SALT CREEK RANCH

PUBLIC FACILITIES FINANCE PLAN

CITY OF CHULA VISTA, CALIFORNIA

SALT CREEK RANCH
PUBLIC FACILITIES FINANCE PLAN

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SUMMARY OF AMENDMENTS

SALT CREEK RANCH
PUBLIC FACILITIES FINANCE PLAN

Summary of Amendments

UPDATE NO. 1

Description:

As required by Condition No. 1 of the Tentative Subdivision Map, Chula Vista Tract 96-06, Conditions of Approval adopted by Resolution 16834, the Public Facilities Finance Plan Update No. 1 has been prepared to reflect the modifications to the sequence of development, the reduction of dwelling units in Phase I and other statistical changes resulting from the modifications.

To identify the updated segments of the text, tables and figures, an updated date (1996) will appear at the end of the paragraph, table or figure.

Salt Creek Ranch
Public Facilities Finance Plan

The Salt Creek Ranch PFFP is the first such plan prepared under the requirements of the City's Growth Management Ordinance. Each section of the plan has been reviewed for accuracy by the responsible department or agency as indicated below.

SECTION		DEPARTMENT
2.1	LAND USE ASSUMPTIONS	Planning
3.1	FACILITY ANALYSIS	
3.2	Traffic	Public Works
3.3	Police	Police Department
3.4	Fire and EMS	Fire Department
3.5	Schools	Chula Vista Elementary School District Sweetwater Union High School District
3.6	Libraries	Library Department
3.7	Parks and Recreation	Parks Department
3.8	Water	Otay Water District/Public Works
3.9	Sewer	Public Works
3.10	Drainage	Public Works
3.11	Air Quality	*Covered in SPA Plan*
3.12	Fiscal	Finance Department
3.13	Civic Center	City Manager's Office
3.14	Corporation Yard	City Manager's Office
3.15	Other Public Facilities	City Manager's Office
4.1	FISCAL ANALYSIS	Finance Department
5.1	FACILITY FINANCE	Planning

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EXECUTIVE SUMMARY

OVERVIEW

This Public Facilities Finance Plan (PFFP) has been prepared under the requirements of the City of Chula Vista's Growth Management Program and Implementation Ordinance No. 2448. The preparation of the PFFP is required in conjunction with the preparation of the Sectional Planning Area Plan (SPA) to ensure that the phased development of the project is consistent with the overall goals and policies of the City's General Plan, Growth Management Program and to ensure that the development of the project will not adversely impact the Quality of Life Standards.

The PFFP is based on the requested developer phasing as presented in the SPA. The PFFP begins by analyzing the existing demand for facilities based upon the demand from existing development and those projects with approved final and tentative maps. Projects which currently have a final or tentative map have committed facility capacity and are the "approved" projects. Then, the PFFP uses the proposed developer phasing of the Salt Creek Ranch project, as shown in the Sectional Planning Area Plan (SPA), to determine the impacts associated with each phase of the project.

Phasing of the future development of this project is done to predict when additional or upgraded facilities will be needed to meet or maintain compliance with the City's Quality of Life Standards. When specific thresholds are projected to be reached or exceeded based upon the analysis of the phased development of the Salt Creek Ranch project, the PFFP provides recommended mitigation necessary for the continued compliance with the Growth Management Program and Quality of Life Standards. The PFFP does not propose different development phasing from that requested by the Applicant, but may indicate that the proposed development phasing requested should be limited or reduced until certain actions are taken to guarantee public facilities will be available or provided to meet the Quality of Life Standards.

As required by Condition No. 1 of the Salt Creek Ranch Tentative Subdivision Map Conditions of Approval, the Salt Creek Ranch Public Facilities Finance Plan was updated to reflect the modifications to the sequence of development, reduction of dwelling units in Phase I and other statistical data derived from the modifications.

The updated text, tables and figures are identified by the year the document was updated (1996), and the original text by the document approval year (1992).

Since the plan is a regulatory document, each facility section contains recommended conditions to ensure that compliance will be maintained with the City's overall Growth Management Program. This Executive Summary includes a list of recommended General and Special Conditions by phase for the Salt Creek Ranch project.

General Conditions for Salt Creek Ranch Public Facilities Finance Plan

1. All development within the boundaries of the PFFP for Salt Creek Ranch shall conform to the provisions of Section 19.09 of the Chula Vista Municipal Code (Growth Management Ordinance) and to the provisions and conditions of this Public Facilities Finance Plan.

2. All development within the boundaries of the PFFP for Salt Creek Ranch shall be required to pay a development impact fee for public facilities and a transportation development impact fee pursuant to the most recently adopted program by the City Council, and as amended from time to time as well as all other applicable fees. Development within the boundaries of the Salt Creek Ranch PFFP shall also be responsible for any additional fees to be incorporated into this plan that are found to be necessary to enable facilities to meet the adopted performance standard.

3. The City of Chula Vista shall monitor all facilities required by the provisions of the Chula Vista Municipal Code pursuant to the requirements of the City's Growth Management Program.

4. Amendment to the Public Facilities Finance Plan is anticipated to incorporate newly acquired data, to add conditions and upgrade standards as determine through the required monitoring program. Amendment to this Plan may be initiated by action of the Planning Commission City Council or property owners at any time. Any such amendments must be approved by the City Council.

5. If a public facility or service is found not to be in conformance with an adopted Quality of Life performance standard during the yearly monitoring or at any other time, the matter will be immediately brought before the City Council. If the City Council determines that a non-conformance does exist, then no future building or development permits shall be issued until amendment of the PFFP is approved by the City Council which addresses those facility shortfalls and brings those facilities into conformance with the adopted Quality of Life Standards.

6. After adoption of this Plan by the City Council, no building permits will be allowed without compliance with the Quality of Life Standards.

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

8. Approval of this PFFP does not constitute prior discretionary review for projects within the boundaries of the Plan. All future projects within the boundaries of the Salt Creek Ranch PFFP shall undergo review as defined in the Chula Vista Municipal Code. This PFFP analyzes the maximum allowable development potential for planning purposes only. The approval of this plan does not guarantee specific development densities; however, the provision of public facilities and improvements in this PFFP are based upon achieving certain residential development thresholds (in terms of dwelling units) in each phase of the Salt Creek Ranch development. In the event that the residential development thresholds are either reduced or not approved, approval of this plan shall not require (or otherwise commit) the developer to provide the facilities and improvements identified in this plan. Instead, the developer shall meet and confer with the Director of Planning, City Engineer and a City Manager designee to agree upon any proposed changes that are in substantial conformance with this plan. The changes will address the reduced residential development thresholds (in terms of swelling units) in each phase of the Salt Creek Ranch project and the facilities and improvements to be provided in each phase of the project.

9. The Public Facilities Financing Plan shall be followed with improvements installed in accordance with said plan or as required to meet threshold standards adopted by the City of Chula Vista. In addition, the sequence that improvements are constructed shall correspond to any future Eastern Chula Vista Transportation Phasing Plan adopted by the City. The City Engineer may modify the sequence of improvement construction should conditions change to warrant such a revision.

Special Conditions for Salt Creek Ranch Public Facilities Finance Plan

TRAFFIC

The first phase of Salt Creek Ranch could develop to a maximum of 1,137 dwelling units. No tentative subdivision map shall be approved until (1) the completion of the H.N.T.B. State Route 125 financing study and determination as to the consistency of the Salt Creek Ranch development with the conclusions of the study, and unless the tentative map is conditioned upon (2) the revision of compliance with the revised Eastern Chula Vista Transportation Phasing Plan (ECVTPP) and Public Facilities Development Impact Fee (DIF) Program based on those conclusions. (1992)

Base Condition

Base Condition Defined: The base conditions were established based on information contained in the ECVTPP. These conditions assume construction of all approved developments and related roadway improvements as documented in the ECVTPP, except for the segment of "H" Street just west of the project site, which was assumed to consist of a two-lane paved road. (1992)

Base Condition Mitigation:

1. Interconnect all traffic signals in the eastern territories and synchronize the signal timing to provide a suitable progression for through traffic along the major circulation streets. A centralized computer system should be installed to more efficiently monitor and coordinate the traffic signal operation in the eastern territories and to optimize the traffic signal timings at all intersections to provide for an efficient traffic operation and reduce delays. (1992)

2. The intersection of Telegraph Canyon Road/EastLake Parkway will require the following improvements in order to operate at level of service (LOS) D or better during the peak hours. (1992)

    a. Widen the southbound approach of EastLake Parkway to provide a channelized right turn lane with an acceleration lane. Restripe to allow the following lane configuration:

        - Eastbound — two left, two through, and two right
        - Westbound — two left, two through, one through/right, one right
        - Northbound — two left, one through, and one through/right
        - Southbound — one left, two through, and one channelized right

b. Construct a driveway (with acceleration/deceleration lanes) along Telegraph Canyon Road west of EastLake Parkway in conjunction with the proposed shopping center in the northwest corner, in order to divert a portion of the right turn and left turn volumes from the southbound and eastbound approaches of this intersection, respectively. Prohibit the left turn movement from the driveway.

3. The intersection of East "H" Street/Hidden Vista Drive will require the following improvements in order to operate at LOS D or better during the peak hours. (1992)

   a. Widen the eastbound and westbound approaches of East "H" Street to provide an additional through lane in each direction. Provide the following lane configuration:

      - Eastbound — two left, four through, and one right
      - Westbound — two left, three through, and one through/right
      - Northbound — one left, one left/through, and one right
      - Southbound — one left, one left/through, and one right

4. The intersection of East "H" Street/Otay Lakes Road will require the following improvements to provide LOS D or better during the peak hours. (1992)

   a. Widen the eastbound and westbound approaches of East "H" Street to provide an additional through lane in each direction.

      - Eastbound — one left, three through, and one right
      - Westbound — one left, three through, and one right
      - Northbound — two left, two through, and a free right
      - Southbound — two left, two through, and one right

   b. Widen the northbound approach of Otay Lakes Road to provide an additional left turn lane. Channelize the right turn movement.

   c. Widen the southbound approach of Otay Lakes Road to provide an additional left turn lane.

5. The intersection of Bonita Road/Otay Lakes Road will require the following improvements to provide LOS D or better during the peak hours. (1992)

   a. Widen the westbound approach of Bonita Road to provide an additional left turn lane. Provide the following lane configuration:

- Eastbound — two through, one right
- Westbound — two left, two through
- Northbound — two left, and one right

6. The intersection of Otay Lakes Road/Elmhurst Drive will require the following improvements to provide LOS D or better during the peak hours. (1992)

   a. Widen the northbound and southbound approaches of Otay Lakes Road to provide an additional through lane in each direction and dual left turns northbound.

7. Since the ADT along Otay Lakes Road exceeds the City's threshold for LOS C, three through lanes in each direction should be provided between Telegraph Canyon Road and north of East "H" Street. (1992)

Scenario 1/Scenario 1A (Phase I)

Scenario 1 and 1A Condition Defined: The Scenario 1 conditions assume the completion of Phase I of the Salt Creek Ranch, in addition to the base condition described above. This condition was established as follows. (1992)

a. Daily and peak hour trip generation rates for Phase I were developed based on SANDAG's *Traffic Generation Manual* (see Table 2, page 28).

b. The Phase I traffic was assigned to the surrounding roadways ad added to the base condition resulting in Scenario 1 traffic volumes. The trip distribution and assignment of the Phase I traffic was estimated based on the TRANPLAN model software.

c. After the results of the analysis indicated unmitigable impacts at the intersection of Hidden Vista Drive/East "H" Street, Phase I traffic and the corresponding development were reduced to establish Scenario 1A.

d. It should be noted that the Circulation network assumed for Scenario 1 and Scenario 1A are different. Scenario 1 assumes that a segment of East "H" Street will remain as a dirt road while Scenario 1A assumes that Proctor Valley Road will remain as a two lane dirt road and East "H" Street west of the site will be paved as a two lane road.

Scenario 1/Scenario 1A (Phase 1) Condition Mitigation:

1. Reduce the development potential of Phase I by 120 dwelling units to attain LOS D at the intersection of Hidden Vista Drive/East "H" Street. (1992)

2. Construct East "H" Street through the project (Phase I boundaries) to ultimate four-lane major street standards, consistent with the City of Chula Vista design criteria. Construct a two-lane roadway connecting East "H" Street from the western limit of Phase I development to Salt Creek I to City standards. (1992)

3. Construct Hunte Parkway to ultimate four-lane major street standards through the project and offsite south to Telegraph Canyon Road, consistent with the City of Chula Vista design criteria. (1992)

4. Construct Lane Avenue as a Class II collector from East "H" Street to meet existing improvements at its current terminus in the EastLake Business Park, consistent with the City of Chula Vista's design criteria. (1992)

5. At the discretion of the City Traffic Engineer, install traffic signals or bond for future installation at the following intersections: (1992)

   - East "H" Street/Lane Avenue
   - East "H" Street/Hunte Parkway
   - Lane Avenue/Telegraph Canyon Road
   - Hunte Parkway/Telegraph Canyon Road

6. Implement transportation demand management strategies, including provisions of transit service and bus stops in order to reduce the peak hour demand on the street network. (1992)

Scenario 2 (Phase I, II, and III and State Route 125)

Scenario 2 Condition Defined: The Scenario 2 conditions assume the ultimate development of Salt Creek Ranch and the implementation of a four-lane at-grade roadway along the State Route 125 corridor. The methodology used to establish the projected traffic volumes for this scenario is similar to Scenario 1 above, using the total traffic generated by Salt Creek Ranch. (1992)

Scenario 2 Condition Mitigation: (1992)

1. Implement all the measures described under Scenario 1 previously.

2. Construct State Route 125 as a four-lane roadway between East "H" Street and State Route 54 with enhanced geometrics at the intersections.

3. Construct "H" Street as a four-lane major street from the western boundary of the site to the existing terminus of "H" Street.

POLICE

No special conditions are required at this time. (1992)

FIRE/EMS

Prior to the approval of a tentative map within the boundaries of the Salt Creek Ranch project, the developer shall reserve a 1.3 acre (1.0 acre net) fire station site adjacent to the neighborhood park along the western boundary of the project as shown in the SPA. The station site shall be conveyed to the City prior to the final subdivision map for any units contained in Phase II of Salt Creek Ranch. If the City decides not to construct a station within Salt Creek Ranch, then the site shall revert back to the developer and a decision on what should be the appropriate land uses for the site shall require review and approval by the City Council. (1992)

If the City's updated Fire Station Master Plan City should still require a fire station within the Salt Creek Ranch, the Developer shall: (1992)

- provide a 1.3 acre fire station site adjacent to the neighborhood park along the western boundary of the project (as denoted in the SPA Plan, this site meets City standards and has access to major roads, sewer and water facilities);

- construct a permanent fire station of approximately 4,000 square feet. This cost is included in the City's Public Facilities Development Impact Fee and is currently estimated at $510,538. Developer shall NOT be responsible for providing the requisite fire pumper, fire station furnishings or fire fighter equipment (said items being provided by another developer); and

- put in place the required streets and water facilities to service the station, as required by Phase I of the development.

