OTAY RANCH FREEWAY COMMERCIAL SPA PLAN
SUPPLEMENTAL
PUBLIC FACILITIES FINANCE PLAN

May 16, 2019

Otay Ranch Freeway Commercial SPA Plan PFFP
Approved by:
Chula Vista City Council
Date: April 1, 2003 Resolution 2003-132

Otay Ranch Freeway Commercial SPA Plan Amendment
Supplemental PFFP
Approved by:
Chula Vista City Council
Date: September 14, 2004 Resolution 2004-300

Otay Ranch Freeway Commercial SPA Plan Amendment
Supplemental PFFP
Approved by:
Chula Vista City Council
Date: September 13, 2016, Resolution 2016-187

Otay Ranch Freeway Commercial SPA Plan Amendment
Supplemental PFFP
Approved by:
Chula Vista City Council
Date: June 18, 2019, Resolution 2019-123

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I. EXECUTIVE SUMMARY

This supplemental Public Facilities Finance Plan (PFFP) studies the proposed density increase on the Freeway Commercial North site and identifies all the backbone infrastructure improvements, public facilities, and administrative costs needed to serve the amended project. The purpose of the PFFP is to ensure that facilities necessary to serve the project site are appropriately funded and would be in place in time to meet project demands. The PFFP includes improvements to roadways, sewer, water, drainage, schools, parks, fire, police, emergency medical services and libraries. It also describes the costs and financing mechanisms that will be used to create these improvements in a timely manner.

The Freeway Commercial North, or FC-2, site is currently entitled as a transit-supportive mixed-use project with up to 600 Multi-Family Residential Units, 15,000 square feet of Commercial Retail, a 2-acre urban park and two hotels with a minimum of 300 rooms. Baldwin & Sons, the current developer of the FC-2 site, has proposed to add 300 multi-family units to the east portion of FC-2. This density increase would allow the developer to maximize land use potential within walking range of the Otay Ranch BRT stop, ensure transit-supportive densities near the BRT line, establish a compact walkable community by replacing surface parking with 5-level structured parking, and provide a more diverse mix of housing types in a fiscally sustainable manner.

The Supplemental 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 GDP. The preparation of the Supplemental PFFP is required in conjunction with the preparation of the SPA Plan Amendment to ensure that the phased development of the project is consistent with the overall goals and policies of the City's General Plan (GP), Growth Management Program, and the Otay Ranch 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 Supplemental PFFP meets the policy objectives of the Otay Ranch GDP.

This Supplemental PFFP is based upon the phasing and project information that has been presented in the FC-2 SPA Plan Amendment draft dated January 2019, and the supporting technical studies that have been submitted by the developer. These technical studies are referenced in subsequent sections of this Supplemental PFFP. This document begins by analyzing the existing demand for facilities based upon the demand from existing development and those projects with various entitlements through the year 2022, when the developer expects full build-out.

When specific thresholds are projected to be reached or exceeded based upon the analysis of the phased development of the FC-2 project, the Supplemental PFFP provides recommended mitigation necessary for the continued compliance with the Growth Management Program and Quality of Life threshold standards. The Supplemental PFFP 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 threshold standards.

A. Public Facility Cost and Fee Summary (Freeway Commercial North SPA)

The following discussion and table (Table A.1) identify and summarize the various facility costs associated with increasing residential density of the FC-2 mixed-use project by 300

dwelling units. 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 project does not require any off-site public street improvements. *Otay Ranch PA12 Trip Generation Review – Revised by Chen Ryan Associates, dated May 8, 2019,* concluded that the proposed density increase at the FC-2 mixed-use project would generate less daily and PM peak hour trips than those already approved under the 2002 EIR, however would generate 58 more trips in the AM peak hour. A focused traffic analysis was conducted and concluded that there will not be any significant traffic impacts associated with the 58 additional AM peak hour trips. Analysis was not conducted for the daily or PM peak as the proposed project would generate less than those in the 2002 EIR. Therefore, no offsite public street improvement projects are anticipated.

The estimated ETDIF for the entire FC-2 planned development (608 apartment units, 292 multifamily for sale units and two hotels with a total of 300 rooms), are $8,467,016. Funding alternatives for street improvements may be accomplished by one or more of the following:

- Payment of ETDIF.
- Construction of improvements by developer with DIF credits towards building permits.
- Financing through assessment districts or Community Facility Districts.
- Expenditure of available DIF account funds.
- Construction of improvements by other developers.
- Outside funding sources.

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 estimated fees for the Poggi Canyon Basin Fee and the Sewerage Participation Fee is $3,462,952.

The FC-2 Amendment project will trigger new fees for parks. The project will pay a Park Benefit Fees of up to $4,580,100 (equivalent to the Park Acquisition and Development (PAD) Fees for 300 multi-family units) to cover the impacts from the proposed new units. The Freeway Commercial project has been annexed into CFD 97-2, which is the open space preserve district. In addition, CFD 19M was formed to assess a special tax on both residential and non-residential properties to provide a funding mechanism for city open space maintenance obligations. CFD 07M is funding maintenance of the landscape along the northern boundary of the Freeway Commercial project adjacent to Olympic Parkway and a portion of Eastlake Parkway.

Capital Facilities for police, fire suppression system, civic center expansion, corporation yard, and other city public facilities, including libraries, will be funded, in part, from revenues generated from the payment of Public Facilities Development Impact Fees (PFDIF) at building permit issuance. These fee revenues total approximately $9,521,336 for the FC-2 Amendment.

Altogether, the City's estimated development impact fees by phase and facility for the FC-2 project total **$35,534,700** as shown on the following Table A.1.

Table A.1 Freeway Commercial Summary of Facilities			
Fee Program and Funding Source	**Total Fee Estimate**	**Timing**	**PFFP Section**
Eastern Transportation Development Impact Fee (ETDIF) Development Impact Fee (DIF)	$8,467,016	Pay prior to Final Inspection	IV.1.6 – Table C.3
Traffic Signal Fee Fee Exaction	$318,162	Pay at Building Permit Issuance	IV.1.6 – Table C.4
Otay Water District (OWD) Potable Water Capacity Fee Meter & Capacity Fees	Determined by OWD	Provide City Engineer OWD water availability letter and required improvements prior to approval of the Final Map.	IV.7
Otay Water District (OWD) Recycled Water Fee (if required) Meter & Capacity Fees	Determined by OWD		
Poggi Canyon Sewer & Drainage Basin Fee Development Impact Fee (DIF)	$212,169	Pay prior to Final Inspection	IV.8.9 – Table J.6
Sewer Capacity Charge Capital Improvement Project (CIP)	$3,250,783	Pay prior to Final Inspection	IV.8.9 – Table J.7
School Fees Community Facilities District (CFD)	Property Tax Levy	Provide documentation showing paid school fees prior to issuance of Building Permit	IV.4
Park Acquisition & Development Fees	$9,160,200	Commence construction prior to the issuance of the 300th residential building permit	IV.6.8 – Table H.5
Park Benefit Fee	$4,580,100	Pay prior to Final Inspection	IV.6.8 – Table H.5
Public Facilities Development Impact Fees (PFDIF):			
PFDIF - Recreation Facilities Development Impact Fee (DIF)	$1,230,300	Pay prior to Final Inspection	IV.6.9 – Table H.6
PFDIF - Library Development Impact Fee (DIF)	$1,620,900	Pay prior to Final Inspection	IV.5.6 – Table G.3
PFDIF - Fire Suppression System Development Impact Fee (DIF)	$1,052,160	Pay prior to Final Inspection	IV.3.6 – Table E.3
PFDIF - Police Facility Development Impact Fee (DIF)	$1,876,983	Pay prior to Final Inspection	IV.2.5 – Table D.3
PFDIF – Civic Center Expansion Development Impact Fee (DIF)	$2,735,824	Pay prior to Final Inspection	IV.II – Table L.1
PFDIF – Corp Yard Relocation Development Impact Fee (DIF)	$417,983	Pay prior to Final Inspection	IV.II – Table L.2
PFDIF – Program Administration Development Impact Fee (DIF)	$587,186	Pay prior to Final Inspection	IV.II – Table L.3
Total Estimated Fees	**$35,534,700**		

Note – Fees presented in this table are estimates only. In addition to the fees presented above, there are other building permits fees that are required, including a $45 sewer administration fee for each building permit issued as well as a $26.09 reserve fund fee assessed on each residential unit. Total reserve fund fees for this project are $23,481.

B. General Conditions for Supplemental PFFP

1. All development within the boundaries of the Supplemental PFFP for the Freeway Commercial North SPA Amendment 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 Supplemental PFFP.

2. All new development within the boundaries of the Freeway Commercial North SPA shall be required to pay development impact fees and other applicable fees, unless the developer has entered into a separate agreement with the City pursuant to the most recently adopted program by the City Council, and as amended from time to time.

3. Approval of this Supplemental PFFP does not constitute prior environmental review for projects within the boundaries of this Plan. All future projects within the boundaries of this Supplemental PFFP shall undergo environmental review as determined appropriate by the City of Chula Vista.

4. Approval of this Supplemental 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 Freeway Commercial North SPA Amendment shall undergo review in accordance with the Chula Vista Municipal Code. This Supplemental PFFP analyzes the maximum allowable development potential for planning purposes only. The approval of this plan does not guarantee specific development densities.

5. The facilities and phasing requirements identified in this Supplemental PFFP are based on the Freeway Commercial North SPA Plan Amendment, which assumes a mixed-use development on the northern district referred to as FC-2, approximately 38 acres. This site currently includes a 148-room hotel and is under development for multi-family residential. At buildout, the project will have up to 900 multi-family units, 15,000 square feet of ground-floor commercial in mixed-use format, and 300 hotel rooms.

II. INTRODUCTION:

This Supplemental PFFP identifies each improvement needed to service the Freeway Commercial North project, with the appropriate funding sources.

The implementing actions covered by the PFFP are:

- Use of Public Financing Mechanisms where applicable.
- Construction of major streets, sewer, water and drainage facilities.
- Internal subdivision improvements pursuant to the Subdivision Map Act.
- Provision of other public facilities.
- Maintenance of certain facilities such as open space areas and street medians.

II.1. Background:

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.

On April 1, 2003, the Chula Vista City Council adopted Resolution 2003-132, which approved the Otay Ranch Area 12 Freeway Commercial (FC) Sectional Planning Area (SPA) Plan including the Public Facilities Financing Plan. The Otay Ranch FC SPA project is located in the eastern portion of the Otay Ranch GDP within the northern one-third of Planning Area 12 (see Exhibit 1).

The FC SPA project area consists of approximately 120 acres within two districts, southern and northern. The southern, approximately 86-acre district is the FC-1 site that has been developed as the Otay Ranch Town Center Shopping Center, consisting of 867,000 square feet of Freeway Commercial uses.

The northern, approximately 38-acre district is the FC-2 site that is the subject of this supplemental PFFP. The FC-2 site was initially approved for 347,000 square feet of regional commercial uses but in 2015 it was rezoned by Resolution 2015-114 to a Mixed-Use district consisting of 300 hotel rooms, 600 multi-family units, a minimum of 15,000 square feet of commercial use in mixed-use format, and a 2-acre public park. The FC-2 site has an operating hotel on the northeast corner, current construction of multi-family on the west side and graded undeveloped land on the east side. The approved project also includes a Bus Rapid Transit (BRT) guideway running between FC-1 and FC-2 districts, and a BRT park-and-ride facility located in FC-1. Under the proposed SPA Plan Amendment which would allow an additional 300 multi-family units in FC-2, no changes to the FC-1 area are included. All proposed modifications would occur within the FC-2 portion of the site.

The environmental impacts of the FC SPA Plan were previously addressed in the *Final Environmental Impact Report for the Otay Ranch Freeway Commercial Sectional Planning Area 12*, *2003, City of Chula Vista* (EIR). In May 2015, the City Council approved the First Addendum to FEIR 02-04, the General Plan and Otay Ranch GDP Amendments to reflect land use changes from Freeway Commercial to Mixed-Use for the FC-2 site. In September 2016, the City Council approved the *Second Addendum to the EIR Otay Ranch Freeway Commercial Sectional Planning*

Area (SPA) Plan Planning Area 12. It provided more specific project detail for the FC-2 SPA Plan Amendment, Tentative Map, and Freeway Commercial North Master Precise Plan.

The proposed residential density increase requires an amendment to the Otay Ranch General Development Plan, Freeway Commercial SPA Plan and Freeway Commercial North Master Precise Plan.

II.2. Purpose

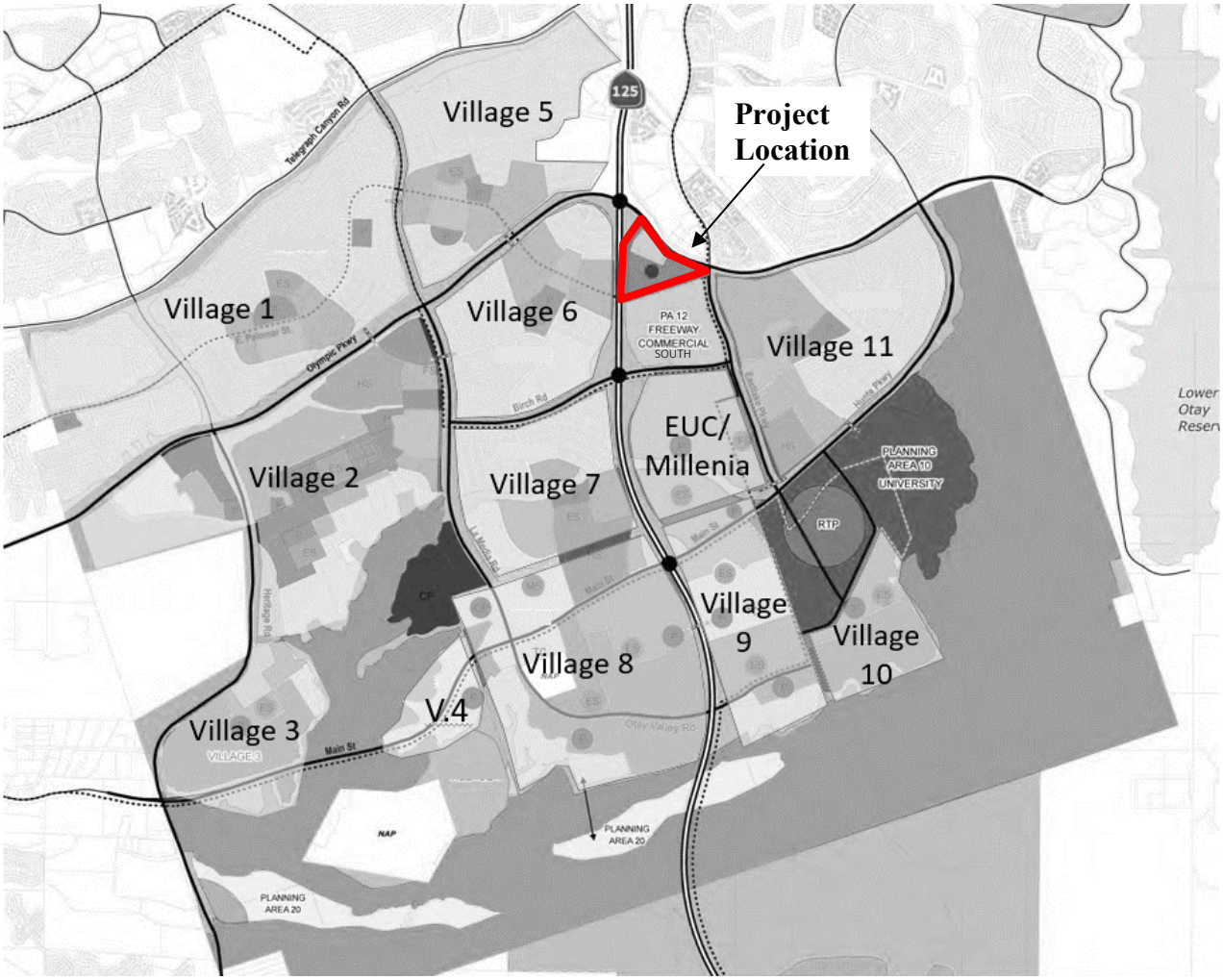
The purpose of this document is to study the impact of the 300 additional multi-family units and identify resources to ensure that adequate public facilities will be available to meet the projected needs of the development. This document supplements the original 2003 Otay Ranch Freeway Commercial SPA PFFP, as amended on September 13, 2016, and applies only to the Otay Ranch Freeway Commercial SPA Plan. Where this Supplemental PFFP conflicts with or requires more stringent standards than the approved Otay Ranch Freeway Commercial SPA PFFP, the requirements of this Supplemental PFFP shall apply. The purpose of all PFFPs in the City of Chula Vista is to implement the City's Growth Management Program and to meet the General Plan goals and objectives, specifically those of the Growth Management Element. The Growth Management Program ensures that development occurs only when the necessary public facilities and services exist or are provided concurrent with the demands of new development. The Growth Management Program requires a PFFP be prepared for every new development project which requires either SPA Plan or tentative map approval. Similarly, amendments to a SPA Plan require an amendment or a supplement to the PFFP.

In the City of Chula Vista, the PFFP is intended to ensure adequate levels of service are achieved for all public services and facilities impacted by a project. It is understood that assumed growth projections and related public facility needs are subject to a number of external factors, such as the local economy, the City's future land use approval decisions, etc. It is also understood that the funding sources specified herein may change due to financing programs available in the future or requirements of either state or federal law. It is intended for revisions to cost estimates and funding programs be handled as administrative revisions, whereas revisions to the facilities-driven growth phases are to be accomplished through an update process via an amendment to or a supplement to the PFFP.


Regional Vicinity
To Los Angeles
To Riverside
Oceanside
Vista
San Marcos
Carlsbad
Escondido
Cardiff by the Sea
Rancho Santa Fe
Del Mar
Poway
La Jolla
San Diego
El Cajon
La Mesa
Lemon Grove
Project Location
National City
Coronado
Chula Vista
Chula Vista City Limits
San Ysidro
Tijuana
MEXICO
SR-125
5
8
15
52
78
163
805
Freeway Commercial
OTAY RANCH
CITY OF CHULA VISTA
Not to Scale

Exhibit 1

Location/SPA Boundaries



CITY OF CHULA VISTA

Otay Valley Parcels
OTAY RANCH

Exhibit 2

Aerial Photograph

Source: Google Maps

Freeway Commercial SPA FC-1 and FC-2
Otay Ranch

Exhibit 3

II.3. Assumptions

A. Purpose

The purpose of this section is to quantify how the FC-2 project 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 forecasts where and when residential development will take place. This forecast is updated annually and is referred to as the Annual Residential Growth Forecast. The 2018 forecast is summarized on Table A.5.

The specific factors that affect the development-phasing forecast include the status of development approvals, binding development agreements and specific road and intersection improvements. These components were reviewed as part of this supplemental PFFP in conjunction with the requirement to provide facilities and services, concurrent with the demand created by FC-2 to maintain compliance with the threshold standards.

The management of future growth includes increased coordination of activities between the various City departments as well as with both School Districts and the Water Districts that serve the City of Chula Vista. The Annual Residential Growth Forecast is a component of the City of Chula Vista's Growth Management Program. The Development Services Department provides annual residential growth forecasts for 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 Growth Management Oversight Commission (GMOC).

For the purposes of projecting facility demands for the Otay Ranch FC-2 project a population coefficient of 2.61 persons per multi-family dwelling unit is used. This factor may be used in this PFFP for converting Equivalent Dwelling Units (EDUs) for the project. The coefficient has been confirmed for use in the PFFP by the Development Services Department. The FC-2 facility demands are based on the criteria of Title Three of the Municipal Code and the technical studies that are referenced by this document.

B. Key Assumptions

There are a number of key assumptions implicit to this supplemental PFFP Amendment. The assumptions play a major part in determining public facility needs, the timing of those needs and the staging of growth corresponding to the various facilities. Key land use and phasing assumptions can be summarized as follows:

1. The proposed project consists of adding 300 multi-family units to the approved plan. This action if approved by the City Council would permit a total of 900 mixed-use residential units in the FC-2 site.
2. The proposed density increase requires: an Otay Ranch General Development Plan amendment, Planning Area 12 Freeway Commercial SPA Amendment, and Freeway Commercial North Master Precise Plan amendment.
3. The SPA Plan Amendment and Planned Community District Regulations will regulate land use allocation and intensity of development for the proposed FC-2 project.
4. Infrastructure improvements may be completed over several phases. Build-out of all building sites may occur over a several-year period.

II.4. Threshold Standards:

Chapter 19.09 of the Chula Vista Municipal Code provides the requirements for the Chula Vista Growth Management Plan. Subsection 19.09.040 provides for eight city facilities and services threshold standard topics: police, fire and emergency medical services, libraries, parks and recreation, traffic, drainage, sewer, and fiscal. Subsection 19.09.050 provides for three external facilities and services threshold standard topics: air quality and climate protection, schools, and water. Each of the 11 threshold standards topics is stated in terms of a goal, objectives, one or more standards, and implementation measures. Table A.2 provides a summary for the eleven threshold standards for the eleven topics.

A. The Threshold Standards fall into three general categories:

1. *A performance standard measuring overall level of service* is established for police, fire and emergency medical services, sewers, drainage facilities, and traffic;
2. *A ratio of facilities to population* is established for park and recreation facilities, and libraries; and
3. *A qualitative standard* is established for schools, water, air quality and climate protection, and fiscal impacts.

Schools are provided by the Chula Vista Elementary School District and the Sweetwater Union High School District; water service is provided by Otay Water District; and sewer service is provided by the City of Chula Vista and has an agreement with the City of San Diego to treat the waste water. Finally, the air quality and climate protection and fiscal threshold standards do not relate to specific public services but are intended to determine whether growth is having an adverse impact on two other measures of quality of life: the air quality within the region and the city's overall fiscal health.

Table A.2 Chula Vista's Threshold Standards	
Air Quality and Climate Protection	The city shall pursue a greenhouse gas emissions reduction target consistent with appropriate city climate change and energy efficiency regulations in effect at the time of project application for SPA plan.
Fiscal	1. Fiscal Impact Analyses and Public Facilities Financing Plans, at the time they are adopted, shall ensure that new development generates sufficient revenue to offset the cost of providing municipal services and facilities to that development. 2. The City shall establish and maintain, at sufficient levels to ensure the timely delivery of infrastructure and services needed to support growth, consistent with the threshold standards, a Development Impact Fee, capital improvement funding, and other necessary funding programs or mechanisms.
Police	1. Priority 1 – Emergency Calls[1]. Properly equipped and staffed police units shall respond to at least 81% of Priority 1 calls within 7 minutes 30 seconds and shall maintain an average response time of 6 minutes or less for all Priority 1 calls (measured annually). 2. Priority 2 – Urgent Calls[2]. Respond to all Priority 2 calls within 12 minutes or less.
Fire and Emergency Medical Services	Emergency Response: Properly equipped and staffed fire and medical units shall respond to calls throughout the city in at least 7 minutes in at least 80% of the cases (measured annually). Note: For growth management purposes, response time includes dispatch, turnout and travel time to the building or site address.
Schools	The city shall annually provide the Chula Vista Elementary School District and the Sweetwater Union High School District with the city's annual 5-year residential growth forecast and request an evaluation of their ability to accommodate forecasted growth, both citywide and by subarea.
Library	The city shall not fall below the citywide ratio of 500 gross square feet (GSF) of library space, adequately equipped and staffed, per 1,000 population.
Parks & Recreation	Population ration: Three (3) acres of neighborhood and community parkland with appropriate facilities shall be provided per 1,000 residents east of Interstate 805.
Water	1. Adequate water supply must be available to serve new development. Therefore, developers shall provide the city with a service availability letter from the appropriate water district for each project. 2. The City shall annually provide the San Diego Water County Water Authority, the Sweetwater Authority, and the Otay Water District with the City's annual 5-year residential growth forecast and request that they provide an evaluation of their ability to accommodate forecasted growth.
Sewer	1. Existing and projected facility sewage flows and volumes shall not exceed city engineering standards for the current system and for budgeted improvements, as set forth in the Subdivision Manual. 2.The city shall annually ensure adequate contracted capacity in the San

	Diego Metropolitan Sewer Authority or other means sufficient to meet the projected needs of development.
Drainage	1. Storm water flows and volumes shall not exceed city engineering standards and shall comply with current local, state and federal regulations, as may be amended from time to time. 2. The GMOC shall annually review the performance of the city's storm drain system, with respect to the impacts of new development to determine its ability to meet the goal and objective for drainage.
Traffic	1. Arterial Level of Service (ALOS) for Nonurban Streets. Those traffic monitoring (TMP) roadway segments classified as other than urban streets in the Land Use and Transportation Element of the City's General Plan shall maintain LOS “C” or better as measured by observed average travel speed on those segments, except that during peak hours LOS “D” can occur for no more than two hours of the day. 2.Urban Street Level of Service (ULOS). Those TMP roadway segments classified as urban streets in the Land Use and Transportation Element of the City's General Plan shall maintain LOS “D” or better, as measured by observed or predicted average travel speed, except that during peak hours, LOS “E” can occur for no more than two hours per day.

B. The Threshold Standards are applied in three ways:

1. Many of the standards were used in the development and evaluation of the City's General Plan to ensure that quality-of-life objectives are met at the time of General Plan build-out during a 20- to-25-year period;
2. Certain standards are used in the evaluation of individual development projects to determine the possible impacts of the project and to apply appropriate conditions and requirements in order to mitigate those impacts; and
3. All of the standards are monitored by the Growth Management Oversight Commission (GMOC) on an annual basis to ensure that the cumulative impacts of new growth do not result in a deterioration of quality of life, as measured by these standards.

Threshold standards are used to identify when new or upgraded public facilities are needed to mitigate the impacts of new development. Building permits will not be issued 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. PFFP Boundaries:

The Growth Management ordinance requires that the City shall 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 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:

A. Service areas, drainage, sewer basins, and pressure zones that serve the Project;
B. Extent to which facilities or improvements are in place or available;
C. Ownership of property;
D. Project impact on public facilities relationships, especially the impact on the City's planned major circulation network;
E. Special district service territories;
F. Approved fire, drainage, sewer, or other facilities or improvement master plans.

The boundary of the Freeway Commercial Mixed-Use Project was established with the previously approved 2016 SPA Plan amendment using the above criteria. The Supplemental PFFP Amendment boundaries are congruent with the adopted GDP Area (see Exhibit 2) and the Freeway Commercial SPA Plan Area (See Site Utilization Plan, Exhibit 5). The currently proposed density increase does not affect the project boundary.

II.6. Development Summary

The Otay Ranch Freeway Commercial (FC) SPA project area is located in the eastern central portion of the Otay Ranch GDP. The area of the proposed SPA Amendment is consistent with the FC designated Planning Area 12 as identified in the Otay Ranch GDP (as amended). The FC SPA project area includes approximately 120-acres of gently rolling terrain and is bounded by the existing SR-125 freeway on the west, Olympic Parkway on the north, Eastlake Parkway on the east and Birch Road on the south (see Exhibit 2).

The FC SPA area consists of two separate parcels with a combined area of approximately 121.0 acres. The FC-1 district consists of approximately 86.2 acres of FC uses and the FC-2 district consists of approximately 38.31 acres of Mixed Use. Table A.3 below summarizes the land use and acreage for each district. The Site Utilization Plan (Exhibit 5) illustrates the location of each district.

Table A.3
Land Use

Parcel	Land Use	Gross Acreage[1]
FC-1	Freeway Commercial	86.2
FC-2	Mixed-Use	38.31
Subtotal:		**124.51**

Access to the site will be provided via Town Center Drive, a north-south road, which bisects the FC-2 site. Town Center Drive intersects with Olympic Parkway, which borders the FC SPA area on the north. Town Center Drive terminates at the FC-1 site. The existing SR-125 borders the FC SPA area on the west. Freeway interchanges exist at SR-125 at both Birch Road and Olympic Parkway. Birch Road borders the FC SPA area on the south. Eastlake Parkway borders the FC SPA area on the east.

