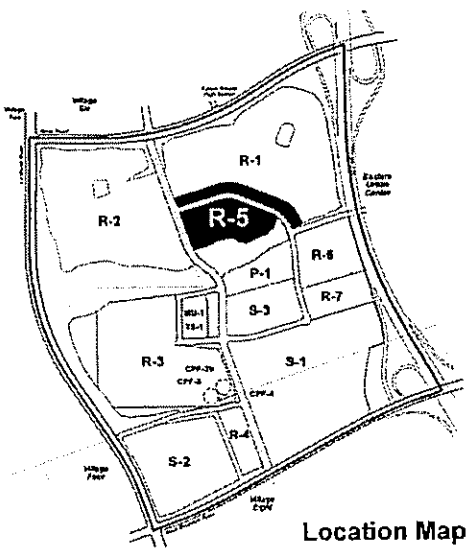
Neighborhood R-5
Design Issues Summary

Description: Neighborhood R-5 is located to the north of the Wolf Canyon Greenbelt on either side of the Village Core Promenade Street loop. Neighborhood access will be taken from the core promenade street. Special attention should be given to the transition from the promenade street to internal streets and/or the intersections with the promenade street, and the transition from the developed neighborhood to the greenbelt open space. All buildings or lots fronting on the promenade street should receive special attention with respect to pedestrian orientation issues.

Product:	7.6 du/ac Multi-family Residential or clustered SFD/SFA Residential
Views:	to Greenbelt open space
Circulation/Entry:	Interface with promenade street
Fencing:	Rear yard fencing along promenade streets and open space
Edges:	Promenade streets coordinate site planning with Neighborhood R-1 behind; greenbelt edge
Landscaping:	Streetscapes; greenbelt edge/transition
Pedestrian Orientation Issues:	Promenade street; access to Greenway trail in Wolf Canyon

Neighborhood R-5





Location Map

- Primary Pedestrian Edge
- Sound Attentuation
- View Orientation
- Landscape Buffer
- Pedestrian Connection

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

3/23/04

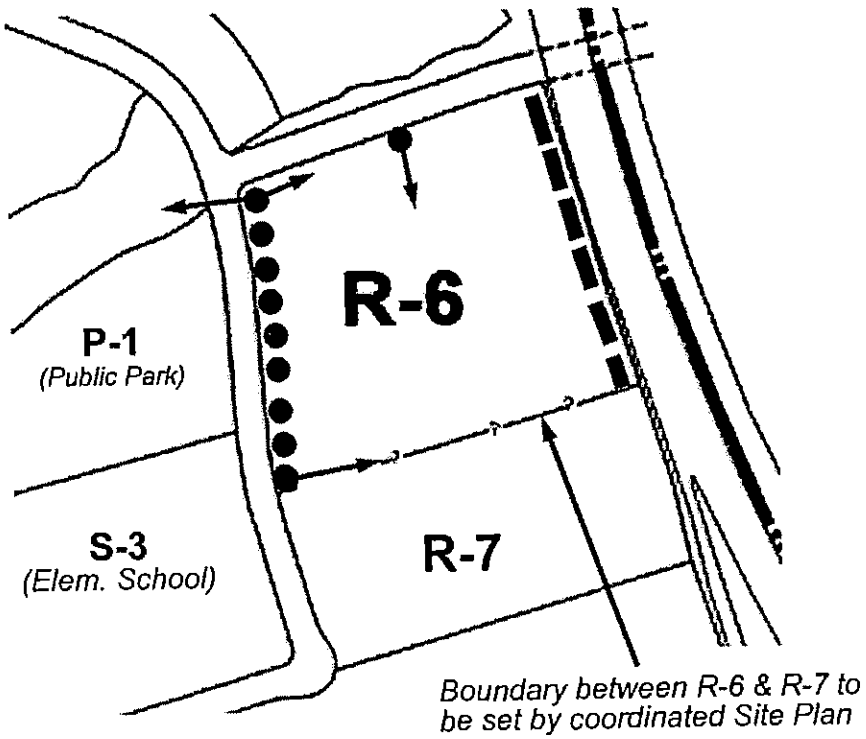
Exhibit 5.5

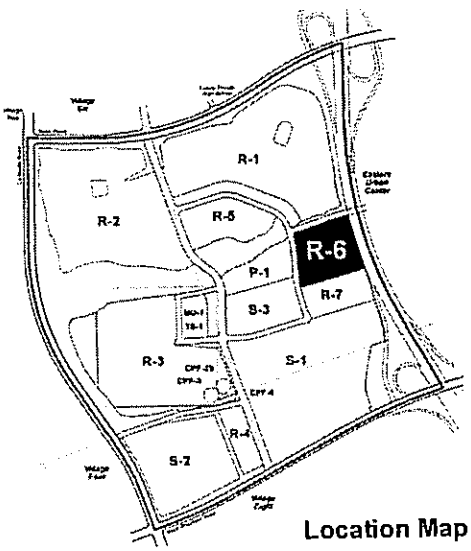
Neighborhood R-6
Design Issues Summary

Description: Neighborhood R-6 is located south of the eastern village entry street which connects Village Seven to the EUC. The Village Core Promenade Street loop forms the western edge of the neighborhood, while the R-7 Neighborhood is immediately to the south and SR-125 is on the east. Neighborhoods R-6 and R-7 are to be planned together since the boundary between them will vary according to the products proposed, although R-7 is defined as multi-family only while R-6 may be single family cluster or multi-family. Units may be transferred between the two parcels as long as the total unit count does not exceed that shown on the Site Utilization Plan for both parcels. Neighborhood access will be taken from the core promenade street and entry street. The promenade street entry may be shared with Neighborhood R-7 and there should be interconnecting circulation, vehicle and pedestrian, between the two neighborhoods. Special attention should be given to the transition from the promenade street to internal streets and/or the intersections with the promenade streets, and the SR-125 edge. All buildings or lots fronting on the promenade street should receive special attention with respect to pedestrian orientation issues.

Product:	Single Family Cluster/Multi-family Residential
Views:	insignificant
Circulation/Entry:	Interface with promenade street and entry street; coordination with neighborhood R-7
Fencing:	Rear yard fencing along promenade and entry streets; neighborhood R-7 edge; SR-125 edge
Edges:	Neighborhood R-7; promenade street; SR-125
Landscaping:	Streetscapes; edge transitions
Pedestrian Orientation Issues:	Promenade street; internal circulation with R-7

Neighborhood R-6





Location Map

- Primary Pedestrian Edge
- Sound Attentuation
- View Orientation
- Landscape Buffer
- Pedestrian Connection