Additionally, should Salt Creek Ranch commence development ahead of Rancho San Miguel, the Developer shall be responsible for fronting the necessary funds to enable the City to purchase the brush rig and equipment as detailed in the Fire section of this PFFP. Salt Creek Ranch will be responsible for fronting the necessary funds if after six months from the date of the first Salt Creek Ranch building permit no building permit has been acquired for any portion of the Rancho San Miguel project. (1992)

SCHOOLS

Chula Vista Elementary School District and Sweetwater Union High School District:

Prior to the approval of the first tentative map within the boundaries of the Salt Creek Ranch project, the City shall require that it receive letters from both School District's confirming the provision of necessary school sites or additional class rooms and participation in an approved finance program. (1992)

LIBRARIES

No special conditions are required for library facilities. (1992)

PARKS AND RECREATION

Prior to the approval of the first tentative map within the boundaries of Salt Creek Ranch, the required park sites must be reserved as indicated in the SPA Plan. (1992)

No final map will be allowed within the boundaries of Salt Creek unless provisions have been made for financing acquisition or dedication to the City of the necessary park sites identified in this PFFP and provisions have been made for the financing of the necessary improvements on these park sites to the satisfaction of the Park and Recreation Director and City Council. The cost of the improvements shall not exceed the total amount of SPA park fee obligation. (1992)

OPEN SPACE AND TRAILS

The maintenance of trails and open space which lie within public easements or on which the City holds title in fee will be considered for funding through the use of an Open Space Maintenance District formed pursuant to the provisions of the Landscape and Lighting District Act of 1972 or other appropriate land secured public financing mechanism. (1992)

An annual fiscal impact report reflecting the actual revenue and expenditure impacts based upon the development of the project shall be prepared by the developer. The project shall be prepared by the developer. The project shall be conditioned to provide funding for periods where expenditures exceed projected revenues. The details of such a funding program shall be determined prior to approval of the tentative subdivision map. (1992)

WATER

Based on anticipated water terminal reservoir construction, development will only receive a proportionate share of water service requests as determined by the Otay Water District's Allocation Formula. (1992)

Water services allocated to major developments of a master planned community will be determined as a part of an agreement with the Otay Water District for construction of required terminal reservoir storage and other major water facilities. As such, the facilities identified in this plan shall be required of the developer either as constructed facilities or through the payment of fees as indicated. (1992)

SEWER

Facilities to accommodate sewer flows and the use of reclaimed water have been identified by phase. The City will not allow the design capacity of trunk sewers to be exceeded. If flows large enough to surpass the design capacity of receiving sewers are anticipated as the result of new development, the City could require the construction of relief lines. The construction of new sewer trunk lines must be phased with the construction of streets. As such, the facilities identified in this plan shall be required of the developer either as constructed facilities of through the payment of fees. (1992)

The Salt Creek Ranch will also share in the cost of the Salt Creek Interceptor. Initial cost estimates indicate that the project's share of this interceptor will be approximately $800,000. Other fees and charges may arise from future studies to solve trunk line capacity problems. (1992)

DRAINAGE

Salt Creek Ranch shall be responsible for the conveyance of storm water flows in accordance with City Engineering standards. In addition, the project shall fund the interim urban runoff facilities as well as participate in more long term facilities to be identified by the City of San Diego at a future date. (1992)

AIR QUALITY

The City continues to provide a development forecast to the APCD in conformance with the threshold standard. A separate Air Quality Improvement Plan is provided as part of the SPA document. (1992)

FISCAL

Section 4.0 of this Public Facilities Financing Plan contains an analysis of the fiscal impacts the development of Salt Creek Ranch will have on the operation and maintenance budgets of the City of Chula Vista, the Otay Water District, the Chula Vista City School District, and the Sweetwater Union High School District. (1992)

The results of the analysis are contained in Section 4.0 and will be included in the next annual fiscal and economic report prepared for the City's Growth Management Oversight Commission. (1992)

CIVIC CENTER

Civic Center facilities will be funded through the collection of the Public Facilities Fees at the rate in effect at the time building permits are issued. (1992)

CORPORATION YARD

Compliance will be satisfied with the payment of public facility fees at the rate in effect at the time building permits are issued. (1992)

FISCAL ANALYSIS

This analysis demonstrates the fiscal impact that development in Salt Creek Ranch will have on the operation and maintenance budgets of the City of Chula Vista, the Otay Water District, the Chula Vista City School District, and the Sweetwater Union High School District. The analysis covers a period of 15 years, 10 years of which depict the development phase of the project, and 5 years which depict the impact of the completed project. (1992)

The net fiscal impact of Salt Creek Ranch on the City of Chula Vista during its first fifteen years indicates that revenues are projected to exceed expenditures in every year of the impact, although the margin decreases rapidly once the development stage of the project is over. The annual net balances range from $133,705 in year 4, to a loss of $24,371 in year 15. The total accumulated net fiscal balance of the fifteen year period covered by the analysis is estimated at $564,769. The present worth of this balance is $435,517 at 8 percent annual interest. (1992)

Order of magnitude operation and maintenance fiscal impacts of Salt Creek Ranch on the Otay Water District were also projected as part of this analysis as required by Growth Management Ordinance No. 2448. All cost and revenue allocation projections are based on the fact that 51 percent of water consumption in the District is by residences. (1992)

Application of revenue and cost allocation factors to development in Salt Creek Ranch results in a net fiscal loss to Otay Water District of about $5,000 annually at the buildout stage of the project. However, since this represents only about 0.4 percent of the revenues and costs resulting from the development, it is reasonable to expect that virtually no net impact will be experienced. This is also consistent with comments made by Otay Water District staff who indicated that rates would be adjusted as needed to balance revenues and operation and maintenance expenditures. (1992)

Also required by Growth Management Ordinance No. 2448, operation and maintenance impacts on the Chula Vista City School District were projected based on the number of students generated by development of Salt Creek Ranch. The rate for revenues and expenditures per student multiplied by the number of elementary school children in Salt Creek Ranch at buildout results in an annual net fiscal loss of about $39,000. However, this amount corresponds to only 1.5 percent of total revenues of $2.7 million. (1992)

The impacts of Salt Creek Ranch on the operation and maintenance budget of the Sweetwater Union High School District were also projected based on the projected number of high school students. The rate for revenues and expenditures per student multiplied by the number of high school students in Salt Creek Ranch at buildout results in an annual net fiscal gain of about $23,000. However, this amount corresponds to only 0.75 percent of total revenues of $3.2 million. (1992)

An annual fiscal impact report reflecting the actual revenue and expenditure impacts based upon the development of the project shall be prepared by the developer. The project shall be conditioned to provide funding for periods where expenditures exceed projected revenues. The details of such a funding program shall be determined prior to approval of the tentative subdivision map. (1992)

1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 Overview

The City of Chula Vista has looked comprehensively at issues dealing with development and the additional impacts it places on public facilities and services. The approval of the Threshold Ordinance and the General Plan update were the first steps in the overall process of addressing growth related issues. The second step in this process was the development and adoption of a specific Growth Management Element which set the stage for the creation of the City's Growth Management Program. (1992)

The adoption of Growth Management Program and Implementing Ordinance No. 2448 formalized on May-28, 1991, a comprehensive system to manage future growth. These documents execute the Growth Management Element of the General Plan, and establish a foundation for carrying out the development policies of the City by directing and coordinating future growth in order to guarantee the timely provision of public facilities and services. (1992)

The Growth Management Ordinance requires a Public Facilities Finance Plan (PFFP) to be prepared concurrently with a Sectional Planning Area (SPA) Plan. The contents of the PFFP are governed by Section 19.09.060 of the Growth Management Ordinance which requires that the plan show how and when the public facilities and services as identified in the Growth Management Program will be installed or financed. (1992)

1.2 Purpose

The purpose of the Public Facilities Finance Plan is to implement the City's Growth Management Program and to meet the General Plan goals and objectives as well as the Growth Management Element goals and objectives. The Chula Vista Growth Management Program implements the City's General Plan and Zoning Ordinance by ensuring that development occurs only when necessary public facilities and services exist or are provided concurrent with the demands of new development. (1992)

Central to the Growth Management Program is the requirement that a Public Facilities Finance Plan (PFFP) be prepared for future development projects requiring either a Sectional Planning Area Plan (SPA) or a tentative map. (1992)

In November, 1996, an update of the Public Facilities Finance Plan was prepared for the purpose of addressing the modifications to the sequence of development,

reduction of dwelling units in Phase I and other statistical changes resulting from these modifications. (1996)

1.3 Threshold Standards

City Council Resolution No. 13346 approved eleven public facilities and services with related threshold standards and implementation measures, which were listed in a policy statement dated November 17, 1987 and have subsequently been refined based on recommendations from the Growth Management Oversight Commission (GMOC). (1992)

The eleven are:

- Traffic
- Police
- Fire/EMS
- Schools
- Libraries
- Parks and Recreation
- Water
- Sewer
- Drainage
- Air Quality
- Fiscal

During the development of the Growth Management Program two new facilities were added to the list of facilities to be analyzed: (1992)

- Civic Facilities
- Corporation Yard

Threshold standards are used to identify when new or upgraded public facilities are needed to mitigate the impacts of new development. Development approvals will not be made unless compliance with these standards can be met. These threshold standards have been prepared to guarantee that public facilities or infrastructure improvements will keep pace with the demands of growth. (1992)

1.4 The Salt Creek Ranch - Project

Salt Creek Ranch includes approximately 1,200 acres and is proposed to be developed in three phases. In total, 2,616 residential dwelling units are proposed to be constructed along with one neighborhood park, one community park, two community purposes facility sites, two elementary school sites and a fire station. The following three tables provide a summary of the development proposed in each phase. (1996)

REVISED SALT CREEK RANCH DEVELOPMENT — PHASE I				
Development	Neighborhood	General Plan Designation	Original Dwelling Units/Acres	Revised Dwelling Units/Acres
Residential - Detached	2	LM	223	213
Residential - Attached	5A	LM	211	119
Residential - Detached	6	LM	222	222
Residential - Detached	7A	LM	58	0
Residential - Detached	7B	L	138	0
Residential - Detached	8	L	242	0
Residential - MultiFam	4A	M	293	101
Residential - Detached	3	LM	0	249
Residential - Detached	5B	LM	0	92
Residential - Detached	4B	M	0	141
Total Phase I Dwelling Units			1,387	1,137
CPF Acres	8		3.0	0.0
Community Park Acres	8		0.0	12.0
Neighborhood Park Acres	3		7.3	0.0
Fire Station Acres	3		1.0	0.0
Elementary School Acres	3		10.0	10.0
Total Phase I Facility Acres			21.3	22.0

(1996)

REVISED SALT CREEK RANCH DEVELOPMENT— PHASE II				
Development	Neighborhood	General Plan Designation	Original Dwelling Units/Acres	Revised Dwelling Units/Acres
Residential - Detached	1	LM	341	330
Residential - Detached	3	LM	263	0
Residential - MultiFam	4A	M	97	289
Residential - Detached	4B	M	134	0
Residential - Detached	9	L	143	143
Residential - Detached	8	L	0	237
Residential - Detached	7A	LM	0	59
Residential - Detached	7B	L	0	126
Total Phase II Dwelling Units			978	1,184
Community Park Acres	8		22.0	10.0
Fire Station Acres	3		0.0	1.0
CPF Acres	9		4.0	7.0
Neighborhood Park Acres	3		0.0	7.3
Elementary School Acres	7		13.1	13.1
Total Phase II Facility Acres			39.1	38.4

(1996)

REVISED SALT CREEK RANCH DEVELOPMENT— PHASE III				
Development	Neighborhood	General Plan Designation	Original Dwelling Units/Acres	Revised Dwelling Units/Acres
Residential - Detached	10A	L	56	57
Residential - Detached	10B	L	16	16
Residential - Detached	11	L	85	85
Residential - Detached	12	L	97	93
Residential - Detached	13	L	43	44
Total Phase III Dwelling Units			297	295
Total Phase III Facility Acres			0	0
Total Dwelling Units All Phases			2,662	2,616
Total Facility Acres All Phases			60.4	60.4

(1996)

1.5 Public Facilities Finance Plan Boundaries

Section 19.12.070 of the Growth Management Implementation Ordinance requires that the PFFP boundaries be established by resolution after a public hearing. The boundaries of the PFFP shall be established by the City 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: (1992)

1. Service areas, drainage, sewer basins, and pressure zones which serve the Project;

2. Extent to which facilities or improvements are in place or available;

3. Ownership of property;

4. Project impact on public facilities relationships, especially the impact on the City's planned major circulation network;

5. Special district service territories;

6. Approved fire, drainage, sewer, or other facilities or improvement master plans.

The boundaries of the PFFP for the Salt Creek Ranch project are congruent with the Sectional Planning Area (SPA) Plan boundaries. (1992)

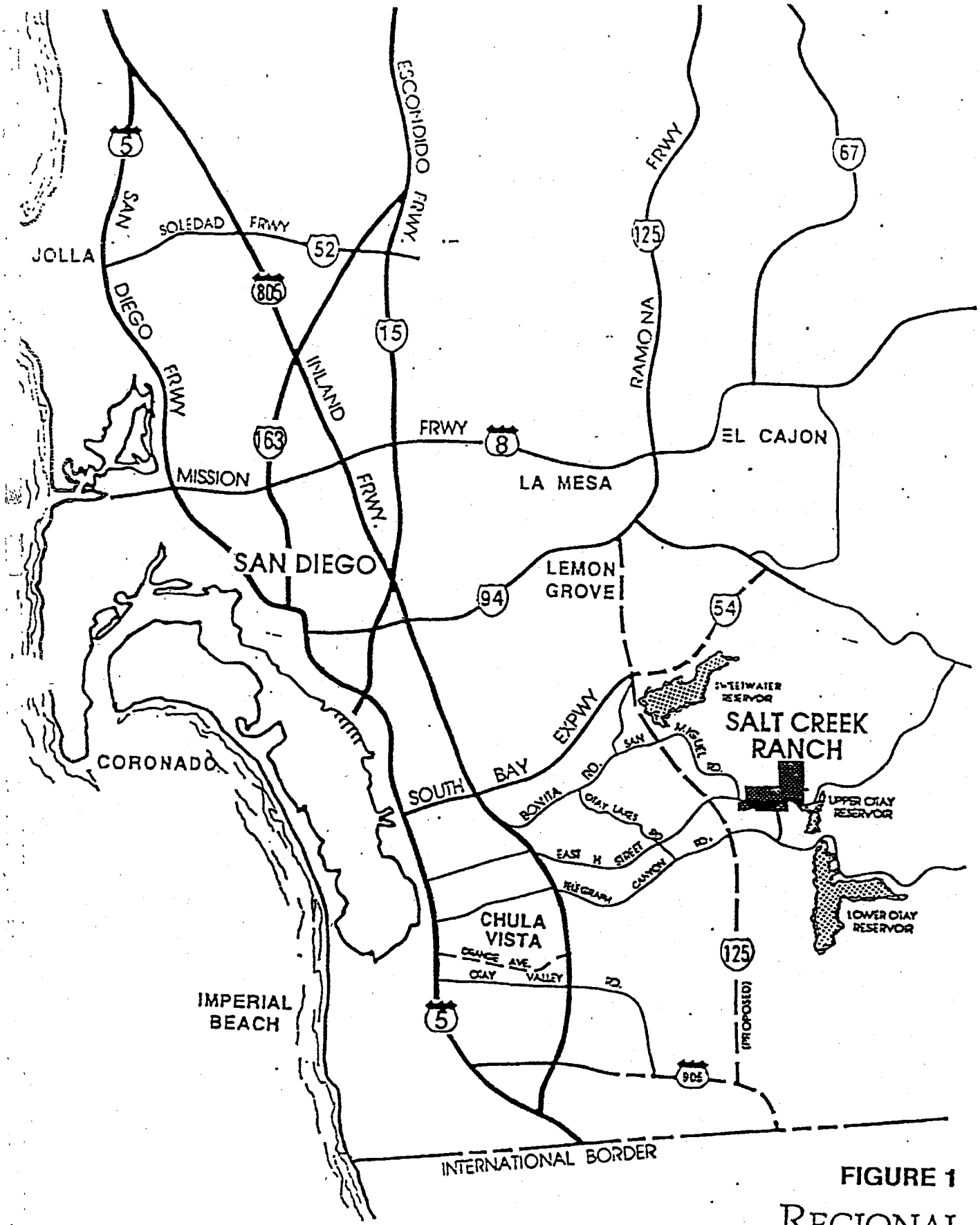

FIGURE 1

ALT CREEK RANCH

REGIONAL LOCATION MAP

Salt Creek Ranch

Development Phasing Plan

1 Neighborhood #

Project Boundary

Neighborhood Boundaries

Lot Lines

Phase 1A

Phase 1B

Phase 2

Phase 3

Partial Improvements Phase 1A
Completion in Phase 2

(1996)

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2.0 LAND USE ASSUMPTIONS

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2.1 PURPOSE

The purpose of this section of the PFFP is to quantify how the Salt Creek Ranch project will be analyzed in relationship with all other projects which are at some stage in the City's overall development process. The Growth Management Program addressed the issue of development phasing in relationship to location, timing, and fiscal/economic considerations. (1992)