The Freeway Commercial SPA Amendment dated January 2019 proposes to modify the FC-2 district only. If approved, this modification will allow up to 900 units of high-density residential in the mixed-use land use designation category with a density range of 20 to 34 units per acre.

[1] Final Map No. 16291

II.7. Project Phasing:

A. FC-2 Phasing

Several phases of development are envisioned to complete the required infrastructure improvements. A summary of the infrastructure phasing is provided in the following table.

Table A.4
Otay Ranch FC-2 Phasing Plan Summary

Facility	Fee Program and Funding Source	Triggers
Traffic	Eastern Transportation Development Impact Fee (ETDIF) Development Impact Fee (DIF)	ETDIF streets will be constructed by Developer (receiving ETDIF credits). Non-ETDIF streets are developer exaction. Pay ETDIF prior to Final Inspection.
Traffic Signal	Traffic Signal Fee Fee Exaction	Pay at Building Permit Issuance.
Potable and Recycled Water	Otay Water District (OWD) Potable Water Capacity Fee Meter & Capacity Fees	Provide City Engineer OWD water availability letter and required improvements prior to approval of the Final Map. Improvements constructed per OWD and SAMP.
	Otay Water District (OWD) Recycled Water Fee (if required) Meter & Capacity Fees	
Storm Drain	Poggi Canyon Sewer & Drainage Basin Fee Development Impact Fee (DIF)	Pay prior to Final Inspection.
	Storm Drain Improvements Fee Exaction	Concurrent with grading permit. Connect to existing drainage system.
Sewer	Sewer Improvements Fee Exaction	Concurrent with phasing. Connect to existing sewer system. Pay sewer capacity fees prior to final inspection.
Schools	No specific facility tied to school fees Community Facilities District (CFD)	Residential fees paid through CFD. Non-residential statutory fees paid prior to issuance of Building Permit.
Parks	Park Acquisition & Development Fees In-Lieu Fees	Park dedication & construction. Prior to 530th residential building permit. Pay park acquisition and development fees prior to Final Inspection.
	Public Facilities Development Impact Fees (PFDIF):	
Recreation	PFDIF - Recreation Facilities Development Impact Fee (DIF)	Pay prior to Final Inspection.
Library	PFDIF - Library Development Impact Fee (DIF)	Pay prior to Final Inspection.
Fire Suppression System	PFDIF - Fire Suppression System Development Impact Fee (DIF)	Pay prior to Final Inspection.
Police	PFDIF - Police Facility Development Impact Fee (DIF)	Pay prior to Final Inspection.
Civic Center Expansion	PFDIF – Civic Center Expansion Development Impact Fee (DIF)	Pay prior to Final Inspection.
Corp Yard Relocation	PFDIF – Corp Yard Relocation Development Impact Fee (DIF)	Pay prior to Final Inspection.
Program Administration	PFDIF – Program Administration Development Impact Fee (DIF)	Pay prior to Final Inspection.

The development of the Otay Ranch Freeway Commercial North SPA will be completed in four non-sequential phases. Construction of one of the hotels occurred before development of the residential and mixed-use parcels began. The Conceptual Phasing Plan (Exhibit 4) reflects anticipated market demand for commercial and residential development within the Planning Area. Exhibit 5A illustrates the project Conceptual Development Plan.

Sequential phasing is frequently inaccurate because of unforeseen market changes or regulatory constraints. Therefore, the Freeway Commercial North SPA PFFP permits non-sequential phasing by imposing specific facilities requirements for each phase to ensure that new development is adequately served, and City threshold standards are met. Construction of the on-site Village Entry street from Olympic Parkway, which serves both ownerships/parcels, shall be phased according to the provisions of the PFFP.

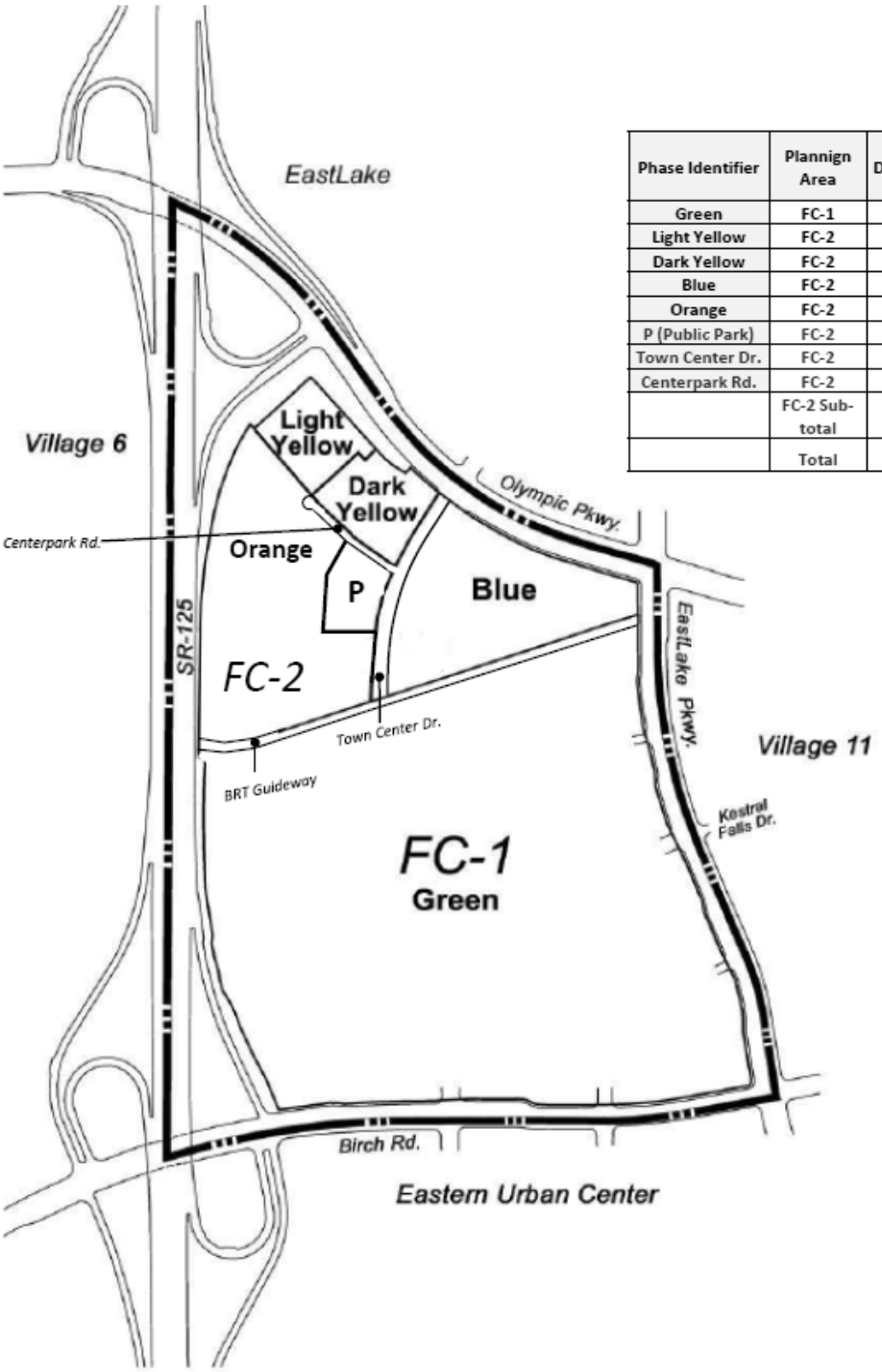
B. Eastern Chula Vista Growth Forecast

A summary of the Eastern Chula Vista development-phasing forecast is shown in Table A.5. The table presents an estimate of the amount of development activity anticipated annually from 2017 to 2022. The number of dwelling units forecasted annually is approximately 1,287 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.

Phasing

Proposed

Phase Identifier	Plannign Area	Net Development Acres	Interior Streets, Park & Buffers	Gross Area
Green	**FC-1**	**81.30**	**4.90**	**86.20**
Light Yellow	**FC-2**	3.30	1.47	3.30
Dark Yellow	**FC-2**	2.80	0.00	2.80
Blue	**FC-2**	10.36	0.00	10.36
Orange	**FC-2**	13.84	1.64	15.48
P (Public Park)	FC-2	2.00	0.00	2.00
Town Center Dr.	FC-2	2.40	0.00	2.40
Centerpark Rd.	FC-2	0.50	0.00	0.50
	FC-2 Sub-total	35.20	3.11	38.31
	Total	116.50	8.01	124.51



CITY OF CHULA VISTA

Freeway Commercial

OTAY RANCH

Exhibit 4

Table A.5
City of Chula Vista Five Year Residential Growth Forecast
2017 Through 2022

SEPTEMBER 2017 - DECEMBER 2022

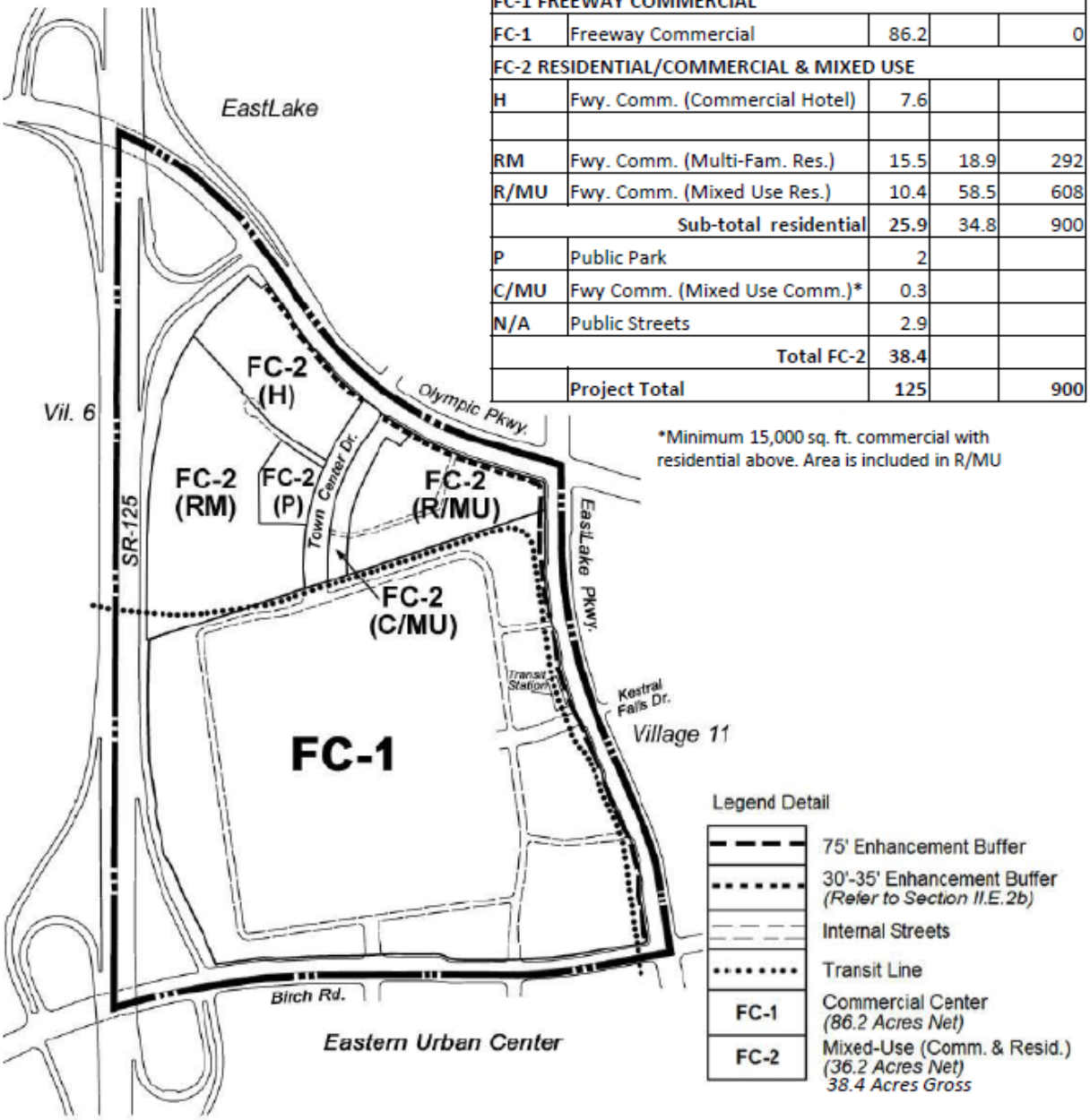
EASTERN PROJECTS	SEP - DEC 2017		JAN - DEC 2018		JAN - DEC 2019		JAN - DEC 2020		JAN - DEC 2021		JAN - DEC 2022		Five Years Forecast SEP 2017 - 2022	
	ISSUE*		ISSUE*		ISSUE*		ISSUE*		ISSUE*		ISSUE*		ISSUE*	
	SF	MF	SF	MF	SF	MF	SF	MF	SF	MF	SF	MF	SF	MF
OTAY RANCH														
Village 2 North - Baldwin & Sons	0	0	0	0	0	0	106	39	21	0	0	0	127	39
Village 2 North - JPB	0	0	35	0	0	0	0	0	0	0	0	0	35	0
Village 2 East - Baldwin & Sons	0	0	0	300	0	285	25	34	6	56	0	0	31	675
Village 2 South - Baldwin & Sons	50	55	156	93	91	48	0	373	0	0	0	0	297	569
Village 2 South - Cornerstone	38	24	105	12	51	0	0	0	0	0	0	0	194	36
Village 2 West - Baldwin & Sons	0	0	0	0	44	44	40	60	27	60	0	60	111	224
Village 2 West - HomeFed Village 2 West	0	0	0	0	0	0	30	0	32	0	0	0	62	0
Village 3 (Escaya) - HomeFed Otay Land II	179	167	274	254	211	30	149	0	0	0	0	0	813	451
Portion of Village 4 - Dansk	0	0	0	0	15	20	39	129	19	128	0	0	73	277
Villages 8, 9, & 10 - HomeFed Otay Land II	0	0	0	0	150	150	200	200	300	300	300	300	950	950
PA-12 Freeway Commercial - Baldwin & Sons	0	27	0	292	0	199	0	52	0	32	0	0	0	602
Ph 1: Millenia Lots 5 & 6 (Evo/Trio/Metro) - Meridian	0	46	0	108	0	0	0	0	0	0	0	0	0	154
Ph 1: Millenia Lot 9 (Element & Z) - Shea	0	27	0	41	0	34	0	0	0	0	0	0	0	102
Ph 2: Millenia Lots 4, 5 & 6 (Alexan) - Trammel Crow	0	309	0	0	0	0	0	0	0	0	0	0	0	309
Ph 2: Millenia Lots 7 & 8 (Genesis) - Meridian	0	0	0	102	0	0	0	0	0	0	0	0	0	102
Ph 2: Millenia Lot 14 (Skylar) - KB Homes	11	0	52	0	16	0	0	0	0	0	0	0	79	0
Ph 2: Millenia Lot 17 - CalAtlantic	0	0	0	40	0	38	0	0	0	0	0	0	0	78
OTAY RANCH SUB-TOTAL	278	655	622	1,242	578	848	589	887	405	576	300	360	2,772	4,568
Bonita Ridge Estates	0	14	0	0	0	0	0	0	0	0	0	0	0	14
Bella Lago Vista Del Cielo - Shea Homes	14	0	14	0	15	0	0	0	0	0	0	0	43	0
SUB-TOTAL	292	669	636	1,242	593	848	589	887	405	576	300	360	2,815	4,582
TOTAL UNITS	961		1,878		1,441		1,476		981		660		7,397	
											Annual Average 2018-2022:		1,287	

Source: City of Chula Vista 2017 Annual Residential Growth Forecast

Site Utilization Plan

Symbol	Land Use	Acres	DU/Ac	Max Dus
FC-1 FREEWAY COMMERCIAL				
FC-1	Freeway Commercial	86.2		0
FC-2 RESIDENTIAL/COMMERCIAL & MIXED USE				
H	Fwy. Comm. (Commercial Hotel)	7.6		
RM	Fwy. Comm. (Multi-Fam. Res.)	15.5	18.9	292
R/MU	Fwy. Comm. (Mixed Use Res.)	10.4	58.5	608
	Sub-total residential	25.9	34.8	900
P	Public Park	2		
C/MU	Fwy Comm. (Mixed Use Comm.)*	0.3		
N/A	Public Streets	2.9		
	Total FC-2	38.4		
	Project Total	125		900

*Minimum 15,000 sq. ft. commercial with residential above. Area is included in R/MU



CITY OF CHULA VISTA

Freeway Commercial

OTAY RANCH

Exhibit 5

Conceptual Site Plan
FC-2

Freeway Commercial

CITY OF CHULA VISTA

OTAY RANCH

0 200 400 600

9/1/2018

Exhibit 5A

II.8. Development Impact Fees

A. Transportation

The current Transportation Development Impact Fees Ordinance sets forth the calculation of development impact fees. The ETDIF is assessed at a rate of $1,455 per daily trip, and this rate is indexed annually on October 1. Table A.6 presents example ETDIF for a range of typical land uses based on traffic generation and the rate of $1,455 per trip. ETDIF for development proposals are assessed by the City of Chula Vista staff based on specific information on land use type and intensity.

Table A.6
ETDIF Rates for Typical Land Uses[2]

Land Use Classification	Development Intensity	ETDIF Rate
Residential (Low)	0-6 DUs/Acre	$14,550 per DU
Residential (Med.)	6.1-20 DUs/Acre	$11,640 per DU
Residential (High)	>20 DUs/Acre	$8,730 per DU
Senior housing	.8 DUs/Acre	$5,820 per DU
Residential mixed use	0.4 DUs/Acre (>18 DU/Acre)	$5,820 per DU
Commercial mixed use	16 EDUs/20 KSF	$232,800 per 20,000 sq. ft.
General Commercial	16 EDUs/Acre (<5 stories)	$232,800 per Acre
Regional Commercial	11 EDUs/Acre (>800 KSF)	$160,050 per Acre
Industrial	9 EDUs/ Acre	$130,950 per Acre

[2] TDIF Fees based on Form 5509 dated 10/1/18. Actual fee may be different, please verify with the City of Chula Vista at the time of building permit.

B. Public Facilities

The Public Facilities Development Impact Fee (PFDIF) was annually indexed by the City on October 1, 2018. Park fee increases were effective October 7, 2018. Current applicable fees for multi-family residential is $10,337/unit and general commercial (including office) development is $33,729/acre. The PFDIF amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the project. The calculations of the PFDIF due for each facility are addressed in the following sections of this report. Table A.7 provides a break-down of what facilities the fee funds.

Table A.7[3]
Public Facilities Estimated DIF Fee Components

Component	Single Family /DU	Multi-Family /DU	Commercial /Acre	Industrial /Acre
Civic Center Expansion	$3,133	$2,968	$9,997	$3,159
Police Facility	$1,873	$2,022	$8,846	$1,907
Corp Yard Relocation	$502	$403	$8,552	$4,028
Libraries	$1,801	$1,801	$0	$0
Fire Suppression System	$1,583	$1,139	$4,186	$833
Program Administration	$673	$637	$2,148	$679
Recreation Facilities (residential only)	$1,367	$1,367	$0	$0
Total per Residential Unit	**$10,932**	**$10,337**		
Total per Com'l/Ind. Acre			**$33,729**	**$10,606**

The calculations of the PFDIF due for each facility are addressed in the following sections of this report.

[3] DIF Fees based on Form 5509 dated 10/1/18. Actual fee may be different, please verify with the City of Chula Vista at the time of building permit.

III. 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.1 highlights the level of analysis for each facility.

Table B.1
Level of Analysis

Facility	Citywide	East of I-805	Service Area	Special District
Traffic	✓	✓		
Police	✓			
Fire Suppression	✓		✓	
Schools				✓
Libraries	✓			
Parks & Recreation		✓		
Water			✓	✓
Sewer			✓	
Drainage			✓	
Air Quality	✓			
Civic Center	✓			
Corp. Yard	✓			
Fiscal	✓		✓	

Each subsection analyzes the impact of the Freeway Commercial Project 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.

IV. PUBLIC FACILITIES THRESHOLDS STANDARDS AND INFRASTRUCTURE REQUIREMENTS

IV.1. TRAFFIC

IV.1.1 GMOC Threshold Standard

A. Arterial Level of Service (LOS) for Non-Urban Streets. Those Traffic Monitoring Program (TMP) roadway segments classified as other than Urban Streets in the Land Use and Transportation Element of the City's General Plan shall maintain LOS "C" or better as measured by observed average travel speed on those segments, except that during peak hours LOS "D" can occur for no more than two hours of the day.

B. Urban Street Level of Service. Those TMP roadway segments classified as Urban Streets in the Land Use and Transportation Element of the City's General Plan shall maintain LOS "D" or better, as measured by observed or predicted average travel speed, except that during peak hours LOS "E" can occur for no more than two hours per day.

Notes to Standards:

1. Arterial Segment: LOS measurements shall be for the average weekday peak hours, excluding seasonal and special circumstance variations.
2. The LOS measurement of arterial segments at freeway ramps shall be a growth management consideration in situations where proposed developments have a significant impact at interchanges.
3. Circulation improvements should be implemented prior to the anticipated deterioration of LOS below established standards.
4. The criteria for calculating arterial LOS and defining arterial lengths and classifications shall follow the procedures detailed in the most recent Highway Capacity Manual (HCM) and shall be confirmed by the City's traffic engineer.
5. Level of service values for arterial segments shall be based on the HCM.

IV.1.2 Service Analysis

The City of Chula Vista 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 City 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 Chula Vista General Plan's Land Use and Transportation Element. The Land Use and Transportation Element of the General Plan serves as the overall facility master plan.

When the land use changed from Commercial to Mixed-Use in the FC-2 portion of the project, an analysis was prepared entitled "Otay Ranch PA 12 Trip Generation Review – Revised" by Chen Ryan Associates, dated 2015. This report was the basis of the First Addendum to the EIR (FEIR). The FEIR concluded that the hotel and mixed-use land uses would generate less daily and peak hour trips than the entitled freeway commercial uses, there would be no significant traffic impacts associated with the land use change and thus no additional traffic analysis would be required. The updated Traffic Memorandum by Chen Ryan dated May 8, 2019 concluded that with the addition of 300 units, the project will still generate fewer trips than the original freeway commercial uses would generate. According to the May 8, 2019 memorandum (Chen Ryan 2019), the FC-2 site would generate approximately 7,681 daily trips, which is lower than the originally approved commercial land use trip generation of approximately 12,145 daily trips for the FC-2 site. As analyzed in the traffic memorandum, there is a reduction in PM peak hour trips (by 524 trips) and an increase in AM peak hour trips (by 58 trips). This project would not result in any new significant traffic impacts during the

Existing Plus Project or Horizon (Year 2030) conditions (Chen Ryan 2019).

IV.1.3 Trip Generation and Phasing

The following is a description of the proposed project trip generation calculations and proposed phasing.

A. Proposed Project

The 2019 Chen Ryan Analysis includes project trip generation for the project with the additional 300 DUs. See Table C.1 below. With a 15% transit and mixed-use reduction, the FC-2 project would generate approximately 7,681 daily trips including 544 and 691 trips during the AM and PM peak hours, respectively.

Table C.1
FC-2 Project Trip Generation

Land Use	Quantity	Rate	Daily Trips	AM Peak Hour	PM Peak Hour
PROPOSED PROJECT					
Apartment (density >20 du/acre)	608 units	6 / unit AM: 8% (2:8) PM: 9% (7:3)	3,648	292 (58-in / 234-out)	328 (230-in / 98-out)
Townhomes (density >20 du/acre)	292 units	6 / unit AM: 8% (2:8) PM: 9% (7:3)	1,752	140 (28-in / 112-out)	158 (110-in / 47-out)
Mixed-Use Commercial Center	15 KSF	110 / 1ksf AM: 3% (6:4) PM: 9% (5:5)	1,650	50 (30-in /20-out)	149 (75-in / 74-out)
Neighborhood Park	2 acres	5 / Acre AM: 4% (5:5) PM: 4% (5:5)	10	0 (0-in / 0-out)	1 (1-in / 0-out)
15% Transit and Mixed-Use Reduction*			-1,059	-72 (-17-in / -55-out)	-96 (-63-in / -33-out)
Sub-Total Mixed Use:			**6,001**	**410 (99-in / 311-out)**	**540 (354-in / 186-out)**
Business Hotel	300 rooms	7 / room AM: 8% (4:6) PM: 9% (6:4)	2,100	168 (67-in / 101-out)	189 (113-in / 76-out)
10% Transit Reduction**			-210	-17 (-17-in / -10-out)	-19 (-11-in / -8-out)
10% Walk/Bike Mode-Share Reduction**			-210	-17 (-17-in / -10-out)	-19 (-11-in / -8-out)
Sub-Total Business Hotel:			**1,680**	**134 (53-in / 81-out)**	**151 (91-in / 60-out)**
Total:			**7,681**	**544 (152-in / 392-out)**	**691 (445-in / 246-out)**
ORIGINAL FREEWAY COMMERCIAL ENTITLEMENT/ FEIR 02-04					
Regional Commercial	347 KSF	35/1ksf	12,145	486 (340-in/146-out)	1,215 (607-in/608-out)
Proposed Project vs. Approved EIR Trip Generation:			**-4,464**	**+58 (-188-in / 246 out)**	**-524 (-162 / -362)**

Notes:
*Per SANDAG's Guide to Vehicular Traffic Generation Rates for the San Diego Region.
**10% Transit Reduction and 10% Walk/Bike Mode-Share Reduction for Business Hotel Trips were obtained from the Ayres Hotel Trip Generation Memo by LLG (March 20, 2017), which was approved by City of Chula Vista.

Exhibit 6 indicates the project has three access points along Olympic Parkway, two on the north (Town Center Drive and Promenade St.) and one on the south (Town Center Drive). These accesses and driveways are as follows:

1. Town Center Dr. / Olympic Parkway – a signalized full access intersection.
2. Town Center Dr./ Ring Road - a signalized T-Intersection.
3. Centerpark Rd. / Town Center Dr. - One-Way Stop Control.
4. Promenade St. / Town Center Dr. – a signalized 4-way intersection.
5. Promenade St. / Olympic Parkway - Right-in/Right out

The Chen Ryan Analysis includes a projection of the project trip distribution patterns associated with the FC-2 project. See the Chen Ryan Analysis for the details of the trip distribution analysis.

B. Project Phasing

Section 19.09.130 Public Facilities Financing Plan (PFFP) Amendment of the Growth Management ordinance requires that if the Development Services Director determines that facilities or improvements within a PFFP are inadequate to accommodate any further development within that area the development shall cease or be metered until a remedy is implemented. If the Development Services Director 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.