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

3/23/04

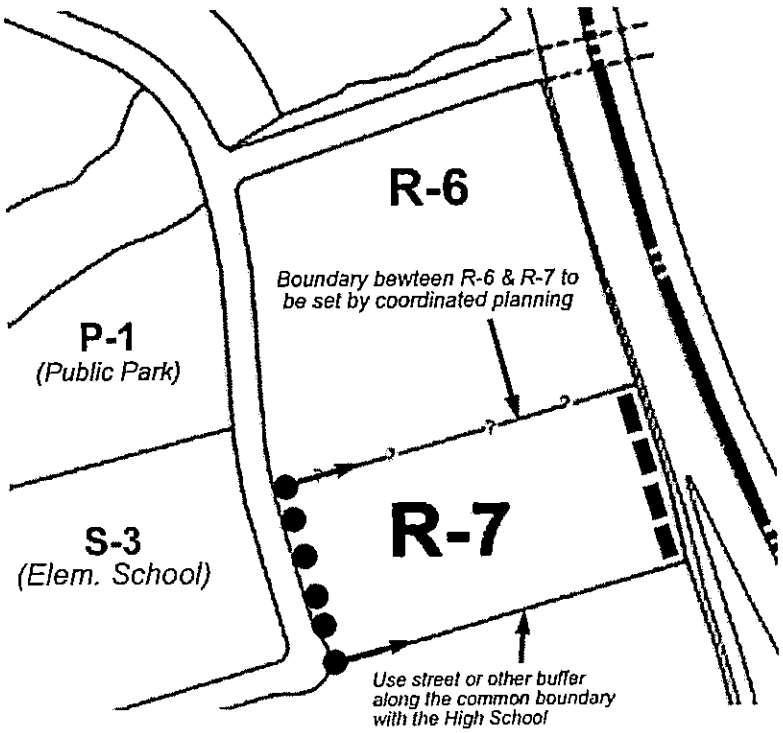
Exhibit 5.6

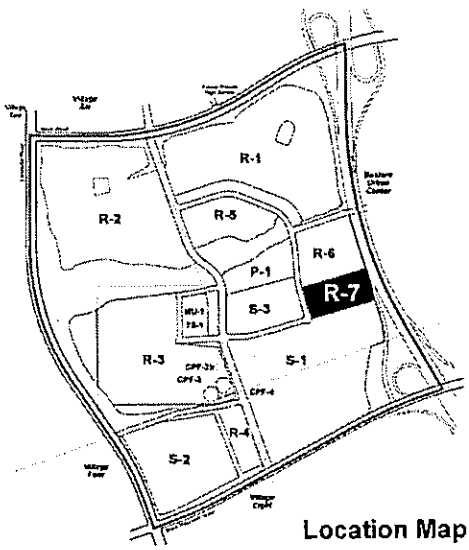
Neighborhood R-7
Design Issues Summary

Description: Neighborhood R-7 is located south of Neighborhood R-6 and north of the high school site, parcel S-1. The Village Core Promenade Street loop forms the western edge of the neighborhood, while SR-125 is on the east. Neighborhoods R-6 and R-7 are to be planned together since the boundary between them will vary according to the products proposed, although R-7 is defined as multi-family only while R-6 may be single family cluster or multi-family. Units may be transferred between the two parcels as long as the total unit count does not exceed that shown on the Site Utilization Plan for both parcels. Neighborhood access will be taken from the core promenade street. The entry may be shared with Neighborhood R-6 and there should be interconnecting circulation, vehicle and pedestrian, between the two neighborhoods. Special attention should be given to the transition from the promenade street to internal streets and/or the intersections with the promenade street. The school and SR-125 edges will be required to provide separation/buffering. All buildings or lots fronting on the promenade street should receive special attention with respect to pedestrian orientation issues.

Product:	Multi-family Residential
Views:	insignificant
Circulation/Entry:	Interface with promenade street; coordination with neighborhood R-6
Fencing:	Any fencing along promenade street; neighborhood R-7 edge; SR-125 and school edge
Edges:	Neighborhood R-6; promenade street; school and SR-125
Landscaping:	Streetscapes; edge transitions
Pedestrian Orientation Issues:	Promenade street; internal circulation with R-6

Neighborhood R-7





Location Map

- Primary Pedestrian Edge
- Sound Attentuation
- View Orientation
- Landscape Buffer
- Pedestrian Connection

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cinti Land Planning

3/23/04

Exhibit 5.7

II.4.6 Non-Residential Design Guidelines

This chapter addresses non-residential development, much of which is located in the village core. Because of its importance to the village aesthetic, its diversity of uses, and its long-term development phasing requirements, special attention should be given to Village Core issues. And, although much of these chapter focuses on such issues, the guidelines relating to quality design and pedestrian orientation should be applied to non-residential projects outside of the core as well.

II.4.6.1 Architecture, Building Siting, Color & Materials

There is no pre-determined architectural style defined for non-residential buildings within the Village Core or other locations, except for the community-wide general guidelines. Because of the range of building sizes and uses, there probably is no one single style which would be appropriate for all structures. However, architectural design within the commercial core should represent a unified style which is responsive and complementary to adjacent structures. Architectural detailing and material selection is essential to good character definition. Accents in color, texture or pattern changes should be used to provide interest and provide scale.

All structures should exhibit articulated building planes, as well as, the use of appropriate textures and materials. Although building height is limited to four stories, each structure should be evaluated using the criteria of a three-tiered hierarchy of articulation, materials and colors as described below:

- Ground Level - Scale and texture should be sensitive to pedestrian interaction. Elements such as landscape pockets, trellis, pergolas, and canopies as well as recessed windows to produce deep shadow lines should be provided. Textured materials are most effective if incorporated into the building design at this level so that the apparent mass of the structure is reduced.

- Mid-Level - The mid-level, generally the most dominant portion of the facade in multi-story buildings, should be designed with a sensitivity to rhythm and proportion so that a harmonious composition can be perceived from the major viewing angles.

- Top Level - Buildings should be designed with a definite termination at the top. The intent is to provide a "cap" so that the exterior walls do not "disappear" as they meet the sky.

Landmarks and other special features may exceed the height limit, if approved in a precise plan. When large or tall buildings are proposed, special consideration should be given to massing and proportion with respect to adjacent buildings. Buildings which are 3 or more stories tall should incorporate steps in the vertical plane.

Building complexes should be designed to create opportunities for pedestrian spaces such as plazas, courtyards, patios and decks. Landscaping may be used to reinforce this concept through the use of pergolas, trellises, *etc.* Buildings within a complex should appear as an assemblage of integrated smaller forms, not as one large mass. Building masses should have an ordered "randomness" with focus, articulation and emphasis where appropriate such as entryways, major plazas, *etc.* Buildings located in "gatepost" locations (adjacent to entries off public and private streets), should be designed with a more distinct or "landmark" character.

A light neutral shade should be the predominate wall color in the commercial core, consistent with climatic and energy conservation considerations. A single, unifying accent color should be used in such items as site furniture, landmarks, entry monuments and signs within the commercial district.

II.4.6.2 Screening

A critical design issue is screening of unattractive utility and mechanical equipment, trash receptacles and storage areas, loading and service areas. Certain restrictions can reduce some of these potential design issues, others must receive attention from the site designer. The Village Seven PC District regulations restrict or prohibit outdoor storage and require screening of ground and/or roof mounted equipment/utility connections. Loading or unloading should occur in the rear or on the side of buildings away from public streets or be screened. Parking areas should also receive some screening.

Fences and walls which provide screening should be designed as an integral part of the building design concept and be constructed of materials, textures and colors that are complementary to the adjacent building.

Outdoor refuse collection areas should be completely enclosed and screened from view by a wall or fence constructed of materials which are complementary in color, finish and texture to adjacent buildings. All such areas should have concrete floors and loading pads and be of sufficient size to accommodate all business related refuse. Refuse collection areas should not be located adjacent to public streets.

II.4.6.3 Site Furnishings

Site furnishings, such as the following, should introduce a consistent system of architectural, color and material character unique to the Village Core:

Benches: A bench should be designed/selected for use in all the pedestrian areas within the village core complementing the design elements described in the other site furnishings.

Bollards: A concrete bollard should be used at the intersections of trail systems and vehicular crossings. They should contain internal light sources for safety at night.

Lighting Fixtures: A designated "Village Core" light standard base should be used for illumination of public areas.

Trash receptacles and Ash Urns: Pre-cast concrete trash receptacles, with ash urns of compatible design, should be used.

Site furnishings such as those listed above, transit shelters and other streetscape furniture including newspaper racks, bicycle racks and other items which could block a sidewalk, should be placed in "pockets" so as to not obstruct pedestrian or bicycle circulation.

II.4.6.4 Lighting & Signage

Lighting and signage, when implemented in a consistent manner, play a large role in the unification of a development district. The purpose of these guidelines is to identify principles of lighting for streets, paths, open spaces and buildings. The signage component is intended to specify sign and monumentation criteria to insure that all individual graphics and signs are coordinated with each other and contribute to the overall theme of the Village Core.

The final design and selection of on-site lighting standards and supports should be coordinated with the overall site furnishings program discussed in the preceding section. Metal halide light fixtures on selected bases should be used in all parking areas to provide design continuity and safety. Parking lot light standards should be restricted to a maximum of 25 feet in height.

Walkway/trail illumination should be provided by the use of low intensity fixtures for safety and comfort. The lighting pattern and intensity should become more intense at path intersections and vehicular crossings.

Within building groups, architectural and accent lighting should be indirect and subtle. Increased lighting levels should highlight pedestrian areas to clearly define the pedestrian path. Service area lighting should be contained within the service area boundaries/enclosure. The actual light bulb for service area lighting should not be visible from adjacent properties.

A complete signage program is to be developed for the Village Core as a whole. All individual project/use identification signs should be designed to fit on a monument system that is compatible and part of the architectural style for the Village Core. Signs associated with the identification of the community trail system and ancillary pathways should be designed as part of the overall streetscape vocabulary of site furnishings, lighting standards and special hardscape materials.

The signage program for each project should provide the means for adequate identification while regulating and controlling design, location and maintenance. The signage program should establish specific standards for all exterior signage to ensure aesthetic continuity and consistency.