Based upon the overall elements to be considered when projecting the phasing of development and policies contained in the Growth Management Program, the City was able to forecast where and when development will take place and produced a 5 to 7 year Development Phasing Forecast. Since the approval of the Growth Management Program, the development phasing forecast has been updated and will be updated annually as facility improvements are made and the capacity for new development becomes available. (1992)

The specific factors which effect the development phasing forecast include the Otay Municipal Water District Allocation Program, the future construction of State Route 125, the status of development approvals and binding development agreements. These components were reviewed as part of this PFFP in conjunction with the requirement to provide facilities and services, concurrent with the demand created by the Salt Creek Ranch project, to maintain compliance with the threshold standards. (1992)

The management of future growth includes increased coordination of activities of the various City departments as well as with both School and Water Districts which serve the City of Chula Vista. The development phasing forecast enables the City to prioritize and maximize limited staff resources in order to focus efforts on the highest priority projects in the forecast. The development phasing forecast (5 to 7 years) is a method which will be used to effectively and efficiently manage future development. (1992)

As indicated in the Growth Management Program, accuracy of the forecast is dependent upon numerous outside influences which affect the overall demand for new development. The first 12 to 18 months of the forecast will be more accurate and subsequent years less accurate due to lower levels of development approval and corresponding agreements to provide public facilities. These later years are subject to change and will become more accurate as development entitlements are solidified and public facilities are guaranteed. (1992)

The PFFP for Salt Creek Ranch will begin analyzing the existing demand for facilities based upon the demand from existing development and those projects with approved final and tentative maps. Projects which currently have a final or tentative map have committed facility capacity and are the "approved" projects. Then, the PFFP will use the proposed phasing of the Salt Creek Ranch project, as shown in the Sectional Planning Area Plan (SPA), to determine the impacts associated with each phase of the project. (1992)

2.2 Existing Development

As a starting point, the PFFP will consider all existing development up to June 30, 1991 as the base condition. This information is based upon City of Chula Vista Planning Department Annual Residential Development Forecast. This report quantified the population of the City as of June 30, 1991 was estimated to be 139,150. The population west of Interstate 805 was approximately 100,042 and east of Interstate 805 was approximately 39,108. (1996)

For the purposes of projecting future facility demands per dwelling unit for Salt Creek Ranch, the State Department of Finance April, 1990 utilizes a population coefficient of 2.693 persons per dwelling unit. This factor is used throughout this Public Facilities Finance Plan to calculate facility demands from approved projects. This coefficient has been confirmed for use in the PFFP by the Planning Department. (1992)

For the purposes of calculating the specific Salt Creek Ranch project facility demands, the following April, 1990 State Department population coefficients will be used: (1992)

1. Single Family Detached	3.24 persons/du
2. Single Family Attached	3.04 persons/du
3. Multi Family up to 4 du's	2.72 persons/du
4. Multi Family - 5 du's or more	2.31 persons/du

2.3 Approved Projects

The total number of dwelling units remaining for building permit issuance within "Approved" Projects on June 30, 1991, was 8,723 dwelling units. Additionally, there were 280.6 acres of industrial and 69.5 acres of commercial land remaining for permit issuance in the "Approved" Project category. The approved projects are considered to have committed facility capacity. (1996)

A summary of the 1991 development phasing forecast is shown below in Figure 3.

FIGURE 3
DEVELOPMENT PHASING FORECAST (5 TO 7 YEARS) SUMMARY[1]

Development	Project Number	Dwelling Units Remaining on 7-1-91	Industrial Acres Remaining on 7-1-91	Commercial Acres Remaining on 7-1-91
Rancho Del Rey I	88-1	1,080	76.2	6.6
EastLake I	84-9	2	66.0	34.2
Ladera Villas	89-3	0		
Woodcrest Terra Nova	89-6	37		
Woodcrest S.W.	89-8	17		
Canyon View	88-8	0		
Olympic Training Center[2]	90-5			10.2
Rancho Del Rey II	89-5	567		
Salt Creek I	89-9	550		
EastLake Greens	88-3	2,449	19.0	
Sunbow	87-8	1,946	46.0	11.0
Village Center (E.L.I.)	84-9	405		
Montillo	89-14	290		
Rancho Del Rey III	90-2	1,380		
Redevelopment			20.0	7.5
Otay Rio Business Park	87-6		53.4	
Totals		8,723	280.6	69.5

(1992)

[1] As of June 30, 1991 as reported by the City Planning Department.

[2] OTC does not require a tentative map. The approval includes 300 beds for athletes.

2.4 Salt Creek Ranch — Development Summary

The revised Salt Creek Ranch project is proposed to include a total of 2,616 residential dwelling units, one neighborhood park, one community park, two community purpose facility sites, two elementary schools and a fire station. The Applicant proposes to build this project in three phases which have previously been delineated and are summarized below: (1996)

Phase I — 1,137 dwelling units, 12 acres of the 22-acre Community Park, one 10-acre Elementary School site, and several private "pocket parks" created on designated lots.

Phase II — 1,184 dwelling units, 10 acres of the 22-acre Community Park, two Community Purpose Facility sites totaling 7.0 acres, one 1-acre Fire Station site, one 7.3-acre Neighborhood Park, and one 13.1-acre Elementary School site.

Phase III — 295 dwelling units.

3.0 FACILITY ANALYSIS

3.1 FACILITY ANALYSIS

This portion of the PFFP contains 13 separate subsections for each facility addressed by this report. Of the 13, 11 have adopted threshold standards, while Civic Center and Corporation Yard, do not have adopted standards. (1992)

The following figure highlights the level of analysis for each facility:

LEVEL OF ANALYSIS				
Facility	Citywide	East of I-805	Service Area Sub-basin	Special District
Traffic	✓	✓		
Police	✓			
Fire/EMS	✓		✓	
Schools				✓
Libraries	✓			
Parks & Recreation		✓		
Water			✓	✓
Sewer			✓	
Drainage			✓	
Air Quality	✓			
Fiscal[1]	✓		✓	
Civic Center[2]				
Corporation Yard[2]				

Each subsection analyzes the impact of the Salt Creek Ranch Project based upon the adopted Quality of Life Standards. The analysis is based upon the specific goal, objective, threshold standard and implementation measures. The current master plan or documents which are being used in place of a completed master plan is used to determine facility adequacy and is referenced within the facility section. (1996)

Each analysis is made based upon the specific project processing requirements for that facility, as adopted in the Growth Management Program. These indicate

1 Fiscal is analyzed on a project-by-project basis.

2 Specific Threshold Standards have not been developed for these facilities.

the requirements for evaluating the project consistency with the threshold ordinance at various stages (General Development Plan, Sectional Planning Area Plan/Public Facilities Finance Plan, Tentative Map, Final Map and Building Permit) in the development review process. (1992)

A service analysis section is included which identifies the service provided by each facility. A existing facilities inventory is included along with those future improvements which are guaranteed through the conditioning of an "Approved" project or are scheduled to be made in the City's adopted Capital Improvement Budget. (1992)

The existing plus approved demands for the specific facility are identified in the subsection based upon the adopted threshold standard. (1992)

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 subsection which proposes the appropriate conditions or mitigation to bring the facility into conformance with the threshold standard. (1992)

3.2 TRAFFIC

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3.2.1 Threshold Standard

1. City-wide: Maintain LOS "C" or better, as measured by observed average travel speed on all signalized arterial segments except that during peak hours an LOS of "D" can occur for no more than any two hours of the day. (1992)

2. West of Interstate 805: Those signalized intersections which do not meet the standard above may continue to operate at their current (year 1991) LOS, but shall not worsen. (1992)

3.2.2 Service Analysis

The City of Chula Vista through the Public Works Department is responsible for ensuring that traffic improvements are provided to maintain a safe and efficient street system within the City. Through project review City staff ensures the timely provision of adequate local circulation system capacity in response to planned development while maintaining acceptable levels of service. Planned new roadway segments and signalized intersections will maintain acceptable standards at the buildout of the City's general plan and circulation element. (1992)

The traffic threshold standard will be analyzed by the following: (1992)

1. LOS measures shall be for the average weekday peak hour, excluding seasonal and special circumstance variations.

2. The measurement of LOS shall be by the *1985 Highway Capacity Manual* (HCM) method of calculation, using the City's published circulation element design standards[1].

3. Intersection of City arterials with freeway ramps shall be excluded from this policy.

4. Circulation improvements shall be implemented prior to anticipated deterioration of LOS below established standards.

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1 On August 30, 1990, the City Council directed staff to provide a more in depth analysis of the two methods, ICU and HCM, which can be used to calculate intersection capacity.

The Circulation Element of the General Plan serves as the overall facility master plan. Additionally, the *Eastern Chula Vista Transportation Phasing Plan (ECVTPP)*, while not formally adopted by the City, provides additional reference information relevant to the phasing of development and necessary improvements required in the area east of Interstate 805. (1992)

The original traffic plan for Salt Creek Ranch was prepared by Basmaciyan-Darnell, Inc. (BDI) in September 1989 for the General Development Plan. The traffic plan was expanded for the SPA by Urban Systems Associates, Inc. (USA). Willdan Associates prepared the *Traffic Impact Study for Salt Creek Ranch* dated November 18, 1991 as modified by memorandum dated January 21, 1992 which analyzed the phased impacts of this project as required by the City's Growth Management Program, and identified the necessary mitigation to comply with the traffic threshold standard. This analysis and recommended mitigation is described in detail in the following sections. (1992)

For consistency with the Environmental Impact Report on the project, the *Traffic Impact Study* was based upon the development phasing and densities in the General Development Plan and not the Sectional Planning Area Plan. (1992)

3.2.3 Project Processing Requirements

Sectional Planning Area Plan/Public Facilities Finance Plans: (1992)

1. Identify phased traffic demand and demonstrate compliance with the "Eastern Chula Vista Transportation Phasing Plan".

2. Identify on-site and off-site impacts and improvements by phase of development.

3. Provide cost estimates for all improvements.

3.2.4 Existing Conditions

The following paragraphs provide a description of the roadways in the vicinity of the proposed project and the latest traffic count data. Figure 4 illustrates the study area and includes the existing number of travel lanes at the key intersections in the vicinity of the project. The following paragraphs provide a description of the roadways in the vicinity of the proposed project. (1992)

Interstate 805 is a north/south eight-lane divided freeway branching off Interstate 5 just north of the Mexican border and reconnecting to Interstate 5 in Sorrento Valley. Currently Interstate 805 carries 145,000 and 131,000 Average Daily Trips (ADT) north and south, respectively of its interchange with "H" Street. North of the Bonita Road interchanges this freeway carries 157,000 ADT. (1992)

State Route 54 is an east/west freeway connecting Interstate 5 and Interstate 805, then transitioning to a four-lane conventional roadway east of Interstate 805. It should be noted, that the portion between Interstate 5 and 805 was recently opened and traffic count data is not available for this section, however, east of Interstate 805 this roadway carries 51,000 ADT. (1992)

East "H" Street is designated a six-lane primary arterial (6 lanes, divided) and is currently constructed to ultimate standards east of Interstate 805 to Otay Lakes Road. East "H" Street is currently carrying 32,400 and 50,400 ADT east and west of Hidden Vista Drive, respectively. West of Otay Lakes Road, East "H" Street currently carries 28,600 ADT. (1992)

East of Otay Lakes Road, East "H" Street is designated as a four-lane major road and is currently constructed to ultimate standards across the EastLake Hills and Shores development to a point just west of the Salt Creek Ranch project. According to the City of Chula Vista's latest traffic counts, East "H" Street carries approximately 15,900 ADT just east of Otay Lakes Road and approximately 14,200 ADT west of Corral Canyon Road, and 9,100 ADT east of Corral Canyon Road. (1992)

Telegraph Canyon Road is an east/west facility connecting Interstate 805 with Otay Lakes Road. Telegraph Canyon Road terminates at its intersection with Otay Lakes Road where Otay Lakes Road turns and changes general direction to become an east/west facility. In the future, the east/west portion of Otay Lakes Road (east of the terminus of Telegraph Canyon Road) will be renamed Telegraph Canyon Road. Currently, this facility is constructed with six travel lanes (divided) between Interstate 805 and Paseo del Rey, five travel lanes (three lanes eastbound and two lanes westbound) between Paseo del Rey and Medical Center Drive, four travel lanes (divided) between Medical Center Drive and Paseo Ladera, transitioning to two travel lanes from Paseo Ladera to just east of Otay Lakes Road. Just east of Otay Lakes Road, the EastLake Development Company is constructing this facility to four travel lanes (divided) within a six-lane primary arterial graded width through their property. The existing two-lane segment between Paseo Ladera and Otay Lakes Road will

be reconstructed to ultimate prime arterial standards by future assessment districts. (1992)

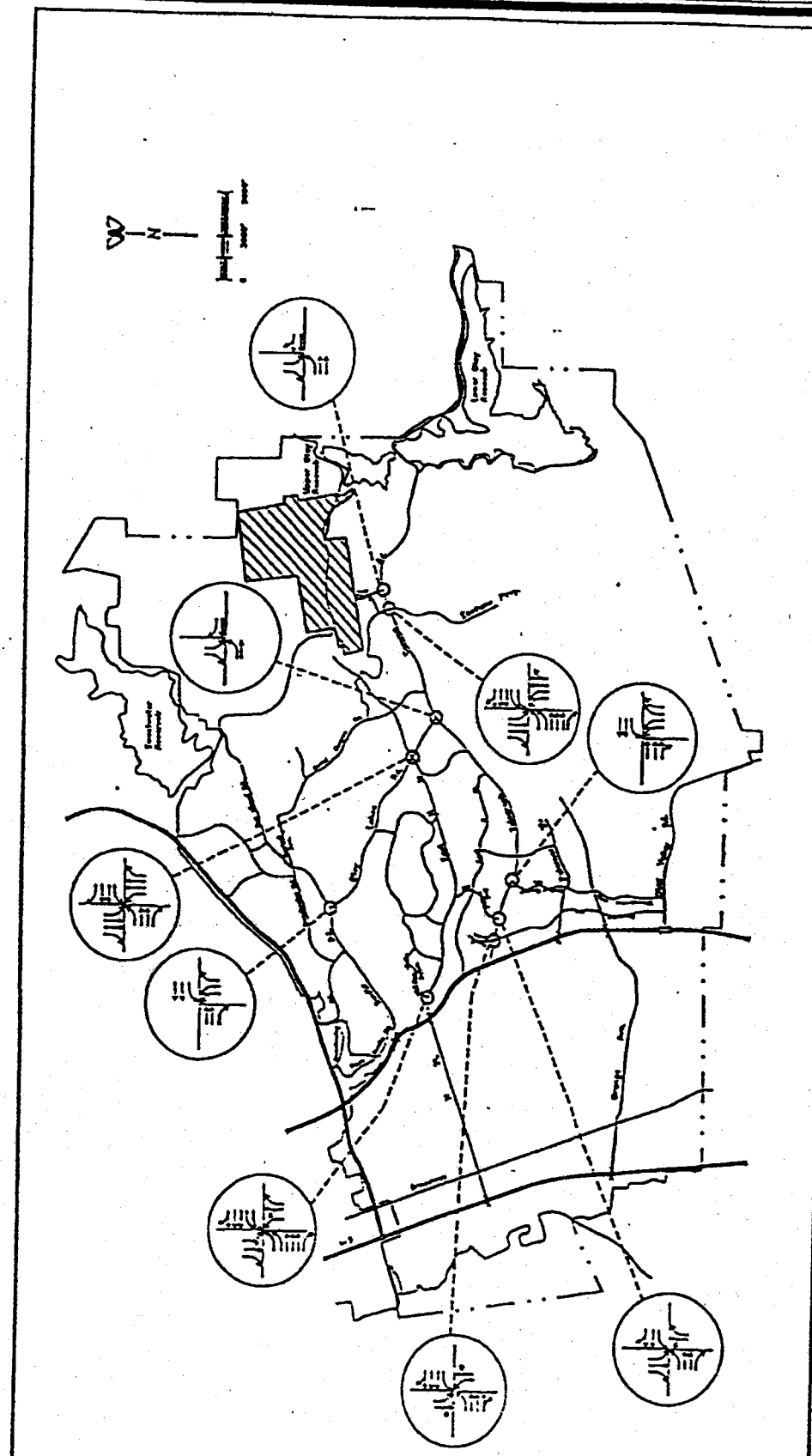
According to the City of Chula Vista's most recent traffic count data, Telegraph Canyon Road is carrying 46,600 ADT just east of Interstate 805 decreasing to 32,500 ADT west of Crest Drive. To the east volumes decrease from 25,800 to 15,900 just west of Otay Lakes Road. (1992)