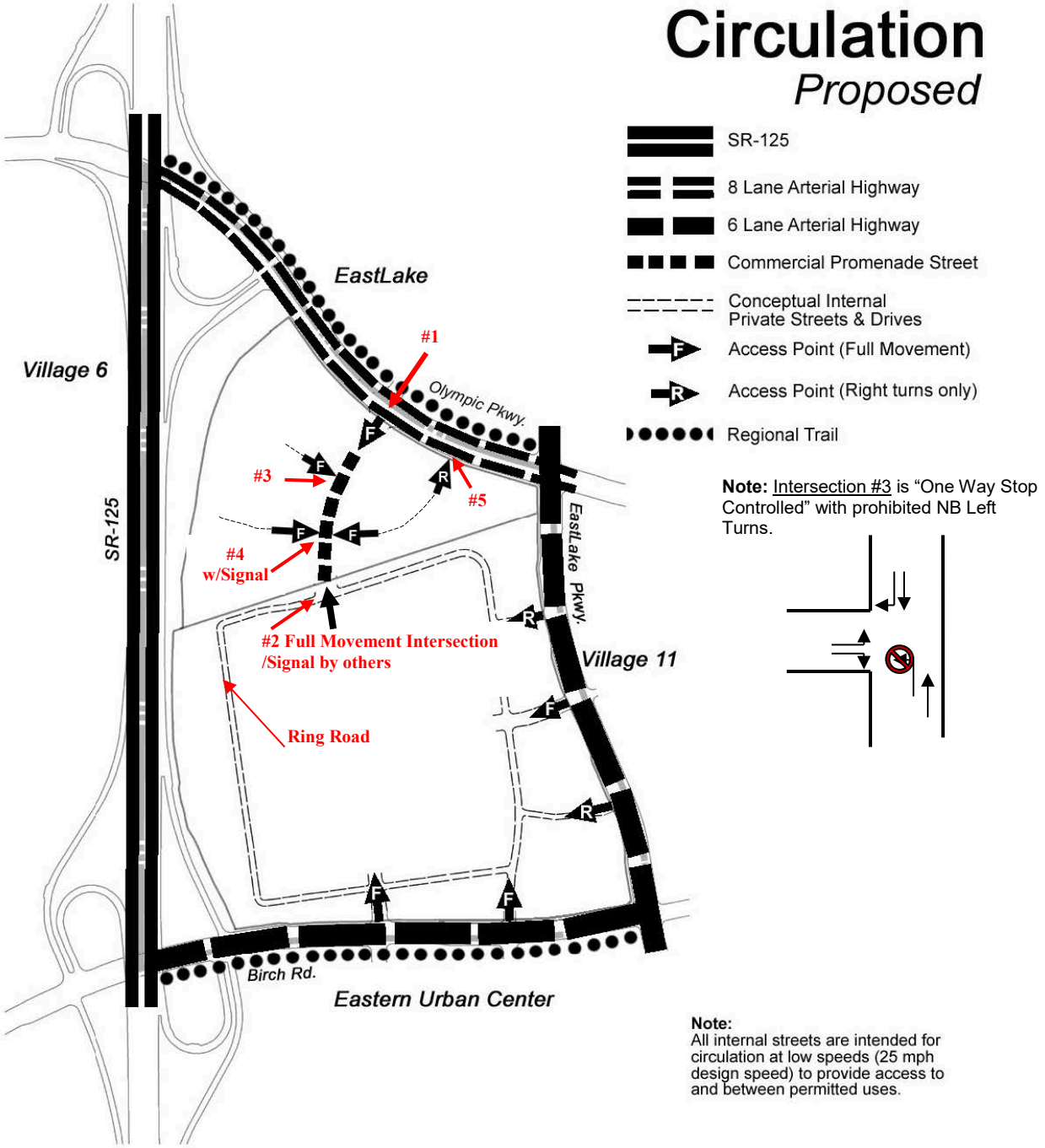
IV.1.4 Traffic Operations

Table C.2 below indicates that both intersections of Town Center Drive / Olympic Parkway and Town Center Drive / Ring Road would continue to operate at acceptable Level of Service (LOS) D or better with addition of the project traffic. All three proposed project driveways would operate at acceptable LOS D or better under Existing Plus Project conditions. The addition of project traffic would not result in any significant traffic impact within the project study area.

Table C.2
Peak Hour Intersection LOS Results - Existing Plus Project

Intersection	Traffic Control	AM Peak Hour		PM Peak Hour		Delay w/o Project (sec)	LOS w/o Project AM/PM	Project % of Entering Volume (>5%)	Significant Impact
		Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS				
1. Town Center Dr. / Olympic Parkway	Signal	40.8	D	54.8	D	31.8 / 53.6	C/D	11.9% / 10.8%	No
2. Town Center Dr./ Ring Road	Signal	10.9	B	17.2	B	12.4 / 28.1	B/C	23.6% / 7.8%	No
3. Centerpark Rd. / Town Center Dr.	One-Way Stop Control*	12.7	B	27.6	D	NA	NA	69.4% / 33.7%	No
4. Promenade St. / Town Center Dr.	Signal	8.9	A	10.8	B	NA	NA	65.7% / 29.3%	No
5. Promenade St. / Olympic Prkwy	Right-in/Right out*	13.9	B	20.8	C	NA	NA	8.4% / 11.3%	No

Notes:
*Indicates one or two-way stop-controlled intersections, the delay shown is the worst delay experienced by any of the approaches.
NA = This scenario was not analyzed by Chen Ryan. *Source: Chen Ryan*



Freeway Commercial

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San Diego, CA (619) 223-7408

1/20/2016

Exhibit 6

The Chen Ryan Analysis indicates that the Year 2030 geometrics of the project are adequate to accommodate the projected ADT. The projected 2030 daily traffic volumes, including the amended FC-2 project, along Town Center Drive are as follows:

- Town Center Drive, north of the hotel driveway – 13,687 ADT;
- Town Center Drive, between the hotel driveway and apartment driveway – 11,766 ADT;
- Town Center Drive, south of the apartment driveway – 9,078 ADT.

Based on these forecast traffic volumes, Town Center Drive – a Class II Collector (2-lanes with a raised median and left-turn pocket) – which has a capacity of 15,000 ADT would be sufficient to accommodate the project traffic.

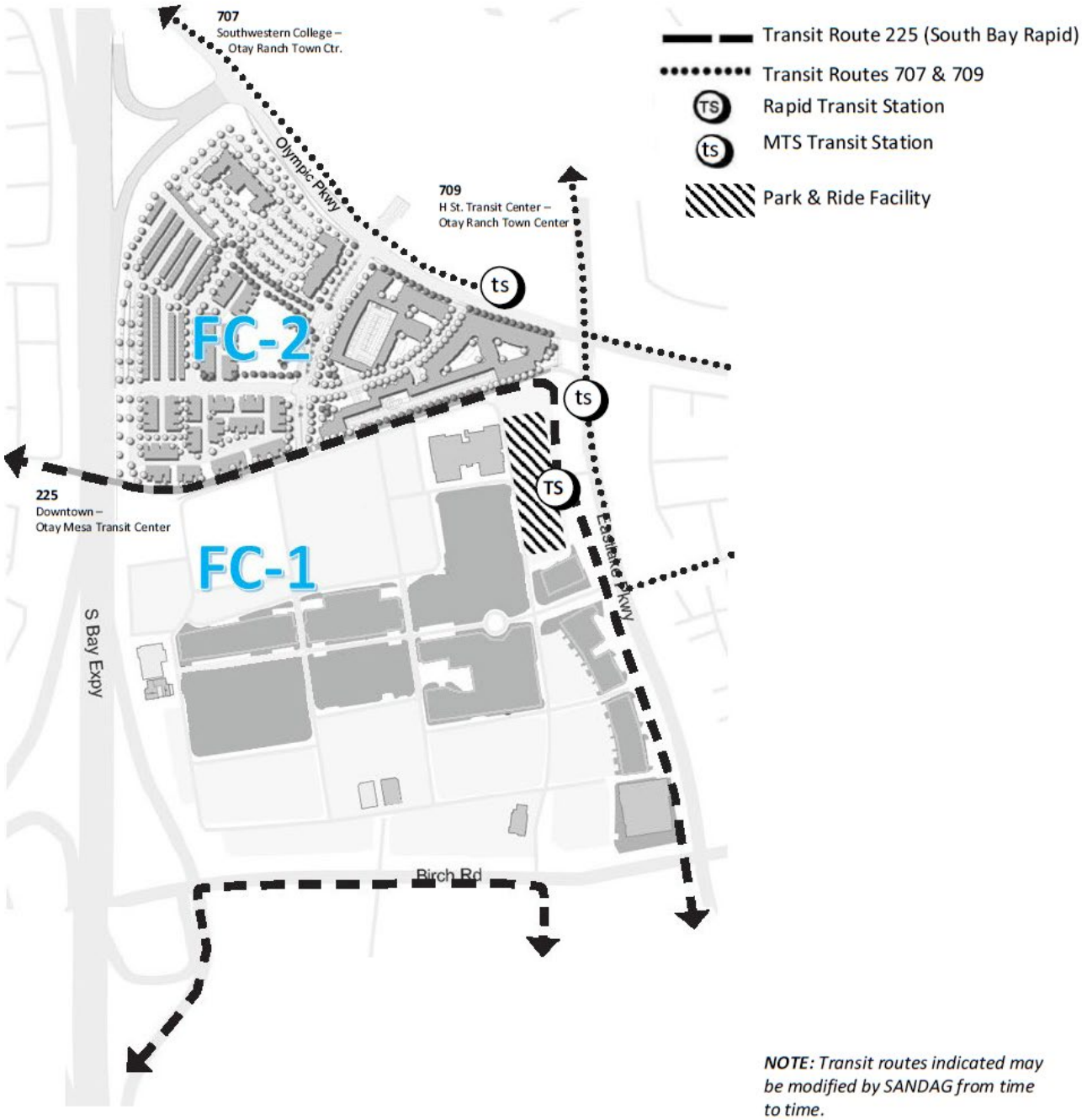
The Chen Ryan Analysis concludes that:

- Town Center Drive should be classified as a Class II Collector to accommodate the future traffic on Town Center Drive.
- The main signalized project driveway should be located at a minimum 260 feet (60 feet taper assumed) south of the Town Center Drive / Olympic Parkway intersection, and at a minimum 160 feet (60 feet taper assumed) north of the Town Center Drive / Ring Road intersection.

IV.1.5 Transit

The Otay Ranch Freeway Commercial site is served by the Metropolitan Transit System. Routes 703, 707 and 709 provide transit service along FC-2's frontage on Olympic Parkway. The San Diego Association of Governments (SANDAG) is administering the South Bay Bus Rapid Transit (BRT) project to implement high speed bus transit service between a proposed Intermodal Transportation Center (ITC) at the Otay Mesa International Border Crossing Port of Entry (POE) in the City of San Diego, the Otay Ranch communities in Eastern Chula Vista, and downtown San Diego, a distance of approximately 21.6 miles. Construction of BRT guideway infrastructure began in 2016 and regular service began in January 2019.

Transit



NOTE: *Transit routes indicated may be modified by SANDAG from time to time.*

CITY OF CHULA VISTA

Freeway Commercial

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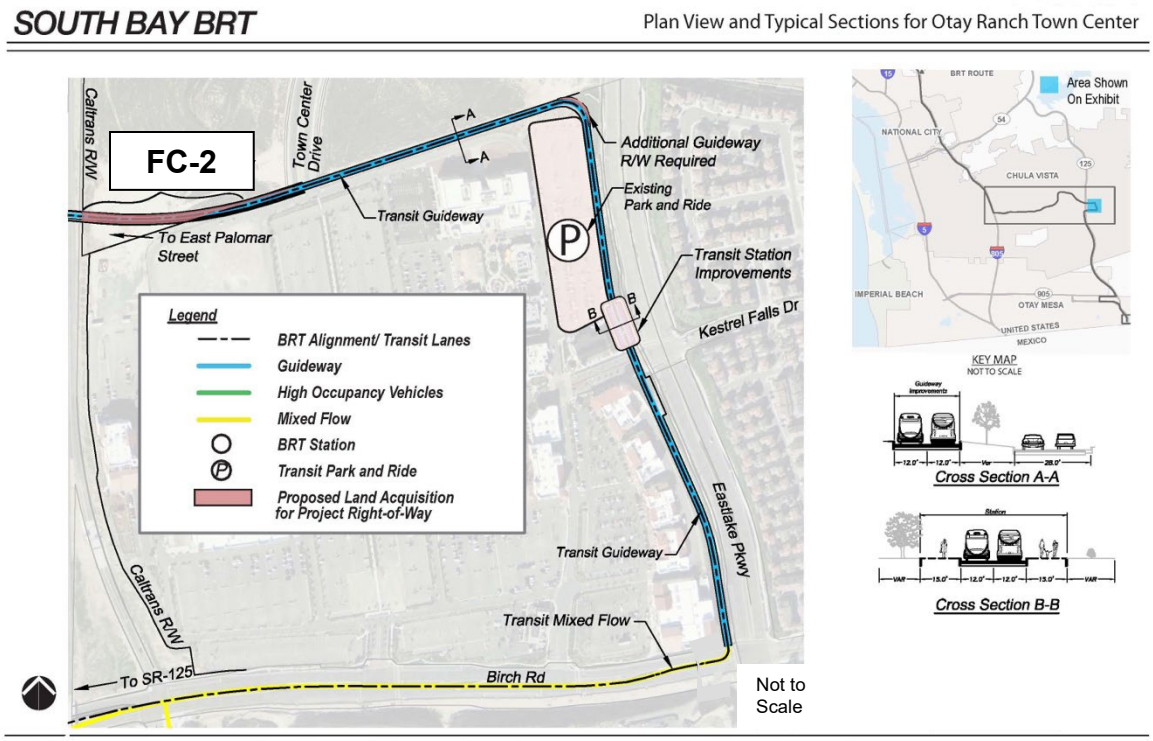
3/26/19

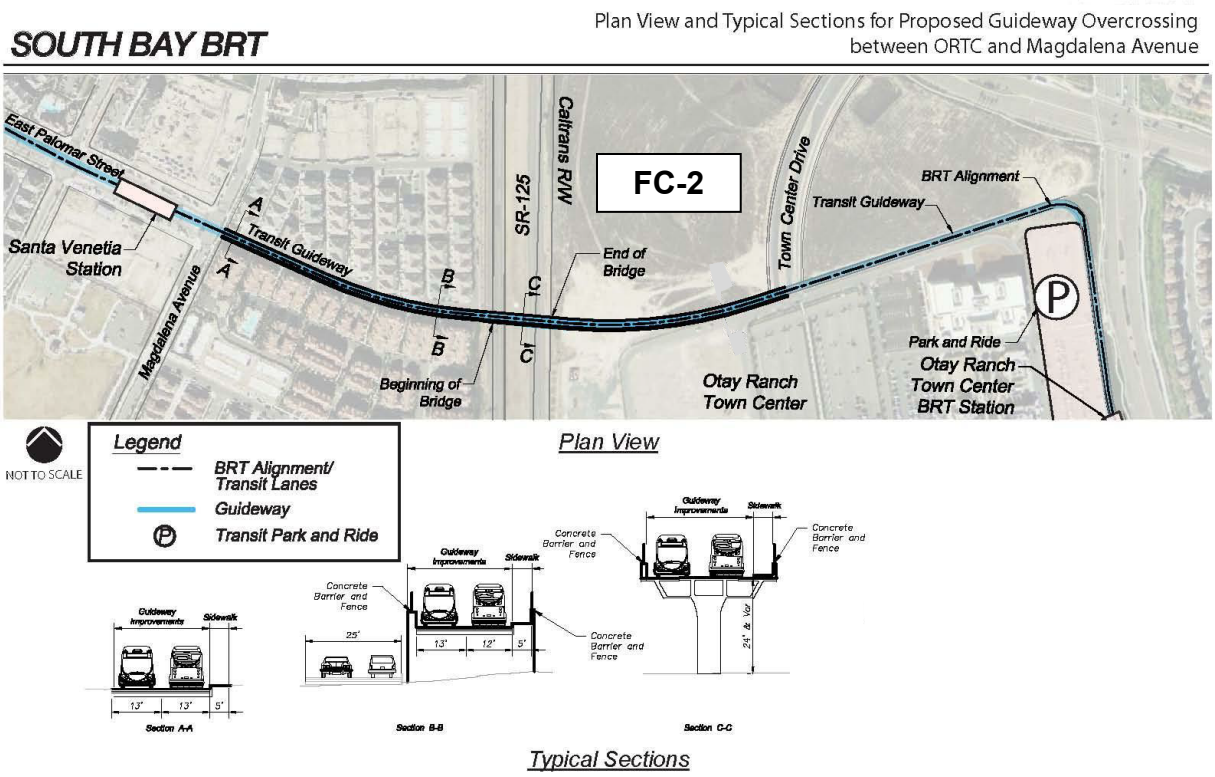
Exhibit 7



BRT guideway: from the FC-2 site, the guideway crosses over SR-125 via a guideway and pedestrian bridge.

Source: SANDAG

Exhibit 8



Source: SANDAG

Exhibit 9

IV.1.6 Bicycle Routes & Pedestrian Trails

Off-street trail routes that connect to the community-wide system of Otay Ranch as well as the City's regional system are included as components of the perimeter arterials of the FC-2 Project. The proposed Pedestrian Circulation system, based on the current site plan for parcel FC-2, is illustrated in Exhibit 10. Bicycles will share the traffic lanes with motor vehicles on the internal streets due to the low (25 mph) speed limit.

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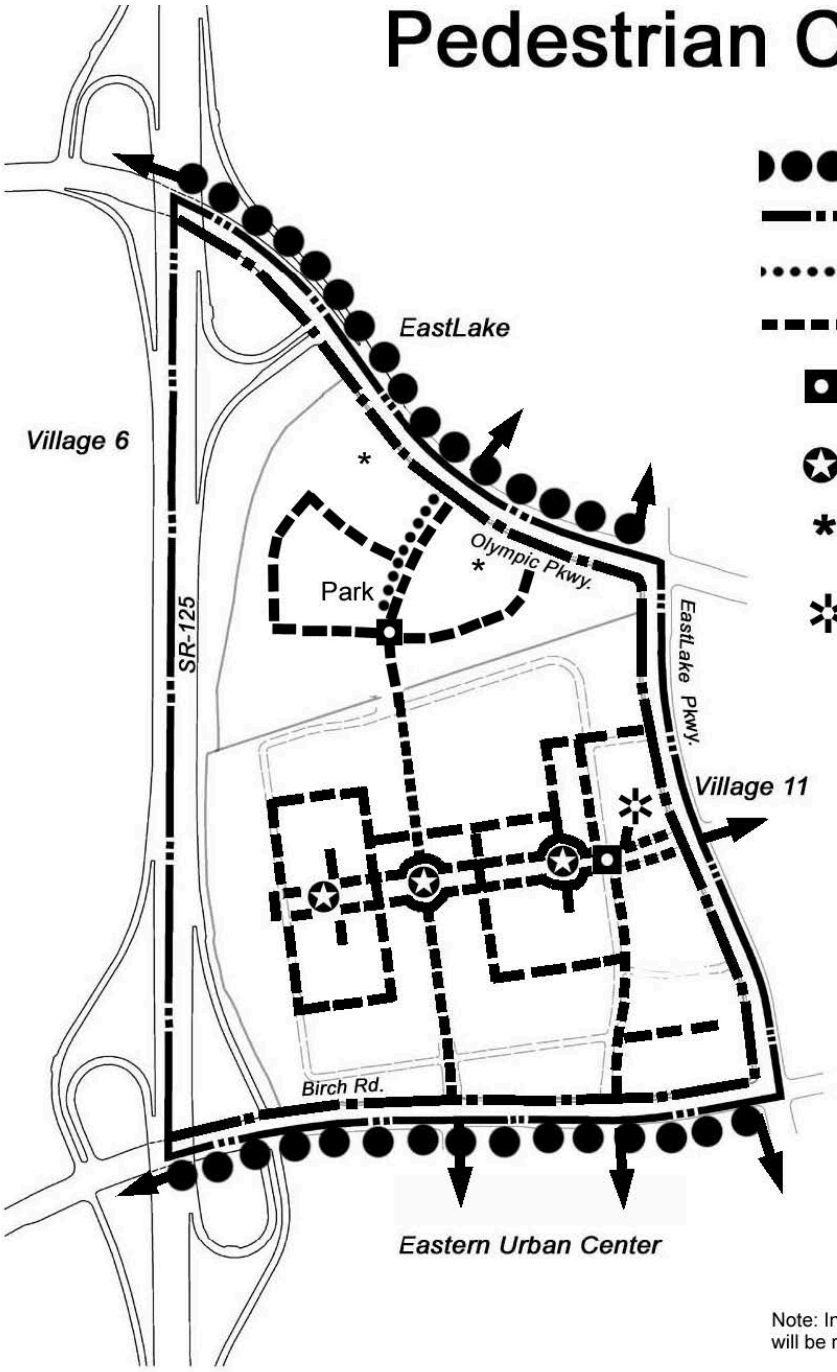
Pedestrian Circulation
Proposed



- Regional Trail
- External Pedestrian Connections (See Sections)
- Promenade Walk
- Internal Connections
- Enhanced Paving Intersection
- Node with Pedestrian Enhanced features
- * Internal connections to be determined by Master Precise Plan.
- Transit Station

Note: Internal circulation is conceptual and will be refined during the site planning process.

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1/19/2016

Exhibit 10

IV.1.6 Cost & Financing Traffic Improvements

A. Street Improvements

The FC-2 project will improve Town Center Drive and provide signalization improvements, as required, during the first phase of development.

B. Transportation Development Impact Fee

The Freeway Commercial project is within the boundaries of the ETDIF program and, as such, the project is subject to the payment of the fees at the rates in effect at the time of payment.

The ETDIF that set the fee was adopted by City Council Ordinance 2802 on November 30, 1999. This fee is adjusted on October 1st of each year automatically without further council action. The amount is also subject to change as the code is amended from time to time. In the City's Master Fee Schedule Medium Density Residential Developments have a 6.1 to 20 DU/Acre density. Medium Density Residential are charged $11,640/EDU. High Residential Developments have a 20.1 or higher DU/Acre density. High Density Residential is charged $8,730/EDU. Mixed Use Residential is charged $5,820/EDU. Commercial Mixed Use is charged at the rate of $232,800 per 20,000 square feet. Hotel ETDIF is based on 4.62 trips per room at a rate of $1,455 ($14,550/10 trips). The total number of estimated ETDIF by phase for FC-2 project is presented in Table C.3.

Table C.3
FC-2 SPA Amendment
Estimated ETDIF[1]

Product Type	DU	Fee/DU	Ac.	Fee/ 20K Sq. Ft.	Trips per Room	Trip Charge Fee	Total Fees
MF >20 DU/ac	212	$8,730					$1,850,760
MF 6.1 – 20 DU/acres	80	$11,640					$931,200
MU >20 DU/ac	608	$5,820					$3,538,560
Commercial MU			0.34	$232,800			$174,600
General[2] Commercial – Hotel 1					4.62 Trips[3] 148 Rooms	Rate used $1,354.10/trip	$950,137
General Commercial – Hotel 2					4.62 Trips[3] 152 Rooms	$1,455/trip	$1,021,759
Total	900		0.34				$8,467,016

[1] Estimated ETDIF is based on the Revised October 1, 2018, City of Chula Vista Development Checklist for Municipal Code Requirements (Form 5509) and is subject to annual adjustments. Actual ETDIF may be different.
[2] ETDIF for the hotel was deferred. The ETDIF totaled $925,879.42 but incurred a 2% interest per annum for a total due and paid 1/15/19 in the amount of $950,137.46.
[3] Per Ayres Hotel Trip Generation Memo by LLG (Marc 20, 2017), which was approved by the City of Chula Vista staff.

C. Traffic Signal Fee

Future development within Freeway Commercial will be required to pay Traffic Signal Fees in accordance with Chula Vista Council Policy No. 478-01. The estimated total signal fee is calculated at $343,096 (see Table C.4).

Table C.4
FC-2 SPA Amendment Traffic Signal Fees[4]

Development Phase	DU or Sq. Ft.	Trips/DU or Sq. Ft.	Trips	Traffic Signal Fee @ $39.92/Trip
MU Residential > 20 du/ac	608 DUs	6/DU (Mixed Use-High)	3,648	$145,628
MU Commercial	15,000 Sq. Ft.	40/1,000 St. Ft.	600	$23,952
MF 6.1 – 20 du/ac	292 DUs	8/DU (Medium)	2,336	$93,253
Residence Inn Hotel	148 rooms	4.62/room	684	$27,305
Courtyard Hotel	152 rooms	4.62/room	702	$28,024
Total			**7,970**	**$318,162**

D. Non-DIF Streets and Signals

The FC-2 project 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.

IV.1.7 Threshold Compliance

A. Threshold compliance will continue to be monitored through the Chula Vista Traffic Monitoring Program.

B. The FC-2 Project shall be conditioned to pay ETDIF at the rate in effect at the time of payment and prior to final inspection.

C. The measures outlined in the Environmental Documentation are required to mitigate cumulative and direct project impacts.

D. The applicant shall comply with all the requirements of the Chen Ryan Analysis.

E. Prior to the first final map for the project, Applicant shall dedicate to the City any right-of-way as required by the City of Chula Vista for the BRT project.

F. Prior to the first building permit for the East Mixed-Use, a signal at Town Center Drive and Promenade St. shall be constructed as shown as #4 in Table C.2.

[4] Table is provided as an estimate only. Fees may change depending upon the actual number of square feet of buildings and multi-family units. Final square foot calculations and the actual number of residential units will be known at time building permits are applied for.

IV.2 POLICE

IV.2.1. Threshold Standard

A. Priority 1- Emergency Calls[5] - Properly equipped and staffed police units shall respond to at least 81% of Priority 1 calls within 7 minutes 30 seconds and shall maintain an average response time of 6 minutes or less for all Priority 1 calls (measured annually).

B. Priority 2 - Urgent Calls[6] - Properly equipped and staff police units shall respond to all Priority 2 calls within 12 minutes or less (measured annually).

Note: For growth management purposes, response time includes dispatch and travel time to the building or site address, otherwise referred to as "received to arrive."

IV.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 Police Priority 1 and Priority 2 threshold standards on May 28, 2002 with adoption of Ordinance 2860. On April 14, 2015, with adoption of Ordinance 3339, the City Council made additional amendments to the Priority 1 and Priority 2 threshold standards. 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.

IV.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.

IV.2.4. Existing Conditions

The Chula Vista Police Department (CVPD) provides law enforcement services to the area encompassing the project. The CVPD is located 315 Fourth Avenue in Chula Vista. This facility is expected to be adequate through the build-out of eastern Chula Vista. Currently, CVPD maintains a staff of approximately 223 sworn officers and approximately 89 civilian support personnel. FC-2 is within Police Patrol Beat 32 that is served by at least one Beat Officer per shift.

IV.2.5. Adequacy Analysis

With adoption of Ordinance 3339, the Police Priority 1 threshold standard was changed from 7 minutes to 7 minutes 30 seconds, with an average response time changed from 5

[5] Priority 1 - Emergency calls are life-threatening calls; felony in progress; probability of injury (crime or accident); robbery or panic alarms; urgent cover calls from officers. Response: Immediate response by two officers from any source or assignment, immediate response by paramedics/fire if injuries are believed to have occurred.

[6] Priority 2 - Urgent calls are misdemeanor in progress; possibility of injury; serious non-routine calls (domestic violence or other disturbances with potential for violence); burglar alarms. Response: Immediate response by one or more officers from clear units or those on interruptible activities (traffic, field interviews, etc.).

minutes 30 seconds to 6 minutes. The implementation of the new threshold standard included changing the reporting methodology by:

- Starting the clock at "received to arrive" rather than "route to arrive";
- Eliminating a "normalization" calculation that was created due to higher reporting times in eastern versus western Chula Vista;
- Adding false alarms to the call volume.

According to the GMOC's Fiscal Year 2017 Annual Report the response times for Priority 1 Calls for Service (CFS) were not met during the 2017 fiscal year (see Table D.1). The CVPD responded to 72.2% of Priority 1 emergency response calls within 7 minutes and 30 seconds, which is 8.8% below the threshold standard of 81 percent.

The Police Department has implemented PremierOne to help route calls for service more efficiently. The system went live summer 2017 and continues to be reviewed and adjusted.

Specific units are properly staffed; however, the actual unit-per-beat count is below the necessary levels to meet the demands of the community. The Police Department emphasizes that any population growth that is not supported by the correct level of sworn staff will negatively impact the level of service a police force can offer.