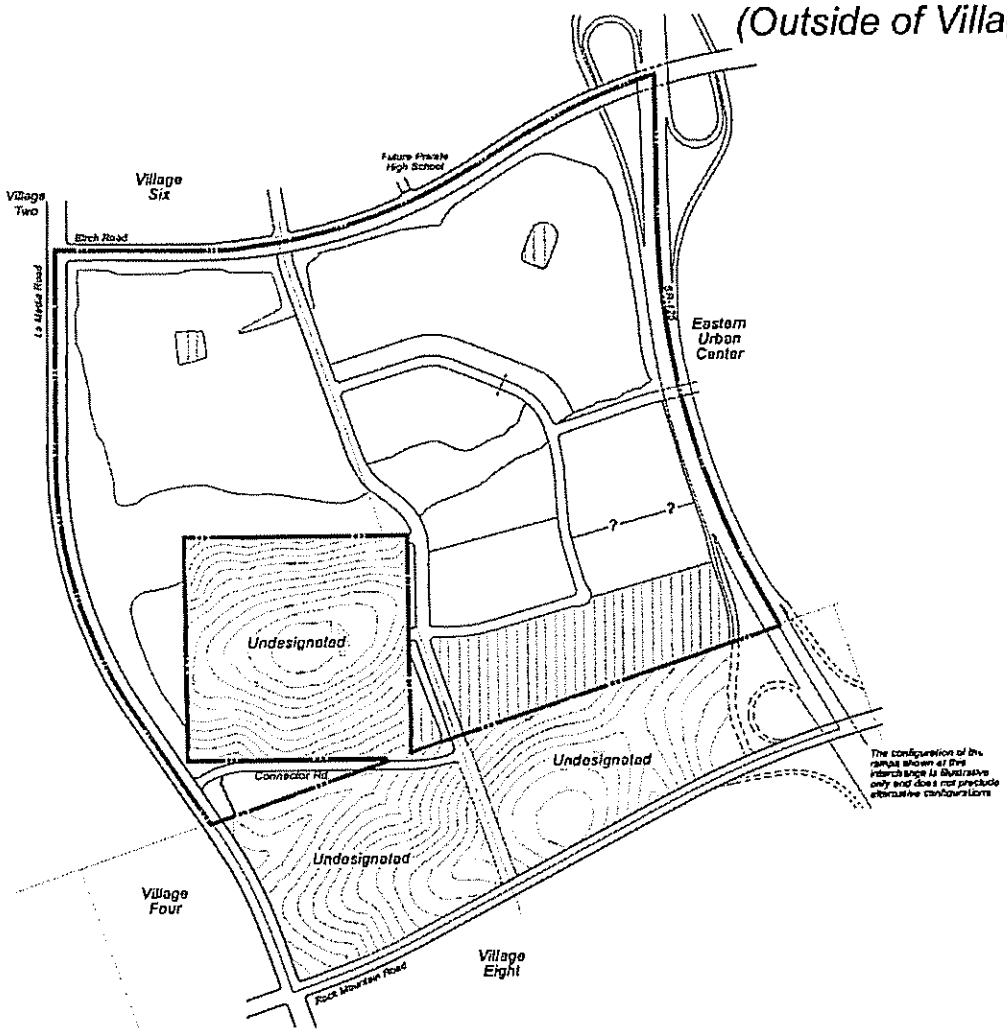
II.4.6.5 Individual Neighborhood Design Criteria

The development descriptions and parcel plan features described in this section are those envisioned at the time of SPA Plan preparation. These designs and specifications are subject to change and refinement in conjunction with the tentative tract map approval, and are subject to such approval. All neighborhood plans which are prepared should respond to the listed planning and design criteria, implementing the techniques and solutions described in the previous sections of this text. All

neighborhood plans shall conform to the development standards and other provisions of the Otay Ranch Village Seven PC District regulations adopted by the City of Chula Vista. Each neighborhood description also includes a lotting or development concept exhibit which identifies the location of special design issues/responses. Because none of the non-residential sites addressed in this chapter are essential components to the overall village design, no design issue maps have been included.

The following are guidelines for site planning each of the major neighborhoods designated for non-residential development outside of the Village Core within Village Seven (refer to the Non-Residential Location Map, Exhibit 6.1, for the location of each neighborhood).

Non-Residential
(Outside of Village Core)



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cirk Land Planning

8/14/04

Exhibit 6.1

Neighborhoods CPF-1, CPF-2a & CPF-2b
Design Issues Summary

Description: Two of the CPF sites, CPF-1 and CPF-2, are within a residential neighborhood and are suitable for common usable open space serving their respective neighborhood.

The other CPF designated neighborhood is outside of the village core, at the intersection of the village entry from La Media Road and the entry from Rock Mountain Road. This site is intended for community-wide CPF uses such a church or day care facility that would draw from a larger area than a single village. Because it is outside of the core, its contribution to and need to adhere to the core design/aesthetics program is not significant. This site is nearly independent in use but should respect the village and community design framework. The only uses sensitive edge is that along single family residential neighborhood R-3. This will likely be a typical rear yard fence edge. The other two edges should incorporate appropriate streetscape treatments for the adjacent streets. It would be desirable for this site to be combined with the other adjacent CPF sites shown on the Overall Village Concept Plan, when those areas are added to the approved SPA.

Concept:	Community Purpose Facilities
Entry:	Coordinate with village entry streets intersection
Edges:	SF residential
Landscaping:	Streetscapes
Building Detailing:	Village entry street edges

Neighborhood S-1
Design Issues Summary

Description: This Neighborhood is near to but outside of the village core and designated for development with a public high school. Because it is outside of the core, its contribution to and need to adhere to the core design/aesthetics program is not significant. The public school use of the site is predetermined but the facility design should respect the village and community design framework. The on ly uses sensitive edge for the high school is the edge with multi-family residential Neighborhood R-7. All other edges are streets.

Concept:	Public high school
Entry:	Coordinate with adjacent parcels
Edges:	MF residential on north of S-1; streets on all others
Landscaping:	Streetscapes; transition to residential
Building Detailing:	Entry street edges

II.4.7 Village Core Concept

This chapter addresses village core development as a whole. Because of its importance to the village aesthetic, its diversity of uses, and its long-term development phasing requirements, special attention should be given to Village Core issues.

The village core is fundamental to the Otay Ranch planning concept and the basis for organizing land uses within Village Seven. As described in Section II.4.1, the surrounding land uses and physical site conditions largely directed the location and organization of land uses within the village core. Land uses within the core have been organized for compatibility, synergy and enhancement of the pedestrian orientation of the village. The Village Seven core contains all of the appropriate land uses to create a vital town center as directed by the Otay Ranch GDP policies.

II.4.7.1 Village Core Planning & Design

The Village Core is intended to be the commercial, social and activity focal point for each village. Along with its functional importance, the Village Core also has an aesthetic importance. Since it is the most intensely developed and most visible portion of a village, its design character and quality is the foundation for the aesthetic of the entire village.

Because of its importance, size and diversity of uses, coordinated and comprehensive planning for the Village Core as a whole must occur. However, separate ownerships, the timing of construction (and accompanying detailed planning and design) will require a multi-phased program during a multi-year time frame, to respond to real estate market forces and other factors. In order to allow approval of the Village Design Plan and SPA Plan so that early phases may progress, while assuring that the overall concept will be implemented and later phases will not be compromised, appropriate design standards/guidelines and a framework for design control is required. This will be accomplished through the Village Core Concept Plan specified by the GDP.

Preparation of the required concept plan will be the initial step for subsequent site plans for the various components of the Village Seven Core. The Concept Plan has not been included in these guidelines because the project sponsors of the Village Seven SPA are not the owner of the mixed-use/town square sites at the heart of the Core. Since the owner of the mixed-use area is not an applicant for the initial SPA approval, the Concept Plan may be prepared by the affected land owners within the approved SPA for that portion of the Village Core within the approved SPA. Critical areas of the village core which are not within the approved SPA should be included at a "sketch" level when necessary to demostrate the design feasibility of the overall Village Core Concept Plan. In lieu of a Concept Plan, these guidelines provide a policy framework and planning/design process, consistent with the GDP, for the Concept Plan and subsequent detailed designs.

When prepared, the Concept Plan illustrates the intended overall land use diversity, site development character and conceptual building/pedestrian/parking/open space relationships within the Core. It should also depict typical building character, scale and proportion, massing and materials through conceptual elevations. As an illustrative plan, it would depict the overall development concept but not detail or establish specific development standards or requirements. Its purpose will be to provide

a context for the evaluation of detailed plans for individual development phases (precise plans) from the perspective of the Village Core as a whole (see Section II.4.7.2 Village Core Design and Implementation Process, below).

The Village Core Concept Plan should incorporate and highlight implementation of the general guidelines provided in this chapter, especially those relating to pedestrian and transit orientation.

II.4.7.2 Village Core Design & Implementation

The Village Core is the essential component of the Otay Ranch Village Concept. It is the commercial, social and community design focal point for the village. Because of this role, the design of the village core must be undertaken in a comprehensive manner. Design of the village core area should be accomplished using a three tiered process defined in the previous Otay Ranch SPA approval: Concept Plan, Master Precise Plan and individual project Precise Plan(s).

As noted above, the Village Core Concept Plan will be a single graphic illustration intended to demonstrate, at a conceptual level, how the village core location and parcelization of the SPA plan can achieve the basic land use and design objectives identified in the Otay Ranch GDP. Because the implementation timing of the essential commercial uses and adjacent multi-family uses in the village core lag the single family residential uses of the Secondary Area, detailed design is properly delayed until actual construction is imminent.