Otay Lakes Road is a north/south facility constructed to four-lane major standards between Bonita Road to just north of Telegraph Canyon Road. Ultimate plans designate Otay Lakes Road as a six-lane major road between Bonita Road and Telegraph Canyon Road. The most recent traffic count data indicates that Otay Lakes Road is carrying between 16,200 and 19,600 ADT between East "H" Street and Bonita Road. South of East "H" Street current daily traffic volumes range between 12,100 and 16,500 ADT. East of Telegraph Canyon Road, Otay Lakes Road carries 9,600 ADT west of EastLake Parkway. Between EastLake Parkway and Lane Avenue this facility currently carries 5,600 ADT. (1992)

Corral Canyon Road is a north/south roadway with two lanes (one travel lane in each direction) with a two-way left turn lane. The City of Chula Vista has classified this roadway as a Class 1 collector (four lanes, undivided) from East "H" Street north to Central Avenue. According to the City's most recent traffic count data, Corral Canyon Road carries approximately 7,400 ADT just north of East "H" Street. (1992)

Central Avenue is an east/west two-lane roadway with its easterly terminus at Country Trails Lane. Central Avenue is designated as a Class 1 collector between Bonita Road and Corral Canyon Road. This facility is constructed to ultimate width from just east of Bonita Road to Frisbie Road; however, it is striped for one wide travel lane in each direction with a center two-way left turn lane. From east of Frisbie Road to Corral Canyon Road, Central Avenue consists of one travel lane in each direction. Central Avenue has signalized intersections with Bonita Road and Corral Canyon Road. Central Avenue currently carries 9,800 and 11,800 ADT east and west of Bonita Road, respectively. (1992)

Bonita Road is designated as a four-lane major road just east of Interstate 805 and is constructed to ultimate standards from I-805 to just east of Otay Lakes Road. At its intersection with Otay Lakes Road, Bonita Road transitions into one travel lane in each direction (but is widened out at the intersection with Central Avenue), and turn in a northerly direction before it terminates at Sweetwater Road. The City's most recent traffic count



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EXISTING LANE CONFIGURATIONS

FIG. 4

information indicates Bonita Road carries 44,600 ADT just east of Interstate 805, decreasing to 31,100 ADT east of Randy Lane. Between Allens School Road and Otay Lakes Road, this facility currently carries 26,700 ADT. Between Otay Lakes Road and Central Avenue, Bonita Road currently carries 26,000 ADT. South of Sweetwater Road to San Miguel Road, this facility carries 11,100 ADT. (1992)

Proctor Valley Road exist today as a two-lane partially paved/graded dirt road in a north/south alignment just south of San Miguel Road, where it then follows a east/west alignment across the southerly portion of the Salt Creek Ranch property connecting with Campo Road/State Route 94 in Jamul. This roadway basically serves scattered agricultural uses and carries very low traffic volumes. Currently, there is no traffic count data available for this roadway. In the future, the east/west portion of Proctor Valley Road will serve as the extension of the East "H" Street across the Salt Creek Ranch property as a four-lane major roadway. Portions of Proctor Valley Road to the north and west of Salt Creek Ranch will serve as part of the future State Route 125 freeway alignment. (1992)

3.2.5 Public Transportation

Public transportation currently does not serve the Salt Creek Ranch project site. Chula Vista Transit route 705A which serves Corral Canyon Road, Central Avenue, and Bonita Road terminates at the Bayfront/E Street trolley station. Chula Vista Transit Routes 704 and 707 provide service to Southwestern College and Telegraph Canyon Road terminating at the "H" Street trolley station. From the "H" Street and Bayfront trolley stations, service to downtown San Diego and transfer to the regional public transportation system is provided. (1992)

3.2.6 Trip Generation

The traffic volumes which will result from the proposed project are estimated using accepted trip generation rates and peak hour factors which are based on categories of land uses. These rates have been developed by various agencies and are summarized by SANDAG in their *Traffic Generators* manual. Figure 5 summarizes the expected trip generation from each phase of the Salt Creek Ranch as calculated using 1996 land use and trip generation rates. (1996)

As shown on Figure 5, Phase I, of the Salt Creek Ranch is estimated to generate 12,368 daily vehicle trips with 1,179 trips (splitting 430 inbound and 749 outbound) during the morning peak hour and 1,215 trips (splitting

821 inbound and 394 outbound) during the afternoon peak hour. Phase II is estimated to generate 13,233 daily vehicle trips with 1,290 daily trips (splitting 484 inbound and 806 outbound) during the morning peak hour and 1,279 trips (splitting 851 inbound and 428 outbound) during the afternoon peak hour. Phase III is estimated to generate 2,950 daily vehicle trips with 236 trips (splitting 71 inbound and 165 outbound) during the morning peak hour and 295 trips (splitting 206 inbound and 89 outbound) during the afternoon peak hour. In total, all three phases of the Salt Creek Ranch would generate 28,551 daily vehicle trips with 2,705 trips (splitting 985 inbound and 1,720 outbound) expected during the morning peak hour and 2,789 trips (splitting 1,878 inbound and 911 outbound) expected during the afternoon peak hour. (1996)

FIGURE 5
SALT CREEK RANCH TRIP GENERATION
(1996)

Land Use	Intensity	Trip Rate	ADT	AM Peak Hour			PM Peak Hour		
				%	In	Out	%	In	Out
Phase I:									
SFDU	1,036 units	10/DU	10,360	8	249	581	10	725	311
MFDU	101 units	8/DU	808	8	13	52	10	57	24
Elementary School	10 acres	60/acre	600	26	156	104	5	15	35
Community Park	12 acres	50/acre	600	4	12	12	8	24	24
Subtotal: Phase 1	1,137 du		12,368		430	749		821	394
Phase II:									
SFDU	895 units	10/DU	8,950	8	215	501	10	627	268
MFDU	289 units	8/DU	2,312	8	37	148	10	162	69
Elementary School	13.1 acres	60/acre	786	26	205	136	5	20	46
Community Park	10 acres	50/acre	500	4	10	10	8	20	20
Neighborhood Park	7.3 acres	50/acre	365	4	8	7	8	15	14
Fire Station	1 acre	40/acre	40	4	2	0	8	2	1
CPF	7 acres	40/acre	280	4	7	4	8	12	10
Subtotal: Phase II	1,184 du		13,233		484	806		851	428
Phase III:									
SFDU	295 units	10/DU	2,950	8	71	165	10	206	89
Subtotal: Phase III	295 du		2,950		71	165		206	89
TOTAL UNITS	2,616 UNITS		28,551		985	1,720		1,878	911

(1996)

3.2.7 Trip Distribution and Assignment

The distribution of trips typically results from an estimate of ultimate travel destination and routes used to reach those destinations. The basis for choosing a route is the drivers consideration of time, distance, and convenience. A major element is access to the regional circulation system and the interaction between residential land uses with employment, shopping, recreation, and institutional areas. In order to determine the distribution of trips to and from the project site, the ECVTPP travel forecast model was utilized for distributing and assigning project related traffic. Under Scenario 1 the majority of traffic (70 percent) will use Telegraph Canyon Road, while under Scenario 2, the majority of traffic (80 percent) will use East "H" Street. Scenario 1A will exhibit similar travel patterns as Scenario 2 (80 percent will use East "H" Street). (1992)

Under buildout conditions, the trips distribution was estimated based on a select zone assignment from the City of Chula Vista scenario four travel forecast (SANDAG 8-13-89). The majority (60 percent) of the project trips will be oriented west along East "H" Street connecting to State Route 125 (north/south destination) and continue west for destinations along East "H" Street. The remainder of the project related traffic will be oriented to the south on Lane Avenue (20 percent) and Hunte Parkway (15 percent) for connection to Telegraph Canyon. (1992)

3.2.8 Key Intersections

Based on a review of the trip generation and distribution, the following intersections were selected for detailed analysis. (1992)

- Telegraph Canyon Road and Crest Drive
- Telegraph Canyon Road and Paseo del Rey
- Telegraph Canyon Road and Medical Center Drive
- Telegraph Canyon Road and Otay Lakes Road
- Telegraph Canyon Road and EastLake Parkway
- Telegraph Canyon Road and Hunte Parkway
- Telegraph Canyon Road and Lane Avenue
- East "H" Street and Hidden Vista Drive
- Elmhurst Drive/Otay Lakes Road
- East "H" Street and Otay Lakes Road
- Bonita Road and Otay Lakes Road

3.2.9 Adequacy Analysis

The adequacy of traffic is based upon a detailed study performed by Willdan Associates, *Traffic Impact Study for Salt Creek Ranch* dated November 18, 1991. The following information is an excerpt from that study. (1992)

Throughout the traffic impact study for this project, a distinction is made between Existing Conditions, Base Conditions, Scenario 1 and 1A Conditions, and Scenario 2 Conditions. The following is a description of each condition and the methodology and tasks undertaken in forecasting the travel demand. (1992)

1. Existing Conditions. The existing traffic and roadway conditions were established based on information obtained from the City of Chula Vista and the 1990 Growth Management Intersection Monitoring Program prepared by JHK and Associates.

2. Base Conditions. The base conditions were established based on information contained in the ECVTPP. These conditions assume construction of all approved developments and related roadway improvements as documented in the ECVTPP, except for the segment of "H" Street just west of the project site, which was assumed to consist of a two-lane paved road.

3. Scenario 1 and 1A Conditions. The Scenario 1 conditions assume the completion of Phase I of the Salt Creek Ranch, in addition to the base condition described above. This condition was established as follows.

    a. Daily and peak hour trip generation rates for Phase I were developed based on SANDAG's *Traffic Generation Manual* (see Table 2, page 28).

    b. The Phase I traffic was assigned to the surrounding roadways and added to the base condition resulting in Scenario 1 traffic volumes. The trip distribution and assignment of the Phase I traffic was estimated based on the TRANPLAN model software.

    c. After the results of the analysis indicated unmitigable impacts at the intersection of Hidden Vista Drive/East "H" Street, Phase I traffic and the corresponding development were reduced to establish Scenario 1A.

d. It should be noted that the Circulation network assumed for Scenario 1 and Scenario 1A are different. Scenario 1 assumes that a segment of East "H" Street will remain as a dirt road while Scenario 1A assumes that Proctor Valley Road will remain as a two lane dirt road and East "H" Street west of the site will be paved as a two lane road.

4. Scenario 2 Conditions. The Scenario 2 conditions assume the ultimate development of Salt Creek Ranch and the implementation of a four-lane at-grade roadway along the State Route 125 corridor. The methodology used to establish the projected traffic volumes for this scenario is similar to Scenario 1 above, using the total traffic generated by Salt Creek Ranch.

Based on the analysis contained herein, major improvements to the surrounding roadway networks have been identified to mitigate the traffic impact of this project and other approved projects in the area and to improve existing operational conditions as well. These improvements include: (1992)

Base Condition

1. Interconnect all traffic signals in the eastern territories and synchronize the signal timing to provide a suitable progression for through traffic along the major circulation streets. A centralized computer system should be installed to more efficiently monitor and coordinate the traffic signal operation in the eastern territories and to optimize the traffic signal timings at all intersections to provide for an efficient traffic operation and reduce delays. (1992)

2. The intersection of Telegraph Canyon Road/EastLake Parkway will require the following improvements in order to operate at level of service (LOS) D or better during the peak hours. (1992)

   a. Widen the southbound approach of EastLake Parkway to provide a channelized right turn lane with an acceleration lane. Restripe to allow the following lane configuration:

      - Eastbound — two left, two through, and two right
      - Westbound — two left, two through, one through/right, one right
      - Northbound — two left, one through, and one through/right

- Southbound — one left, two through, and one channelized right

b. Construct a driveway (with acceleration/deceleration lanes) along Telegraph Canyon Road west of EastLake Parkway in conjunction with the proposed shopping center in the northwest corner, in order to divert a portion of the right turn and left turn volumes from the southbound and eastbound approaches of this intersection, respectively. Prohibit the left turn movement from the driveway.

3. The intersection of East "H" Street/Hidden Vista Drive will require the following improvements in order to operate at LOS D or better during the peak hours. (1992)

a. Widen the eastbound and westbound approaches of East "H" Street to provide an additional through lane in each direction. Provide the following lane configuration:

- Eastbound — two left, four through, and one right
- Westbound — two left, three through, and one through/right
- Northbound — one left, one left/through, and one right
- Southbound — one left, one left/through, and one right

4. The intersection of East "H" Street/Otay Lakes Road will require the following improvements to provide LOS D or better during the peak hours. (1992)

a. Widen the eastbound and westbound approaches of East "H" Street to provide an additional through lane in each direction.

- Eastbound — one left, three through, and one right
- Westbound — one left, three through, and one right
- Northbound — two left, two through, and a free right
- Southbound — two left, two through, and one right

b. Widen the northbound approach of Otay Lakes Road to provide an additional left turn lane. Channelize the right turn movement.

c. Widen the southbound approach of Otay Lakes Road to provide an additional left turn lane.

5. The intersection of Bonita Road/Otay Lakes Road will require the following improvements to provide LOS D or better during the peak hours. (1992)

   a. Widen the westbound approach of Bonita Road to provide an additional left turn lane. Provide the following lane configuration:

      - Eastbound — two through, one right
      - Westbound — two left, two through
      - Northbound — two left, and one right

6. The intersection of Otay Lakes Road/Elmhurst Drive will require the following improvements to provide LOS D or better during the peak hours. (1992)

   a. Widen the northbound and southbound approaches of Otay Lakes Road to provide an additional through lane in each direction and dual left turns northbound.