Current facilities, equipment and staff will not be able to accommodate forecasted growth in the next 12-18 months or 5 years.

Table D.1
Priority 1 – Emergency Calls or Services

Fiscal Year	Call Volume	% of Call Response w/in 7 Minutes 30 seconds (Threshold = 81%)	Average Response Time (Minutes) (Threshold = 6 minutes)
FY 2017	**765 of 65,672**	**72.2%**	**6:74**
FY 2016	742 of 67,048	71.0%	6:31
FY 2015	675 of 64,008	71.2%	6:49
FY 2014	711 of 65,645	73.6%	6:45
FY 2013	738 of 65,741	74.1%	6:42
FY 2012	726 of 64,386	72.8%	6:31
FY 2011	657 of 64,695	80.7%	6:03
FY 2002	1,539 of 71,859	80.0%	5:07
FY 1992	-	81.2%	4:54
FY 1990	-	87.6%	4:08

Source: GMOC 2017 Annual Report

The Priority 2 threshold standard was not met for the twentieth consecutive year. With an average response time of 13 minutes 53 seconds, the 12-minute threshold standard was missed, and was 3 seconds longer than last year.

As with the Priority 1 threshold standard, the Priority 2 threshold standard was amended in

2015 with adoption of Ordinance 3339. The Priority 2 "Average Response Time" was changed from 7 minutes 30 seconds to 12 minutes, and the "percentage of calls responded to within 7 minutes" portion of the threshold standard was eliminated. Implementation of the new Priority 2 threshold standard follows the same methodology used for the new Priority 1 threshold standard, including: 1) Starting the clock at "received to arrive" rather than "route to arrive"; 2) Eliminating a "normalization" calculation that was created due to higher reporting times in eastern versus western Chula Vista; and 3) Adding false alarms to the call volume.

Table D.2
Priority 2 – Urgent Calls or Services

Fiscal Year	Call Volume	Average Response Time (Minutes) Threshold = 12 minutes
FY 2017	**19,309 of 65,672**	**13:53**
FY 2016	19,288 of 67,048	13:50
FY 2015	17,976 of 64,008	13:50
FY 2014	17,817 of 65,645	13:36
FY 2013	18,505 of 65,741	13:44
FY 2012	22,121 of 64,386	14:20
FY 2011	21,500 of 64,695	12:52
FY 2002	22,199 of 71,859	10:04
FY 1992	--	6:30
FY 1990	--	6:15

Source: GMOC 2017 Annual Report

Current facilities, equipment and staff will not be able to accommodate forecasted growth in the next 12-18 months or 5 years.

IV.2.6. Financing Police Facilities

PFDIF was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2847. The PFDIF is adjusted every October 1st pursuant to Ordinance 3050, which was adopted by the City Council on November 7, 2006. The Police PFDIF Fee for Multi-Family Development is $2,022/unit (see Table A.7)[7]. The Police PFDIF for Commercial development is $8,846 per acre. This amount is subject to change as it is amended from time to time. 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 project Police Fee obligation at build-out is $1,876,983.

Table D.3
Police Fee For Freeway Commercial

Development	Number of DUs	MF PFDIF/DU	Com'l Acres	Com'l PFDIF/AC.	Police Fee for Freeway Commercial
Multi-Family Residential	900	$2,022			$1,819,800
Commercial (Residence Inn)			3.31 AC	$8,846	$29,280
Commercial (Courtyard)			2.81 AC	$8,846	$24,857
Commercial Mixed Use			≈0.34 AC	$8,846	$3,046
Totals	**900**				**$1,876,983**

The projected fee illustrated in Table D.3 is an estimate only. Actual fees may be different. PFDIF Fees are subject to change depending upon City Council actions and or Developer actions that change residential densities, industrial acreage or commercial acreages.

IV.2.7. Threshold Compliance

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 and commercial acreage, prior to the issuance of certificate of occupancy; the fees shall be paid at the rate in effect at the time payment is made.

[7] Fee based on Form 5509 dated 10/01/18. Actual fee may be different, please verify with the City of Chula Vista at the time of building permit.

IV.3 FIRE SUPPRESSION SYSTEM

IV.3.1. Threshold Standard

Emergency response: Properly equipped and staffed fire and medical units shall respond to calls throughout the City within 7 minutes in 80% of the cases.

IV.3.2. Service Analysis

The City of Chula Vista Fire Department (CVFD) provides Fire and Emergency Medical Services (EMS). EMS is provided on a contract basis with American Medical Response (AMR). The City also has countywide 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 Fire Facility, Equipment and Deployment Master Plan (FFMP) adopted by City Council on January 28, 2014. The FFMP indicates that the number and location of fire stations play a key role in determining response times. The FFMP evaluates the planning area's fire coverage needs, and recommends a network of twelve stations at build out to meet and maintain threshold standard compliance (see Table E.1).

IV.3.3. Existing Conditions

There are currently nine (9) fire stations serving the City of Chula Vista. The existing station network is listed below:

Table E.1
Current Fire Station Facilities

Station	Location	Equipment	Staffing
Current Fire Station Facilities			
Station 1	447 F St.	Engine 51/Truck 51/Battalion 51	Assigned: 24 - On Duty: 8
Station 2	80 East J St.	Engine 52	Assigned: 9 - On Duty: 3
Station 3	1410 Brandywine Ave.	US&R[8] 53 + Tender & Trailer	Assigned: 12 - On Duty: 4
Station 4	850 Paseo Ranchero	Engine 54	Assigned: 9 On Duty: 3
Station 5	391 Oxford St.	Engine 55	Assigned: 9 On Duty: 3
Station 6	605 Mt. Miguel Rd.	Engine 56/Brush 56	Assigned: 9 On Duty: 3
Station 7	1640 Santa Venetia Rd.	Engine 57/Truck 57/Battalion 52	Assigned: 24 On Duty: 8
Station 8	1180 Woods Dr.	Engine 58	Assigned: 9 On Duty: 3
Station 9	291 E. Oneida Street	Engine 59	Assigned: 9 On Duty: 3
Planned Fire Station Facilities			
	EUC	New Engine/ New Truck	Unknown
	Bayfront	New Engine/ New Truck	Unknown
	Village 8 West	New Engine/ New Truck	Unknown

Source: CVFD

The adopted FFMP sets forth a plan for a Fire/Emergency Medical Services delivery system within the City of Chula Vista that can, upon build-out, meet the expected growth of the City. The FFMP recommends the expansion of one existing fire station and the addition of three new fire stations for a total of twelve fire stations. The FFMP anticipated

[8] National Urban Search and Rescue (US&R) Response System Team

the University Villages development. Two of the new fire stations are within Otay Ranch, one in Village 8 West, the other in the Millenia project, which is consistent with the Otay Ranch GDP and EUC SPA Plan. Additionally, a third fire station would serve the Bayfront. All future growth projected in the City will be served by the station locations and configuration as outlined within the FFMP, or as amended.

During the City's next comprehensive update of the PFDIF program, the level of capital program financial support required from both the General Fund and the PFDIF will be determined. The City's PFDIF program is the primary funding source for the one-time fire related facility capital expenditures; the General Fund is the funding source for the operating costs. Cost sharing between the City and the PFDIF will also be determined during the PFDIF update and the new aforementioned development related facilities will be added to the PFDIF program fee calculation.

American Medical Response (AMR) is contracted by the City of Chula Vista to provide Emergency Medical Services. There are four AMR units that provide paramedics to the City of Chula Vista exclusively. Currently two full-time units are stationed within the city limits and are dedicated to Chula Vista, while two other full-time units are shared with other cities. The Chula Vista Fire Department is also providing an Advance Life Support (ALS) program to provide residents with the most appropriate emergency medical care in a timely manner.

IV.3.4. Adequacy Analysis

The City of Chula Vista Fire Department (CVFD) currently serves areas within the City's boundaries, including the Freeway Commercial project. The closest CVFD stations to the project site are:

- Fire Station #7, located in Village 2 – 1.5 miles.
- Fire Station #8, located in Eastlake III – 2.5 miles

The station nearest to the Freeway Commercial Condominium project is Station #7. This station is approximately 1.5 miles from the Freeway Commercial Condominium project. Station #8 is located in the Eastlake Woods neighborhood, which is approximately 2.5 miles away. The department's standard response to a fire at the project site with the proposed uses could include: Four Fire Engines from Stations 4, 6, 7 & 8; Two Trucks from Stations 1 & 7; Two Battalion Chiefs from Stations 1 & 7; and One Urban Search & Rescue team from Station 3.

According to the GMOC's Fiscal Year 2017 Annual Report, Fire and EMS complied with the threshold standard, which is responding to calls within 7 minutes 80% of the time. They responded within 7 minutes 80.6% of the time.

Table E.2 FC-2 SPA Fire Response Times						
Years	**Call Volume**	**% of All Call Responded to Within 7:00 Minutes (Threshold = 80%)**	**Average Response Time for all Calls**	**Average Travel Time**	**Average Dispatch Time**	**Average Turn-out Time**
2017	**13,665**	**80.6**	**5:50**	**4:07**	**0:53**	**0:50**
2016	13,481	74.8	6:15	4:25	0:55	0:56
2015	12,561	78.3	6:14	3:51	1:12	1:10
2014	11,721	76.5	6:02	3:34	1:07	1:21
2013	12,316	75.7	6:02	3:48	1:05	1:08

Source: GMOC 2017 Annual Report

The FFMP includes additions to the existing network of fire stations, which should result in improved response times. The FFMP does not specify definitive dates or triggers for fire station construction to begin, nor has a funding mechanism been identified.

The fire department has determined that the following system improvements are required to make significant improvements in compliance:

- Additional fire stations within the network;
- Additional improvements in call for service dispatch processes;
- Improved management of response time performance to include interactive discussion with fire crews, use of mapping capabilities, and shared data with stakeholders.

IV.3.5. Fire Suppression Facility Analysis

The CVFD has four fire stations west of Interstate 805, where streets are on a traditional grid pattern, and five fire stations east of Interstate 805, where there is less street connectivity. Despite several more calls on the west side, these stations consistently comply with the threshold standard, while the stations in the east face more geographic challenges to comply. New developments in the eastern portion of the city will require better street connectivity and an increased awareness for emergency vehicle access to improve response times. The CVFD has indicated that new fire stations and associated apparatus is necessary to accommodate new growth over the next five years.

IV.3.6. Financing Fire Suppression Facilities

The PFDIF was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2847. The PFDIF is adjusted every October 1st pursuant to Ordinance 3050, which was adopted by the City Council on November 7, 2006. The Fire PFDIF Fee for Multi-Family Development is $1,139/unit (see Table A.7)[9]. The Fire PFDIF for Commercial development is $4,186 per acre. This amount is subject to change as it is

[9] Fee based on Form 5509 dated 10/01/18. Actual fee may be different, please verify with the City of Chula Vista at the time of building permit.

amended from time to time. 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 project Fire Fee obligation at build-out is $1,052,160.

Table E.3
Fire Suppression System Fee For FC-2

Development	DU's	MF PFDIF/DU	Com'l Acres	Com'l PFDIF/AC.	Fire/EMS Fee
Multi-Family Residential	900	$1,139			1,025,100
Commercial (Residence Inn)			3.31 AC	$4,186	$13,856
Commercial (Courtyard)			2.81 AC	$4,186	$11,763
Commercial Mixed Use			0.34 AC	$4,186	$1,441
Totals	900				$1,052,160

The projected fee illustrated in Table E.3 is an estimate only. Actual fees may be different. PFDIF Fees are subject to change depending upon City Council actions and or Developer actions that change residential densities or commercial acreages.

IV.3.7 Threshold Compliance

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.

B. Prior to the issuance of certificate of occupancy for any residential dwelling units, the applicant(s) shall pay PFDIF in accordance with the fees in effect at the time of payment and phasing approved in this document, unless stated otherwise in a separate development agreement.

IV.4. SCHOOLS

IV.4.1. Threshold Standard

The City shall annually provide the Chula Vista Elementary School District (CVESD) and the Sweetwater Union High School District (SUHSD) with the City's annual 5-year residential growth forecast and request an evaluation of their ability to accommodate forecasted growth, both citywide and by subarea. Replies from the school districts should address the following:

A. Amount of current classroom and "essential facility" (as defined in the Facility Master Plan) capacity now used or committed;

B. Ability to absorb forecasted growth in affected facilities and identification of what facilities need to be upgraded or added over the next five years;

C. Evaluation of funding and site availability for projected new facilities identified; and

D. Other relevant information the school district(s) desire(s) to communicate to the City and GMOC.

IV.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.

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 for unified school districts at $3.48 per square foot for new residential construction and $0.56 per square foot for new commercial and industrial construction).

CVESD utilizes their current *Fee Justification Report, by SDFA*, to quantify the impacts of new residential development on the district's 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, alternative fees or implementation of a Mello Roos Community Facilities District (CFD) will be necessary.

Both CVESD and SUHSD are justified per Gov't Code to collect the maximum fee of $3.79 per square foot for new residential construction. CVESD has an agreement with SUHSD specifying the amount of the development fee that each district collects from new residential development.

Sweetwater Union High School District utilizes their current "Sweetwater Union High School District Long Range Comprehensive Master Plan." Implementation of the SUHSD Plan is ongoing and has resulted in the upgrading of older schools and accommodating growth. In November 2006, the community supported Proposition O, a 644-million-dollar bond measure. This bond measure addresses the critical and urgent safety needs of the district's campuses. The types of repairs and improvements that Prop O addresses included: improving handicap accessibility, removing asbestos and lead paint, and upgrading fire and life safety systems.

In November 2012, the community supported Proposition E, a 90-million-dollar bond measure. This bond measure addressed the renovation and upgrades of the existing campuses within the CVESD.

IV.4.3 Project Processing Requirements

The PFFP is required by the Growth Management Program to address the following issues for School Services:

A. Identify student generation by phase of development.

B. Specific siting of proposed school facilities will take place in conformance with the *Sweetwater Union High School District Long Range Comprehensive Plan,* and Chula Vista Elementary School District's Standards and Criteria.

C. Reserve school sites, if necessary, or coordinate with the district for additional school classrooms.

D. Provide cost estimates for facilities.

E. Identify facilities consistent with proposed phasing.

F. Demonstrate the ability to provide adequate facilities to access public schools in conjunction with the construction of water and sewer facilities.

G. Secure financing.

IV.4.4. Existing Conditions

A. School Facilities Inventory, Chula Vista Elementary School District

Currently, the CVESD's inventory consists of 46 elementary schools including 5 Charter schools. In addition, CVESD oversees two independent charter schools. Table F.1 lists existing schools together with the capacity and enrollment of each. Capacity using existing facilities is approximately 32,581. Estimated enrollment for the 2017/18 school year is approximately 29,598. Forty of the district's 46 schools are located within the City of Chula Vista. Most of the District's 40 schools have some capacity (see Table F.1). According to the GMOC's Fiscal Year 2017 Annual Report, the CVESD reported that, with the addition of a new elementary school by 2021, they should be able to provide the facilities necessary to accommodate additional students in Eastern Chula Vista in the next five years.

Table F.1 Chula Vista Elementary School District Enrollments vs. Capacity			
Schools	**2017/2018 Enrollment through week 10/6/17**	**State Loaded Classroom Capacity**	**Remaining Capacity**
Allen	368	500	132
Arroyo Vista Charter	985	1,000	15
Camarena	1,075	1,100	25
Casillas	457	573	116
Castle Park	394	485	91
Chula Vista Hills	562	600	38
Clear View	509	540	31
Cook	331	500	169
CV Learning Comm. Charter	1,536	1,150	-386
Discovery Charter	953	959	6
Eastlake	563	714	151
Feaster/Ed Charter	1,243	1,050	-193
Finney	385	536	151
Halecrest	521	589	68
Harborside	708	863	155
Hedenkamp	1,033	1,000	-33
Heritage	808	900	92
Hilltop Drive	565	551	-14
Juarez-Lincoln	570	711	141
Kellogg	327	377	50
Lauderbach	793	989	196
Liberty	729	764	35
Loma Verde	499	634	135
Los Altos	330	501	171
Marshall	657	686	29
McMillin	825	793	-32
Montgomery	340	493	153
Mueller Charter	1,477	875	-602
Muraoka	537	723	186
Olympic View	785	825	40
Otay	544	713	169
Palomar	365	411	46
Parkview	353	552	199
Rice	611	727	116
Rogers	443	635	192
Rohr	327	489	162
Rosebank	586	714	128
Salt Creek	945	925	-20
Silver Wing	407	500	93
Sunnyside	456	501	45
Tiffany	470	598	128
Valle Lindo	460	689	229
Valley Vista	603	650	47
Veterans	911	893	-18
Vista Square	652	689	37
Wolf Canyon	600	914	314
Totals	**29,598**	**32,581**	**2,983**

Source: CVESD Fee Justification Report for New Residential & Commercial/Industrial Development dated March 2018

Note: Total Enrollment includes 1,701 students from the Charter Schools in grades 7-12
CVESD

Table F.2 Sweetwater Union High School District Enrollments vs. Capacity			
School Site	**2017 Projected Enrollment as of 12/17**	**Approximate Capacity**	**Capacity vs. Projected**
Middle Schools			
Bonita Vista	1,114	1,515	401
Castle Park	847	1,201	354
Chula Vista	849	1,329	480
Eastlake	1,701	1,867	166
Hilltop	980	1,380	400
Rancho del Rey	1,693	1,646	-47
Subtotal	**7,184**	**8,938**	**1,754**
High Schools			
Bonita Vista	2,244	2,299	55
Castle Park	1,515	2,238	723
Chula Vista	2,290	2,377	87
Eastlake	2,940	2,722	-218
Hilltop	1,986	2,538	552
Olympian	2,399	2,346	-53
Otay Ranch	2,340	2,621	281
Palomar	338	502	164
Subtotal	**16,052**	**17,643**	**1,591**
Total	**23,236**	**26,581**	**3,345**

Source: GMOC 2017 Annual Report

B. School Facilities Inventory, Sweetwater Union High School District

Established in 1920, SUHSD is the largest secondary school district in the State of California. Four feeder school districts provide education for students through either the sixth or eighth grade. SUHSD currently operates 32 schools – ten middle schools (grades 7-8), one junior high school (grades 7-9), twelve high schools, one continuation high school, four alternative education programs and four adult education schools. Planned for the future is middle school #12 and high school #14. According to the GMOC's Fiscal Year 2017 Annual Report, the SUHSD reported that, with the addition of a new middle school by 2022, they should be able to provide the facilities necessary to accommodate additional students in Eastern Chula Vista in the next five years.

C. Community Facilities District (CFD)

Several master-planned communities within Eastern Chula Vista are currently in a CFD while other communities have entered into agreements with the District to form a CFD. Because these developments have already secured mitigation to ensure the timely construction of school facilities to house students generated from these developments they are deemed Mitigated Developments by the District and are excluded from the payment of Alternative Fees. Residential development projects that have currently not mitigated the impacts that result from their development projects are considered "Unmitigated Developments."

In the event that schools are overcapacity, the school district uses relocateable classrooms to temporarily house additional students until a new facility opens. In recognition of the impact on school facilities created by new development, the District and developers may enter into various mitigation agreements in order to ensure the timely construction of school facilities to house students from new residential development ("Mitigation Agreement"). Historically, developers and school districts have entered into School Mitigation Agreements and community facilities district ("CFD"), pursuant to the Mello-Roos Community Facilities District Act of 1982, to finance school facilities. However, per AB 2926, in the absence of a mitigation agreement, the developer shall pay the statutory school fees under state law in effect at the time of building permit issuance.

IV.4.5 School Sizing and Location

The project is proposed to consist of 900 multi-family residential dwelling units at build out. At completion, the proposed project could generate approximately 463 students using the following Student Generation Factors:

Table F.3
Student Generation Rates

District	Single Family Detached	Single Family Attached (Condos, Duplex, Triplex)	Multi-Family (Apartments)	Weighted Average (All CFD DU)
CVESD	.4015	.3573	.2543	.3725
SUHSD – Middle School	.1154	.0734	.0712	.10
SUHSD – High School	.2548	.1622	.1504	.22

Source: CVESD & SUHSD

By school category, the project is expected to generate the following students:

Table F.4
Estimated Project Student Generation

Multi- Family Dwelling Units	Elementary (K-6)	Middle (7-8)	High School (9-12)	Total Students
900	259	65	139	463

School Size Standards:

Elementary	800 students
Middle	1,500 students
Senior High	2,400 students

Chula Vista Elementary School District
As noted in Table F.4, the build-out of the project would generate the need to house approximately 259 elementary school age students within the Wolf Canyon attendance area. A portion of the project was within CFD 1, however, the district and the developer agreed to detach the project from CFD 1 and annex into the new CFD 19 that will include the FC-2 project and a portion of Village 2. The new CFD 19 will assess a new annual tax per the mitigation agreement and Rate and Method of Apportionment. Non-residential property will pay the State mandated school fee. This CFD was formed to cover the costs of the District's capital facilities required to serve the development area.

A new 800-student school (#46) in Otay Ranch Village 2 opened in July 2017, providing relief to Wolf Canyon Elementary, which is nearing capacity. A second school in Village 2, which will accommodate 600 students, is also planned. New schools will also be added in Village 3 and the Eastern Urban Center (Millenia). The school district has discontinued zone transfers so that students can attend school in the communities where they live.

Sweetwater Union High School District
The project is currently within the Eastlake Middle School and Olympian High School attendance areas. Both schools are at capacity and the Project will generate additional need for new schools.

The school district is working on updating its Facilities Master Plan and has met with the City to discuss potential high school and middle school sites. The district will need to acquire another 50+-acre site to accommodate future growth.

The SUHSD formed CFD 19 to mitigate for the school impacts of the entire FC project. Property will be assessed an annual tax pursuant to the mitigation agreement and Rate and Method of Apportionment for CFD 19. Non-residential property will pay the State mandated school fee.

IV.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.

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. The following Mello-Roos Districts have been created by each district:

SUHSD		CVESD	
CFD Number	Location	CFD Number	Location
1	Eastlake	1	Eastlake
2	Bonita Long Canyon	2	Bonita Long Canyon
3	Rancho del Rey	3	Rancho del Rey
4	Sunbow	4	Sunbow
5	Annexable	5	Annexable
6	Otay Ranch (V1 & V5)	6	Otay Ranch (V1 & V5)
7	Rolling HillsRanch*.	7	Rolling Hills Ranch*
8	Coral Gate (Otay Mesa)	8	No CFD 8
9A	Ocean View Hills	9A	No CFD 9A
9B	Dennery Ranch	9B	No CFD 9B
10	Remington Hills/Annexable	10	Dennery Ranch/Annexable
11	Lomas Verdes		Lomas Verde
12	Otay Ranch (V1 West)		Otay Ranch (V1 West)
13	San Miguel Ranch		San Miguel Ranch
14	Otay Ranch (V11 Brookfield/Shea)	14	Otay Ranch (Village 11 Brookfield/Shea)
15	Otay Ranch (V6)	15	Otay Ranch (V6)
16	Otay Ranch (Portion of V6)	16	No CFD 16
17	Otay Ranch (Portion of V2 & V7)	17	Otay Ranch (Portion of V2 & V7)
18	Eastern Urban Center (Millennia)	18	Eastern Urban Center (Millennia)
19	PA12 & Portion Otay Ranch (V2)	19	PA12 & Otay Ranch (V2)
20	V3 North	20	V3 North

*No tax obligation. CFD was mitigated by a fee payment.

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 $121,375 per student (2018 dollars). Excluding land, the cost for a high school is approximately $ $93,332 per student (2018 dollars). The cost for a middle school, including land acquisition, is approximately $42,627 per student (2018 dollars). Excluding land, the cost for a middle school is approximately $33,858 per student (2018 dollars). Estimated cost per new dwelling unit is approximately $26,878 for grades 7 – 12. The cost for an elementary school, including land acquisition, is approximately $63,146 per student (2018 dollars). Excluding the land, the cost of an elementary school is approximately $46,384 per student. Estimated school

facility cost per dwelling unit is approximately $13,911. Land acquisition cost is calculated at approximately $1,000,000/net usable acre (10-acre elementary school site). Using the aforementioned costs per student together with the school size, the following costs per facility can be anticipated.

Elementary School Cost	
(800 students) ($46,384/student w/o land cost)	$37,106,880
(800students) ($63,146/student w/land cost)	$47,106,880
Middle School Cost	
(1,500 students) ($33,858/student w/o land cost)	$109,351,000
(1,500 students) ($42,627/student w/ land cost)	$141,175,000
High School Cost	
(2,400 students) ($93,332 /student w/o land cost)	$209,957,000
(2,400 students) ($121,375/student w/ land cost)	$278,971,000

IV.4.7 Threshold Compliance

Prior to the issuance of each building permit for any residential dwelling units, the applicant(s) shall provide evidence or certification by the SUHSD and CVESD that any fee charge, dedication or other requirement levied by the school district has been complied with or that the district has determined the fee, charge, dedication or other requirements do not apply to the construction or that the applicant has entered into a school mitigation agreement. School Facility Mitigation Fees shall be in accordance with the fees in effect at the time of building permit issuance.

IV.5 LIBRARIES

IV.5.1 Threshold Standard

The City shall not fall below the citywide ratio of 500 gross square feet (GSF) of library space, adequately equipped and staffed, per 1,000 residents.

IV.5.2 Service Analysis

The Chula Vista Library is a division of the City of Chula Vista Community Services Department, providing library facilities and services.

IV.5.3 Project Processing Requirements

The PFFP is required by the Growth Management Program to address the following issues for Library services:

A. Identify phased demands in conjunction with the construction of streets, water and sewer facilities.

B. Specifically identify facility sites in conformance with the Chula Vista Library Master Plan.

IV.5.4 Existing Conditions

The City provides library services through the Civic Center Branch Library, the South Chula Vista Branch Library and, Otay Ranch Town Center Branch Library. The Civic Center Branch Library is located at 365 F Street, approximately seven miles from the FC-2 project and is the largest library facility within the city, consisting of a two-story, 55,000-square-foot building. The South Chula Vista Branch Library is located at 389 Orange Avenue, approximately six miles from the project and consists of approximately 37,000 square feet. The Otay Ranch Branch Library is located at 2015 Birch Road in the Otay Ranch Town Center, approximately one-quarter mile from the project and consists of approximately 5,400 square feet. 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
Otay Ranch Town Center	5,412
Total Existing Square Feet	**97,412**

The Chula Vista Public Library Strategic Facilities Plan identified ways to improve library service delivery to the community, particularly to residents of Eastern Chula Vista. The plan indicates that the additional needed library square footage can be developed as multiple smaller branches, or as one large library. However, the library's operating budget has been significantly reduced and capital funding is not currently available. Therefore, the facilities plan does not determine which option would be implemented. The options will be evaluated when capital and operating funds become available. Additional measures

such as mall outlets, book vending machines, a bookmobile, and service partnerships are identified as possible interim measures. The library branch at the Otay Ranch Town Center is an interim measure that opened in April 2012 and expanded in 2014 to over 5,000 square feet.

IV.5.5 Adequacy Analysis

Using the Threshold Standard of 500 square feet of library space per 1,000 population, the demand for library space based on Chula Vista's estimated population of 271,323[10] as of 12/31/2017 is approximately 135,662 square feet. Chula Vista currently provides approximately 97,412 square feet of library space. This represents an approximate 38,250 square-foot deficit. The demand generated by the 8,300 forecasted dwelling units City-wide through 2022 (GMOC's Fiscal Year 2017 Annual Report) is approximately 13, 322 square feet (8,300 x 3.21[11]/1,000) x 500). By 2022, the demand for library space generated by the existing and forecasted dwelling units totals approximately 148,983 (135,662 + 13,322) square feet. Comparing this demand to the existing library square footage of 97,412 square feet results in a deficit of approximately 51,571 square feet unless the City completes the Rancho Del Rey or Millennia Regional Library or a combination of a Regional Library and numerous branch libraries before 2022.