The second level of design/implementation is the preparation of a Master Precise Plan for the Village Core area. The Master Precise Plan builds upon and refines the SPA-level Concept Plan. In addition, the Master Precise Plan establishes the design framework, including mandatory site plan/urban design elements which must be implemented in the individual projects in order to achieve the overall planning/design goal. However, since critical componets of the Village Core are not within the initial SPA approval, it may be impossible to prepare a Master Precise Plan for the entire Core. If such is the case, the Master Precise Plan shall be prepared only for that portion of the Village Core within the approved SPA.

The Master Precise Plan shall address the following design issues, in the form of guidelines or mandatory requirements, as appropriate:

- Building Design/Siting - Identification of building massing and locations of proposed structures.
- Pedestrian/Vehicle/Transit Access - Identification of pedestrian, bicycle, vehicle routes, connections and separations, where appropriate.
- Urban Character/Architecture - Identification of overall architectural style, key urban design elements and landscape/hardscape features.
- Lighting/Signing/Street Furnishings - Identification of lighting, sign and street furnishing types.

The Village Core Master Precise Plan shall include:

- Identification of all Village Core components and the important relationships/connections among them.
- Identification of Mandatory Site Plan or Urban Design Elements which must be implemented to achieve the overall Village Core concept.
- General and site-specific design guidance for non-mandatory site planning/urban design components.
- A design review process to evaluate subsequent submittals and determine consistency with the Master Precise Plan.

The final step in the Village Core design/implementation process is the preparation of individual precise plans for each project within the village core area. These project specific plans shall be evaluated using the process and standards established in the Master Precise Plan. A project-specific precise plan submittal shall include a scaled drawing or drawings which dimension and depict the following:

- Property boundaries and adjoining streets;
- Existing topography and proposed grading plan, showing slope, retaining walls, pad elevations, and percent of slope on streets, driveways and other graded areas;
- Existing and proposed streets, utilities, and easements;
- Access: pedestrian, vehicular and service; points of ingress and egress; with driveway locations and dimensions;
- Loading and trash areas, walls and/or fences (including height);
- Proposed location, height, and dimensions of buildings, including color and materials on all elevations. The floor area, number of stories, number of units and bedrooms (when applicable) shall be given. Proposed uses shall be indicated including floor area devoted to each use;
- Parking layout, including dimensions, number of stalls, and circulation flow;
- Location, height, and size of signs proposed on the property;
- Landscaping and irrigation concepts;
- Lighting, including the location, type and shielding; and,
- Location and design of recreational areas (if any).

II.4.7.3 Village Core Site Planning

The focus of the Village Core is the commercial core or mixed use area which is the heart of the village. The GDP specifies that each village core will emulate the form of either a "town square" or "main street." However, the site for this component is not within the initial SPA approval. Inclusion of the site within the SPA approval will require a formal amendment of all SPA documents including this Village Design Plan. That amendment shall include the necessary design guidance for the mixed-use area.

II.4.7.4 Architectural Design Guidelines

The following guidelines shall apply to the community purpose facility, elementary school, park and other community buildings within the village core. Although not directly in the village core, the high school should also respond to these guidelines and the architectural style selected for the village core in order to maintain the village design theme throughout Village Seven.

- Landmark architecture shall be located at all focal points and major intersections within the village. "Landmark architecture" should be a distinctive element that creates an accent or focal point, such as a tower.
- Primary building entries shall be oriented to the street to the extent possible.
- Buildings shall be arranged to create outdoor rooms, such as courtyards, wherever possible.
- Exterior building elevations shall incorporate a range of scale-defining elements that relate larger building masses to the pedestrian. Such elements include columns, archways, doorways, upper floor windows and balconies.
- Overhead features that create a sense of enclosure and encourage visitors to linger and enjoy the area may be incorporated into the design. Features such as canopies, arcades and roof overhangs create the sense of enclosure and also protection from sun and rain.
- Building height and massing shall be varied.
- Roof forms shall be compatible with the architectural style and create skyline interest.
- Architecture along the same street or within a complex shall include buildings of similar but varying height and share one or more distinctive element, such as materials, window and door style, detailing, porches, arcades, overhangs, roofing, color, *etc.*
- Decorative detailing shall be consistent with the overall architectural style and be used as accents. Detail elements include arches, balconies, balustrades, chimneys, cupolas, ceramic tile, moldings, reveals, wrought iron, hand rails, window sills, finials, and lighting fixtures.
- All utilitarian aspects of development such as mechanical equipment, gutters, downspouts, storage and refuse collection areas shall be integrated into the building design so as not to be visible from pedestrian and public view areas to the extent possible.
- Exterior staircases shall be compatible with the building architecture.
- Exterior staircases shall be visually perceived, as integral to the building or as a significantly defined architectural accent.
- Side and rear elevations of buildings exposed to view shall be articulated or enhanced to provide a pleasing appearance from public or neighboring use views.

II.4.7.5 Landscape

The landscape concept for the Village Core is to enhance the pedestrian orientation of the area through landscape and outdoor amenities. Trees will create a sense of identity for the core with formal planting arrangements on streets and a mix of skyline, shade and accent trees. Pedestrian scaled plantings, such as colorful groundcovers, container plantings and vines covering arbors, will enliven the core hardscape. Outdoor amenities, such as plazas, areas of enhanced paving, seating areas and lighting will create an atmosphere that is appropriate for shopping, socializing and

recreation. Landscape design shall be in conformance with the City of Chula Vista Design Manual and Landscape Manual.

The Otay Ranch pedestrian-oriented design theme strives to minimize automobile influences in the village. Landscaping in and around parking lots should help to achieve that objective. Perimeters of parking lots should be screened by berms, low walls or shrubs, approximately 3 feet in height, to block headlight glare yet provide visual access into the lots to enhance pedestrian safety and security. Shade trees should be planted within parking lots to City standards to reduce heat and glare from paving and parked cars. Planters should be included within larger lots to visually break up the expanse of paving.

II.4.7.6 Lighting

A selected lighting design will be used in the village core as a key element in creating the village theme. The liveliness of the village core can be accentuated through the use of appropriate lighting. The following are guidelines specific to the village core:

A. Street Lights

The street lights within the mixed use/commercial and the community purpose facility areas should be the most decorative in the village. Light standards/fixtures which include arms for hanging banners and/or flower baskets should be considered. Street lights in other areas should be compatible in design, but less decorative.

B. Parking Lighting

The lighting within parking areas should be selected for energy efficiency and village design compatibility. Light fixtures should provide adequate illumination for their intended use, while directing the light onto the paved surface. Glare screens should be used where necessary to reduce the amount of light filtering into adjacent residential land uses. Light fixtures should be selected to match the style and character of the architecture and complement the village design theme.

II.4.7.7 Street Furnishings

Street furnishings within the village core are key elements in enhancing the pedestrian experience and expressing the village theme. The street furnishings in the core may consist of vine-covered arbors and bus stops, benches, trash receptacles, newspaper racks, bicycle racks, kiosk structures, clock towers, banners, hanging baskets, fountains, and public art pieces.

II.4.7.8 Signage

Signs within the village core may consist of individual project monument signs, individual tenant signs and directional signs. Sign regulations controlling the location, number and size of signs

within each land use district are provided in the Village Seven PC District Regulations. A comprehensive sign plan that includes guidelines for all proposed types of signs will be developed as part of the Village Core Master Precise Plan. Individual Precise Plans for the developments within the village core will provide more specific sign criteria suitable to each project.