7. Since the ADT along Otay Lakes Road exceeds the City's threshold for LOS C, three through lanes in each direction should be provided between Telegraph Canyon Road and north of East "H" Street. (1992)

Scenario 1/Scenario 1A (Phase I)

1. Reduce the development potential of Phase I by 120 dwelling units to attain LOS D at the intersection of Hidden Vista Drive/East "H" Street. (1992)

2. Construct East "H" Street through the project (Phase I boundaries) to ultimate four-lane major street standards, consistent with the City of Chula Vista design criteria. Construct a two-lane roadway connecting East "H" Street from the western limit of Phase I development to Salt Creek I to City standards. (1992)

3. Construct Hunte Parkway to ultimate four-lane major street standards through the project and offsite south to Telegraph Canyon Road, consistent with the City of Chula Vista design criteria. (1992)

4. Construct Lane Avenue as a Class II collector from East "H" Street to meet existing improvements at its current terminus in the EastLake

Business Park, consistent with the City of Chula Vista's design criteria. (1992)

5. At the discretion of the City Traffic Engineer, install traffic signals or bond for future installation at the following intersections: (1992)

   - East "H" Street/Lane Avenue
   - East "H" Street/Hunte Parkway
   - Lane Avenue/Telegraph Canyon Road
   - Hunte Parkway/Telegraph Canyon Road

6. Implement transportation demand management strategies, including provisions of transit service and bus stops in order to reduce the peak hour demand on the street network. (1992)

Scenario 2 **(Phase I, II, and III and State Route 125)**

1. Implement all the measures described under Scenario 1 above. (1992)

2. Construct State Route 125 as a four-lane roadway between East "H" Street and State Route 54 with enhanced geometrics at the intersections. (1992)

3. Construct "H" Street as a four-lane major street from the western boundary of the site to the existing terminus of "H" Street. (1992)

Salt Creek Ranch

PFFP Phasing Plan
Phase 1
1137 Units

1 Neighborhood Number
10 Facility Number Per TM Conditions
Project Boundary
Neighborhood Boundaries
Partial Improvements
Voluntary Improvements
Required Facilities
Phase 1A
Phase 1B

800 0 800 Feet

N
W E
S

1 330 Units
2 100 Units
2 113 Units
3 121 Units
3 128 Units
4 141 Units
4A 101 Units
4A 289 Units
5A 119 Units
5B 92 Units
6 106 Units
6 114 Units
7A 59 Units
7B 126 Units
7C
8 237 Units
9 143 Units
10A 57 Units
10B 16 Units
11 85 Units
12 93 Units

VALLEY ROAD
ALAMEDA BOULEVARD
LANE
PARKWAY
COMMUNITY PARK
NEIGHBORHOOD PARK
ELEMENTARY SCHOOL

HUNSAKER & ASSOCIATES SAN DIEGO, INC.
PLANNING ENGINEERING SURVEYING

(1996)

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Scale 1: 9600 Size: 17 X 11 Date: 3/21/97

Salt Creek Ranch

PFFP Phasing Plan
Phase 2
1184 Units

1 Neighborhood Number
10 Facility Number Per TM Conditions
Project Boundary
Neighborhood Boundaries
Required Facilities
Work Completed Per Phase 1
Phase 2

800 0 800 Feet

HUNSAKER & ASSOCIATES SAN DIEGO, INC

(1996)

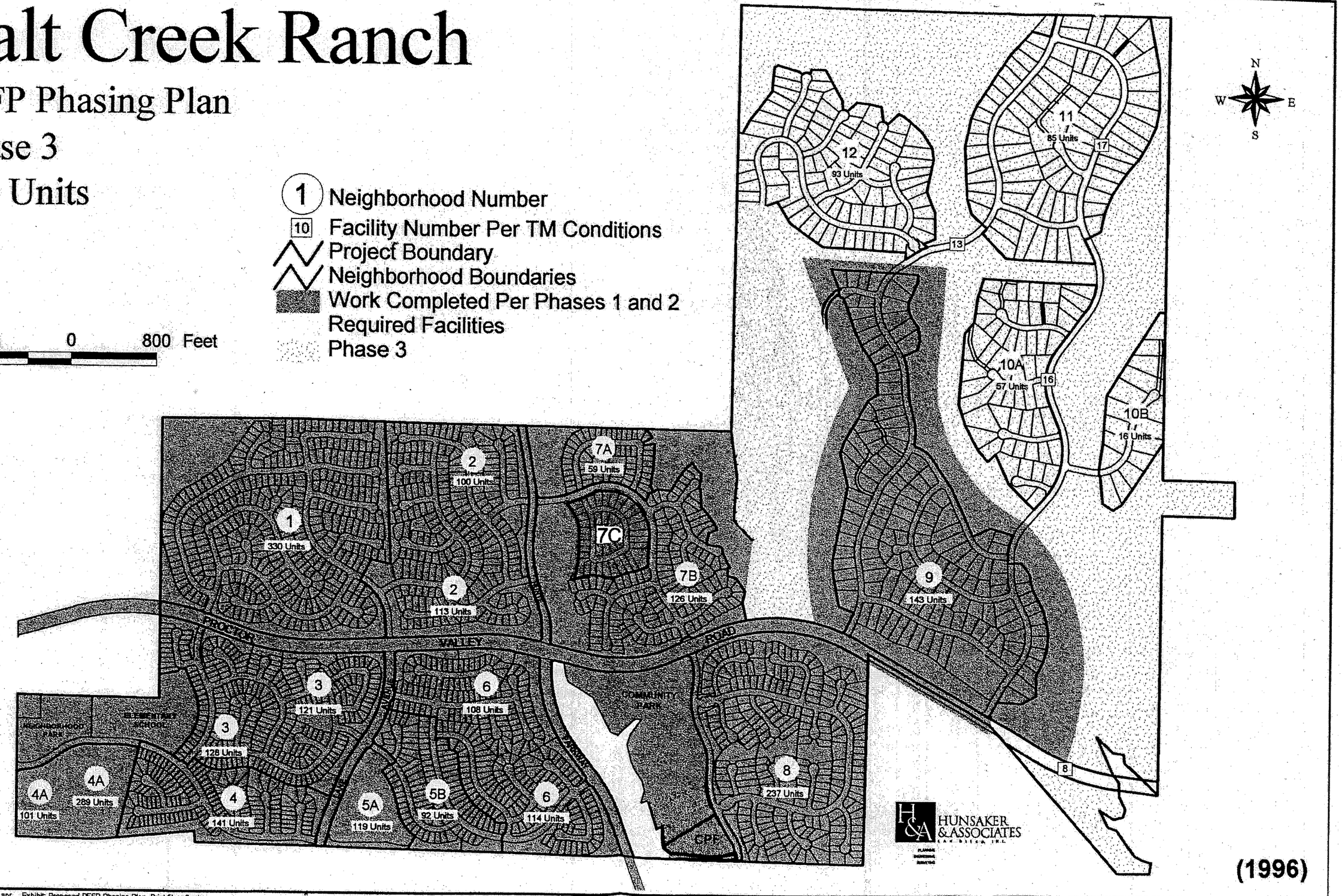
Path: M:\GIS\1413\24\p2.apr Layout: Proposed PFFP Phasing Plan
Scale 1: 9600 Size: 17 X 11 Date: 3/21/97

Salt Creek Ranch

PFFP Phasing Plan
Phase 3
295 Units

1 Neighborhood Number
10 Facility Number Per TM Conditions
Project Boundary
Neighborhood Boundaries
Work Completed Per Phases 1 and 2
Required Facilities
Phase 3

800 0 800 Feet



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Scale 1: 9600 Size: 17 X 11 Date: 3/21/97

3.2.10 Threshold Compliance

Threshold compliance will continue to be monitored through the annual intersection monitoring program and the Eastern Chula Vista Transportation Phasing Plan updates. (1992)

Based upon the traffic analysis prepared for the Salt Creek project, threshold compliance is projected to be maintained with implementation of the improvements identified in the "base condition" and "Scenario 1/1A" of the Traffic Impact Study dated November 18, 1991. (1992)

The amount of development which can be permitted prior to implementation of the improvements identified in Scenario 2 of the Traffic Impact Study includes the "Approved" projects as of June 30, 1990 (see Section 2.3 of this document) and the initial 1,137 dwelling units of Salt Creek Ranch. No development beyond this level will be allowed until a method of allocation is established. (1992)

Future development within Salt Creek Ranch will be required to pay Traffic Signal Fees in accordance with Chula Vista Council Policy No. 475-01. Traffic Signal Fees, Transportation DIF Fees, Interim Pre-125 DIF Fees and all other applicable fees shall be paid at the rate in effect at the time the building permits are issued. (1996)

Non-DIF Streets and Signals

The Salt Creek Ranch project contains residential streets and signals that, by city policy, are not eligible for DIF credit. These streets and signals will be funded by the development. (1992)

3.3 POLICE

3.3 POLICE

3.3.1 Threshold Standard

A. Emergency response: properly equipped and staffed police units shall respond to 84 percent of "Priority One" emergency calls within 7 minutes and maintain an average response time to all "Priority One" emergency calls of 4.5 minutes or less. (1992)

B. Respond to 62 percent of "Priority Two Urgent" calls within 7 minutes and maintain an average response time to all "Priority Two" calls of 7 minutes or less. (1992)

3.3.2 Service Analysis

Police services are provided by the City of Chula Vista Police Department. 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. (1992)

Police Facilities are addressed in *A Master Plan for the Chula Vista Civic Center Solving City Space Needs Through Year 2010*, dated May 8, 1989. (1992)

3.3.3 Project Processing Requirements

Sectional Planning Area Plan/Public Facilities Finance Plans (1992)

1. Services reviewed consistent with proposed phasing of the project.
2. Demonstrate conformance with *A Master Plan for the Chula Vista Civic Center*, May 8, 1989.

3.3.4 Existing Conditions

The Chula Vista Police Department currently provides police service for the project area. It is expected that the Salt Creek Ranch development will increase the demand for police service in the project area. (1992)

Police Facility Inventory

Figure 6
Police Service Analysis
(1992)

Existing Facility	Existing Location
Police Headquarters	276 4th Avenue
Future Facilities	
Remodel Existing Facility	276 4th Avenue

3.3.5 Adequacy Analysis

Based upon the latest report by the GMOC, the threshold for police services was met for both Priority 1 and Priority 2 calls during 1990. The threshold for Priority 1 (emergency calls) requires that 84% of these calls be responded to within seven minutes and that an average response time to all Priority 1 calls of 4.5 minutes or less be maintained. The actual performance for 1990 indicated that 87.6% of all Priority 1 calls were responded to within seven minutes and that the average response time for all priority calls was 4.13 minutes. This indicates that the threshold standard for Priority 1 calls was met during 1990. (1992)

With regard to Priority 2 calls (urgent calls) the threshold standard requires that 62% of all Priority 2 calls be responded to within 7 minutes, and that an average response time to all Priority 2 calls of 7 minutes or less be maintained. The actual performance for 1990 was that 68% of al Priority 2 calls were responded to within 7 minutes and the average response time was 6.25 minutes. Again, the data indicated that the threshold for Priority 2 Police services was met. (1992)

The Police Department indicated to the GMOC that based upon the proposed development phasing schedule that it did not have any specific concerns with its ability to continue to meet the standard in 1991. (1992)

Depending upon workload factors and response time performance, development of the Salt Creek Ranch may necessitate the addition of another police patrol beat. If an additional beat is needed, the Developer shall be responsible for fronting the necessary funds to enable the City to purchase the requisite patrol vehicles and vehicle equipment as well as the

required start-up equipment for the new peace officers. Such equipment and vehicle purchases would qualify for a credit against the police portion of the public facilities fees. (1992)

3.3.6 Financing Police Facilities

In January 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Development Impact Fee to pay for various public facilities within the City of Chula Vista. The facilities are required to support future development within the City and the fee schedule has been adopted in accordance with Government Code Section 66000. (1992)

The Salt Creek Ranch project is within the boundaries of the public facilities DIF program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. (1992)

3.3.7 Threshold Compliance

The City will continue to monitor police responses to calls for service in both the Emergency (priority 1) and Urgent (priority 2) categories and report the results to the GMOC on an annual basis. (1992)

Compliance will be satisfied with the payment of Public Facilities Fees at the rate in effect at the time building permits are issued. (1992)

3.4 FIRE AND EMERGENCY MEDICAL SERVICES

3.4 FIRE AND EMERGENCY MEDICAL SERVICE

3.4.1 Threshold Standard

Emergency response: Properly equipped and staffed fire and medical units shall respond to calls throughout the City within seven (7) minutes in 85 percent (current service to be verified) of the cases (measured annually). (1992)

3.4.2 Service Analysis

Fire and Emergency Medical Services are provided by the City of Chula Vista Fire Department. The City also has county wide mutual aid agreements with surrounding agencies should the need arise for their assistance. The purpose of the Threshold Standard and the monitoring of response times is to maintain and improve the current level of fire protection and emergency medical services (EMS) in the City. Fire/EMS facilities are provided for in the "Fire Station Master Plan", dated March 23, 1989. The Fire Station Master Plan indicates that response time is primarily determined by the number and location of fire stations. The Fire Station Master Plan evaluates the planning area's fire coverage needs, and recommends an eight station network at buildout to maintain compliance with the threshold standard. (1992)

3.4.3 Project Processing Requirements

Developments shall be in accordance with the project guidelines outlined in the Fire Station Master Plan and detailed below. (1992)

In accordance with the Fire Station Master Plan, the City, at its sole discretion, shall determine when a new fire station is required in order to achieve threshold service levels, meet specific project guidelines or maintain general operational needs of the Fire Department. The requirement to pay for fire station construction and related equipment shall be the sole responsibility of the developer or developers and the City may require said developer or developers to provide a guarantee mechanism to assure the availability of such funding. (1992)

Sectional Planning Area Plan/Public Facilities Finance Plans

1. Specific siting of the facility takes place which conforms with the *Fire Station Master Plan*, March 23, 1989.

2. Site reserved.
3. Equipment needs identified.
4. Methods of financing discussed.
5. Timing of construction is consistent with threshold service levels, specific project guidelines and/or general operational needs of the Fire Department.
6. Demonstrate the ability to provide adequate facilities to access required fire stations in conjunction with the construction of sewer & water facilities.

3.4.4 Existing Conditions

There are currently five city stations and one county station serving the planning area. These existing and future stations are listed below: (1992)

FIRE STATION INVENTORY

Existing Facility	Location
Station #1	447 "F" Street
Station #2	80 East "J" Street
Station #3	266 East Oneida
Station #4	861 Otay Lakes Road
Station #5	391 Oxford
Bonita — Sunnyside Fire Protection District Station	Bonita Road near Acacia
Fire Personnel Training Tower	80 East "J" Street
Fire Prevention Offices	447 "F" Street
Fire Administration	447 "F" Street

Planned Facility	Location	Cost Estimate
Station #1 (Expansion)	Central Chula Vista	$438,000
Station #3 (Relocated)	Sunbow II (1991-92)	434,500
Station #4 (Relocated)	Salt Creek (1992-93)	660,000
Station #6	El Rancho Del Rey (1992-93)	970,000
Otay Ranch Station	Otay Reservoir	none
Radio Communication Tower	Potentially in EastLake I	24,000
Fire Personnel Training Tower (Relocated to Station #6)	Rancho Del Rey	417,340
Brush Rig	Salt Creek	208,345
TOTAL		$3,152,197

3.4.5 Adequacy Analysis

The SPA Plan proposes a 1.3 acre fire station site adjacent to the neighborhood park along the western boundary of the project. This site meets City standards and has access to major roads, sewer, and water facilities. (1992)

The City of Chula Vista Fire Department has jurisdiction over most of the project area. The closest station to the project site at this time is located on Otay Lakes Road, south of East "H" Street. Although portions of the site are currently within the County's Rural Fire Protection District, project approval and future annexation to the City of Chula Vista would remove this property from the Rural Fire Protection District jurisdiction. At that time, all service responsibility would then be assumed by the City. This transfer of responsibility would occur concurrent with the annexation process. (1992)

The City of Chula Vista's Fire Station Master Plan, dated February, 1989 and revised July 10, 1989, identified an optimal fire station network to serve the eastern territories. The Master Plan stipulated the need for a permanent site for a new, sixth City fire station within the Salt Creek Ranch development. The optimal fire station network may, however, change based upon plans for the Otay Ranch Project. As such, the City plans to reexamine its fire station needs and locations in the near future. (1992)

During the initial phases of development within the Salt Creek Ranch, fire coverage shall be provided to the project site by an interim fire station t be located within the EastLake-I Business Park. This interim station is scheduled to become operational in March-April, 1992. It is anticipated that a decision concerning the optimal, permanent location for the City's sixth fire station will be made no later than 1996. The interim fire station shall remain operational until a permanent fire station is constructed.

If the City's updated Fire Station Master Plan should still require a fire station within the Salt Creek Ranch, the Developer shall: (1992)

- provide a 1.3 acre fire station site adjacent to the neighborhood park along the western boundary of the project (as denoted in the SPA Plan, this site meets City standards and has access to major roads, sewer and water facilities);

- construct a permanent fire station of approximately 4,000 square feet. This cost is included in the City's Public Facilities Development Impact Fee and is currently estimated at $510,538. Developer shall NOT be responsible for providing the requisite fire pumper, fire station furnishings or fire fighter equipment. However, Salt Creek Ranch shall be required to purchase a reserve fire pumper for use as a backup for the eastern territories. The cost of the reserve pumper is estimated to be $50,000. Should the Rancho San Miguel Development commence ahead of Salt Creek Ranch, the Rancho San Miguel developer shall be responsible for fronting the necessary funds to enable the City to purchase the reserve pumper; and

- put in place the required streets and water facilities to service the station, as required by Phase I of the development.