Table G.2 illustrates the need to increase Library Facilities over the next five years to keep pace with the city's projected growth. The table assumes the Millenia Library is completed and the Otay Ranch Branch is closed. The SANDAG 2030 build-out population for Chula Vista is approximately 289,044. This population will require approximately 144,500 square feet of Library Facilities.

The GMOC Threshold Standard for libraries is 500 square feet of library space per 1,000 residents. According to the GMOC's Fiscal Year 2017 Annual Report, the current service ratio for FY 2017 was approximately 349 square feet for every 1,000 residents. Therefore, the City does not currently meet the threshold standard for libraries.

Construction of the proposed 30-35,000 square foot Library at the Millenia project may not achieve the City's Threshold Standard compliance. The GMOC Annual Report indicated that "either doubling the size of the Millenia library to 70,000 square feet or constructing two 35,000 square-foot libraries – one in Millenia and one on the Rancho del Rey library site – will be necessary to achieve compliance at build-out."

[10] GMOC's Fiscal Year 2017 Annual Report

[11] City forecasting Population coefficient of 3.21 persons per household.

Table G.2 Library Space Demand vs. Supply				
	Estimated Population	**Demand Square Footage**	**Estimated Supply Square Footage**	**Above/(Below) Standard**
Estimated Existing Citywide 12/31/16	271,323	135,662	97,412	(38,250)
Regional library at Millenia (EUC) 2022			32,500	(682)
Forecasted Projects to 2022	26,643	13,322		**(10,500)**
Subtotal	**297,966**	**148,983**	**129,912**[1]	**(19,071)**
Note 1: Assumes the Millenia Library completed with the closing of the Otay Ranch Branch				

Source: 2017 GMOC Annual Report

IV.5.6 Financing Library Facilities

The PFDIF was updated by the Chula Vista City Council on November 19, 2002 by adoption of Ordinance 2847. The PFDIF is adjusted every October 1st pursuant to Ordinance 3050, which was adopted by the City Council on November 7, 2006. The current PFDIF for single-family residential and multi-family development is $1,627/unit. This amount is subject to change with the adoption of Ordinance 3010. The PFDIF amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the project. The calculations of the PFDIF due for each facility are addressed in the following sections of this report. At the current library fee rate, the Otay Ranch FC-2 Library Fee obligation at build-out is $1,620,900 (see Table G.3).

Table G.3 FC-2 Estimated Library Fee[12]					
Development	**DU's**	**MF PFDIF/DU**	**Acres**	**Com'l PFDIF/AC.**	**Library Fee**
Multi-Family Residential	900	$1,801	N/A	N/A	$1,620,900
Totals	**900**				**$1,620,900**

The projected fee illustrated in Table G.4 is an estimate only. Actual fees may be different. PFDIF Fees are subject to change depending upon City Council actions and or Developer actions that change residential densities.

[12] Fee based on Form 5509 dated 10/1/18 Actual fee may be different, please verify with the City of Chula Vista at the time of building permit.

IV.5.7. Threshold Compliance

A. Project compliance will be satisfied with the payment of Public Facilities Fees. The proposed project will be required to pay public facilities fees for Library services, based on the number of dwelling units, prior to the issuance of certificate of occupancy; the fees shall be paid at the rate in effect at the time payment is made.

B. Prior to the issuance of each certificate of occupancy for any residential dwelling units, the applicant shall pay the required PFDIF in accordance with the fees in effect at the time of payment and phasing approved. Payment of the PFDIF would represent the project's fair share contribution to meet the City's Threshold Standard for library space.

C. The City of Chula Vista shall continue to monitor library facilities and services and report the results to the GMOC on an annual basis.

IV.6 PARKS, OPEN SPACE, TRAILS AND RECREATION

IV.6.1 Parks and Recreation Threshold Standard

Population Ratio: Three (3) acres of neighborhood and community park land with appropriate facilities shall be provided per 1,000 residents east of I-805.

IV.6.2 Service Analysis

The City of Chula Vista provides public park and recreational facilities and programs through the Community Services Department which is 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, who makes recommendations to 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 the Otay Ranch.

The Otay Ranch Freeway Commercial (FC) SPA must conform to the Chula Vista Parks and Recreation Master Plan, as amended, which provides the guidance for planning, siting and implementation of neighborhood and community parks. Further, the SPA Plan must conform to the City of Chula Vista Greenbelt Master Plan and the Otay Valley Regional Park Concept Plan.

IV.6.3 Project Processing Requirements

A. Identify park demands in conformance with the number of dwelling units constructed, street improvements and in coordination with the construction of water and sewer facilities.

B. The specific siting of public parks and recreation facilities shall be in conformance with the Chula Vista Parks and Recreation Master Plan.

C. Sites reserved for park purposes within the project.

IV.6.4 Existing Conditions

The FC-2 site is currently entitled as a transit-supportive mixed-use project with up to 600 Multi-Family Residential Units, 15,000 square feet of Commercial Retail, a new 2-acre urban park with 4.69 acres of equivalence enhancements and two hotels with a minimum of 300 rooms. Baldwin & Sons, the current developer of the FC-2 site, has proposed to add 300 multi-family units to the east portion of FC-2. This density increase would allow the developer to maximize land use potential within walking range of the Otay Ranch BRT stop, ensure transit-supportive densities near the BRT line, establish a compact walkable community by replacing surface parking with 5-level structured parking, and provide a more diverse mix of housing types in a fiscally sustainable manner.

The City of Chula Vista's existing and future parks are depicted in the Park and Recreation Element of the General Plan. Current information is contained in the city's Parks and Recreation Master Plan.

IV.6.5 Project Park Requirements

Compliance with Public Park Standards

If the 300 DU increase is approved, the Freeway Commercial Mixed-Use Project will generate an estimated population of 2,349 (900 dwelling units x 2.61[13] 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.1). 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

Freeway Commercial Population	Standard	Parkland Acres Required
2,349	3 acres per 1,000 population	7.05

All new development in the City of Chula Vista is subject to the requirements contained in the City's Parkland Dedication Ordinance CVMC Chapter 17.10. The ordinance establishes fees for park land 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. There are three types of housing: Single Family dwelling units (defined as all types of single family detached housing and condominiums), Multi-Family dwelling units (defined as all types of attached housing including townhouses, attached condominiums, duplexes, triplexes and apartments) and Mobile Homes. Single Family Housing is defined as a freestanding structure with one residential unit. Multi-Family Housing is defined as any freestanding structure that contains two or more residential units. Parkland dedication requirements are shown below 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	460 sf/du	95 du/ac.
Multi-Family	341 sf/du	128 du/ac.

[13] CVMC 17.10.040.

Table H.3 Freeway Commercial Project Preliminary Parkland Dedication Requirements			
Dwelling Unit Type	**Number of D.U.**	**Parkland Required/DU**	**Required Acres**
Single Family	0	460 sf	0
Multiple Family	900	341 sf	7.05
TOTALS	**900**		**7.05**

The City's Parklands and Public Facilities Ordinance (CVMC 17.10) is based on the Quimby Act. Based on the City's Parklands and Public Facilities Ordinance, the parkland requirement for the FC-2 Project is approximately 7.05 acres (see Table H.3).

IV.6.6 Park Adequacy Analysis

Table H.4 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 project. A review of the existing and approved park demands for Chula Vista east of I-805 including the project indicates the estimated 2017 demand of approximately 453.8 acres of Neighborhood and Community Parks. The 2017 estimated supply of park acreage east of I-805 is 604.25 acres, which is 150.45 acres more than the projected demand.

Table H.4 Estimated Park Acreage Demand Compared to Supply East of Interstate 805					
	Population East of I-805[14]	**Demand Park Acres[15]**	**Existing Park Acres**	**Eligible Credit Acres**	**Net Acres +/- Standard**
Estimated 2017	**151,266**	**453.8**	**604.25[16]**	**604.25**	**+150.45**
Forecasted 2017 - 2022	**17,542[17]**	**52.62**	**61.46[18]**	**61.46**	**+8.84**
Total	**168,808**	**506.43**	**665.71**	**665.71**	**+159.29**

Source: GMOC FY 2017 Annual Report

IV.6.7 Open Space, Trails and Recreation

A. <u>Open Space</u>

Open space within the FC-2 site will be provided by a landscaped buffer area along Olympic Parkway and Eastlake Parkway. Open space lands are indicated on the Landscape Plan (Exhibit 11).

B. <u>Trails</u>

Off-street trail routes which connect to the community-wide system of Otay Ranch as

[14] Population figures are from the GMOC FY 2017 Annual Report.
[15] City of Chula Vista's Threshold requirement is 3 acres of parkland per 1,000 residents that are east of I-805.
[16] Existing Park Acreage is from the GMOC FY 2017 Annual Report.
[17] Population figure derived from the GMOC FY 2017 Annual Report.
[18] Forecast data identified includes addition of parkland anticipated to be opened within the identified time horizon.

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 the Freeway Commercial Center. The FC-2 project is surrounded by large-scale commercial and residential, there is an opportunity to connect uses via pedestrian routes and pedestrian-oriented design features within the project along the internal streets, including and extending from the project entries to major destinations within the commercial center. The intersections of the internal streets are designated as "pedestrian enhanced intersection," where pedestrian oriented features (such as pedestrian plazas, shop fronts on sidewalk, etc.) will be provided.

The "Village Pathway," providing community-wide pedestrian and bicycle circulation connections will be located off-site on the south side of Birch Road and the Regional Trail located along Olympic Parkway. Bicycles will share the traffic lanes with motor vehicles on the FC-2 internal streets due to the low (25 mph) speed limit.

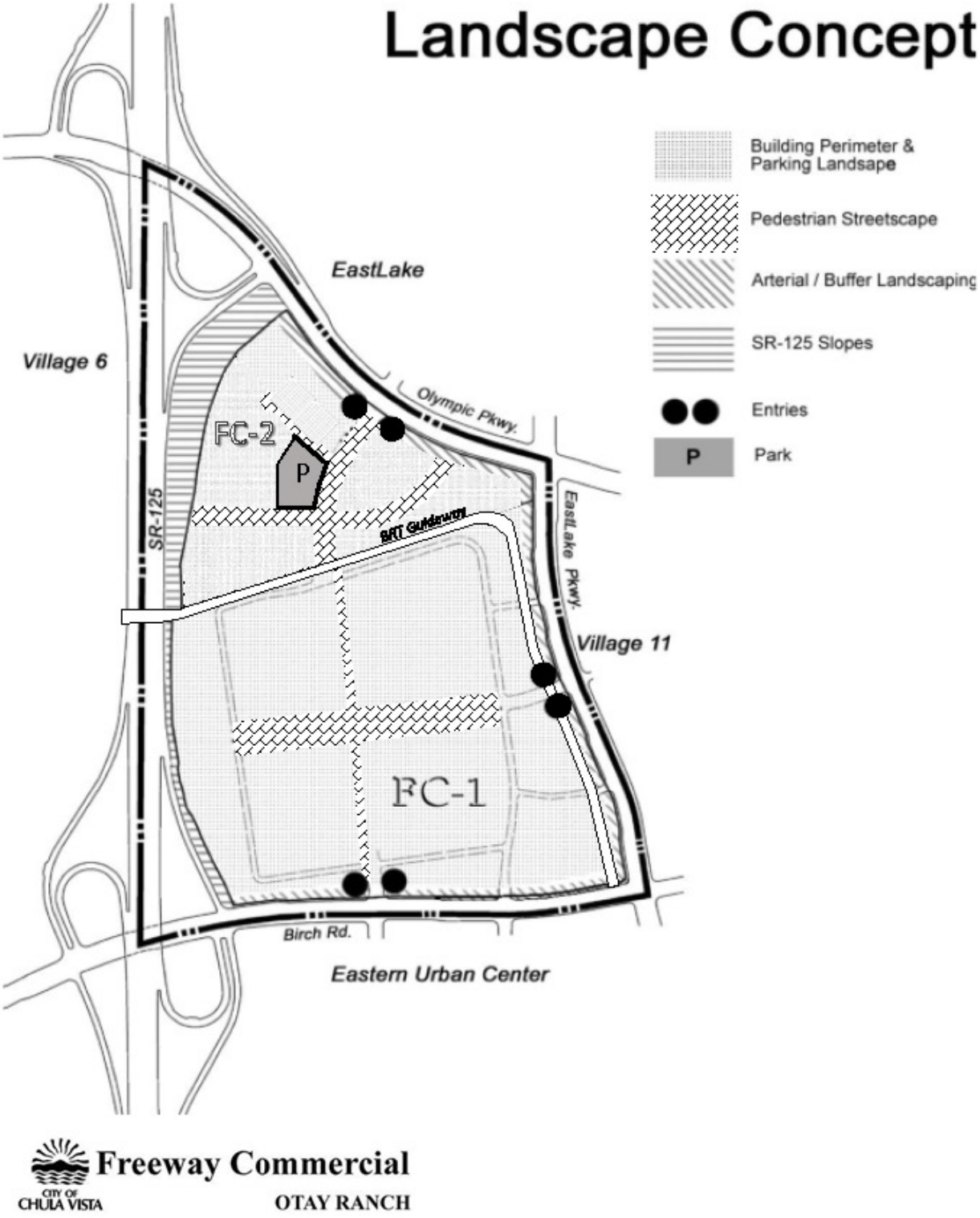

Landscape Concept
Building Perimeter & Parking Landsape
Pedestrian Streetscape
Arterial / Buffer Landscaping
SR-125 Slopes
Entries
P
Park
EastLake
Village 6
Olympic Pkwy.
FC-2
P
SR-125
BRT Guideway
EastLake Pkwy.
Village 11
FC-1
Birch Rd.
Eastern Urban Center
Freeway Commercial
CITY OF CHULA VISTA
OTAY RANCH

Exhibit 11

IV.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 be paid to the City prior to final inspection.

Chapter 17.10 of the CVMC, which requires the collection of fees from residential developments to pay for parkland acquisition and various park facilities within the City of Chula Vista, is subject to changes by the City Council from time to time. Ordinance 2886 was approved by the Chula Vista City Council, which amended Chapter 17.10 of the CVMC to update the Parks Acquisition and Development Fees on November 19, 2002. On July 13, 2004, the City Council approved Ordinance 2945, which amended the CVMC Chapter 17.10 master fee schedule to adjust the Parkland Acquisition and Development (PAD) Fees for Neighborhood and Community Park requirements and the collection of In-Lieu PAD Fees from Residential developments that are not required to submit a subdivision map or parcel map.

On October 25, 2005, the Chula Vista City Council approved Ordinance 3026, which amended CVMC Chapter 17.10 to adjust the Park Acquisition and Development Fees to pay for new park facilities. Ordinance 3303 was approved by the Chula Vista City Council on February 11, 2014 to amend Chapter 17.10 by deleting the Hotel and Motel requirement.

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 I-805. PAD fees cover parkland acquisition and the cost of related capital items associated with parkland development, including:

- Grading
- Improvements including:
  - Drainage Systems
  - Street Improvements
  - Lighted Parking Lots
  - Concrete Circulation Systems
  - Security Lighting
  - Park Fixtures *(drinking fountains, trash receptacles, bicycle racks, etc.)*
  - Landscaping *(Trees, Shrubs, Ground Cover and Turf)*
  - Automatic Irrigation Systems
  - Restrooms and Maintenance Storage
  - Play Areas *(including preschoolers and primary school-age children, with disabled accessible surfacing, as required)*
  - Picnic Shelters and Tables
  - Outdoor Sports Venues *(tennis courts, baseball/softball/soccer fields. basketball courts, multi-purpose sports fields, skateboard and roller blade venues)*
- Utilities

The project is responsible for both the park development component and the acquisition component PAD Fees. The project parkland demand is 7.05 acres based on CVMC 17.10 (Table H.3). The project will meet its parkland obligation of 7.05 acres through two

separate mechanisms. The obligation of the first 600 residential units will be met through the provision of a 2-acre public park enhanced to a value equivalent to 4.69 acres of parkland. The remaining 300 units will satisfy the remaining 2.36 acres of obligation through payment of a Park Benefit Fee (per the Project's Development Agreement) equal to the PAD fees (both Acquisition and Development components) for multi-family units.

Table H.5 identifies the estimated City of Chula Vista October 2018 fees for the Parkland Acquisition and Development Component of the PAD fees paid for the first 600 units in FC-2 and the Park Benefit Fee paid for units 601 through 900 in FC-2.

Table H.5

FC-2 Multi-Family Acquisition and Development Fee (Preliminary Calculation)

MF Units	MF Acquisition Fee $9,408	MF Development Fee $5,859	Park Benefit Fee $15,267	Total
600	$5,644,800	$3,515,400	-	$9,160,200*
300	-	-	$4,580,100	$4,580,100
Total:				**$13,740,300**

* Figures in this table are preliminary estimates and shall be recalculated at the time when the obligations are due as determined by the Development Agreement. This table does not include credit for the 2-acre park and Development Agreement required park enhancements

These fees are estimates only and are dependent upon the actual numbers of units filed on the final map. The table does not include the provisions of Ordinance 3345 and the Development Agreement that requires the applicant to provide a 2-acre enhanced urban park. Recalculation of the Acquisition Fee at the time the obligation is due shall be based on the Development Agreement and the value of the 2-acre park. Acquisition and Development Fees are also subject to change by the City Council. Multi-Family dwelling units are defined as all types of attached housing including townhouses, attached condominiums, duplexes, triplexes and apartments.

IV.6.9 Financing Recreation Facilities

Ordinance 2887, approved by the Chula Vista City Council on November 19, 2002, amended CVMC 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. Ordinance 3010 approved by the Council on June 14, 2005, amended Chapter 3.50 to update the public facilities DIF and implemented an automatic annual adjustment based on the building construction cost index and the U.S. Department of Labor Index (see Ordinance 3010). Chapter 3.50 was also updated by Ordinance 3050 on November 7, 2006, to update the public facilities DIF.

Major recreation facilities are funded through a component of the PFDIF. The major capital items to be included are community centers, gymnasiums, swimming pools, and senior/teen centers. Since the demand for major public recreation facilities is created by

residential development, facilities costs are not spread to commercial/industrial development. Table H.6 provides an estimate of the Recreational PFDIF for the project.

Table H.6
FC-2 Multi-Family Project
Public Facilities Fees for Recreation[19] (Preliminary Calculation)

Development	Dwelling Units		Recreation Fee		Total
	SF	MF	$1,367/SF Unit	$1,367/MF Unit	
Multi-Family	**0**	**900**	0	$1,230,300	$1,230,300

The projected fee illustrated in Table H.6 is an estimate only. Actual fees may be different. Recreation Fees are subject to change depending upon City Council actions and or Developer actions that change residential densities.

IV.6.10 Threshold Compliance

A. Park obligation will be satisfied pursuant to Ordinance 3345 and the City approved Development Agreement between the City and the Developer, which was approved and adopted by the Chula Vista City Council on June 16, 2015. The agreement outlines the Developer's current 4.69-acre park obligation requirement based on the previously approved 600 multi-family units. Developer shall pay a Park Benefit fee (which is equal to the City's PAD fee at the time of payment) to the City for all additional 300 residential units constructed in FC-2 (i.e. if all 900 residential units are built) to be used towards other parks in Otay Ranch.

B. Generally, the developer's obligation of 7.05-acre parkland dedication and improvement is satisfied by the following:

- Dedicate 2 (two) acres in a permanent park easement.
- Develop a highly amenitized "Turnkey Park."
- Developer shall invest the value equivalent of the dedication and improvement requirement for the 4.69 park development than would be typical for a 2-acre park. The Developer's value equivalency is based on the acquisition and development components of the PAD Fees as required by the City.
- Based on City standards in effect as of October 2018.
- Payment of Park Benefit fee in the amount of $4,580,100 (for 300 units).

C. Owner shall receive PAD credits by satisfying its actual park obligations by the following:
   a. The Developer shall grant 2 (two) acres of the FC-2 site to the City in a permanent easement for public usage, shall develop a highly amenitized, "turnkey" park" on the Park Site, as described in the Agreement, to the

[19] Fee based on Form 5509 dated 10/1/18. Actual fee may be different, please verify with the City of Chula Vista at the time of building permit.

satisfaction of the Director of Development Services.

b. The Park shall generally be located as depicted in Exhibit 11, with the final location subject to City approval.

c. In order to create an extraordinary public space, the Park shall generally consist of the elements described in the Development Agreement. Developer shall invest substantially more to the development and granting of the Park than would be typical for a City standard park, up to and including the value equivalent to the dedication and improvement required to satisfy the Developer's park obligation for the first 600 residential units constructed in FC-2, as calculated at the time park obligations for the Project become due.

d. Developer shall commence construction of the Park prior to the issuance of the five hundred and thirtieth (530th) residential building permit[20] and substantially complete the Park within fifteen (15) months of commencement of construction.

e. Developer shall pay Park Benefit fee on units 601 through 900.

D. Prior to issuance of each building permit for any residential dwelling units, the Developer shall pay Recreation Facility Development Impact Fees (part of the Public Facilities Development Impact Fee) in accordance with the fees in effect at the time of building permit issuance.

[20] Per Development Agreement terms.

IV.7 WATER

IV.7.1 Threshold Standard

A. Adequate water supply must be available to serve new development. Therefore, developers shall provide the City with a service availability letter from the appropriate water district for each project.

B. The City shall annually provide the San Diego County Water Authority, the Sweetwater Authority and the Otay Municipal Water District with the City's annual 5-year residential growth forecast and request that they provide an evaluation of their ability to accommodate forecasted growth. Replies should address the following:

   1. Water availability to the City, considering both short- and long-term perspectives.
   2. Identify current and projected demand, and the amount of current capacity, including storage capacity, now used or committed.
   3. Ability of current and projected facilities to absorb forecasted growth.
   4. Evaluation of funding and site availability for projected new facilities.
   5. Other relevant information the district(s) desire to communicate to the City and the Growth Management Oversight Commission (GMOC).

IV.7.2 Service Analysis

The Otay Water District (OWD) provides water service for the existing Otay Ranch Town Center (FC-1) and the FC-2 project. The FC-2 project is located within Improvement Districts 22 and 27. The district has existing facilities in the vicinity of the project site that can provide sufficient water services to support the proposed density increase at the FC-2 project. "The Sub-Area Water Master Plan Freeway Commercial", dated January 2018, by Dexter Wilson Engineering, Inc. was approved by the OWD on February 28, 2018. The Sub-Area Master Plan (SAMP) for the Freeway Commercial project addresses the facilities necessary to support the project. In addition, the projected water demands for the Approved Freeway Commercial project were included in the Otay Water District's "2010 Water Resources Master Plan", prepared by PBS&J and adopted November 2010 and revised in April 2013.

Water service and facilities were addressed in the "Freeway Commercial Conceptual Water and Recycled Water Study", dated September 2002, by PBS&J. A subsequent project design change required an update letter, dated March 3, 2004, by PBS&J, indicated the original report is still valid. A second update letter entitled "Memorandum", dated December 17, 2014 by Dexter Wilson studied the impact of the change in land use from Freeway Commercial to Mixed-Use. The third update letter entitled Memorandum, dated September 25, 2017 studied the impact of adding 300 units to the previously approved mixed-use project. The phasing and financing of water facilities in this PFFP is based on the third Dexter Wilson Memorandum.

The design criteria implemented to evaluate the potable and recycled water systems for the Freeway Commercial project are established in accordance with the Otay Water District Master Plan. 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.

California Senate Bills 610/221 require a Water Supply Assessment and Verification (WSAV) report to be prepared for projects proposing 500 or more residential dwelling units, or projects that demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project. Since the proposed Freeway Commercial SPA amendment proposes an equivalent development of more than 500 residential units, a WSAV was prepared for the project entitled "Water Supply Assessment and Verification Report" dated February 2015, by Lisa Coburn-Boyd and Robert Kennedy, P.E., in consultation with Dexter Wilson, Inc., and the San Diego County Water Authority.

IV.7.3 Project Processing Requirements

The SPA Plan and the PFFP are required by the Growth Management ordinance to address the following issues for water services.

A. Identify phased demands in conformance with street improvements and in coordination with the construction of sewer facilities.

B. Identify location of facilities for onsite and offsite improvements in conformance with the master plan of the water district serving the proposed project.

C. Provide cost estimates and proposed financing responsibilities.

D. Identify financing methods.

E. 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.

IV.7.4 Existing Conditions

The California Urban Water Management Planning Act (UWMP) requires that each urban water supplier providing water for municipal purposes, either to more than 3,000 customers, or more than 3,000 acre-feet of water annually, must prepare, adopt, and update a UWMP at least once every five years. This applies to Metropolitan Water District (MWD), San Diego County Water Authority SDCWA, and its member agencies, including the OWD. The intent of an UWMP is to present information on water supply, water usage/demand, recycled water, and water use efficiency programs within a water district's service area over a 25 year time frame.

The UWMP process ensures that water supplies are being planned to meet future growth. The most current supply and demand projections are contained in the 2010 UWMPs of MWD, SDCWA, and OWD. San Diego County Water Authority member districts rely on the UWMPs and Integrated Resources Plans (IRPs) of MWD and the Regional Water Facilities Master Plan of SDCWA to document supplies available to meet projected demands.

In the 2010 UWMPs, MWD, SDCWA, and all SDCWA member agencies, including OWD, have determined that adequate water supplies would be available to serve existing service areas under normal year, single dry year, and multiple dry year conditions through the year 2035.

The GMOC annually distributes a questionnaire to relevant city departments and public facility and service agencies to monitor the status of threshold standards compliance. The response from the OWD in the Fiscal Year 2017 GMOC Annual Report included the topic of existing water system adequacy to serve projected growth for Chula Vista.

The response identified OWD's capital improvement programs required to serve the forecasted water demands and identified a list of capital improvement projects (CIPs) that would need to be implemented in order to meet projected demand. The OWD concluded that the existing potable and recycled water systems including their CIP projects should be adequate to meet Chula Vista's forecasted growth over the next five-years.

Water conservation efforts remain voluntary in San Diego County since July 2016 when the drought restrictions enacted in 2015 were rescinded due to the addition of the Carlsbad Desalination water supply. A prohibition on wasteful water practices such as watering during rainfall or hosing off sidewalks remains in effect under Executive Order B-40-17. Future legislation is expected that will establish long-term water conservation measures and improved planning for more frequent and severe droughts. The district also noted that City's required Water Conservation Plans for all SPA Plans, Tentative Maps, and major development projects has been positive for water conservation within the City. The GMOC Fiscal Year 2017 Annual Report indicated that water was compliant with the threshold standards.

With ample water in storage, the Otay Water District's water supply is very high—well over what is currently demanded. They continue to pursue a future desalination plant in Rosarito, Mexico as another source of water, however, saying that doing so may provide price stability.

A. Metropolitan Water District:

In November 2010, MWD adopted their 2010 Regional UWMP, which evaluates water supply reliability, over a 20-year period, for average, single-dry, and multiple-dry years within its service area. MWD developed estimates of total retail demands for the region, factoring in the impacts of conservation. The water reliability analysis identifies both the current supplies and supplies under development to meet projected demands. MWD's reliability assessment showed that MWD can maintain reliable water supplies to meet projected demands through the year 2035. MWD also identified a planning buffer supply intended to protect against the risk that future demands could be higher than projected. As part of its implementation of the planning buffer, MWD periodically evaluates water supply development, supply conditions, and projected demands to ensure that the region is not under or over developing supplies. The planning buffer will ensure that Southern California, including San Diego County, will have adequate water supplies to meet long-term future demands.