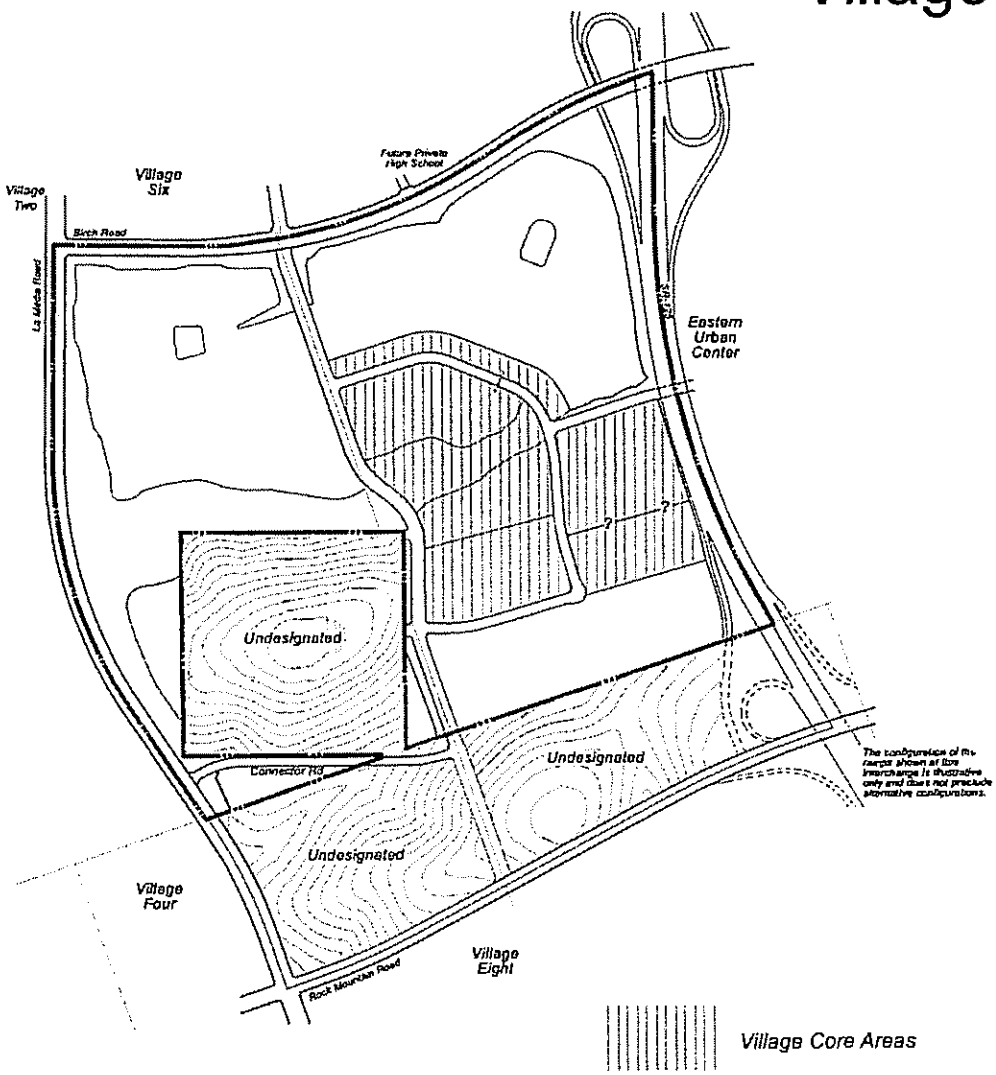
Sign design in the village core will be consistent with the overall design themes. Monument signage for the mixed use/commercial, community purpose facility, school, and multifamily residential projects, if desired, shall be consistent with the design for village monuments.

II.4.7.9 Individual Neighborhood Design Criteria

The development descriptions and neighborhood plan features described in this section are those envisioned at the time of SPA Plan preparation. These designs and specifications are subject to change and refinement in conjunction with the tentative tract map approval, and are subject to such approval. All neighborhood plans which are prepared should respond to the listed planning and design criteria, implementing the techniques and solutions described in the previous sections of this text. All neighborhood plans shall conform to the development standards and other provisions of the Otay Ranch Village Seven PC District regulations adopted by the City of Chula Vista. Each neighborhood description also includes a lotting or development concept exhibit which identifies the location of special design issues/responses.

The following are guidelines for site planning each of the major neighborhoods within Village Seven Village Core (refer to the Village Core Location Map, Exhibit 7.1, for the location of each neighborhood). Neighborhoods designated for residential development are addressed in the Multi-family residential chapter of these guidelines.

Village Core



CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Cink Land Planning
6/14/04

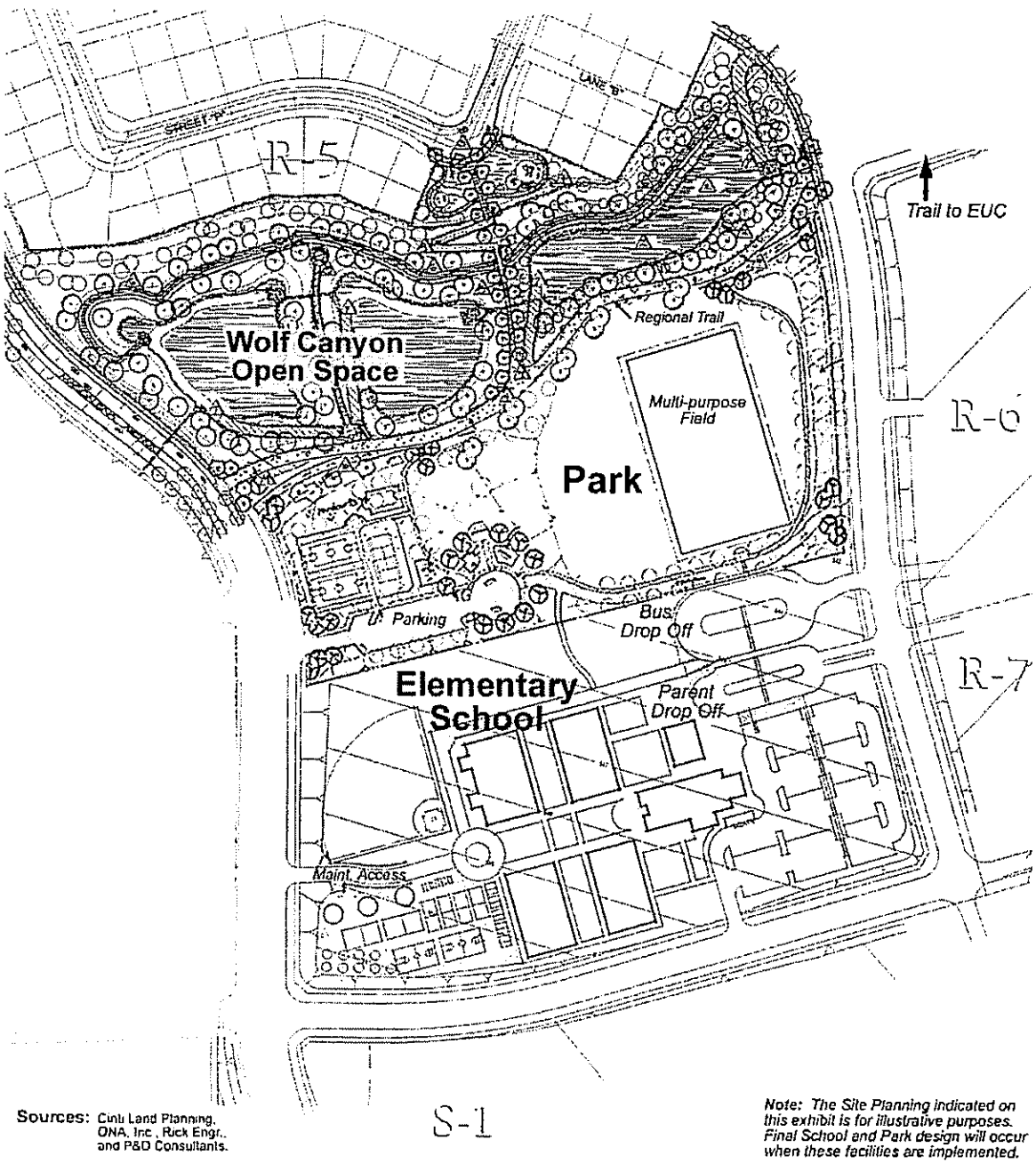
Exhibit 7.1

Neighborhoods S-3 and P-1
Design Issues Summary

Description: These neighborhoods form the neighborhood school/park which is a part of the Village Seven Core. Both will be designed, constructed and operated by public agencies. The school will be the responsibility of the Chula Vista Elementary School District while the park is the responsibility of the City of Chula Vista. The site is bounded on three sides by village streets. The south edge of the school is across the street from the high school site which will be a sensitive edge to design to avoid conflicts. The northern edge of the park site adjoins the Village Greenway extending in Wolf Canyon to the SR-125 underpass to the EUC. The public trail edge will need to be integrated with the park area.

Since development of these neighborhoods will be undertaken by public agencies and not subject to the usual design review process, a concept sketch has been substituted on the following page for the design issues map.

Conceptual Design for Elementary School & Park



Sources: Cuttl Land Planning, ONA, Inc., Rick Engr., and P&D Consultants.

Note: The Site Planning indicated on this exhibit is for illustrative purposes. Final School and Park design will occur when these facilities are implemented.

Exhibit 7.2

WATER CONSERVATION PLAN

Village Seven Sectional Planning Area (SPA)
Otay Ranch GDP

Adopted October 12, 2004

by Resolution No. 2004-329

Project Sponsor

McMillin Otay Ranch, LLC
2727 Hoover Avenue
National City, CA 91950
Contact: Dave Gatzke
(619) 336-3726

Prepared by

Cinti Land Planning
2932 Poinsettia Drive
San Diego, CA 92106
Contact: Gary P. Cinti
(619) 223-7408

SECTION II.8
WATER CONSERVATION PLAN

TABLE OF CONTENTS

SECTION		PAGE
II.8.1	Executive Summary	II.8-1
II.8.2	Introduction	II.8-2
II.8.3	Purpose	II.8-3
II.8.4	Project Description	II.8-4
II.8.5	Water Service & Supply	II.8-7
II.8.6	Projected Water Use	II.8-8
II.8.7	State and Federal Water Conservation Requirements	II.8-10
II.8.8	Local Water Conservation Requirements	II.8-11
II.8.9	Water Conservation Estimated Savings	II.8-14
II.8.10	Implementation Measures	II.8-15
II.8.11	Monitoring	II.8-16

LIST OF TABLES

TABLE		PAGE
Table 1	Non-Mandated Water Conservation Measures	II.8-1
Table 2	Potable Water Demand	II.8-8
Table 3	Recycled Water Demand	II.8-9
Table 4	Total Water Conservation Estimate	II.8-14

LIST OF EXHIBITS

EXHIBIT		PAGE
WC-1	Water Conservation Planning Areas	II.8-5
WC-2	Site Utilization Plan	II.8-6

II.8.1 Executive Summary

As detailed in this plan, numerous features have been included in the project and commitments made by the Master Developer to minimize the use of water during the construction and use of development within the Otay Ranch Village Seven Sectional Planning Area (SPA). These measures are expected to result in an average water savings of 0.061 million gallons per day (MGD).