Additionally, as detailed in the Public Facilities Development Impact Fee, the City requires a brush rig and associated equipment to properly service the area (estimated at $208,345). Currently, the rig and equipment is scheduled to be provided in conjunction with the Rancho San Miguel development. Should Salt Creek Ranch commence development ahead of Rancho San Miguel, the Developer shall be responsible for fronting the necessary funds to enable the City to purchase the brush rig and equipment. (1992)

3.4.6 Financing Fire Service Facilities

In January 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Development Impact Fee to pay for various public facilities within the City of Chula Vista. The facilities are required to support future development within the City and the fee schedule has been adopted in accordance with Government Code Section 66000. The current fee is $2,150 per equivalent dwelling unit. (1992)

The Salt Creek Ranch project is within the boundaries of the public facilities DIF program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. (1996)

Should Salt Creek Ranch commence development ahead of Rancho San Miguel, the Salt Creek Ranch developer shall be responsible for fronting the estimated $208,345 to purchase the brush rig and equipment. Credit will be given against the payment of public facility fees for costs up to the

amount of fees due. Costs in excess of fees due will be subject to reimbursement in accordance with adopted City ordinances. (1992)

3.4.7 Threshold Compliance

Compliance will be satisfied with the payment of Public Facilities Fees at the rate in effect at the time buildings permits are issued. In addition, should Salt Creek Ranch commence development ahead of Rancho San Miguel, Salt Creek Ranch shall be responsible for fronting the purchase of a brush rig and equipment and a reserve pumper. (1992)

Salt Creek Ranch shall also provide a 1.3 acre fire station site which meets City standards. If the City's updated Fire Master Plan should still require a fire station within Salt Creek Ranch, the developer shall construct a permanent fire station of approximately 4,000 square feet. Costs in excess of public facilities fees due will be subject to reimbursement in accordance with adopted City ordinances. 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. (1992)

3.5 SCHOOLS

3.5 SCHOOLS

3.5.1 Threshold Standard

The City shall annually provide the two local school districts with a 12 to 18 month development forecast and request an evaluation of their ability to accommodate the forecast and continuing growth. The District's replies should address the following: (1992)

1. Amount of current capacity now used or committed.

2. Ability to absorb forecast growth in affected facilities.

3. Evaluation of funding and site availability for projected new facilities.

4. Other relevant information the District(s) desire(s) to communicate to the City and GMOC.

3.5.2 Service Analysis

School facilities and services in Chula Vista are provided by two school districts. The Chula Vista Elementary School District administers education for kindergarten through sixth grades. The Sweetwater Union High School District administers education for the Junior 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 developed 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. (1992)

Chula Vista Elementary School Districts School Facilities Needs Analysis (SFNA) is used in the place of a defined master plan. (2003)

Sweetwater Union High School District utilizes the "Sweetwater Union High School District Long Range Comprehensive Master Plan", dated November 1984. (1992)

3.5.3 Project Processing Requirements

Sectional Planning Area Plan/Public Facilities Finance Plans (1992)

1. Identify student generation by phase of development
2. Specific siting of proposed school facilities will take place in conformance with the Sweetwater Union High School District Long Range Comprehensive Plan, November, 1989" and Chula Vista Elementary School District's School Facilities Needs Analysis.
3. Reserve school sites, if necessary, or coordinate with the district for additional school classrooms.
4. Provide cost estimates for facilities.
5. Identify facilities consistent with proposed phasing.
6. Demonstrate the ability to provide adequate facilities to access public schools in conjunction with the construction of water and sewer facilities.
7. Secure financing.

3.5.4 Existing Conditions

School Facilities Inventory. Chula Vista Elementary School District

The Chula Vista Elementary School District's inventory consists of 39 existing elementary schools. Figure 7 lists existing schools with the actual number of students. Permanent capacity totals 27,140. (SFNA 2003)

New elementary schools have been constructed to meet the educational needs of students generated from the projected development and resultant population increase. The elementary schools planned for Terra Nova, Rancho del Rey, EastLake Greens, Eastlake Trails and Rolling Hills Ranch have been constructed. In addition new elementary schools are planned to be constructed in San Miguel Ranch by 2004 and Eastlake Woods by 2005. (SFNA 2003)

Figure 7

Student Placement Office
School Capacity and Actual Enrollment 02-03

School	12/3/2002 Enrollment	Capacity with existing Buildings	Seats Available
Allen	443	470	27
*Arroyo Vista	805	800	-5
*Casillas	706	750	44
Castle Park	608	600	-8
Chula Vista Hill	583	600	17
CVLCC	533	600	67
Clear View	520	600	80
Cook	555	550	-5
*Discover	838	880	42
*Eastlake	608	750	142
Feaster	1,142	1,120	-22
*Finney	505	750	245
Halecrest	553	600	47
Harborside	737	750	13
*Heritage	876	890	14
Hilltop Drive	561	560	-1
*Juarez-Lincoln	675	750	75
Kellogg	421	430	9
*Lauderbach	986	970	-16
*Loma Verde	643	750	107
Los Altos	433	560	127
*Marshall	559	750	191
*McMillin	746	750	4
Montgomery	431	500	69
Mueller	923	940	17
*Olympicview	693	760	67
Otay	649	700	51
Palomar	445	500	55
Parkview	553	650	97
Rice	726	750	24
*Rogers East	521	630	109
*Rohr	493	550	57
Rosebank	725	760	35
Silver Win	573	600	27
Sunnyside	476	600	124
Tiffany	651	720	69
Valle Lindo	509	700	191
Valle Vista	614	750	136
*Vista Square	719	800	81
TOTAL	**24,737**	**27,140**	**2,403**

ATT/ENR, Cap & Acutal 02-03 (Prepared 12-11-02)
*YRS
Capacity @ 20/class in gr K-3; doubled for Kdg am/pm; 31/class in gr 4-6, SDC @10

Development Projections & Dwellings Unit Size

The purpose of the (SFNA) is to quantify and provide justification for additional school facilities within the District as a result of development anticipated to occur during the next five years. A significant number of the future residential projects that are expected to develop within the boundaries of the District have already mitigated their impact through the formation and participation in a Community Facilities District (CFD) or other alternative mitigation measures. For SFNA the District will consider the effects of developments that have not yet fully mitigated for school impacts. The following table indicates the District's estimate of dwelling units that may be developed by 2007 within these development. The Information is derived from the City of Chula Vista's most recent Growth Management Forecast (18-month and Five-Year), dated October 2002.

TABLE 1
Project Dwelling Units from "Not Fully-Mitigated" Developments to be Developed by 2007[1]

Project Name	Total Units in Project	Total Estimated SFDs[2]	Total Estimated SFAs & Apts[3]
Otay Ranch – Est. Unmitigated	1,500	500	1,000
Bella Lago	150	150	0
Vista Mother Miguel	40	40	0
Western Chula Vista	250	125	125
Total	**1,940**	**815**	**1,125**

Notes:
1 Source: Preliminary Growth Forecast Information (Five-Year and 18-Month), dated October 2002.
2 SFDs – single-family detached units.
3 SFAs – single-family attached dwelling units.

School Facilities Inventory, Sweetwater Union High School District

The Sweetwater Union High School District currently administers four junior and four senior high schools and one continuation high school in Chula Vista. As the population grows, the District is predicting a need for 4 to 6 junior highs and 3 to 6 high schools. Currently, the District owns three school sites east of Interstate 805. (1992)

The first site, which is the most westerly, has been determined by the State Department of Education to be unbuildable due to seismic constraints. The second site, located in the Sunnyside community has been determined by the Sweetwater District to be unbuildable because of the proposed State Route. Caltrans' least intrusive alignment plan for State Route 125 cuts through the property and leaves 5 acres of buildable land for school construction. Construction for a new high school on the third site in the Eastlake greens Community is underway with completion anticipated prior to the beginning of the 1992 school year. (1992)

Figure 8
Sweetwater Union High School District

EXISTING SCHOOLS

Junior Highs	**Students Over Permanent Facility Capacity**
Castle Park	
Hilltop	96
Chula Vista	364
Bonita	398
	858

High Schools	
Castle Park	417
Hilltop	144
Chula Vista	622
Bonita Vista	239
Palomar	---
	1,422

FUTURE SCHOOLS	**Capacity**	**Estimate Opening Date**
Eastlake High School	2,400	Sept. 1992
Rancho del Rey Junior High School	1,200-1,500	Sept. 1997
Junior/Middle School in Eastlake Trails	1,200-1,500	Contingent on schedule of build-out
Otay Ranch		
2-4 Junior Highs	1,200-1,500 each	unknown
2-5 High Schools	2,400 each	unknown

3.5.5 Adequacy Analysis

The Salt Creek Ranch is planned for a build out of 2,662 dwelling units. Neighborhoods 1 through 8 are largely completed and future development will consist of mainly Neighborhoods 9 through 12. All future development is projected to be completed by 2007. This consists of 168 multi-family units and 1,172 single family units (2002 GMOC Report).

Approximately 1,322 dwelling units have been constructed in Salt Creek Ranch. Thurgood Marshall Elementary School has been constructed within Salt Creek Ranch and 2002-03 enrollment was 559 with 191 seats available. The remaining 1340 units to be constructed include 168 multi-family units with a lower student generation factor, and are expected to generate 402 elementary students using the student generation factors below:

Student Generation Factors:

Elementary (K-6)	= .30 students/dwelling units
Junior High (7-9)	= .19 students
High School (9-12)	= .10 students

School Size

Elementary	600-650 students
Junior High	1,500 students
High School	2,400 students

Based on maximum elementary school capacity levels, it is anticipated that the projected 402 elementary students generated by future development in Salt Creek Ranch will be accommodated by the remaining capacity in the Thurgood Marshall Elementary School and/or the San Miguel Ranch or EastLake III elementary schools. In addition, schools in this area serve the Salt Creek I project which contains approximately 550 dwelling units.

The original Salt Creek Ranch Sectional Planning Area Plan assumed that two elementary schools might be needed to serve not only Salt Creek Ranch, but also San Miguel Ranch or possibly, portions of EastLake III. In 1991, when Salt Creek Ranch was being processed by the city, the timing of approval and number of units for San Miguel Ranch and EastLake III was unknown. Dr. Lowell Billings, who was responsible for forward planning for the Chula Vista Elementary School District at the time, has stated that the second elementary school site in Salt Creek Ranch was planned to accommodate future students generated by Salt Creek Ranch in the unlikely event that either San Miguel Ranch or EastLake III were not approved and\or did not provide additional elementary school sites.

Subsequently, San Miguel Ranch (1,394 dwelling units-418 elementary students) was approved with one elementary school site which is scheduled to be constructed in 2004 and EastLake III (2002 dwelling units — 600 elementary students) was approved with a second elementary school site which will be constructed following the San Miguel Ranch elementary school.

The new EastLake High School has been constructed, and the new Rancho Del Rey Middle School has been constructed since the original approval of Salt Creek Ranch. Currently, a second middle school is under construction in EastLake III and a new high school is under construction in Otay Ranch. Additional planning is ongoing to identify the number and location of additional high school and middle school facilities needed to serve future development in Otay Ranch.

For the northeastern portion of the district, the opening of Rancho Del Rey Middle School and EastLake High School will adequately serve the Salt Creek Ranch community and surrounding development for the planned build out of San Miguel Ranch, Salt Creek Ranch, and EastLake III.

3.5.6 Financing School Facilities

New development within the Eastern Territories is provided new school facilities through the voluntary establishment of and/or annexation to a Mello-Roos Community Facilities District. The school districts also require that new development provide the district with a graded school site.

Therefore, based on two additional elementary schools in San Miguel Ranch and EastLake III which will be financed and constructed using the Mello Roos Community Facilities Act bonding mechanism, the Chula Vista Elementary School District has declared the second school site in Salt Creek Ranch as surplus and notified the developer that it will not be exercising its option to purchase the site.

3.5.7 Threshold Compliance

According to the Chula Vista Elementary School District, there is now sufficient information to declare the second school site in the Salt Creek Ranch as surplus and not needed to house the projected number of elementary school students within the surrounding area. Therefore, the district has notified the developer that it will not be exercising its option to purchase the site and stated in a letter to the city that this site is not needed to meet anticipated enrollment levels or to comply with the Quality of Life Threshold Standards.

The Sweetwater Union High School District is currently constructing a new middle school within EastLake III and a new high school within Otay Ranch. These new facilities will serve to relieve enrollment pressures at EastLake High School.

As development applications are processed within the boundaries of Salt Creek Ranch, the city will coordinate with the School Districts to ensure that development approvals do not take place until the provision for and financing of school facilities is approved by each of the school districts and are consistent with the threshold standard.

The approval of a tentative map within the boundaries of Salt Creek Ranch will not be made unless the City receives a letter from the Districts confirming the provision of necessary school sites and/or additional school facilities or participation in financing programs approved by the school districts.

3.6 LIBRARIES

3.6 LIBRARIES

3.6.1 Threshold Standard

Population ratio: 500 square feet (gross) of library adequately equipped and staffed facility per 1,000 population. (1992)

3.6.2 Service Analysis

Library facilities are provided by the City of Chula Vista Library Department. The City Council approved Master Plan for Libraries includes a range of 500 to 700 square feet of library per 1,000 population. Using the design criteria set forth in the April 30, 1987 Chula Vista Public Library Master Plan, the libraries are being designed to an average of 600 square feet per 1,000 population. (1992)

Library facilities are provided in the "Chula Vista Public Library Master Plan. Facility Planning to the Year 2010", dated April 30, 1987. (1992)

3.6.3 Project Processing Requirements

Sectional Planning Area Plan/Public Facilities Finance Plans (1992)

1. Identify phased demands in conjunction with the construction of streets, water and sewer facilities.
2. Specifically identify facility site in conformance with the "Chula Vista Library Master Plan", April 30, 1987.

3.6.4 Existing Conditions

Inventory

The City provides library services through the Chula Vista Public Library at Fourth and "F" Street and two small branch libraries in the Montgomery/Otay planning area. (1992)

The existing and future libraries are listed below.

Existing Facilities (1992)	
Existing Libraries	Square Footage
Chula Vista (permanent)	55,000
Castle Park (temporary)	1,720
Woodlawn Park (temporary)	608
Total Existing Square Feet	**57,328**

On November 21, 1990, the Chula Vista Public Library filed a Preliminary Application with the California State Library to apply for California Library Construction and Renovation Bond Act funds for the construction of a 35,000 square foot library in the Montgomery/Otay Planning Area. The City's final application was approved on April 24, 1991 and the City will receive $6,850,515 in State Funds. Construction of the 35,000 square foot library at Fourth and Orange Avenues could be completed by February 1994. (1992)

Future Libraries	Square Footage	Estimated Cost
Montgomery/Otay	35,000	$ 12,324,000
Sweetwater/Bonita	29,000	6,271,500
Eastern Territories	17,000	4,105,100
Total Planned Square Feet	**81,000**	**$ 22,700,600**
Total Planned Library Square Feet	**136,000**	

3.6.5 Adequacy Analysis

Using the square footage threshold standard of 500 square feet of library per 1,000 population, the libraries conceptualized in the Chula Vista Master Plan of Libraries are adequate. The existing demand, based on a July 1, 1991 population of 139,150 is 69,575 square feet. With the 35,000 square foot library schedule for the Montgomery/Otay area, and the existing 55,000 square feet of permanent library space, the library facilities will total 90,000 square feet, which is a 20,425 square foot surplus for the present population demand. (1992)

The demand generated by the 8,723 "approved" dwelling units remaining as of July 1, 1991 is 11,746 square feet based on a population factor of 2.693 (State Department of Finance April, 1990) persons per dwelling unit. The existing plus approved demand for library space totals 81,321 square feet. Comparing the existing and scheduled library square footage of 90,000 square feet, there is a surplus of 8,679 square feet. (1992)

The following table highlights existing plus approved project demands for library space as compared to the existing and scheduled library space as well as the impact of the phased development of the Salt Creek Ranch project. (1992)

LIBRARY SPACE DEMAND COMPARED TO SUPPLY AS OF JULY 1, 1991

	Population	Demand Square Footage	Supply Square Footage	Above/ Below Standard
Existing (Citywide)	139,150	69,575	90,000	20,425
Approved Projects (8,723 x 2.693)	23,491	11,746		
Sub-total	**162,641**	**81,321**	**90,000**	**8,679**
Salt Creek Ranch				
Phase I	4,199	2,100		6,579
Phase II	3,079	1,540		5,039
Phase III	962	481		4,558
Sub-total	**8,240**	**4,121**		**4,558**
TOTAL	**170,881**	**85,442**	**90,000**	**4,558**

Salt Creek Ranch will have a total library demand of 4,121 square feet.