B. San Diego County Water Authority:

The SDCWA service area covers approximately 951,000 acres and encompasses the western third of San Diego County. SDCWA has 24 member agencies, including OWD. SDCWA is responsible for ensuring a safe and reliable water supply to support the region's economy and quality of life for over three million residents. SDCWA imports between 70% and 95% of the water used in the San Diego region from MWD. In 2008, MWD provided 71% of the San Diego region's water supply. Most of this water is obtained from the Colorado River and the State Water Project (SWP) through a system of pipes, aqueducts, and associated facilities. Historically, SDCWA has relied on imported water supplies purchased from MWD to meet the needs of its member agencies. SDCWA is the largest MWD member agency in terms of deliveries, accounting for nearly 25% of MWD's delivered water.

According to the SDCWA 2010 UWMP, the San Diego region has reduced water usage over 50,000 acre feet average during the past three years. Conserved agricultural transfer water from the Imperial Valley has begun flowing to the San Diego region. This source provided approximately 70,000 acre feet in 2010 and will provide approximately 200,000 acre feet by 2021. This relatively new source of water is the result of SDCWA entering into the Quantification Settlement Agreement (QSA) with other water agencies in October 2003. The QSA resolved long-standing disputes regarding Colorado River water use among several agencies, and established a water budget for the agricultural agencies. This resolution permitted the implementation of several water conservation and transfer agreements, including the SDCWA/Imperial Irrigation District (IID) transfer agreement.

Table I.1
Average/Normal Water Year Supply and Demand Assessment (acre feet/year)

Local Supplies		2020	2025	2030	2035
Surface Water		47,940	47,878	47,542	47,289
Water Recycling		43,728	46,603	48,278	49,998
Groundwater		11,100	12,100	12,840	12,840
Groundwater Recovery		15,520	15,520	15,520	15,520
Seawater Desalinization		56,000	56,000	56,000	56,000
Imported Supplies					
IID Water Transfer		190,000	200,000	200,000	200,000
Supply from MWD		230,601	259,694	293,239	323,838
Coachella Canal and All American Canal Lining Projects		80,200	80,200	80,200	80,200
Total Projected Supplies		**675,089**	**717,995**	**753,619**	**785,685**
Total Estimated Demands[1]		**675,089**	**717,995**	**753,619**	**785,685**
Difference		**0**	**0**	**0**	**0**

[1] With Conservation

Source: University Villages Project Environmental Impact Report

Table I.2
Single Dry Water Year Supply and Demand Assessment (acre feet/year)

Local Supplies		2020	2025	2030	2035
Surface Water		17,932	17,932	17,932	17,932
Water Recycling		43,728	46,603	48,278	49,998
Groundwater		9,977	9,977	9,977	9,977
Groundwater Recovery		15,520	15,520	15,520	15,520
Seawater Desalinization		56,000	56,000	56,000	56,000
Imported Supplies					
IID Water Transfer		190,000	200,000	200,000	200,000
Supply from MWD		305,101	338,501	376,023	409,389
Coachella Canal and All-American Canal Lining Projects		80,200	80,200	80,200	80,200
Total Projected Supplies		**718,458**	**764,733**	**803,930**	**839,016**

Total Estimated Demands[1]		**718,458**	**764,733**	**803,930**	**839,016**
Difference		**0**	**0**	**0**	**0**

[1] With Conservation. *Source: University Villages Project Environmental Impact Report*

The SDCWA UWMP contains documentation of existing and planned water supplies. These supplies include MWD (imported Colorado River water and SWP water), and local member agency supplies that include (1) IID water transfer supplies; (2) supplies from conservation projects to line the Imperial Valley's All-American Canal and the Coachella Valley's Coachella Canal; and (3) development of a seawater desalination facility at the Encina Power Plant in Carlsbad, which is anticipated to produce 56,000 acre feet per year of water supplies. Additionally, since 1980, approximately 5 to 30% of member agency water has come from local sources, primarily from surface water reservoirs. Recycled water and groundwater recovery projects are growing in importance in the region. These projects coupled with water conservation efforts have made SDCWA member agencies less dependent on imported water.

Based on the imported and member agency local water sources, SDCWA estimates that it, along with member agency local sources, will be able to supply 675,089 acre feet of water in 2020. Therefore, according to the MWD and SDCWA 2010 UWMPs, there is available water to meet all of the region's anticipated demand, as shown in Table I.1, and I.2.

C. Otay Water District:

The Project is within the boundaries of the OWD, which provides water services to a large portion of San Diego East County and Eastern Chula Vista, including the Eastlake community, Otay Ranch, and Otay Mesa along the U.S./Mexico International Border. OWD covers 137 square miles with approximately 450 miles of pipelines, 21 pump stations, and 37 reservoirs with a total storage capacity of approximately 190 million gallons. OWD provides approximately 90% of its water service to residential and approximately 10% to commercial, industrial, and other land uses. Average daily consumption is approximately 40,324 acre-feet. OWD also operates the Ralph W. Chapman Water Recycling Facility.

The OWD 2010 UWMP provides an overview of OWD's service area, its current water supply sources, supply reliability, water demands, and measures to reduce water demand, and planned water supply projects and programs. Reliability for water service is based on the documentation in the UWMP's prepared by MWD and SDCWA and that these agencies have determined that they will be able to meet potable water demands through 2035, during normal and dry year conditions. The OWD 2010 UWMP relies on MWD and SDCWA for its potable supply, and OWD works with these agencies to prepare consistent demand projections for OWD's service area.

The OWD has several connections to SDCWA Pipeline No. 4 which delivers filtered water from the Metropolitan Water District's filtration plant at Lake Skinner in Riverside County. The OWD also has a connection to the La Mesa - Sweetwater Extension Pipeline, which delivers, filtered water from Helix Water District's (HWD) R.M. Levy Water Treatment Plant. Recently, OWD service reliability levels were enhanced with additional major facilities including an increase in supply capacity from the Levy Water Treatment Plant.

1. **Existing Potable Water System:** The project can be served by the Central Service Area of OWD. This area is supplied water from Connection Nos. 10 and 12 to the SDCWA aqueduct, which fills 624 Zone reservoirs. Water is then distributed within the 624 Zone. Water is then pumped to the 980 service zones. There is water service from the existing 16" water line within the adjacent Olympic Parkway.

2. **Recycled Water:** The Ralph W. Chapman Water Recycling Facility has a rated capacity of 1.3 million gallons per day (mgd) with a maximum production of approximately 1.1 mgd and could be expanded to an ultimate capacity of 2.50 mgd. Typically, the summer demands exceed the 1.1 mgd plant capacity. Recycled water supply is also available from the South Bay Water Treatment Plant, which has an ultimate rated capacity of 15 mgd and OWD has capacity rights to 8.0 mgd of recycled water. This additional source of recycled water will allow OWD to meet existing and future recycled water demands. The OWD has master planned a series of pump stations, reservoirs, and transmission lines to integrate this source of water into the existing recycled water system. Currently, there is a 12-inch recycled water main within the adjacent Eastlake Parkway.

IV.7.5 Water 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 "Otay Ranch Planning Area 12 SPA Amendment Water Conservation Plan" dated April 2018, by Baldwin & Sons addresses the 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. The Water Conservation Plan is included with the SPA Plan documentation.

As detailed in the Water Conservation Plan, the FC-2 project is committed to being water efficient through the use of recycled water for irrigation and utilizing other water conservation devices and measures. Through the use of recycled water and other water conservation measures the FC-2 project is expected to reduce the potential potable water usage by 53,385 gpd, or 24% of the baseline usage.

As evidenced by the information contained in the Water Conservation Plan, the objectives of the Otay Ranch GDP to incorporate water saving fixtures, drought tolerant landscaping, and recycled water usage into the development are being met. Based on information contained in the 1989 San Diego County Water Authority Annual Report, average water use within the Otay Water District was 220 gallons per day per capita (20,469.7 AF for a population of 83,000). Based on 2007 data from the OWD 2008 Master Plan, per capita water usage has dropped to approximately 189 gpd (33.26 mgd for a population of 186,000). These per capita numbers include non-residential demands and indicate the effectiveness that the conservation measures are having. It is expected that this trend will continue as adopted guidelines are

increasingly focused on reducing per capita water use.

B. FC-2 Potable Water Demand

Table I.3 summarizes the previously approved development in the FC-2 SPA Amendment area along with the proposed development. The projected water demands for Freeway Commercial were included in the Otay Water District February 2015 Water Supply Assessment and Verification (WSAV) report.

Table I.3
FC-2 SPA Amendment

Land Use	Approved	Proposed
MF Residential Units	600 units	900 units
Hotels	300 units	300 units
Park	2.0 acres	2.0 acres
Commercial	15,000 square feet	15,000 square feet

Source: Dexter Wilson Engineering, Inc.

Table I.4
FC-2 SPA Amendment Water Demand Summary

Land Use	Acres	Building Units	Unit Demand Factor	Total Demand (gpd)
Approved Water Demand (2015 WSAV)				
MF Residential	---	650	255 gpd/unit [1]	165,750
Hotel Rooms	---	310	115 gpd/unit	35650
Commercial	3.6	---	1,785 gpd/ac	6,428
Subtotal				**207,828**
Proposed Water Demand (Current SPA Amendment)				
Multi-Family Residential	---	900	170 gpd/unit [1, 2]	153,000
Hotels	---	300	115 gpd/unit	34,500
Commercial	3.6	---	1,785 gpd/ac [2]	6,428
Subtotal				**193,928**
Decreased Water Demand				**13,900**

[1] Assumes recycled water to be used for irrigation

[2] Based on 2015 Water Facilities Master Plan (OWD)

Source: Dexter Wilson Engineering, Inc.

Table I.4 summarizes the projected water demands based on the proposed SPA Amendment. As shown, the projected water demand decreased by 13,900 in the current scenario as compared to the assumptions in the 2015 WSAV. The reduction in demand is a result of updated water demand factors used in the ODW 2015 Water Facilities Master Plan These updated water demand factors for residential development are based on actual usage data and reflect lower projected usage per unit as a result of water conservation efforts in recent years. According to the Water Conservation Plan, the water demand will be reduced approximately 24% through the use of recycled water

and other water conservation measures to approximately 194,928 gpd.

As shown by Table I.4, the projected water demand for the amended project is lower than the previously estimated 2013 WRMP. This information will be provided by the developer to OWD for their use in regional water supply planning.

The sizing of the existing 16-inch water line in Olympic Parkway, 20-inch line in Eastlake Parkway, and proposed 12-inch line in Town Center Drive is adequate to support the proposed development and, thus, no changes to the proposed Freeway Commercial water system are necessary as a result of the proposed development.

California Senate Bills 610/221 require a Water Supply Assessment and Verification (WSAV) report to be prepared for projects proposing 500 or more residential dwelling units, or projects that demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project. The proposed PA-12 SPA amendment includes a WSAV report dated 2015.

The City of Chula Vista utilizes the Uniform Fire Code for determining required fire flows and durations for new development. Specific flows will ultimately depend on building type and size. The approved Freeway Commercial Project was based on the 1995 OWD Master Plan that used 5,000 gallons per minute (gpm) flow for 5-hours in assessing storage capacity adequacy, necessary pumping capacity and distribution piping requirements. The WRMP requires a fire flow of 5,000 gpm for a minimum 4-hour duration and 20 psi residual pressure for the Hotel uses.

C. FC-2 Recycled Water Demand

Within the FC-2 Project, recycled water will be used to irrigate street parkway landscaping, manufactured slopes along the circulation areas, commercial landscaping, open space and park area. Dexter Wilson estimated projected recycled water demands for the proposed project are approximately 31,560 gpd. Table I.5 contains a summary of the projected recycled water demands for the FC-2 SPA Amendment.

Table I.5 FC-2 SPA Amendment Projected Recycled Water Demands					
Land Use[21]	**Quantity**	**Recycled Water Factor[22]**	**Net Recycled Acreage**	**gpd/ac.**	**Average Demand (gpd)**
Approved					
Multi-Family Residential	600 units	15%		30 gpd/unit	18,000
Commercial	4.0 ac.	10%	0.4	1,900	760
Park	2.0 ac.	100%	2.0	1,900	3,800
Subtotal:					22,560
Proposed					
Multi-Family Residential	900 units	15%		30 gpd/unit	27,000
Commercial	4.0 ac.	10%	0.4	1,900	760
Park	2.0 ac.	100%	2.0	1,900	3,800
Subtotal					**31,560**
Increased Recycled Demand					**9,000 gpd**

Source: Dexter Wilson Engineering, Inc.

D. Otay Water District Master Plan

The OWD's master plan includes water demands for this project as part of the overall demands in the area based upon the City of Chula Vista land use data.

IV.7.6 Existing Potable Water Facilities

The Central Service Area of the OWD serves the Freeway Commercial project. This area of the District is supplied water from Connection Number 10 and 12 to the SDCWA aqueduct that fills 624 Zone reservoirs. Water is then distributed within the 624 Zone where it is pumped up to the 711 Zone (1st lift) storage and distribution system. Water is supplied to the 980 Zone storage and distribution system by the Eastlake Pump Station, which takes suction from the 1st lift (711) Zone. The Eastlake pump station supplies the entire 2nd lift zone.

The entire FC-2 site has been graded. Elevations on the FC-2 parcel range in elevation from low of approximately 645 to a high of approximately 657 feet. The project is within the 980 water service zone (2" lift zone) and is supplied from the 711 water service zone (1st lift zone).

IV.7.7 Existing Recycled Water Facilities

Currently, the source of recycled water for the OWD is the Ralph W. Chapman Water Recycling Facility. This facility has a capacity of 1.3 MGD and can be expanded to an ultimate capacity of 3.84 MGD. Two ponds in the District's Recycled Use Area near the two existing 980 Zone potable water tanks provide storage of the treated effluent.

The recycled water storage ponds have a high water line of approximately 944 feet and

[21] Acreages based on Site Utilization Plan prepared by Cinti Land Planning (August 1, 2004)

[22] Percentage irrigated is based on WRMP

provide the storage and supply for the 944 Zone distribution system. Recycled water pressure range between 135 psi to 165 psi for the FC-2 Project and is sufficient to provide fire protection. The 944 Zone's recycled water supply will be ultimately augmented by the South Bay Water Reclamation Plant, which will supply the 680 Zone and then pumped to the 944 Zone. There are currently no 944 Zone pipelines in place to supply recycled water to the FC-2 Project. Facilities within both of these zones are planned within Olympic Parkway along the northern boundary of the project.

IV.7.8 Proposed Facilities

The proposed FC-2 project shall be responsible for constructing all potable and recycled water improvements necessary to serve the project, which includes but are not limited to the proposed 12" water line in Town Center Drive and associated connections and upgrades (see Exhibit 12 and 13). Further, the proposed project shall adequately provide potable and recycled water service without relying on any proposed water construction phasing by other developments.

IV.7.9 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 approved by OWD. 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 approved by OWD. The District may provide reimbursement for construction and design costs associated with development of these improvements.

IV.7.10 Threshold Compliance

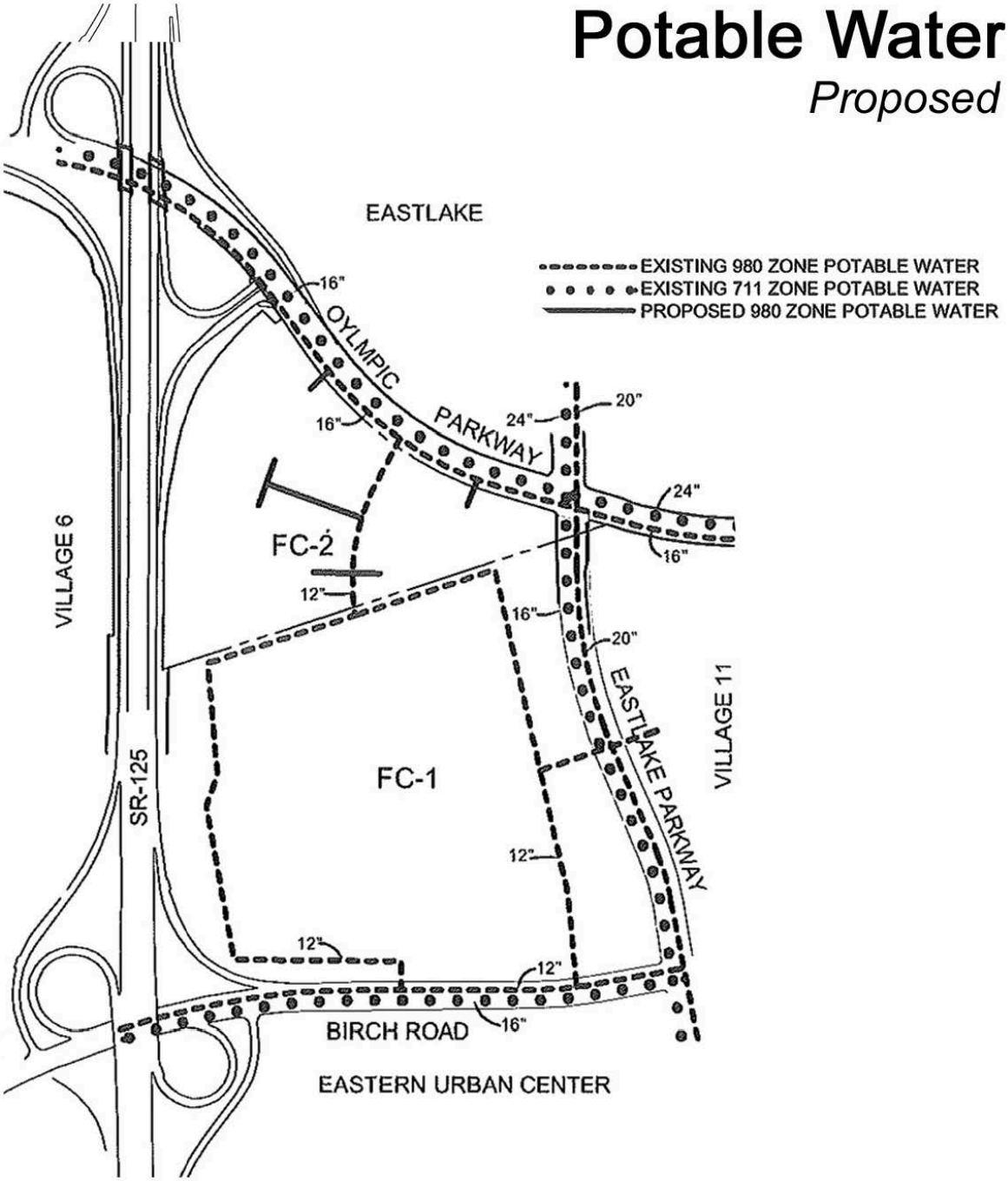
A. The approved "SAMP Freeway Commercial" dated January 2018, by Dexter Wilson identify water facilities to be constructed to provide the appropriate level of water service to meet the criteria established within the plans. The potable and recycled water systems have been designed and the costs identified by phase of development. The Developer shall be responsible for constructing all potable and recycled water improvements necessary to adequately serve the FC-2 SPA Amendment Project.

B. The developer shall request and deliver to the City a service availability letter from the OWD prior to a final map being approved for the FC-2 parcel of the Freeway Commercial Project.

C. The developer shall provide the OWD the projected increased water demand for the FC-2 SPA Amendment project.

Potable Water

Proposed



Sources: Powell/PBSJ and P& D

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

0 200 400 600

8/5/15

CITY OF CHULA VISTA

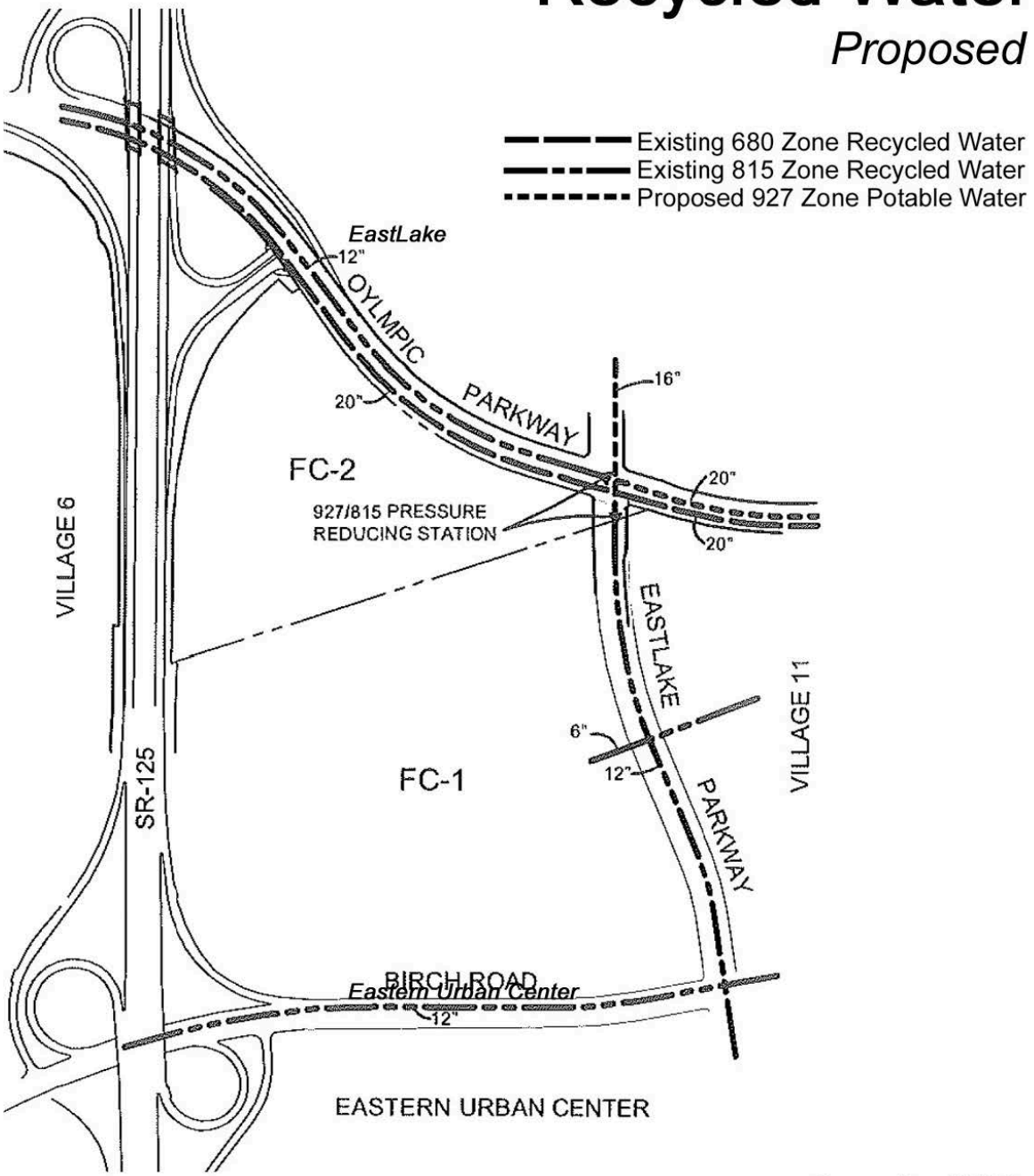
Freeway Commercial

OTAY RANCH

Exhibit 12

Recycled Water

Proposed



Sources: Powell/PBSJ and P& D

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San Diego, CA (619) 223-7408
0 200 400 600
8/5/15

CITY OF CHULA VISTA

Freeway Commercial

OTAY RANCH

Exhibit 13

IV.8 SEWER

IV.8.1 Threshold Standard

A. Existing and projected facility sewage flows and volumes shall not exceed City engineering standards for the current system and for budgeted improvements, as set forth in the Subdivision Manual.

B. The City shall annually ensure adequate contracted capacity in the San Diego Metropolitan Sewer Authority or other means sufficient to meet the projected needs of development.

IV.8.2 Service Analysis

The City of San Diego Metropolitan District provides sewer treatment services for the City of Chula Vista and 14 other participating agencies in accordance with the terms of a multi-agency agreement (Metro Agreement). The Metro system currently has adequate sewage treatment capacity to serve the region until approximately 2025. The Developer shall pay capacity fees prior to building permit issuance. Development shall not occur without adequate sewer capacity as determined by the City Engineer. Building permits will not be issued if the City Engineer has determined that adequate sewer capacity does not exist.

Sewer service to the project site is provided by the City of Chula Vista. Future development of the FC-2 site will require a connection to the Poggi Canyon Interceptor located in Olympic Parkway. The capacity of the off-site sewer facilities to serve the FC-2 SPA Amendment project has been analyzed by the "Otay Ranch Planning Area 12 Freeway Commercial SPA Amendment Sewer System Evaluation" dated September 25, 2017, by Dexter Wilson Engineering, Inc. This study is referred to as the Dexter Wilson Sewer Study throughout this PFFP. The study includes an analysis of a connection to the Poggi Creek Interceptor Sewer located in the adjacent Olympic Parkway.

The base source of information regarding the existing and recommended sewer facilities is from the "Freeway Commercial Conceptual Sewer Study" dated July 2002 by PBS&J and City engineering. This study is referred to as the PBS&J Sewer Study throughout this PFFP. An update letter dated March 3, 2004, was provided by PBS&J, indicating the original 2002 report is still valid for the reconfigured FC-1 SPA project.

IV.8.3 Project Processing Requirements

The SPA Plan and the PFFP are required by the Growth Management ordinance 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 Dexter Wilson Sewer Study.
3. Provide cost estimates for all facilities and proposed financing responsibilities.
4. Identify financing methods.

IV.8.4 Existing Conditions

The Project area is within the City of Chula Vista's Poggi Canyon Sewer Basin. Sewage generated within the Project will ultimately flow to the Poggi Canyon Interceptor in Olympic Parkway. The proposed on-site collection system serving the FC-2 parcel will drain northward to a connection to the Interceptor just west of Eastlake Parkway.

The existing Poggi Canyon Interceptor currently flows west along Olympic Parkway to Brandywine eventually connecting to the Salt Creek Interceptor, which ultimately connects to the Metro system facilities just west of Interstate 5. As a part of other Projects, the 18-inch Poggi Canyon Interceptor in Olympic Parkway was extended to the Project entrance at the FC-2 Entry Street.

IV.8.5 Proposed Land Use Change

Table J.1 summarizes the previously approved development in the FC-2 SPA Amendment area along with the new development currently being proposed.

Table J.1
FC-2 SPA Amendment

Land Use	Approved[23]	Proposed
MF Residential Units	600 units	900 units
Hotels	300 units	300 units
Park	2.0 acres	2.0 acres
Commercial	1.4 acres*	1.4 acres*

**Assumes retail floor space to site area ratio of 0.25 for 15,000 sq. ft., or 0.34 acres.*

Dexter Wilson Engineering, Inc.

An evaluation of the proposed land use change impact will have on the sewer collection system has been prepared by Dexter Wilson Engineering. This evaluation includes an estimate of the projected sewage flows. The August 2004 approved SPA plan provided the projected sewer flows when the project was initially approved. Table J.2 provides a comparison between projected sewer flows from the approved sewer study and the current land use plan proposal, per the proposed FC-2 Amendment. The result of the evaluation is that there is a total increase of approximately 237 EDUs over and above the 2004 SPA Plan as a result of the additional 300 multifamily units. Compared to Currently Approved Project, the proposed addition of 300 multi-family units results in an increase of 237 EDU's.

[23] Based on the 2016 SPA Plan Amendment, approved by Resolutions No. 2016-187, 2016-188, Ordinance No. 2016-3376.