The following water conservation measures will be implemented in the project as described in this Water Conservation Plan:

Table 1
Water Conservation Measures

- Hot Water Pipe Insulation
- Pressure Reducing Valves
- Water Efficient Dishwashers
- Water Efficient Landscaping
- Evapotranspiration Controllers
- Soil Moisture Sensors
- Dual Flush Toilets

II.8.2 Introduction

Otay Ranch Village Seven SPA is a development component of the Otay Ranch Planned Community located in the eastern portion of the City of Chula Vista (City). Other portions of the community currently under development are the Villages One, Five, Six and Eleven. The predominate land use in the Village Seven SPA is single family residential with a large complement of public school sites, a commercial/mixed-use site in the Village Core, three CPF sites and a large greenbelt in Wolf Canyon. This Water Conservation Plan has been prepared with the initial SPA submittal which includes only a portion of the Village Seven area designated in the Otay Ranch General Development Plan (GDP), see the Water Conservation Planning Areas Exhibit WC-1. The inclusion of areas outside of the approved area to Village Seven SPA will require formal amendments or supplements to the adopted SPA documents including this Water Conservation Plan.

The approach to water conservation outlined in this plan is intended to be comprehensive and implemented throughout the life of the development project. Water conservation during construction and after occupancy are addressed, as well as the installation of water conserving landscaping, appliances and fixtures.

The following are goals of the Village Seven SPA Water Conservation Plan (WCP):

1. To conserve water during and after construction of the projects within the Otay Ranch Village Seven SPA.

2. To comply with the water conservation standards and policies of the City of Chula Vista and Otay Water District.

3. To create a comprehensive framework for the design, implementation and maintenance of water conserving measures, both indoor and outdoor.

4. To be economically efficient and cost effective.

II.8.3 Purpose

The purpose of this Water Conservation Plan (WCP) is to respond to the Growth Management Policies of the City of Chula Vista which require larger development projects to prepare a WCP. The water conservation measures presented in this plan are intended to respond to the long term need to conserve water in new development.

The City has adopted formal guidelines for the preparation and implementation of the required WCPs. This WCP incorporates the requirements of the adopted guidelines by following the mandated format for WCPs and incorporating the required water conservation measures into the Village Seven project. The guidelines require the following water conservation measures in all large residential projects subject to WCP requirements:

- Hot water pipe insulation
- Pressure reducing valves
- Water efficient dishwashers
- At least one outdoor water conservation measure from the Residential Water Conservation Measures list.
- At least one additional water conservation measure from either the indoor or outdoor categories identified on the Residential Water Conservation Measures list.
- Water conservation measures not found on the Residential Water Conservation Measures list may be proposed consistent with the provision of Part Five of the Water Conservation Plan Guidelines.

Further, all non-residential projects subject to the WCP requirements must include the following conservation measures:

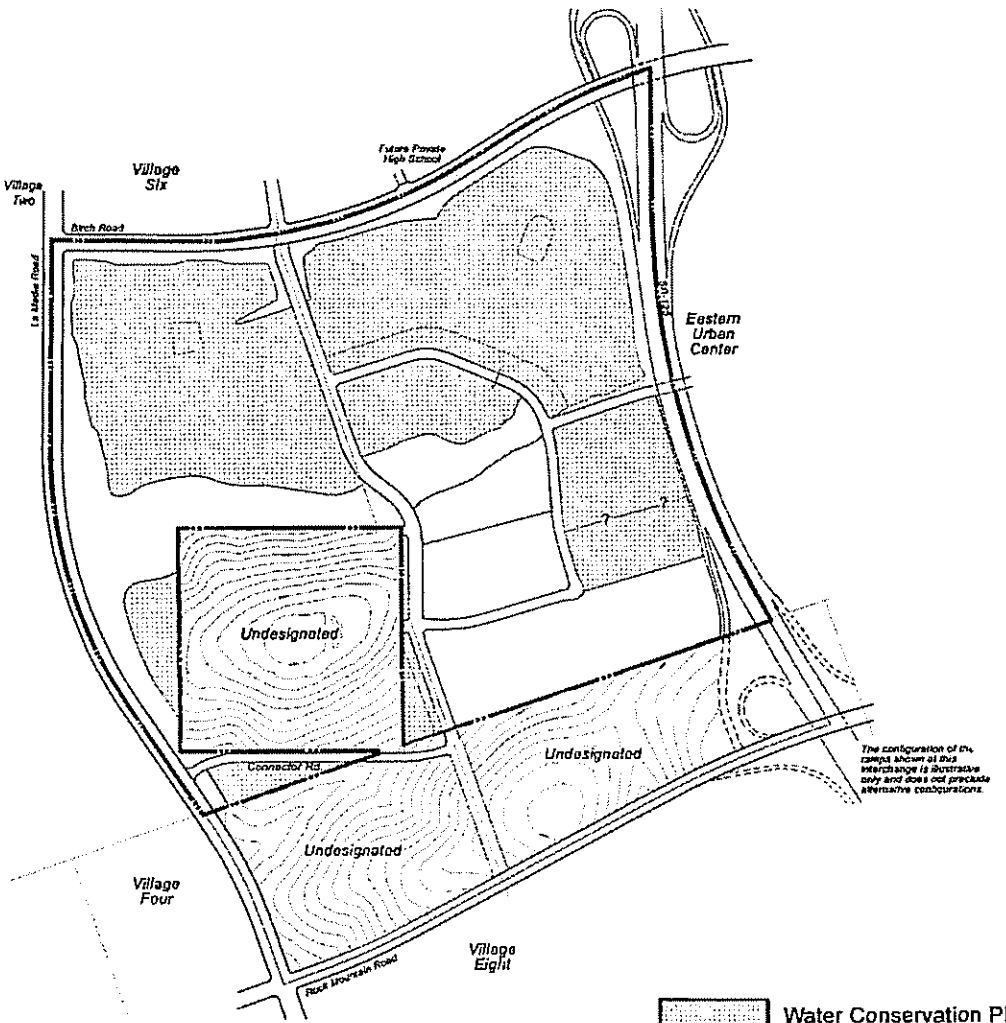
- Hot-Water Pipe Insulation.
- Pressure Reducing Valves.
- At least one outdoor water conservation measure from the Non-Residential Water Conservation Measures list.
- At least one additional water conservation measure from either the indoor or outdoor categories identified on the Non-Residential Water Conservation Measures list.
- Water conservation measures not found on the Non-Residential Water Conservation Measures list may be proposed consistent with the provision of Part Five of the Water Conservation Plan Guidelines.

II.8.4 Project Description

Otay Ranch Village Seven is an urban village as defined by the Otay Ranch General Development Plan, surrounded by prime arterials and an open space buffer augmented by the major open space feature in Wolf Canyon. The land use pattern implements the village concept with higher intensity uses and residential densities within a village core and decreasing intensity/density away from the core area. The Village Seven SPA Plan defines the village core in the central portion of the planning area, focused on a future commercial/mixed-use area. In addition to the commercial focal point, a public neighborhood park, and an elementary school site will comprise the core, along with multi-family residential development. The surrounding secondary area will include middle and high school sites, three CPF sites at the village entrance form La Media Road, and single family residential areas.

As noted previously, this Water Conservation Plan has been prepared with the initial SPA approval within Village Seven which includes only a portion of the village (see Exhibit WC-1). See also the Site Utilization Plan, Exhibit WC-2. All other private development sites in Village Seven are owned by others and will require a formal amendment of the SPA package to be included in the approved SPA (shown as "undesignated" on the Site Utilization Plan). Subsequent development submittals by other property owners shall address Water Conservation compliance requirements either by amending or supplementing this plan or preparing separate plans concurrently with the required SPA amendment(s).

Water Conservation Planning Areas



Water Conservation Plan included in SPA Plan.

Undesignated Water Conservation Plan not included in SPA Plan.