3.6.6 Financing Library Facilities

In January 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Development Impact Fee to pay for nine categories of public facilities within the City of Chula Vista. The facilities are required to support future development within the City. The current fee adopted in accordance with Government Code Section 66000 is $2,150 per equivalent dwelling unit. (1992)

The portion of the fee attributable to libraries is $544/EDU plus $20.75/

EDU for administration of the program. (1996)

The Salt Creek Ranch project is within the boundaries of the public facilities DIF program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued.

3.6.7 Threshold Compliance

Based upon the analysis contained in this PFFP, it is projected that the library threshold standard will be maintained throughout the phased development of the Salt Creek Ranch project. These existing and approved library space totals 90,000 square feet, while the total "approved" projects and Salt Creek Ranch project demand is 85,442 square feet. This results in a surplus of 4,558 square feet at the rate in effect at the time building permits are issued. (1992)

No mitigation is required other than the payment of the Public Facilities Fee for library facilities at the rate in effect at the time building permits are issued. (1992)

3.7 PARKS AND RECREATION

3.7 PARKS AND RECREATION

3.7.1 Threshold Standard

Population ratio: Three (3) acres of neighborhood and community parkland with appropriate facilities shall be provided per 1,000 residents east of Interstate 805. (1992)

3.7.2 Service Analysis

The City of Chula Vista provides public park and recreational opportunities through the Parks and Recreation 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. A recommendation is made by the Parks Commission to the deciding body, the City Council. (1992)

The Parks Element of the General Plan dated July 1990 serves as the master plan for park facilities. There is currently no existing detailed parks master plan. (1992)

3.7.3 Project Processing Requirements

Sectional Planning Area Plan/Public Facilities Finance Plans (1992)

1. Identify phased demands in conformance with street improvements and in coordination with the construction of water and sewer facilities.
2. Specific siting of the facility will take place in conformance with the "Chula Vista General Plan Park and Recreation Element".
3. Site reserved.

3.7.4 Existing Conditions

The existing and future parks as depicted in the Park and Recreation Element of the General Plan are listed in Figures 9 and 10. (1992)

Figure 9
Chula Vista Existing Parks
(1992)

	Acres[1] West of I-805	Acres[1] East of I-805
Community Parks		
Eucalyptus Park	19.8	
J Street Marina and Bayside	21.4	
Greg Rogers	52.1	
Rohr-Sweetwater		62.2
Discovery		14.5
Total Existing Community Acres:	41.2	128.8
Neighborhood Parks		
Marina View	4.5	
City Hall & Friendship Park	8.4	
Memorial Park	8.0	
Norman Park		1.7
Hilltop Park	10.9	
Lauderbach Park	4.0	
Palomar	5.2	
Orange Avenue & Reinstra Field	10.0	
Loma Verde Park	6.2	
SDG&E Park		18.0
Otay Park	2.8	
Los Niños Park	5.2	
Bay Boulevard Park	1.5	
Valle Lindo Park		4.2
Halecrest Park		2.0
Terra Nova Park		6.5
Independence Park		4.1
Tiffany Park		7.2
Paseo Del Rey		3.0
Bonita Long Canyon Park		12.5
Sunridge Park		6.0
Sunbow Park		4.0
Rancho del Rey Park		10.2
Total Existing Neighborhood Acres:	86.4	59.7
EXISTING TOTAL	127.6	188.5

[1] Inventory and acreages provided by the Parks and Recreation Department.

Figure 10
Chula Vista Future Parks
(1992)

Future Community Parks	Acres[1] West of I-805	Acres[1] East of I-805
Rancho San Miguel		25
Salt Creek Community		20
Rutgers		25
Telegraph South		25
Montgomery	24.0	
Otay Valley		25
University West		25
University East		25
EastLake Woods		22.5
Sunbow Community		10.5
EastLake Community		12.5
Total Future Community Acres:	**24.0**	**215.5**
Future Neighborhood Parks		
Marisol Park		6.0
F Street & Woodlawn	12.5	
4th & Orange	12.5	
Explorer Park		5.0
Otay Valley Road & Brandywine		12.5
Paseo Ranchero & Wolf Canyon		12.5
Rancho Drive Park	12.5	
EastLake Trails		12.5
Salt Creek Neighborhood		7.0
EastLake Greens		12.5
Unnamed Park		12.5
Unnamed Park		12.5
Total Future Neighborhood Acres:	**37.5**	**93.0**
FUTURE TOTAL	**61.5**	**308.5**

Note: The general plan minimum park sizes are 15 acres for community and 7 acres for neighborhood. Since the desired and anticipated size is 20-30 acres for community and 10-15 acres for neighborhood, it is recommended that the general plan element be amended to reflect the desired size. For the purposes of this park listing an average is used; 25 acres for community parks and 12.5 for neighborhood parks.

[1] Inventory and acreages provided by the Parks and Recreation Department.

3.7.5 Salt Creek Ranch Park Requirements

Compliance to Public Park Standards

All new development in the City of Chula Vista is subject to the requirements contained in the City's Parkland Dedication Ordinance revised June 22, 1991, which is confirmed in Municipal Code Chapter 17.10. This establishes land development fees for park acquisition and development, sets standards for dedication and establishes criteria for acceptance of parks and open space by the City of Chula Vista. (1992)

Parkland dedication requirements per the ordinance are shown on Figure 11.

FIGURE 11
PARKLAND DEDICATION STANDARDS

Dwelling Unit Type	Park Dedication per Unit	Dwelling Units per Park Acre
Single-Family— Detached	423 sf/du	102.9 du/ac
Single-Family— Attached	366 sf/du	119.0 du/ac
Multiple-Family	288 sf/du	151.0 du/ac

Based upon the parkland dedication standards, the following requirements will apply to Salt Creek Ranch. (1996)

Number of DU's	Dwelling Unit Type	Parkland Required/DU	Total Park Acres
2,107	Single-Family— Detached	423 sf/du	20.46 ac
119	Single-Family— Attached	366 sf/du	1.00 ac
390	Multi-Family	288 sf/du	2.58 ac
2,616			**24.04 ac**

The total acres of parkland proposed in the Salt Creek Ranch SPA is as follows: (1996)

Parcel	Gross Acres	Net Usable Acres	Use	Acres
NP-1	22.0	22.0	Community Park	22.0 ac
NP-2	7.3	7.0	Neighborhood Park	7.0 ac
Subtotal	**29.3**	**29.0**		**29.0 ac**

FIGURE 12
SALT CREEK RANCH POPULATION ESTIMATES
(1996)

Proposed Use	Units	Persons Per D.U.	Population Estimate[1]
Residential	2,107	3.24	6,827
	119	3.04	362
	390	2.31	901
	2,616		8,090

Using the parkland standard, 24.04 acres of public parkland are required within the revised Salt Creek Ranch development under the dedication ordinance. The Salt Creek Ranch Site Utilization Plan Map in the proposed SPA plan shows 29.0 net acres of public parkland comprised of a 22.0 net acres community park and one neighborhood park totaling 7.0 net acres. (1996)

Gross vs Net Park Acreage

The City's Park and Recreation Department defines net usable acreage as follows: (1992)

1. Areas for ballfields or built facilities (tennis courts, basketball courts, gymnasiums, etc.) shall be graded to a 2% slope to provide for proper drainage.
2. In no case will slopes steeper than 4:1 be considered for lawn areas.
3. No perimeter slopes or interior slopes steeper than 3:1 will be given park credit.
4. No areas within the existing San Diego Gas and Electric easement will be given park credit.
5. Graded slopes are to be constructed to have natural appearance. Slopes should not be the typical constant gradient for the entire length.
6. All park areas are to be handicap accessible per the American Disabilities Act.

In addition, areas taken up by non-dedicated park lands, such as slope banks necessary for roadways is not acceptable and will not be considered in the net usable park acreage counts.

[1] Based on Department of Finance April, 1990 Population Coefficients as shown in Land Use section.

Dedication

The 7.0 net acre Neighborhood Park is proposed to be located on the west portion of the Salt Creek Ranch community along San Miguel Road. The site is adjoined by a proposed one net acre fire station on the northwest corner of the park and on the east by a 10 net acre school site. (1992)

The 22.0 net acre Community Park is proposed to be located in the central portion of the project site on the south side of East "H" Street, adjacent to the Salt Creek open space corridor. (1992)

A park master plan has not been completed or adopted for either the 7 net acre neighborhood park or the 22 net acre community park. The exact amenities for these parks have not been established. However, conceptual plans have been included in the SPA plan which define the proposed facilities and size parameters. (1992)

In accordance with Municipal Code Chapter 17.10, the City will grant credits against park fees for park land dedications that meet the City's net useable acreage requirements. (1992)

Pocket Parks

In order to provide an additional amenity to the community, several residential lots may be eliminated and replaced with small "pocket parks". The purpose is to provide a small grassy area and tot lot within walking distance of the families with small children. These pocket parks are likely to be less than one acre in size and will not count toward park acreage requirements. Additionally, they will become part of the Open Space District and, therefore, not be subject to maintenance funded by the City's General Fund. (1996)

3.7.6 Adequacy Analysis

The following table provides a comparison of park acreage demands and supply east of Interstate 805 for existing, approved projects, as well as the phased addition of the Salt Creek Ranch project. (1996)

PARK ACREAGE DEMAND COMPARED TO SUPPLY EAST OF INTERSTATE 805 AS OF JULY 1, 1991					
	Population East of I-805	Demand Park Acres	Supply Park Acres	Net Project Acres Above/Below Standard	Cumulative Above/Below Standard
Existing	39,108	117.32	188.50	71.18	71.18
Approved Projects	23,491	70.47	37.60	-32.87	-32.87
Sub-total	**62,599**	**187.79**	**226.10**	**38.31**	**38.31**
Salt Creek Ranch					
Phase I	3,566	10.57	7.0	-3.57	34.74
Phase II	3,567	10.60	22.0	11.40	46.14
Phase III	956	2.86	0	-2.86	43.28
Sub-total	**8,089**	**24.03**	**29.00**	**4.97**	
TOTAL	**70,688**	**211.82**	**255.10**		**43.28**

(1996)

A review of the existing and approved park demands with the addition of Salt Creek Ranch indicates a total demand for 211.82 acres of neighborhood and community park east of Interstate 805. Comparing this total demand to the existing and scheduled park improvements of 255.10 acres results in a park surplus of 43.28 acres. Because the park standard is measured as a total east of Interstate 805, the standard is shown to be met. (1996)

On a project and phasing basis, Phase 1 park development falls short of the City's requirement by 3.57 acres and Phase 3 falls short by 2.86 acres. As a City Parks and Recreation Department policy, the completion of parks should always occur at or before residential occupancy at the levels identified in the Parkland Dedication Ordinance. As a result, there is never a deficit of developed parkland at the completion of any single phase of a development project. (1996)

To ensure that each phase of development receives the benefit of the required developed park acreage, each tentative map and subsequent subdivision map will be conditioned to provide the necessary developed parkland concurrent or prior to completion of each subdivision. (1992)

3.7.7 Trails and Open Space

The Parks, Open Space, and Trails Plan within the proposed SPA plan shows the overall network of trails within the Salt Creek Ranch. Salt Creek Ranch contains 351.1 acres of undeveloped land which will be retained as natural open space. The SPA plan includes essentially four levels of trails within the community. These include 1) pedestrian/bicycle baths, 2) equestrian/hiking trails, 3) pedestrian sidewalks, and 4) open space trail corridors. These trails provide non-vehicular circulation throughout the community linking the Salt Creek Ranch with the adjacent regional trail systems and Chula Vista Greenbelt. The trails also provide access into open space along the Salt Creek Corridor, the easterly open space areas and provide access for neighborhoods to the active parks and community facilities on-site. (1992)

1. There is a 10-foot sidewalk/bicycle path located along the north side of East "H" Street separated from the street by a landscaped strip. This pathway system links the eastern and western ends of the site and provides access to the Salt Creek Corridor, the neighborhood park and school and other open space areas. A sidewalk/bike path is also provided along the southerly property line from Hunte Parkway to the westerly end of the Salt Creek Ranch providing links to the neighborhood park and school from neighborhoods in Sub-Area One. There is also a pedestrian path planned for the areas between Neighborhoods 1 and 2 which provides a north/south access from East "H" Street to the northern property edge. (1992)

2. The equestrian/hiking trails are combined to provide non-paved access for hikers and horseback riders. These trails are fenced adjacent to roads or other land uses. The trail system links Salt Creek Ranch with the proposed Chula Vista Greenbelt Trail System. These equestrian trails are located along Salt Creek Corridor and north of East "H" Street and east of Hunte Parkway. There is also an equestrian trail running north/south in Sub-Area Three just east of Neighborhood 9. Trail undercrossings are provided under East "H" Street at Hunte Parkway and at the eastern property edge on East "H" Street and between Neighborhoods 9 and 10a under the local street. These will be an Armco multi-plated arch or similar design with a minimum dimension of 12-feet high and 23-feet wide to accommodate both bicycles and horses in the Salt Creek corridor. The eastern undercrossings will be wide enough to accommodate equestrian and hiking use only. (1992)

3. A 5-foot sidewalk is located along all roadways. It is highlighted on the Parks/Open Space/Trail Map along the major roadways, however, this walkway system would extend into each of the adjacent neighborhoods. The walkway is curb-adjacent at development edges, and will meander adjacent to open space. (1992)

4. There are several pedestrian trail corridors which will be six feet wide. One trail is proposed to be developed within the 200-foot wide San Diego Gas and Electric (SDG&E) easement corridor in the Sub-Area Three. This trail will include a vista point at the west end. The proposed trail will meet the requirements as set by SDG&E. In addition to the pedestrian trail, the easement could include park uses, an equestrian trail, a bicycle path, vegetation, and lights with a maximum height limit of 15 feet. Prior to development of the easement, approval must be received from SDG&E and the easement dedicated to the City of Chula Vista. (1992)

5. The last trail corridor segment is within Neighborhood 8 which is a private pedestrian trail (as the neighborhood will be gated). This trail runs east/west providing access from within the community to the neighborhood park on the west. (1992)

3.7.8 Financing Park, Trails and Open Space Facilities

The financing of parkland and improvements is governed by Chapter 17.10 of the Chula Vista Municipal Code as amended June 22, 1991. Included as part of the regulations are park acquisition and park development (PAD) fees established for the purpose of providing neighborhood and community parks and improvements. The fees are paid to the City prior to the acceptance of a final subdivision map or approval of a parcel map at the rate in effect at that time. (1992)

The Salt Creek Ranch project is responsible for the following PAD Fees at current rates. (1996)

PARK ACQUISITION AND DEVELOPMENT FEES							
	Dwelling Units			PAD Fees/DU			
Phase	SFD	SFA	MFD	SFD @ $4,375	SFA @ $3,810	MFD @ $2,990	Total Fees Due
1	917	119	101	$4,011,875	$453,390	$301,990	$4,767,255
2	895	0	289	3,915,625	0	864,110	4,779,735
3	295	0	0	1,290,625	0	0	1,290,625
TOTAL	2,107	119	390	$9,218,125	$453,390	$1,166,100	$10,837,615

The maintenance of trails and open space which lie within public easements will be considered for funding through the use of an Open Space Maintenance District formed pursuant to the provisions of the Landscape and Lighting District Act of 1972. At this time, cost estimates for such maintenance are not available. (1992)

3.7.9 Threshold Compliance

Based upon the analysis contained in this section, the parks standard measured on an area-wide basis east of Interstate 805 is projected to be met at the completion of each phase of Salt Creek Ranch. (1992)

On a project specific basis, Phases 1 and 3 as proposed will not meet the requirements of the City's Parks and Recreation Department for developed parkland. In order to comply with this policy, it will be the responsibility of the developer to prepare a master plan for each park site that is acceptable to the Parks and Recreation Commission and the City Council, to grade the sites according to that plan, and to install improvements or pay fees, or a combination thereof, as required by the City's Park Dedication Ordinance. (1992)

Where the City elects to construct parks, the City may, at the City's option, act to oversee design and construction of such parks through the City's Parks and Recreation Department. This shall include the selection of the design and engineering consultants as well as the prime contractor. (1992)

The developer shall fund the preparation of master plans for both the neighborhood and community parks as a condition of future tentative maps without receiving a credit against PAD fees. (1992)

Lastly, it is recommended that the GMOC consider the addition of a fourth item to the SPA/PFFP processing requirements of the Growth Management Program to include a requirement that the developer prepare, under the City's supervision, a recreation needs analysis prior to the park design process that will identify the demand for various park facilities. Such an analysis will ensure that parks are designed to meet the expressed needs of the community. (1992)

3.8 WATER

3.8 WATER

3.8.1 Threshold Standard

1. Developer will request and deliver to the City a service availability letter from the Water District for each project. (1992)

2. The City shall annually provide the San Diego County Water Authority, the Sweetwater Authority, and the Otay Municipal Water District with a 12 to 18 month development forecast and request and evaluation of their ability to accommodate the forecast and continuing growth. The District's replies should address the following: (1992)

   a. Water availability to the City and Planning Area, considering both short and long term perspectives.

   b. Amount of current capacity, including storage capacity, now used or committed.

   c. Ability of affected facilities to absorb forecast growth.

   d. Evaluation of funding and site availability for projected new facilities.

   e. Other relevant information the District(s) desire(s) to communicate to the City and GMOC.