Table J.2 FC-2 SPA Amendment Sewer Flow Summary				
Land Use	**Acres**	**Building Units**	**Generation Factor**	**Average Flow (gpd)**
FC-2 Originally Approved Sewer Flow (2004)				
Commercial	34.5	---	2,500 gpd/ac	86,250
FC-2 Currently Approved Sewer Flow				
MF Residential Units	---	600	182 gpd/unit	109,200
Hotels	---	300	76 gpd/unit [1]	22,800
Park	2.0	---	410 gpd/ac	820
Commercial	1.4	---	1,401 gpd/ac	1,960
Subtotal				**134,780**
FC-2 Proposed Sewer Flow				
MF Residential Units	---	900	182 gpd/unit	163,800
Hotels	---	300	76 gpd/unit [1]	22,800
Park	2.0	---	410 gpd/ac	820
Commercial	1.4[3]	---	1,401 gpd/ac	1,960
Subtotal				**189,380**
Increased Sewer Flow				**54,600**
Increased Sewer EDUs [2] from current approval				**237**

[1] Based on 0.33 EDU/Rm. *Dexter Wilson Engineering, Inc.*

[2] Based on 230 GPD/EDU.

[3] Assumes retail floor space to site area ratio of 0.25 for 15,000 sq. ft., or 0.34 acres.

IV.8.6 Adequacy Analysis

The wastewater master plan evaluates sewer facilities from two aspects, the current and future adequacy of trunk sewers and the future wastewater treatment facilities.

A. <u>Wastewater Treatment:</u>

According to the GMOC 2017 Annual Report, the City's sewer facilities are in compliance with the Threshold Standard and it is projected to remain in compliance for the next five years (See Table J.3). However, additional treatment capacity will be required as the City begins to approach build-out projections

Table J.3 City of Chula Vista Sewage Flow & Treatment Capacity						
Million Gallons per Day (mgd)	**Fiscal Year 2015**	**Fiscal Year 2016**	**Fiscal Year 2017**	**Projection for next 18 months**	**Projection for next 5 years**	**Projection for "Build-out"***
Average Flow	15.499	15.385	15.426	15.986	17.235	20.760
Capacity	20.864	20.864	20.864	20.864	20.864	20.864
* Buildout Projection based on Chula Vista Wastewater Master Plan (2005).						

Source: GMOC 2017 Annual Report

B. <u>Poggi Canyon 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 southerly to the Salt Creek Interceptor near the intersection of Palm Avenue and Main Street.

In accordance with the City of Chula Vista Subdivision Manual, Dexter Wilson used the City's sewage generation rates for commercial, residential and hotel land use to estimate the total annual average wastewater flows produced from the FC-2 SPA Amendment project (see Table J.2). On-site and off-site collection, trunk, and interceptor facilities were evaluated by Dexter Wilson Engineering based on this sewage flow. In addition, the design criteria are used for analysis of the existing sewer system as well as for design and sizing of proposed improvements and expansions to the system to accommodate the flows anticipated to be generated by the project.

Dexter Wilson Engineering's evaluation of the Poggi Canyon Interceptor is based on the April 2009 Poggi Canyon Basin Gravity Sewer Development Impact Fee Update (DIF Report). A comparison of the current FC-2 plan and the proposed FC-2 SPA amendment versus the assumptions in the DIF Report was prepared. Table J.4 provides the sewer flow projections for the current land use plan for the proposed amendment compared to the 2009 DIF Report. As shown, the Poggi Basin projections in the 2009 DIF Report would be increased by approximately 403 EDUs based on the current plan for the proposed FC-2 SPA Amendment.

Table J.4 FC-2 SPA Amendment Poggi Basin EDU Summary				
Description	**Quantity**	**Unit Flow Factor**	**Average Flow, gpd**	**EDUs**
2009 DIF Study				
C-1	30.4 ac.	2,500 gpd/ac.	76,000	330.4
C-2	8.2 ac.	2,500 gpd/ ac.	20,500	89.1
Subtotal 2009 DIF Study				**420**
Current Plan with Amendment				
Res. Apartments	900 units	182 gpd/unit	163,800	712.2[1]
Hotels	300 units	76 gpd/unit	22,800	99.1[2]
Park	2.0 ac.	410 gpd/ac.	820	3.6
Commercial	1.4 ac. [3]	1,401 gpd/ac.	1,960	8.5
Subtotal Current Plan with Amendment				**823**
Increase				**403**

[1] Based on 230 GPD/EDU.

[2] Based on 0.33 EDU/Rm.

[3]Assumes retail floor space to site area ratio of 0.25 for 15,000 sq. ft., or 0.34 acres.

Dexter Wilson Engineering, Inc.

C. Poggi Canyon Trunk Sewer:

The Poggi Canyon Interceptor available capacity was evaluated by the Dexter Wilson Sewer Study considering the proposed land use changes. Data on the Poggi Canyon Interceptor was obtained from the April 2009 Poggi Canyon Basin Gravity Sewer Development Impact Fee Update prepared by PMC. Data from this report includes existing permitted EDUs in the basin as well as committed EDUs based on previous project approvals.

Since the preparation of the 2009 PMC Study, a few proposed projects have the potential of increasing the number of units that will flow into the Poggi Interceptor. A brief description of these projects from the Dexter Wilson Sewer Study is provided below:

1. Village 2 Unit Transfer. As outlined in an August 4, 2011 memorandum, Baldwin and Sons processed a unit transfer that did not change the total unit count in Village 2 but transferred units between neighborhoods. The net effect of these transfers was a shift of 84 EDUs from the Wolf Canyon Basin to the Poggi Basin. These EDUs were considered in the Dexter Wilson Sewer Study.

2. JPB Village 2 SPA Amendment. The JPB Village 2 SPA Amendment increased the unit count in Village 2 by 197 units. Per the November 21, 2011 Sewer System Evaluation that was done for this project, the net effect of this land use change was the addition of 160 EDUs to the Poggi Basin. These additional EDUs were considered in the Dexter Wilson Sewer Study.

3. Village 2 Comprehensive SPA Amendment. Baldwin and Sons processed a comprehensive SPA Amendment that increased the number of units in Village 2 by approximately 1,500 units. The impact of this was an increase of 1,098 EDUs

in the Poggi Basin. These numbers include the unit transfer and JPB Amendment discussed above.

4. Eastern Urban Center (EUC). The EUC was approved in September 2009, shortly after the 2009 PMC Study was prepared. The PMC Study did, however, anticipate the EUC project and included 429 EDUs from the EUC in the calculation of the Poggi Interceptor Fee. These units include 189 EDUs within the Poggi Basin and 240 EDUs that are proposed to be permanently diverted from the Salt Creek Basin to the Poggi Basin. The current estimate for the EUC is 457 EDUs and so an additional 28 EDUs from the EUC have been considered in Dexter Wilson sewer system evaluation.

Table J.5 provides a reach by reach summary of permitted and committed EDUs and provides the impact that the FC-2 SPA Amendment would have on remaining capacity. Exhibit 14 identifies the reach locations and indicates where the FC-2 SPA Amendment EDUs will connect to the Poggi Interceptor. As shown in Table J.7, only the two reaches already identified for future replacement are shown as being over capacity. The proposed amendment does not require additional reaches of the Poggi Canyon Interceptor to be upgraded in the future. Upon approval of the proposed FC-2 SPA Amendment, the Poggi Basin Gravity Sewer Development Impact Fee should be updated to reflect the additional units.

TABLE J.5
POGGI CANYON INTERCEPTOR SUMMARY
FC-2 SPA Amendment

Reach	Capacity at[1] d/D=0.85 EDUs	Permitted EDUs		Committed EDUs[3]		Freeway Commercial Amendment		
		Current[2]	Remaining Capacity	Current[2]	Remaining Capacity	Additional EDUs[4]	Net EDUs Permitted Remaining	Net Committed Remaining EDUs
P102 to P140	21,162	11,602	9,560	16,204	4,958	1,529	8,031	3,429
P140 to P175R	25,569	11,602	13,967	16,204	9,365	1,529	12,438	7,836
P175R to P195	41,361	11,602	29,759	16,204	25,157	1,529	28,430	23,628
P195 to P230	21,162	10,726	10,436	15,328	5,834	1,529	8,907	4,305
P230 to P240	18,927	10,053	8,874	14,655	4,262	1,529	7,335	2,733
P240 to P253R	18,927	10,053	8,874	14,655	4,262	1,529	7,335	2,733
R253R to P270	14,028	9,763	4,265	14,365	(337)	1,529	2,736	(1,866)
P270 to P305	14,028	8,587	5,441	13,125	903	1,529	3,912	(626)
P305 to P310	44,362	8,587	35,775	12,609	31,753	1,529	34,246	30,224
P310 to P345	19,641	8,447	11,194	12,469	7,172	1,529	9,665	5,643
P345 to P365	15,369	8,289	7,080	12,312	3,057	1,529	5,551	1,538
P365 to P405	19,938	8,289	11,649	11,590	8,348	1,529	10,120	6,819
P405 to P410	15,369	7,770	7,599	11,070	4,299	1,529	6,070	2,770
u/s P410 to SR125	15,369	6,605	8,764	9,906	5,463	1,529	7,235	3,934

[1] Revised based on current factor of 230 gpd/EDU
[2] These numbers have not been updated based on the current sewer generation factors.
[3] Committed EDUs do not include interim 464 EDUs from Village 7, 281 EDUs from EUC.
[4] Includes 1,098 EDUs from Village 2, 28 EDUs from the EUC, and 403 EDUs from PA-12.

Source: Dexter Wilson Engineering, Inc.

Poggi Interceptor Map

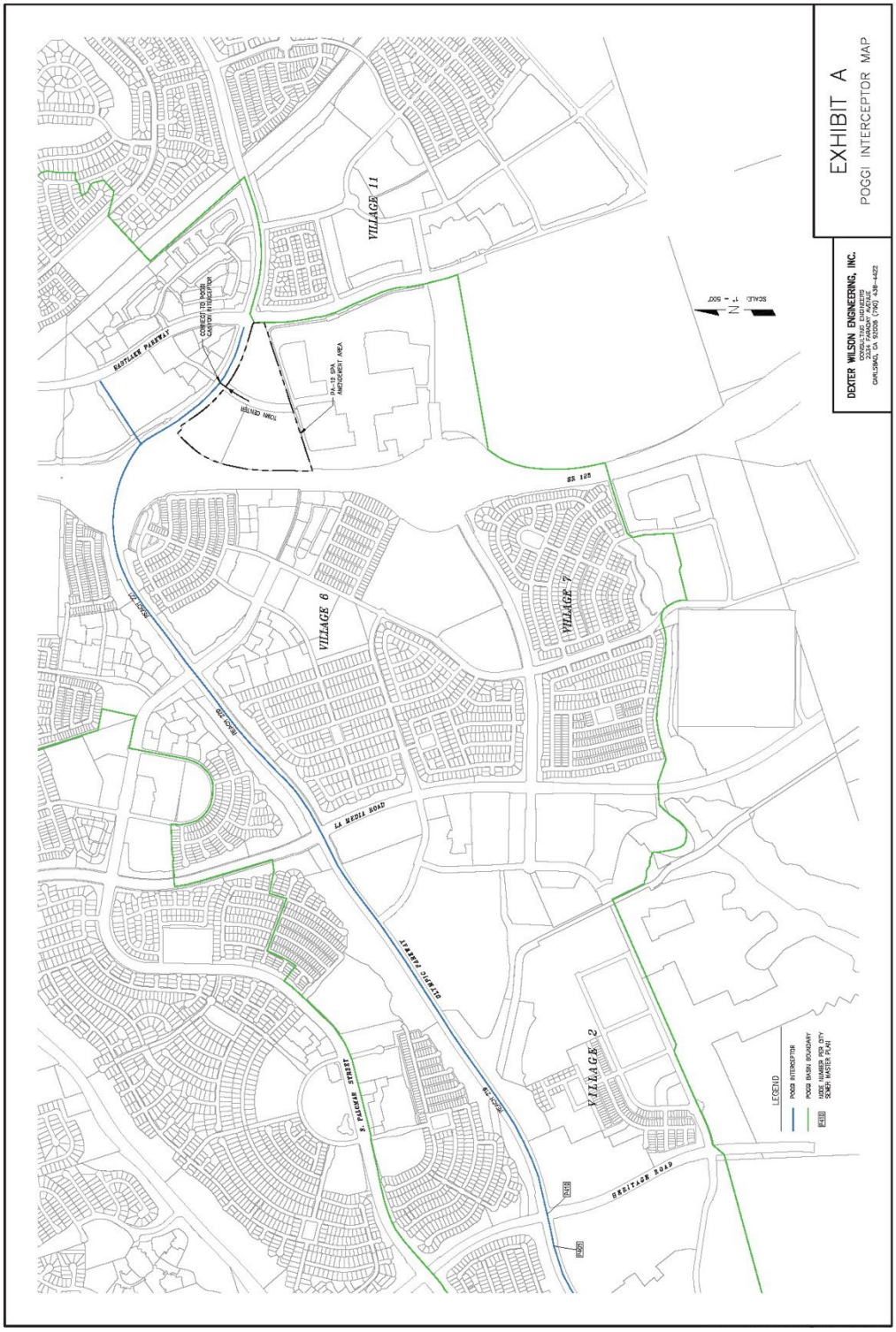
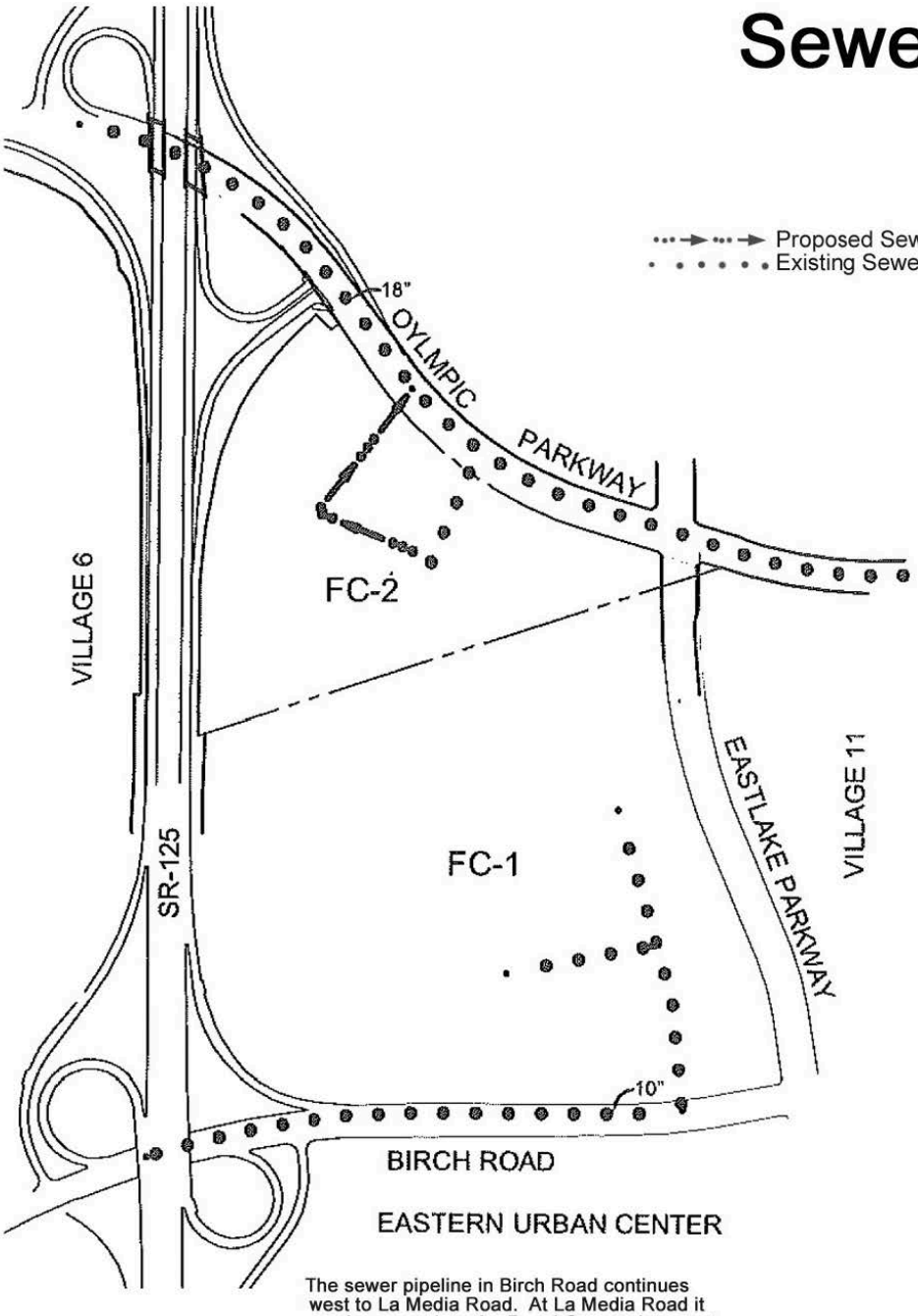


Exhibit 14

Sewer Plan



The sewer pipeline in Birch Road continues west to La Media Road. At La Media Road it continues north to the Poggi Canyon Interceptor.

Sources: Powell/PBSJ and P& D

Cinti Land Planning
San Diego, CA (619) 223-7408
0 200 400 600
8/5/15

CITY OF CHULA VISTA

Freeway Commercial

OTAY RANCH

Exhibit 15

IV.8.7 Recommended Sewerage Facilities

The recommended onsite sewer system for the FC-2 SPA Amendment area consists of gravity sewer lines that will convey flow to the Poggi Canyon Interceptor in Olympic Parkway. Based on the average flow presented in Table J.2 and a peak factor of 2.22 from the City Subdivision Manual, the projected peak flow for the project is 0.42 mgd. An 8-inch gravity sewer line with a minimum slope of 1.0% is adequate to convey this total project flow.

IV.8.8 Freeway Commercial North Improvements

The proposed FC-2 SPA Amendment will exceed the units foreseen in the 2009 Poggi DIF update, however, the limits of the required DIF improvements remain the same. The cost related to the DIF improvements has been identified in the Poggi DIF program and the FC-2 SPA Amendment project will be required to update the Poggi DIF study as a condition of approval for the project. The developer proposes an onsite sewer system consisting of 8-inch sewer lines with a single point of connection to the Poggi Canyon Interceptor at Town Center Drive.

IV.8.9 Financing Sewerage Facilities

The Poggi Basin Plan established a fee for funding capital improvements. City of Chula Vista Ordinance Number 2716 established the fee to be paid by future development within the Poggi Canyon Basin. Table J.6 summarizes the Poggi Canyon Basin Impact Fees to be paid for the proposed project. There is a $45 sewer administration fee is assessed per proposed connection. Table J.7 summarizes the Sewerage Capacity Fees to be paid for the proposed project. Fees are calculated using City factors.

Table J.6
Estimated Poggi Canyon Basin Impact Fees

Land Use	Quantity	EDUs	Impact Fee @ $265/EDU
MF Residential	900 units	675	$178,875
Hotels	300 units	122.44	$32,446
Commercial	.34 acres	3.2	$848
Total		**800.64**	**$212,169**

Table J.7
Estimated Sewerage Capacity Fees

Land Use	Quantity	EDUs	Fee @ $3,851/EDU
MF Residential	900 units	711	$2,738,061
Hotels	300 units	122.44	$471,516
Commercial	.34 acres	10.7	$41,206
Total		**844.14**	**$3,250,783**

II.8.10 Threshold Compliance

A. 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. 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.

B. The applicant for the FC-2 SPA Amendment project shall:
   1. Pay all current sewer fees required by the City of Chula Vista.
   2. Comply with Section 3-303 of the City of Chula Vista Subdivision Manual.
   3. Construct all on and off-site sewer lines and connections as required by the City Engineer to serve the project.

C. Prior to each final map the developer shall either demonstrate that Poggi Sewer has adequate capacity or upsize the inadequate segment, all to the satisfaction of the Director of Development Services and the City Engineer.

D. Prior to the first final map, Developer shall fund the updates of the Poggi Canyon Sewer DIF to include the projects proposed additional units. Further, prior to the first final map developer shall agree not to protest the update of the Poggi Canyon Sewer DIF.

IV.9 Drainage

IV.9.1 Threshold Standard

A. Storm water flows and volumes shall not exceed City engineering standards and shall comply with current local, state and federal regulations, as may be amended from time to time.

B. The GMOC shall annually review the performance of the City's storm drain system, with respect to the impacts of new development, to determine its ability to meet the goal and objective for drainage.

IV.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 FC-2 project existing conditions and proposed drainage improvements are identified in the "Otay Ranch Planning Area 12, Drainage Study" October 7, 2014, by Hunsaker & Associates, which is referred as the Hunsaker Drainage Study throughout this PFFP. The Hunsaker Drainage Study identifies the Pre-Development and Post-Development Conditions flow rates for 50-year and 100-year storm events; the required size of the proposed storm drain facilities needed to route the expected runoff through the developed site; and a capacity analysis and recommendation for the existing storm drain capacity once the site is developed. A Drainage Report and a Storm Water Quality Management Plan (SWQMP) were prepared by SB&O Inc. on August 8, 2018 for the east portion of FC-2.

The existing project storm water quality conditions and proposed water quality improvements are identified in three reports. Each report focuses on a specific area within FC-2 and are referred collectively as the Hunsaker WQTR throughout this PFFP. The reports include the following:

- The Hotel Site: "Water Quality Technical Report (Major WQTR) for Otay Ranch Village 12, PA-12 West Residential", October 20, 2014 by Hunsaker & Associates.

- The Eastern Residential area: "A Drainage Report and a SWQMP", August 8, 2018 by SB&O Inc.

- The Western Residential area: "Water Quality Technical Report (Major WQTR) for Otay Ranch Village 12, PA-12 West Residential", December 31, 2015 by Hunsaker & Associates.

The Hunsaker and SB&O WQTRs have been prepared to implement the methods and procedures as described in the City of Chula Vista Storm Water Manual and Standard Urban Stormwater Mitigation Plan (SUSMP) for BMP design. The treatment of the runoff from the project is addressed in the WQTR. The proposed design will utilize on-site Low Impact Development (LID), Best Management Practices (BMPs) and Bioretention Integrated Management Practices (IMP's) Treatment Controls to treat the 85th percentile flow from the development.

The FC-2 project is under the jurisdiction of the San Diego Regional Water Quality Control Board (SDRWQCB). The FC-2 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 "City of Chula Vista BMP Design Manual", December 2015, addresses the onsite post-construction storm water requirements for Standard Projects and Priority Development Projects (PDPs) and provides procedures for planning, preliminary design, selection, and design of permanent storm water BMPs based on the performance standards as required by the Municipal Storm Water Permit for the San Diego Region [Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100].

The requirements in the Chula Vista BMP Design Manual were effective February 16, 2016 and replaced the City of Chula Vista Storm Water Manual (January 2011). All development projects must comply with the requirements.

IV.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.

IV.9.4 Existing Conditions

The FC-2 site is located within the northwest portion of the overall Otay Ranch Planning Area 12 or Freeway Commercial North site, which is bisected by Town Center Drive. The FC-2 site has been mass graded with an average slope of 1.1%. Sediment basins are located at the southwest and southeast corner of the Olympic Parkway-Town Center Drive intersection to desilt runoff from the site. Runoff from these basins is conveyed towards the existing storm drain along Town Center Drive. This storm drain ties into the existing Olympic Parkway storm drain system and Poggi Canyon Creek downstream. The existing storm drain was designed as part of the Improvement Plans for Olympic Parkway (from SR-125 to the SDG&E Easement). The flowrates for the existing storm drain were based on ultimate buildout of Otay Ranch Planning Area 12 using runoff coefficients consistent with a commercial development. Therefore, problems with capacity of the downstream storm drain system are not anticipated by the Hunsaker Drainage Study.

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 in Scenario 4 of the general plan. Only the remaining ten basins will experience major development and the subsequent changes in drainage conditions.

The City's Drainage Master Plan analyzed current and future requirements for drainage facilities. The report details three alternative solutions for drainage in each basin. 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 hydrologic calculations were performed by Hunsaker for various areas within Planning Area 12 west of Town Center Drive. Runoff values obtained were based on the interim and ultimate buildout of the areas west of Town Center Drive in order to verify that the existing downstream storm drain had sufficient capacity. The values in Table K.1 below are the cumulative flows from the area west of Town Center Drive for the Interim Conditions.

Table K.1
Site Runoff Flows - Interim Condition*

Project Subarea	Area (acres)	Q50 (cfs)	Q100 (cfs)
PA 12 West, north portion	5.77	16.68	18.81
PA 12 West, south portion	17.45	15.58	17.84
PA 12 West (cumulative)	23.22	32.26	36.65

Source: Hunsaker & Associates

** PA 12 East is undeveloped in the interim condition*

IV.9.5 Proposed Facilities

A. Storm Drainage

The values in Table K.2 below are the cumulative flows from the area west of Town Center Drive for the Ultimate Conditions.

Table K.2
Site Runoff Flows - Ultimate Condition

Project Subarea	Area (acres)	Q50 (cfs)	Q100 (cfs)
PA 12 West, north portion	22.59	59.70	68.05
PA 12 West, south portion	0.63	2.56	2.91
PA 12 West (cumulative)	23.22	62.26	70.96
PA 12 East (cumulative)	10.41	40.5	46.02

Source: Hunsaker & Associates

The existing storm drain along Town Center Drive, which connects to the Olympic Parkway storm drain system was sized per the "Grading Plans for Olympic Parkway (from SR125 to the SDG&E Easement)". The storm drain was sized based on the assumption that PA12 would be developed as a commercial development with a runoff coefficient of 0.85. Those calculations determined a runoff of 78.3 cfs from the PA 12 site based on hydrologic methodology being used in 2002. Subsequent changes to the hydrologic methodology dictated by the City of Chula Vista and the County of San Diego in 2003 have typically

shown significant flow increases relative to values obtained in 2002 or earlier. Thus, the discrepancy in flows generated by PA 12 are expected although the land use and area have not changed. A preliminary hydraulic analysis by Hunsaker was performed on the existing storm drain along Town Center Drive using the calculated flows from the PA 12 site (west of Town Center Drive) to verify that it was not compromised. The Hunsaker Drainage Study includes this analysis, as well as the reference 'As- Built' drawings for the existing storm drain along Town Center Drive.

According to the Hunsaker Drainage Study the northeast and southern portion of the PA-12 site will remain undeveloped in an interim condition. A new sediment basin within the southern portion will be constructed until this portion is developed. The new basin was sized per the City of Chula Vista Subdivision Manual (Section 3-204.4). The basin size required to desilt the southern portion of the site was determined to be 89' wide by 179' long and 6.5' deep. The basin will require a 48" perforated pipe extending to a height of 3.5' from the base of the basin. This riser will produce a head of 0.54 feet based on a Q100 flowrate. Please reference the Hunsaker Drainage Study for sediment basin calculations. Hunsaker concludes that the proposed site layout of FC-2 site as presented in the current grading plans will not present any unanticipated hydrologic concerns on the existing downstream storm drain infrastructure (see Exhibit 16 Drainage Plan).

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 City requires that sufficient information and analysis on how the project will meet the water quality requirements shall be provided as part of the Tentative Map and/or Site Plan review process. In this manner, the type, location, cost, and maintenance characteristics of the selected BMPs will be given consideration during the project planning and design. Therefore, the City requires that prior to approval of any Tentative Map and/or Site Plan for the project, whichever occurs first, the applicant shall obtain the approval of the City Engineer of a Water Quality Technical Report containing specific information and analysis on how the project will meet the requirements of the City of Chula Vista Storm Water and Discharge Control Ordinance and the NPDES Municipal Permit (including the Final Model SUSMP for the San Diego Region).

The overall FC-2 development site is currently graded and slopes towards the existing sediment basins. Town Center Drive divides PA 12 into two parcels. A sediment basin is located at the southeast corner of the Olympic Parkway- Town Center Drive intersection to address runoff from the area east of Town Center Drive. Runoff from this basin is conveyed towards the existing storm drain along Town Center Drive. This storm drain ties into the existing Olympic Parkway storm drain system and Poggi Canyon Creek downstream.