Public Ownership Parcels *(Schools & Park)*

CITY OF CHULA VISTA

Vista Verde

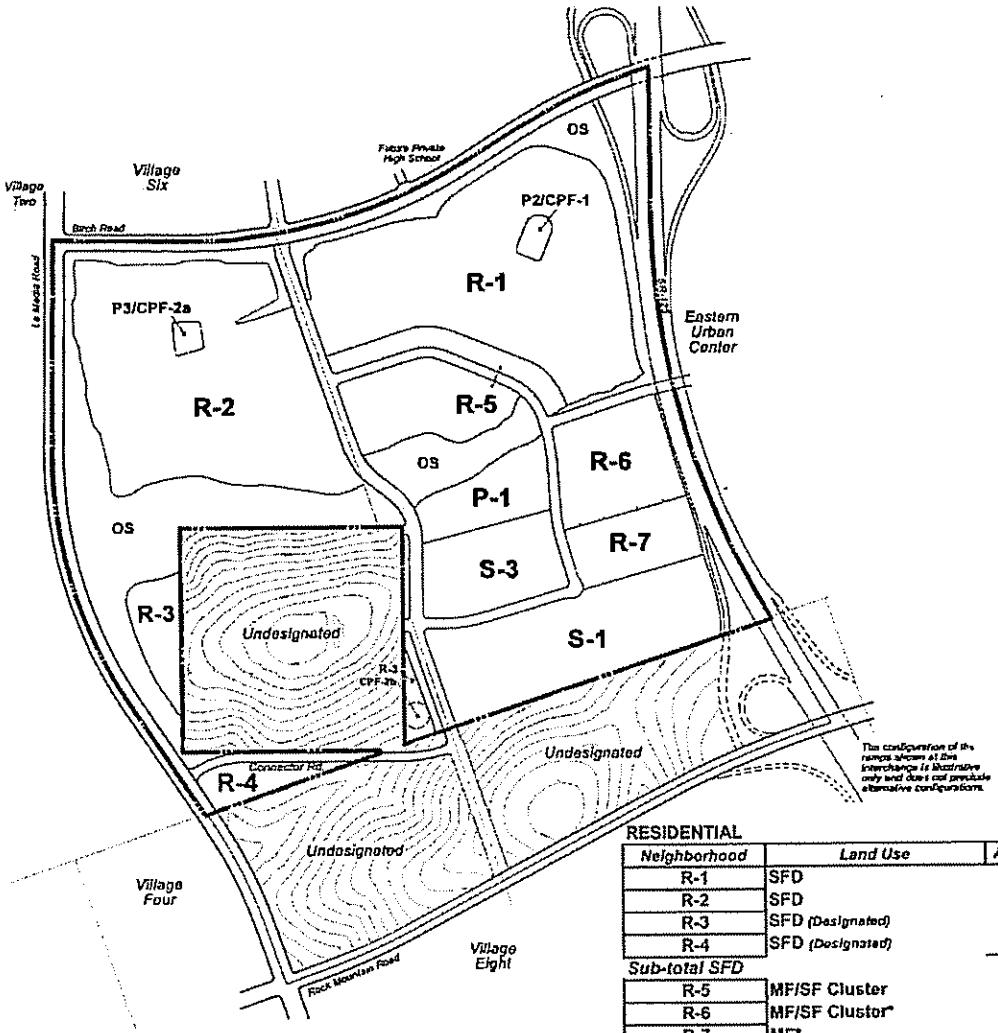
Village Seven - Otay Ranch

Land Planning

5/26/04

Exhibit WC-1

Site Utilization Plan



RESIDENTIAL

Neighborhood	Land Use	Acres	dulac	DU
R-1	SFD	50.7	6.8	346
R-2	SFD	50.5	7.4	375
R-3	SFD (Designated)	5.3	4.2	22
R-4	SFD (Designated)	3.1	4.2	13
Sub-total SFD		*109.6*	*6.9*	*756*
R-5	MF/SF Cluster	17.4	7.6	132
R-6	MF/SF Cluster*	12.5	15.4	193
R-7	MF*	8.0	15.4	123
Sub-total MF		*37.9*	*11.8*	*448*
Total Residential		147.5	8.2	1,204

NON-RESIDENTIAL

Neighborhood	Land Use	Acres
P-1	Public Park	7.6 (7.0 ac net req'd)
P2/CPF-1	CPF (Common OS)	1.1
P3/CPF-2a	CPF (Common OS)	0.7
CPF-2b	CPF	1.0
S-1	High School (Designated)	23.4
S-3	Elem. School	11.1
OS	Open Space (Designated)	47.8
Undesignated	Undesignated Uses	121.3
Cir.	Circulation	62.9
Total Non-Residential		276.9
VILLAGE TOTAL		424.4

* Refer to SPA Text for provisions to blend these two parcels.

CITY OF CHULA VISTA

Vista Verde

Village Seven - Otay Ranch

Civil Land Planning

8/24/04

Exhibit WC-2

II.8.5 Water Service & Supply

Most of the potable water used in San Diego County is imported from the Colorado River and the Sacramento-San Joaquin Rivers Delta. A small portion is from local surface water storage reservoirs and groundwater.

The Otay Water District (OWD) provides water service to the Otay Ranch Village Seven SPA project area. The OWD is a member of the San Diego County Water Authority (CWA) which purchases the imported water from the Metropolitan Water District of Southern California (MWD). The OWD obtains filtered water from CWA and delivers it local customers.

The Village Seven SPA is located within the OWD's Central Service Area. The project will receive its water supply from the District's Central Area System. Potable water is provided to the Central Service Area of the Otay Water District via the Second San Diego Aqueduct. Water is delivered at aqueduct connections No. 10 and No. 12 and is conveyed by gravity to the Central Service Area emergency/operating reservoirs at a grade of 624 feet. Water is then pumped to the existing 711 and 980 service zones.

The OWD also provides recycled water to the project area. The District owns and operates the Ralph W. Chapman Water Recycling Facility located near the intersection of Singer Lane and Highway 94. This plant has a stated capacity of 1.3 million gallons of recycled water per day for non-potable water uses such as irrigation of golf courses, school playing fields, public parks, and public landscaping. An additional recycled water supply will be available from the City of San Diego's 15.0 million gallons per day (MGD) capacity South Bay Water Reclamation Plant, which is located in the Tijuana River Valley at Monument and Dairy Mart Roads near the Mexican border. The initial phase of this plant was recently completed.

Recycled water requirements for the project will be coordinated by the Otay Water District and the City of Chula Vista. The phased construction of potable and recycled water facilities, based on the District-approved master plans, will be incorporated into the Village Seven SPA Public Facilities Financing Plan and/or subdivision map conditions for the project to assure timely provision of required facilities.

II.8.6 Projected Water Use

This section presents information on the anticipated water demand of the Otay Ranch Village Seven project. The following potable water and recycled water consumption estimates are taken from Chapter 7 of the Village Seven SPA Plan.

Potable Water Demand

Table 2 shows projected water use in Otay Ranch Village Seven SPA, based on average use rates from the Otay Water District's Master Plan, which do not reflect significant conservation measures, and the proposed land use statistics.

Table 2
Potable Water Demand

Land Use	Net Area (ac)	Dwelling Units	Unit Demand	Average Annual Day Demand (gpd)*
SF Residential	109.6	756	500 gpd/du	378,000
MF Residential	37.9	448	300 gpd/du	134,400
Elementary School	11.1		1,785 gpd/ac	19,814
High School	23.4		1,785 gpd/ac	41,769
Public Park	7.6		2,155 gpd/ac	16,378
CPF	2.8		893 gpd/ac	2,500
TOTAL				**0.593 mgd**

* gpd = gallons per day; mgd = million gallons per day — Source: Powell/PBS&J (7/03)

Recycled Water Demand

The projected demand for recycled water in Otay Ranch Village Seven is 0.110 MGD for landscape irrigation as shown in Table 3 below.

Table 3
Recycled Water Demand

Land Use	Net Area (ac)	Percent Irrigated	Irrigated Area (ac)	Irrigation Rate (gpd/ac)	Average Day Demand (gpd)*
MF Residential	37.9	15%	5.7	2,152	12,234
Park	7.9	100%	7.6	2,152	16,355
Elementary. School	11.1	20%	2.2	2,152	4,777
High School	23.4	20%	4.7	2,152	10,114
CPF	2.8	20%	0.6	2,152	1,291
Open Space	47.8	50%	23.9	2,152	51,433
Streets	62.9	10%	6.29	2,152	13,536
TOTAL					**0.110 mgd**

* gpd = gallons per day; mgd = million gallons per day

Source: Powell/PBS&J (7/03)

II.8.7 State & Federal Water Conservation Requirements

Some water conservation measures are mandated by state or federal law. The federal water efficiency plumbing standards were included in the Energy Policy Act enacted in 1992, and effective January 1, 1994. Passage of the Act provided a uniform standard for manufacturers of water-using fixtures including ultra-low-flow toilets, low-flow showerheads and faucets, aerators, washing machines and other appliances and fixtures.

State regulation of water efficiency is based on the California Constitution and Water Code. The Constitution provides the basis for efficient water use and is the foundation for the state's subsequent policies and mandates regarding water conservation and reuse. Additionally, the Urban Water Management Planning Act which was adopted by the California Legislature in 1983 and amended serially through 1995. The Act requires advance planning for water supplies to meet projected demands in the short term and long term with emphasis on water conservation, water recycling, emergency planning for drought restrictions on water use, among other provisions.

In California, regulation of manufacturing and installation of hot-water-related plumbing fittings is under the jurisdiction of the California Energy Commission. The efficiency requirements and regulations are incorporated in the California Code of Regulations Title 20, Appliance Efficiency Regulations. These regulations establish the maximum flow rate for all new showerheads, lavatory faucets, sink faucets, and tub spout diverters manufactured, sold or offered for sale in California.

In effect, current federal and state legislation require the use of certain plumbing devices that meet specified maximum flow rates. These devices include:

- Showerheads
- Lavatory Faucets
- Sink Faucets
- Metering Faucets in Public Restrooms
- Tub Spout Diverters
- Residential Water Closets
- Flushometer Valves
- Commercial Water Closets
- Urinals

Water savings in a typical single family home in Southern California through use of mandated fixtures has been calculated to be approximately 25% of the pre-conservation total.

II.8.8 Local Water Conservation Requirements

In addition to the State and Federal requirements identified above, the City of Chula Vista and the Otay Water District have also adopted water conservation requirements.

The City of Chula Vista Growth Management Ordinance, Municipal Code Section 19.09.050C, requires a Water Conservation Plan (WCP) to be submitted with all Sectional Planning Area (SPA) Plans. The WCP is to provide an analysis of water usage requirements of the proposed project, as well as a detailed plan of proposed measures for water conservation, use of reclaimed water, and other means of reducing per capita water consumption from the proposed project, as well as defining a program to monitor compliance.

As noted in Section II.8.3 Purpose, all projects subject to a WCP are required to include a specific set of water conservation measures from a menu provided by the City. Per that requirement, the following water conservation measures will be incorporated in the project as described below:

- Hot Water Pipe Insulation
- Pressure Reducing Valves
- Water Efficient Dishwashers
- Water Efficient Landscaping
- Evapotranspiration Controllers
- Soil Moisture Sensors
- Dual Flush Toilets

Landscape irrigation is another significant opportunity for water conservation and local agencies have established their own mandates. The City of Chula Vista Landscape Manual requires the use of recycled water, if available, for landscape irrigation within all designated areas as allowed by state and local health codes. Further, Section 26 of the OWD ordinances state that it is the District's policy that reclaimed water shall be used "...whenever its use is financially and technically feasible, and consistent with legal requirements, preservation of public health, safety and welfare, and the environment." The use of recycled water in the Otay Ranch Village Seven project will comply with this requirement. All common area landscaping in the project will be irrigated with recycled water.

Use of recycled water does not reduce the irrigation demand for landscaping but more efficiently uses available water supplies by using potable water indoors and using recycled water for outdoor irrigation.

Measures Included in Project

Each of the selected water conservation measures included in the project is detailed below along with an estimate of the water savings associated with each.

Indoor Measures

Hot Water Pipe Insulation

Insulation of hot water pipes and separation of the hot and cold pipes to reduce heat exchange can reduce the amount of time a faucet will need to flow to produce hot water. The estimated water savings is 2,400 gallons per residential unit per year.

Pressure Reducing Valves

Installation of a pressure-reducing valve at the water service connection can maintain the pressure below 60 psi, reducing the volume of leakage that may be present and prevent excessive flow of water from all appliances and fixtures. The estimated water savings is 1,800 gallons per residential unit per year.

Water-Efficient Dishwashers

Dishwashers with water saving features such as water level sensors instead of timed fillers. The estimated water savings is 650 gallons per unit per year.

Outdoor Measures

The two property owners within the approved SPA boundary have selected different outdoor measures. McMillin (Neighborhoods R-1, R-5, R-6 and R-7 on Exhibit WC-2) has selected

Water-Efficient Landscaping

Guidelines for water-efficient landscaping are included in the City's Landscape Design Manual. Water efficient landscaping will be utilized on all developer installed landscaping, including the front yards of single family homes. This includes the use of drip irrigation where possible and restriction of sprinkler irrigation as recommended by the water purveyors. The estimated water savings by using water efficient landscaping is up to 50 percent of non-efficient landscaping. For a 2,100 square foot landscaped area, a saving of 12,000 gallons per year is estimated.

Otay Ranch Company (Neighborhood R-2 on Exhibit WC-2) has selected:

Evapotranspiration (ET) Controllers

Timed, fixed irrigation scheduling based on estimates of actual plant evapotranspiration rates.

Radio signal from a central control station or satellite transmits information to the controllers to operate the sprinklers for the appropriate length of time. Water savings are estimated to be 20,000 gallons per year per single family residential unit.

One Additional Measure

The two property owners have selected different additional measures as well. McMillin has selected:

Soil Moisture Sensors

Soil moisture sensors placed at two or more depths and at several locations in the landscape to help determine when the soil is dry enough to require irrigation. Alone, soil moisture sensors do not achieve water savings, except to avoid over watering and limit irrigation water waste.

Otay Ranch Company has selected:

Dual Flush Toilets

Provides option to flush with partial (0.8 gallon) flow of water or with a full (1.6 gallon) flow depending on need. It is estimated that a dual flush toilet can save 4,000 gallons of water per year

II.8.9 Water Conservation Estimated Savings

Based on the savings estimates detailed in the preceding section, the total water conservation estimate for the applicant's portion of the Otay Ranch Village Seven project is 0.029 million gallons per day, per Table 4 below.

Table 4
Total Water Conservation Estimate

Conservation Measure	Annual Estimated Savings/Unit		Conservation Estimate (gallons/year)
	SF Unit	MF Unit	
Hot Water Pipe Insulation (all)	2,400 g	2,400 g	2.890 million
Pressure Reducing Valve (all)	1,800 g	1,800 g	2.167 million
Water Efficient Dishwasher (all)	650 g	650 g	0.783 million
Water Efficient Landscaping (346 SFD/448 MF)	12,000 g	1,200 g	4.690 million
Evapotranspiration Controllers (410 SFD)	20,000 g	2,000 g	8.200 million
Soil Moisture Sensors (346 SFD/448 MF)	n/a	n/a	none
Dual Flush Toilets (410 SFD w/ 2 toilets ea.)	4,000 g/toilet	4,000 g/toilet	3.280 million
TOTAL	--	--	**22.010 million**
Average Daily Savings	--	--	**0.061 MGD**

II.8.10 Implementation Measures

The following water conservation measures will be implemented in the project as described in this Water Conservation Plan:

1. Hot Water Pipe Insulation
2. Pressure Reducing Valves
3. Water Efficient Dishwashers
4. Water Efficient Landscaping
5. Evapotranspiration Controllers
6. Soil Moisture Sensors
7. Dual Flush Toilets

Implementation of this Water Conservation Plan shall primarily be the responsibility of the Master Developers and individual site developers. The Master Developers will establish requirements and guidelines for site developers/builders. Alternate water conservation measures consistent with the Water Conservation Plan Guidelines may be substituted as approved by the Director of Planning and Building, at his/her sole discretion. The Master Developers will also install water efficient landscaping, approved by the City, in all developer installed landscape areas.

A substantial responsibility will also rest with the City of Chula Vista Planning and Building Department to ensure and enforce the provisions of this conservation plan. This department will review plan submittals and develop an internal program to ensure that water conservation measures are properly implemented in public areas, and approve planting and irrigation plans.

Mains and laterals for recycled water will be installed with the major road and infrastructure improvements. The provision of reclaimed water is the responsibility of the Otay Water District, which will also be responsible for enforcing water quality regulations. Use of recycled water for irrigation in open space and public park areas will be the responsibility of the City of Chula Vista while such use on school sites will be the responsibility of the appropriate school district.

II.8.11 Monitoring

In order to ensure that all provisions of this plan are met, the standard review of landscape and construction documents preformed by the City will include an evaluation of compliance with the provisions of this Water Conservation Plan. This approach will allow for a formal determination by the City that each of the required measures are implemented. Future discretionary or administrative actions with regard to development within the Otay Ranch Village Seven SPA (*e.g.*, tentative map, building or grading permit, *etc.*) may be utilized to address or ensure compliance with the prescribed water conservation measures.

References

Cinti Land Planning; Draft Otay Ranch Village Seven SPA Plan; June 2004.

City of Chula Vista; Water Conservation Plan Guidelines; May 27, 2003.

Metropolitan Water District of Southern California; Final Draft Regional Urban Water Management Plan. July 1990.

Willdan Associates and Bud Gray; Growth Management Program - City of Chula Vista. 1990.