The Hunsaker WQTR indicates that due to the FC-1 onsite type "D" soils that infiltration is not recommended. Therefore, infiltration BMP's or LID features are not proposed. Hunsaker designed the storm drain system and layout to address peak flows as well as to integrate water quality features needed to comply with the City of Chula Vista Standard Urban Stormwater Mitigation Plan (SUSMP) requirements for water quality.

1. FC-2 Hotel Site:

The Hotel Site is located within the northwest portion of the Planning Area 12 or FC-2 site. It is South of Olympic Parkway, west of Town Center Drive, east of SR-125, and north of Birch Road. Two hotels are proposed west of Town Center Drive. The westernmost hotel has been completed in opened in October 2017. The site will eventually consist of two hotel buildings, parking spaces, and storm drain and water quality facilities to collect and treat all runoff from the site. On an interim basis, the existing sediment basin located at the future location of the second hotel site will be converted into a hydromod basin to address hydromodification of the westernmost hotel site.

The aforementioned existing sediment basin immediately west of Town Center Drive currently collects all onsite runoff (from areas west of Town Center Drive). An existing riser and storm drain connect to the existing storm drain on Town Center Drive, which connects to the Olympic Parkway storm drain system. Runoff from the first hotel site will be collected by inlets and piped towards the existing sediment basin and existing storm drain within Town Center Drive. The developed site will contain drainage facilities such as inlets, storm drain, and street gutters to direct flow to the existing storm drain at Olympic Parkway.

The hotel site will include a few open landscaped areas that are planned to be used as water quality facilities. In addition, some of these areas will serve as collection points for peak flow runoff. Permeable pavement areas within the hotel parking areas will serve for LID treatment for those respective areas. Peak flows for those areas will be directed towards downstream storm drain inlets.

Biofiltration units (Bio-Clean Modular Wetland Units or approved equal) will be specified at the two inlets along the entry road to the site. These units will be flow-based and will treat the Q85th flow being delivered towards each unit from the respective street.

2. FC-2 West Residential Site:

The West Residential Site is located within the southern portion of the overall Planning Area 12 or FC-2 west site. It is South of Olympic Parkway, west of Town Center Drive, east of SR125. The site will consist of multifamily dwelling units, a park, a biofiltration basin, and associated improvements typical of multi-family sites. Utilities such as sewer, water, and storm drain will connect to existing facilities adjacent to the site. Water quality and hydromodification facilities will also be constructed onsite for mitigation of site runoff. The site will be accessed by two entry roads from Town Center Drive.

Drainage facilities will be built as part of the FC-2 West Residential development and will include storm drain, inlets, headwalls, cleanouts and rip rap outlet dissipation devices. The storm drain from the site will connect downstream to the storm drain which will be constructed as part of the Hotel site improvements. The proposed flows from the residential areas have been considered in the design of the hotel site storm drain design.

Similar to the other areas within the FC-2 site, infiltration is not recommended for this site because of the type "D" soils. Therefore, infiltration BMPs or LID features are not proposed. Storm drain from this residential area and park site will connect to the storm drain which will be built as part of the Hotel improvement plans. Therefore, storm drain inverts will be constrained to those set per the Hotel plans. The western boundary of the site includes open space which can be utilized as a location for a water quality/HMP facility.

The park area will be considered self-treating since it will consist of pervious areas. The residential areas propose to use a biofiltration facility as treatment control BMPs. The biofiltration basins were sized to treat the design capture volume (DCV) from the area, which is tributary to it. The BMP surface area, which is the bottom area of the bioretention area, was sized to ensure that the entire water quality runoff would filter through the amended soil layer. The total DCV will be accounted for within the engineered fill and gravel layers as well as the ponded volume above the basin bottom.

3. FC-2 East Residential Site:

The FC-2 East Residential or Planning Area 12 East site is located within the Eastern portion of the FC-2. It is South of Olympic Parkway, east of Town Center Drive, west of Eastlake Parkway, and north of Birch Road. The western boundary is the existing Town Center Drive that connects to Olympic Parkway at its northern end. The site will consist of residential units as well as retail shops, a swimming pool, parking lots, and open spaces. Utilities such as sewer, water, and storm drain will connect to existing facilities adjacent to the site. Water quality and hydromodification facilities will also be constructed onsite for mitigation of site runoff. In addition, the proposed residential project will include a few open landscaped areas that will be used to construct water quality facilities.

The overall FC-2 is currently graded. Town Center Drive divides it into two parcels. A sediment basin is located at the southeast corner of the Olympic Parkway- Town Center Drive intersection to desilt runoff from the area east of Town Center Drive. Runoff from this basin is conveyed towards the existing storm drain along Town Center Drive. This storm drain ties into the existing Olympic Parkway storm drain system and Poggi Canyon Creek downstream.

In accordance with the SWQMP (prepared by SB&O), the PA 12 East Residential project proposes a combination of biofiltration basins and proprietary structures to provide treatment, along with an underground storage and control facility to provide HMP compliance.

After review and analysis of various treatment options, SB&O selected the Design BMPs that were deemed to be effective and feasible for the project. The following summarizes the City of Chula Vista's standard water quality mitigation measures to be implemented for this project.

- **Storm Water Pollution Prevention Plan:** Prior to issuance of each grading permit for Otay Ranch FC-2 project or any land development permit, including clearing and grading, the project applicant shall submit a notice of intent and obtain coverage under the NPDES permit for construction activity from the SWRCB.

- **Post-Construction/Permanent BMPs:** Prior to issuance of each grading permit, the City Engineer shall verify that parcel owners have incorporated and will implement post-construction BMPs in accordance with current regulations.
- **Limitation of Grading:** The project applicant shall comply with the Chula Vista Development Storm Water Manual limitation of grading requirements.
- **Hydromodification Criteria:** The project applicant shall comply, to the satisfaction of the City Engineer, with city Hydromodification Criteria or the hydrograph modification management plan, as applicable.

  The combination of proposed construction and permanent BMP's will reduce, to the maximum extent practicable, the expected project pollutants and will not adversely impact the beneficial uses of the receiving waters.

IV.9.6 Financing Drainage Facilities

A. 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 Freeway Commercial North project will be required to construct all onsite facilities needed for the project.

In the newly developing areas east of I-805, it is the City's policy that development projects assume the burden of funding all maintenance activities associated with drainage facilities. As such, the City will enter into an agreement with the project applicant whereby maintenance of 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.

B. 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 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.

The proposed project modifications shall comply with all applicable Federal, State and local rules and regulations including compliance with NPDES permit requirements for urban runoff and storm water discharge. Best Management Practices (BMPs) for design, treatment and monitoring for storm water quality will be implemented as delineated in the approved WQTR with respect to municipal and construction permits. Compliance with all applicable rules and regulations governing water quality as well as implementation of all mitigation measures outlined in the FEIR would ensure no additional impacts to water quality beyond those previously analyzed would occur as a result of the proposed modifications.

IV.9.7 Threshold Compliance

A. Prior to approval of the Tentative Map and/or Site Plan by the Design Review Committee, whichever occurs first, applicant shall demonstrate compliance with the City of Chula Vista Storm Water and Discharge Control Ordinance and the NPDES Municipal Permit (including

the Final Model SUSMP for the San Diego Region). The Applicant shall obtain the approval of the City Engineer of a WQTR.

B. The project shall comply with the recommended mitigation measures provided in the Hunsaker Drainage Study and the Hunsaker WQTR and SB&O Drainage Study and SWQMP and the Environmental Impact Report for the Otay Ranch University Villages Project.

C. The project 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.

D. The project shall incorporate urban runoff planning in the Tentative Map and/or Site Plan.

E. The project shall be required to comply with all current regulations related to water quality 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.

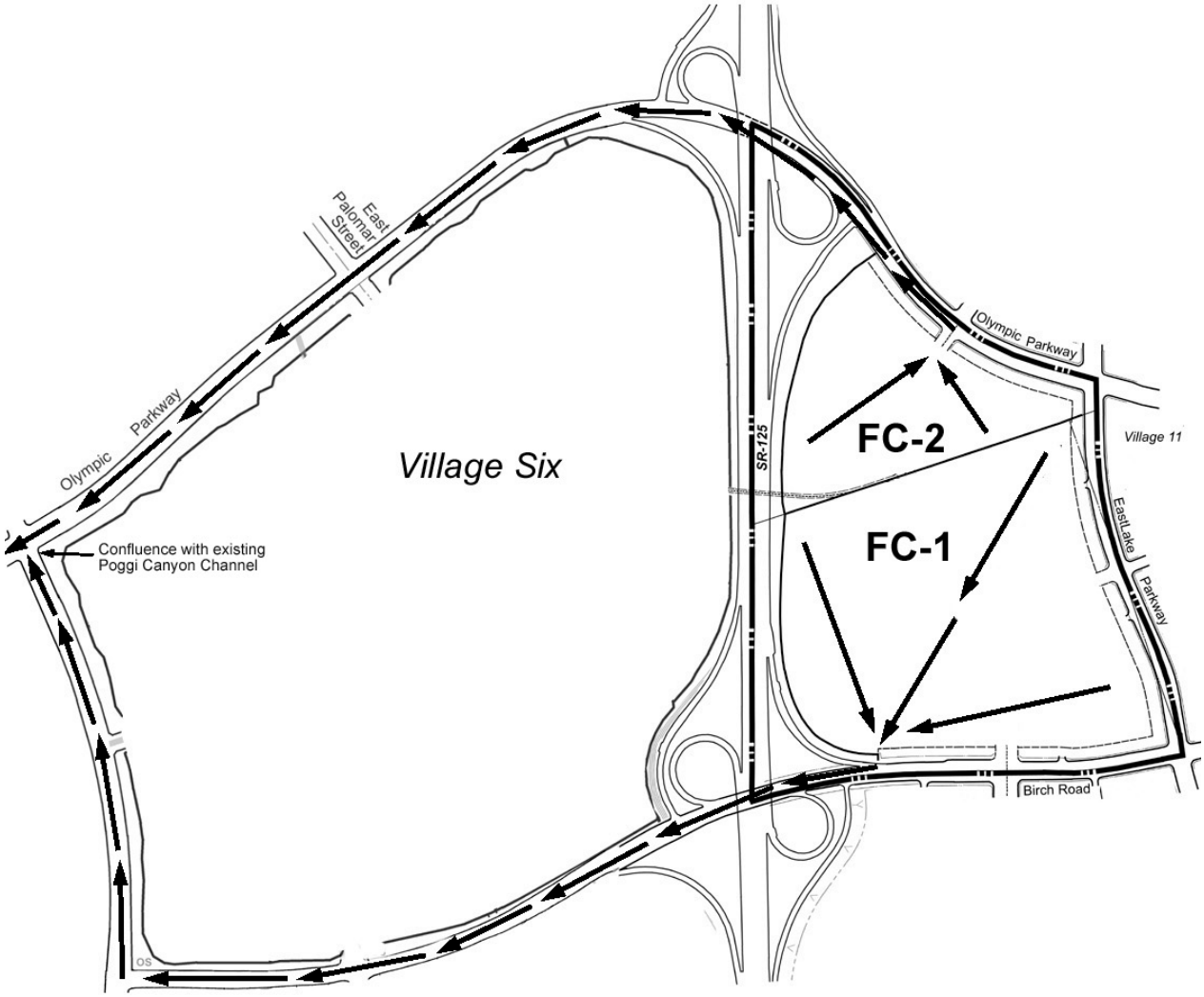
F. The project applicant will assure the maintenance of drainage facilities by a property owner's association that would raise funds through fees paid by each property owner and/or participation in a CFD established over the entire project to raise funds through the creation of a special tax for drainage maintenance purposes.

G. Additional drainage analysis may be required at the tentative map phase of the project to demonstrate the adequacy of the proposed on-site storm drain system(s) and the existing storm drain connections.

H. Future drainage reports shall be prepared by the Applicant, as required by the City of Chula Vista, for the final engineering phase(s) of the project.

I. The project applicant shall comply with the Project FEIR Water Quality & Hydrology mitigation measures. A full discussion of these mitigation measures can be found in the Project FEIR.

Drainage Plan



Drainage Flow Direction

Freeway Commercial

CITY OF CHULA VISTA

OTAY RANCH

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

0 200 400 600

1/19/2016

Exhibit 16

IV.10 AIR QUALITY AND CLIMATE PROTECTION

IV.10.1 Threshold Standard

The City shall pursue a greenhouse gas emissions reduction target consistent with appropriate city climate change and energy efficiency regulations in effect at the time of project application for SPA plans or for the following, subject to the discretion of the Development Services Director:

A. Residential projects of 50 or more residential dwelling units;

B. Commercial projects of 12 or more acres (or equivalent square footage);

C. Industrial projects of 24 or more acres (or equivalent square footage); or

D. Mixed use projects of 50 equivalent dwelling units or greater.

IV.10.2 Service Analysis

The City of Chula Vista has a Growth Management Element (GME) in its General Plan. One of the stated objectives of the GME 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.

To implement the GME, the City Council has adopted the Growth Management ordinance 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. 19.09.050 A.3) 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 in accordance with the adopted AQIP Guidelines.

The Chula Vista City Council adopted the 2008 state Energy Code (Title 24) with an amendment requiring an increased energy efficiency standard. This amendment went into effect on February 26, 2010, as Section 15.26.030 of the Municipal Code. As required by this amendment, all building permits applied for and submitted on or after this date are subject to these increased energy efficiency standards. The increase in energy efficiency is a percentage above the new 2008 Energy Code and is dependent on climate zone and type of development proposed.

- New residential and nonresidential projects that fall within climate zone 7 must be at least 15% more energy efficient than the 2008 Energy Code.

- New low-rise residential projects (three-stories or less) that fall within climate zone 10 must be at least 20% more energy efficient than the 2008 Energy Code.

In Addition, per Section 15.12 of the City's Municipal Code, all new residential construction, remodels, additions, and alterations must provide a schedule of plumbing fixture fittings that will reduce the overall use of potable water by 20%.

The City of Chula Vista has developed a number of strategies and plans aimed at improving air quality. The City is a part of the Cities for Climate Protection Program, which is headed by the International Council of Local Environmental Initiatives (ICLEI). In November 2002, Chula Vista adopted the CO_2 Reduction Plan to lower the community's major greenhouse gas emissions, strengthen the local economy, and improve the global environment. The CO_2

Reduction Plan focuses on reducing fossil fuel consumption and decreasing reliance on power generated by fossil fuels, which would have a corollary effect in the reduction of air pollutant emissions into the atmosphere.

IV.10.3 Adequacy Analysis

In 1983, the California Legislature enacted a program to identify the health effects of Toxic Air Contaminants (TACs) and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." The California Health and Safety Code defines a TAC as an air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health.

Impacts to air quality are addressed in "Final Environmental Impact Report for the Otay Ranch Freeway Commercial Sectional Planning Area 12 (FEIR)", 2003, City of Chula Vista. The proposed modifications addressed in this Addendum would not result in an increase in overall land use intensity or substantially change traffic distribution patterns and would result in a decrease in traffic generation.

In May 2015, the City approved the General Plan and Otay Ranch GDP Amendments, as well as entitlements, for the proposed modifications through approval of the First Addendum to the FEIR. First and Second Addenda to the FEIR modified the project to allow for the construction of 600 multifamily residential units, 15,000 square-feet of commercial space in a mixed-use format, and 2.0 acres of public parkland. The FEIR and the First Addendum are collectively referred to as the "FEIR."

"A Third Addendum to the EIR Otay Ranch Freeway Commercial Sectional Planning Area (SPA) Plan Planning Area 12", August 28, 2018, City of Chula Vista provides more specific detail regarding the proposed modifications for the approval of the SPA Plan Amendment, and Freeway Commercial North Master Precise Plan Amendment to add 300 Multi-family uses to the previously approved project.

The "Air Toxics Health Risk Assessment for the Otay Ranch Planning Area 12 Project" dated March 24, 2016, by SRA (SRA Report), was the basis of the Second Addendum. SRA prepared a technical memorandum evaluating the impacts associated with the proposed density increase amendment. The SRA Report and memorandum evaluated the potential for adverse impacts to the ambient air quality due to construction and operational emissions resulting from the Project. The report indicates that construction would result in a temporary addition of pollutants to the local air shed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials.

Construction emissions as estimated in the SRA Report would be below all significance thresholds for criteria air pollutants and would not exceed those levels identified in the FEIR. The site would be watered at least three times daily to control fugitive dust emissions, and vehicle speeds would not exceed 15 miles per hour, per FEIR mitigation measure 5.4-2. In addition, low-VOC paints would be utilized during architectural coatings. With incorporation of these design features, construction emissions were estimated to be below construction emissions estimated in the FEIR. The FEIR also identified mitigation measures 5.4-1 and 5.4-2, which reflect dust control measures and measures to reduce VOC and NO emissions.

With the proposed increase of residential density, operational emissions would be well below the levels identified in the FEIR. As discussed, the proposed modifications would result in fewer trips than the approved project; therefore, mobile emissions resulting from the proposed modifications would be lower than that previously analyzed in the FOR. Additionally, mitigation measures 5.4-3 and 5.4-4 are identified in the FEIR, which would further reduce operational emissions.

The SRA Report determined that there are no new significant sources of construction or operational air emissions or health risk impacts beyond those identified in the FEIR that would occur with implementation of the proposed modifications to the approved project.

IV.10.4 Threshold Compliance

The project applicant shall comply with the FEIR and SRA Report Air Quality mitigation measures. A full discussion of these mitigation measures can be found in the aforementioned documents.

IV.11. CIVIC CENTER, CORPORATION YARD AND ADMINISTRATION FEES

There are no adopted threshold standards for such Public Facilities as the Civic Center Expansion, Corporation Yard Relocation and Administration. Funds for the most recent renovation of the Civic Center are tied to the collection of the PFDIF fees in effect at the time of payment and prior to certificate of occupancy issuance. The information regarding the Corporate Yard and other Public Facilities is being provided in this section of the PFFP to aid in calculating the required PFDIF.

The PFDIF was updated by the Chula Vista City Council on November 7, 2006 by adoption of Ordinance 3050. Current applicable fees for Civic Center multi-family residential is $2,968/unit and general commercial (including office) development is $9,997/acre. Current applicable fees for Corp Yard multi-family residential is $403/unit and general commercial (including office) development is $8,552/acre. The PFDIF amount is subject to change as it is amended from time to time. Both residential and non-residential development impact fees apply to the project. The calculations of the PFDIF due for each facility are addressed in the following tables of this report.

At the current fee rate, the FC-2 SPA Amendment Civic Center Expansion Fee obligation at build-out is approximately $2,735,824 (see Table L.1).

Table L.1
Civic Center Expansion Fees

Development	DU's	MF PFDIF/DU	Acres	Com'l PFDIF/AC.	Estimated Civic Center Fee
Multi-Family Residential	900	$2,968			$2,671,200
Commercial (Residence Inn)			3.31	$9,997	$33,090
Commercial (Courtyard)			2.81	$9,997	$28,092
Commercial Mixed Use			0.34	$9,997	$3,442
Totals	900				$2,735,824

At the current fee rate, the FC-2 SPA Amendment Corporate Yard Fee obligation at build-out is approximately $417,983 (see Table L.2).

Table L.2
Corporate Yard Relocation Fees

Development	DU's	MF PFDIF/DU	Acres	Com'l PFDIF/AC.	Estimated Fee Corporate Yard
Multi-Family Residential	900	$403			$362,700
Commercial (Residence Inn)			3.31	$8,552	$28,307
Commercial (Courtyard)			2.81	$8,552	$24,031
Commercial Mixed Use			0.34	$8,552	$2,945
Totals	900				$417,983

At the current fee rate, the FC-2 SPA Amendment Administration Public Facilities Fee obligation at build-out is approximately $587,186 (see Table L.3).

Table L.3
Public Facilities Fees For Program Administration Facilities

Development	DU's	MF PFDIF/DU	Acres	Com'l PFDIF/AC.	Estimated Admin. Fee
Multi-Family Residential	900	$637			$573,300
Commercial (Residence Inn)			3.31	$2,148	$7,110
Commercial (Courtyard)			2.81	$2,148	$6,036
Commercial Mixed Use			0.34	$2,148	$740
Totals	900				$587,186
*Includes 0.34 acres of commercial mixed use					

The projected fees, illustrated in Tables L.1, M.2 and M.3, are estimates only. Actual fees may be different. PFDIF Fees are subject to change depending upon City Council actions and or Developer actions that change residential densities, industrial acreage or commercial acreages.

Civic Center, Corporation Yard and Administration Facilities fees shall be paid prior to final inspections, at the rate in effect at the time payment is made.

IV.12. FISCAL ANALYSIS

IV.12.1 Threshold Standard

A. Fiscal Impact Analyses and Public Facilities Financing Plans, at the time they are adopted, shall ensure that new development generates sufficient revenue to offset the cost of providing municipal services and facilities to that development.

B. The City shall establish and maintain, at sufficient levels to ensure the timely delivery of infrastructure and services needed to support growth, consistent with the threshold standards, a Development Impact Fee, capital improvement funding, and other necessary funding programs or mechanisms.

IV.12.2 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 included as part of the Chula Vista General Plan.

IV.12.3 Project Processing Requirements

The SPA Plan and the PFFP are required by the Growth Management ordinance to prepare a phased fiscal/economic report dealing with revenue vs. expenditures including maintenance and operations.

IV.12.4 Fiscal Analysis of Project

IV.12.4.1 Introduction

For the proposed Amendment which adds 300 DUs to the previously approved mixed-use project, Spicer Consulting Group (SCG) prepared a "Fiscal Impact Analysis of Otay Ranch Freeway Commercial North" dated January 30, 2018. This report is referred to as the SCG FIA throughout this Supplemental PFFP and this section of the PFFP is based upon the SCG FIA.

IV.12.4.2 Fiscal Impact Methodology

The FC-2 Amendment fiscal impact analysis was prepared in accordance with the City's newly developed SPA Fiscal Impact Analysis (FIA) Framework. As prescribed in the SPA Fiscal Impact Framework, SCG used revenue and expenditure factors from the SPA Fiscal Impact Framework to estimate fiscal revenues and expenditures expected to grow proportionally with new development. Special analysis models were used to estimate revenues, such as property tax revenues, transient occupancy tax, vehicle license fee (VLF) revenues, and sales taxes that may not grow proportionately with new development.

IV.12.4.3 Fiscal Impact Analysis Results

The annual net fiscal impact associated with the Project over the ten-year period is summarized in Table M.1, below. Table M.2 represents the comparison of the net revenues between the currently approved Project and the proposed amendment Project. As with the currently approved Project, the amended Project is projected to generate a positive net fiscal impact to the City's General Fund. While the public safety cost is increasing with the additional 300 multi-family units, the Project is still expected to generate a positive annual net fiscal revenue to the City of

Chula in Year 10 of approximately $1.4 million.

Project expenditures over the 10-year period are illustrated in the Appendix. SCG projected annual expenditures associated with the Project to increase each year. There is a significant increase in expenditures between Years 1 and 5, primarily attributed to Police and Fire expenditures as all the new residential units are absorbed. Thereafter, projected expenditures remain relatively constant at low $800,000 (814,004 - $837,226) because the Project is expected to be built out as of Year 5.

Project revenues over the 10-year period are detailed in the Appendix. SCG projected annual revenues associated with the Project to increase each year over the 10-year period; the largest increase occurs between Years 2 - 4 ($658,148 to $1,320,195), attributed to the addition of TOT tax from the construction of the second hotel and sales tax from the 15,000 sq. ft. of commercial in mixed-use format.

Table M.1
FC2 Amendment Fiscal Impact

							10 Year Analysis	
Proposed FC2	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 10**	**Cumulative**	**Average**
Revenues	$653,432	$785,376	$1,368,936	$2,041,727	$2,278,011	$2,439,411	$ 8,997,264	$1,899,726
Expenditures	$8,298	$127,229	$363,486	$721,532	$966,365	$1,006,993	$ 7,151,311	$ 715,131
Net (projected)	$645,133	$658,148	$1,005,450	$1,320,195	$1,311,647	$1,432,418	$ 1,845,954	$1,184,595

Source: SCG

Table M.2
Net Revenues of Approved FC SPA vs. Amended FC SPA

							10 Year Analysis	
Net Revenues	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 10**	**Cumulative**	**Average**
Approved FC2	$645,133	$629,387	$981,061	$1,411,651	$1,435,353	$1,615,559	$ 2,805,261	$1,280,526
Proposed FC2	$645,133	$658,148	$1,005,450	$1,320,195	$1,311,647	$1,432,418	$ 1,845,954	$1,184,595
Net Change	$-	$28,761	$24,390	$(91,456)	$(123,706)	$(183,140)	$ (959,308)	$ (95,931)

Source: SCG

IV.12.4.4. Net Fiscal Impact Conclusions

According to SCG, both the FC-2 Amendment and Approved FC SPA Plan are projected to generate a positive net fiscal revenue to the City of Chula Vista in Year 10. The FC-2 Amendment is expected to generate $802,187 more than the Approved FC SPA in Year 10. Table M.4 presents the annual opportunity (cost)/benefit between the FC-2 Amendment and the Approved FC SPA Plan.

V.1 PUBLIC FACILITY FINANCE

V.1.1 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 Freeway Commercial North project 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 Freeway Commercial North project to construct and finance public facilities.

V.1.2 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.

V.1.3 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.

Freeway Commercial North, 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 Freeway Commercial North and areas beyond this specific project. These fees may include but not be limited to:

1. Eastern Chula Vista ETDIF — established to provide financing for circulation element road projects of regional significance in the area east of I-805.
2. Traffic Signal Fee — to pay for traffic signals associated with circulation element streets.
3. Public Facilities Development Impact Fee — Public Facilities DIF established to collect funds for Civic Center Facilities, Police Facilities, Corporation Yard Relocation, Libraries, Fire Suppression System, Geographical Information System (GIS), Mainframe Computer, Telephone System Upgrade and a Records Management System.
4. Park Acquisition and Development Fee — PAD Fee established to pay for the acquisition and development of park facilities.
5. Poggi Canyon Sewer Basin Development Impact Fee — to pay for constructing sewer improvements within the Poggi Canyon basin.
6. Sewerage Participation Fee — established fee to aid in the cost of processing sewerage generated in the city.
7. 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.

V.1.4 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, which 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.

V.1.5 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, but 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 Freeway Commercial North, the following public sites are proposed to be dedicated:

1. Roads (if public)
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 FC-2.

Developer Reimbursement Agreements

Certain facilities that are off-site and/or provide regional benefits may be constructed in conjunction with the development of FC-2 SPA Amendment. 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

An approved development agreement exists between the City of Chula Vista and the Developer of FC-2. This development agreement will 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.

V.1.6 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.

V.1.7 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 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, which 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.

City Codes and Regulations provide the standards and design specifications that are required for infrastructure. Developers and contractors are required to meet city standards and design regulations. These standards and specifications have been developed over time to achieve the maximum life cycle of infrastructure that will be owned and maintained by the City. Prior to approval of new infrastructure, City Staff thoroughly reviews all plans and specifications to insure the maximum life cycle.

The initial construction of roads, traffic signals, sewers, drainage, lighting, etc., usually accounts for the bulk of the costs associated with a project. The initial construction activities consist of preliminary engineering, construction engineering, traffic control, etc. Subsequent to initial construction, the City of Chula Vista is responsible for maintenance, rehabilitation and eventual reconstruction/replacement over a projected 50-year life expectancy.

All project public facilities for the Otay Ranch Freeway Commercial North SPA Plan are subject to the City's life cycle cost analysis before construction. The City uses LCC analysis prior to or concurrent with the design of public facilities required by new development. Such requirement assists in the determination of the most cost-effective selection of public facilities.

APPENDIX

Spicer Consulting Group Fiscal Impact Analysis