The growth forecast and water district response letters shall be provided to the GMOC for inclusion in its review. (1992)

3.8.2 Service Analysis

Water is provided to the City of Chula Vista through the San Diego County Water Authority, Sweetwater Authority, and the Otay Municipal Water District. The City of Chula Vista is working with each of these special districts to ensure that new growth will not reduce the availability of adequate water supplies or jeopardize the water quality standards within the City. Each of these districts is responsible for providing capital facilities necessary to accommodate future growth as well as providing services to existing development within the City of Chula Vista. (1992)

The Sweetwater Authority utilizes "Sweetwater Authority Water Master Plan", dated December, 1989. (1992)

The Otay Water District Water Resource Master Plan dated 1994 was prepared by Montgomery Watson. (1996)

A Subarea Master Plan (SAMP) for Salt Creek Ranch dated December 1990 was prepared by Black and Veatch. (1996)

A Master Plan of Water for Salt Creek Ranch dated October, 1991 was been prepared by Wilson Engineering. A revised Master Plan of Water dated July 1996 was subsequently prepared by Wilson Engineering. (1996)

3.8.3 Project Processing Requirements

<u>Sectional Planning Area Plan/Public Facilities Finance Plans</u> (1992)

1. Identify phased demands in conformance with street improvements and in coordination with the construction of sewer facilities.
2. Identify location of facilities for on-site and off-site improvements in conformance with the master plan of the water district serving the proposed project and in compliance with the Otay Water District's Allocation Plan.
3. Provide cost estimates and proposed financing responsibilities.
4. Identify financing methods.
5. A Water Conservation Plan shall be required for all major development projects (50 dwelling units or greater, or commercial and industrial projects with 50 EDU's of water demand or greater).

3.8.4 Existing Conditions

Facility Inventory

San Diego County Water Authority

Existing Facility	Capacity
Pipeline #3, east of Corral Corral Canyon Rd.	66" single to deliver treated water

Proposed Facility	Capacity	Estimated Cost
Pipeline #4 Extension Parallel line, east of Corral Canyon Rd.	96" single to deliver raw water	Chula Vista's portion of the cost is unknown, but the total estimated cost is $40-60 million

Otay Municipal Water District Allocation Program

The Otay Municipal Water District has been experiencing a water storage problem for some time. As a result, the district developed and is implementing a water allocation system. The *Otay Water District Report on Allocation of Water Requests Based on Water Availability* was adopted by the Board of Directors on April 19, 1989 as Resolution No. 2742. Because of the limited water supply and storage for unlimited amounts of construction, the allocation system allots 1,900 Equivalent Dwelling Units (EDUs) of water service per year for the service area. In the City of Chula Vista this limit equates to approximately 700 to 1,000 units per year. This system will remain in effect until supply and terminal storage conditions improve, at which time, the yearly allotment of connections will be raised or the allocation program will be eliminated. These improvements are not anticipated to be completed before 1994 — 1995. (1992)

The Otay Water District water allocation program addresses actions taken by the District and land developers to allow issuance of water service connections within the District until the County Water Authority (CWA) completes construction of the new Pipeline No. 4. The issuance of water services is subject to the District's present limited water storage and water supply. These actions include the approval of guidelines which 1) categorize various water requests and 2) determine if a water service request qualifies for immediate connection or future connection by a land

development being allocated water service to a proportion of the anticipated Equivalent Dwelling Units (EDUs) requests. The following categories are used in determining the association of water service in the District: (1992)

Category I — Water service requests that qualify for immediate water connection with issuance of an approved building permit.

Category II — Water service requests that qualify for water service connection contingent upon completion of conditions of an agreement with the District entered into prior to adoption of the allocation program.

Category III — Land development water service requests that are allocated water service dependent on contribution to construction of major water facilities including, but not limited to, terminal water reservoirs, major water transmission mains, pump stations, etc., that directly or indirectly support water service.

Based on anticipated terminal reservoir construction, development will only receive a proportionate share of water service requests, as determined by the Allocation Formula applied to the total requests that qualify in a given year within the annual limit of 1,900 EDUs. The proportionate share will be determined from an allocation process in which a specific request is considered in a quarterly allocation of total requests. (1992)

Water services allocated to major developments of a master planned community will be determined for a future quarter as a part of an agreement with the District for construction of required terminal reservoir storage and other major water facilities. (1992)

Otay — Triad Agreement

This agreement is between the Otay Water District, EastLake Development Company, Rancho Del Rey Partnership, and Rancho Del Sur Partnership. In essence, the Otay-Triad Agreement allows EastLake, Rancho Del Rey, and Rancho Del Sur to request more EDUs per quarter per development for single family connections than would otherwise be possible. Without the Otay-Triad Agreement, these developers would not be able to request more than 200 EDUs per quarter per development for single family connections. In exchange, the developers have approved bond financing of terminal storage faculties in lieu of paying Otay a Reservoir Storage Fee. This enables Otay to construct the necessary terminal storage reservoirs at an earlier date than would have been possible by simply collecting fees. (1992)

3.8.5 Adequacy Analysis

The Otay Municipal Water District's allocation program will impact or limit development in the City of Chula Vista to between 700 and 1,000 units per year until additional storage facilities are provided. It is projected these facilities will not be available until 1994 — 1995. (1992)

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 EDU's 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. (1992)

The water conservation plan shall provide an analysis of water usage requirements of the proposed project, as well as a detailed plan of proposed measures for water conservation, use of reclaimed water, and other means of reducing per capita water consumption from the proposed project, as well as defining a program to monitor compliance. This plan shall be reviewed by the Resource Conservation Commission and Planning Commission, prior to final review and adoption by the City Council. The Water Conservation Plan will not be prepared as part of the Public Facilities Financing Plan. (1992)

Salt Creek Ranch Water Demand

The Salt Creek Ranch project is located within the Otay Water District and, therefore, water service for the project will be provided by the Otay Water District. Because of the range of elevation throughout the project, the Salt Creek Ranch development will be served by two water service zones. The majority of the project falls within the 980 Zone. Approximately 145 residential units are above the upper service boundary of the 980 Zone which is 840 feet; these lots will require service from the next higher zone, the 1296 Zone. (1992)

The estimated average demand in the 980 Zone is 1,060,000 gpd and the estimated average demand for the 1296 Zone is 135,000 gpd. The total average demand projected for Salt Creek Ranch is 1,200,000 gpd (833 gpm). This amount excludes demands that will be satisfied by reclaimed water. (1992)

Current district policy also requires ten average days of total storage capacity be provided for emergency storage to meet aqueduct shutdown

conditions. The total volume required for Salt Creek Ranch is 12 million gallons. At a construction cost of $0.40 a gallon, this equates to $4.8 million. Terminal storage fees are collected at the time water meters are purchased. Major developers may be required by the District to construct terminal storage facilities in lieu of paying these fees. (1992)

Salt Creek Ranch will also be required to annex into an improvement district within Otay Water District. These improvement districts are set up for the purpose of collecting fees for the expansion, operation and maintenance of water facilities. (1992)

Otay Water District Master Plan

The Otay Water District's new water and reclaimed water master plan includes a total of 3,247 units for Salt Creek Ranch and Salt Creek I. This is approximately the same as the proposed land uses on Salt Creek Ranch (2,616 units) and Salt Creek I (550 units) which totals 3,166 units. (1996)

3.8.6 Existing Facilities

The existing water facilities adjacent to the Salt Creek Ranch development consist of 980 Zone facilities and lower zone facilities. At the present time there are no facilities in place to serve the 1296 Zone. The following paragraphs detail the existing 980 Zone water facilities. (1992)

Pipelines

Existing water lines in the vicinity of the Salt Creek Ranch project are primarily located in the EastLake Business Park. A 20-inch transmission pipeline is located in Lane Avenue and extends through the Salt Creek Ranch project to the 980 Zone reservoirs. A 16-inch transmission main is located in East "H" Street approximately 5,000 feet west of the project. This 16-inch, 980 Zone water line is proposed to be extended through the Salt Creek I project when development of this project begins. In addition, existing 16-inch pipelines are also located in Miller Drive and Boswell Street. (1992)

Pumping Facilities

There is presently one booster pump station in operation which takes water from the 710 Zone and pumps it to the 980 Zone reservoirs. This pump station is located at the southeastern corner of Lane Avenue and Otay Lakes Road. (1992)

Reservoirs

There are two existing reservoirs in the 980 Zone system. The reservoirs are located on the Otay Water District Reclamation Property. The reservoirs are located on the same site and each tank has a capacity of five million gallons. (1992)

Facilities Capacity

Distribution system capacity has been provided for the EastLake development in the 980 Zone. In addition, major water distribution lines have been sized for ultimate buildout of the 980 Zone based on a water system master plan coordinated by the Otay Water District. Therefore, paralleling of existing water lines will not be necessary in order to provide service to areas beyond the EastLake development. (1992)

The existing 980 Zone water booster station is presently configured to provide a firm pumping capacity of 4,000 gallons per minute. Firm pumping capacity is determined by calculating the station's pumping capacity with the largest pump not included. The pump that is not included is considered as a backup pump. In addition to the two 4,000 gpm pumps that currently exist, a third 4,000 gpm pump can be added. (1992)

3.8.7 Proposed Facilities

980 Zone Distribution System

Water distribution facilities for the 980 Zone will consist of pipelines necessary to provide adequate water service not exceeding 150 psi to the project. Onsite water lines will have to connect to existing mains in the EastLake development. Specifically, the 16-inch pipeline in East "H" Street will have to be extended to the Salt Creek Ranch project and the 20-inch pipeline, which is currently being extended from Boswell Court to the Salt Creek Ranch southern property boundary, will also have to be extended north as a 16-inch pipeline to tie into future East "H" Street which traverses the Salt Creek Ranch project. (1992)

Water distribution pipelines for the Salt Creek Ranch project will also tie into the existing 20-inch transmission main which crosses the property. Depending on development planning, this existing 20-inch pipeline may need to be relocated into a street or dedicated open space easement. (1992)

980 Zone Pump Station

The present 980 Zone pump station's capacity is 4,000 gpm, of which an estimated 2,000 gpm maximum day demand is presently being delivered to EastLake. The ultimate maximum day demand for the approved portions of EastLake is 3,300 gpm. Since the maximum day water demand of the Salt Creek Ranch project of 2,059 gpm cannot be met with the remaining pump station capacity. According to the SAMP, the Salt Creek Ranch project will be required to participate in the funding of a second 980 Zone pump station. This pump station would be constructed with a minimum number of two pumps, with one pump functioning as a back up. (1996)

It must be noted that at the time that Salt Creek Ranch approaches the Otay Water District for water service, the 980 Zone demands may be such that the addition of the Salt Creek Ranch project demand would cause the total 980 Zone demands to increase beyond 8,000 gpm. In this situation, the Salt Creek Ranch project would have to undertake the construction or participation in a 980 Zone pump station. Salt Creek Ranch Project's contribution for these pumping facilities will be based on its ultimate 980 and 1296 zone maximum day demand divided by the initial capacity of the next 980 zone pumping station to be constructed. (1992)

980 Zone Reservoir

Based on the SAMP, an additional 5.0 MG of 980 Zone storage is required for buildout of Salt Creek Ranch and Eastlake Development: a third 5.0 MG tank is proposed on the same site adjacent to the two existing reservoirs. The Salt Creek Ranch project needs a total of 4.2 MG of 980 Zone operational storage based on projected demands; the 4.2 MG operational storage requirement for Salt Creek Ranch includes fire flow and emergency reserve capacity. (1996)

1296 Zone Distribution System

The distribution system for the 1296 Zone on the Salt Creek Ranch project will consist of water lines providing domestic and fire protection service not

LEGEND

- EXISTING WATER LINE
- PROPOSED WATER LINE
- WATER BOOSTER STATION
- 1296 ZONE SERVICE AREA
- PROPERTY BOUNDRY

980 ZONE RESERVOIRS, 5 MG EACH

1296 ZONE RESERVOIR, 3 MG

SALT CREEK RANCH

1296 ZONE

1296 P.S.

SALT CREEK

EASTLAKE

980 ZONE

980 ZONE P.S.

OTAY LAKES ROAD

OTAY LAKES ROAD

TELEGRAPH CANYON ROAD

N

N.T.S.

3.8-10

Figure 13

RECOMMENDED WATER FACILITIES

WILSON ENGINEERING . 605-732

exceeding 150 psi and a transmission pipeline to a 1296 Zone reservoir. (1992)

1296 Zone Pump Station

A new pump station will have to be constructed to boost water from the 980 Zone to the 1296 Zone. The Otay Water District Master Plan identifies an ultimate maximum day demand for the new 1296 and higher zones of 600 gpm. (1996)

The maximum day demand of the 1296 Zone area in Salt Creek Ranch is approximately 225 gpm, based on 154 single family residential units served. As with the 980 Zone pump station, the 1296 Zone pump station will likely be constructed in phases. Total ultimate required capacity in the 1296 Zone would not have to be available immediately, but the pump station site should facilitate expansion to a firm capacity of 600 gpm. The initial configuration of the station would include two 300 gpm pumps with one functioning as a back-up and space for a future third pump. (1996)

The pump station should be located close to a 980 Zone transmission main and the 1296 Zone service area. A site can be determined as land planning for the Salt Creek Ranch project progresses. (1992)

1296 Zone Reservoir

A new reservoir will be required to provide service to the 1296 Zone. Based on the ultimate estimated demand for the 1296 Zone, the Otay Water District Master Plan estimated the required storage for the 1296 Zone to be 1.5 million gallons. Salt Creek Ranch requires approximately 0.78 MG of operational storage in the 1296 Zone which includes fire flow and emergency reserve capacity. If the Salt Creek Ranch project is the first to need water service in the 1296 Zone, it will have to build the storage reservoir. An offsite location will have to be obtained for this reservoir; the pad elevation of the reservoir should be around 1,270 feet. A specific reservoir site has not been established. (1996)

3.8.8 Financing Water Facilities

Phase I

The first phase consisting of Phase 1A and 1B totaling 1,137 dwelling units including 528 units in Neighborhoods 2, 3, 5, and 6 and 609 units in neighborhoods 2, 3, 4, 5, and 6. Primary service will come from the existing 20-inch line to be located in Lane Avenue. This section of 20-inch line

south of Proctor Valley Road must be relocated in Lane Avenue prior to development in this phase. A secondary water source will be via the 16-inch connection in Proctor Valley Road. (1996)

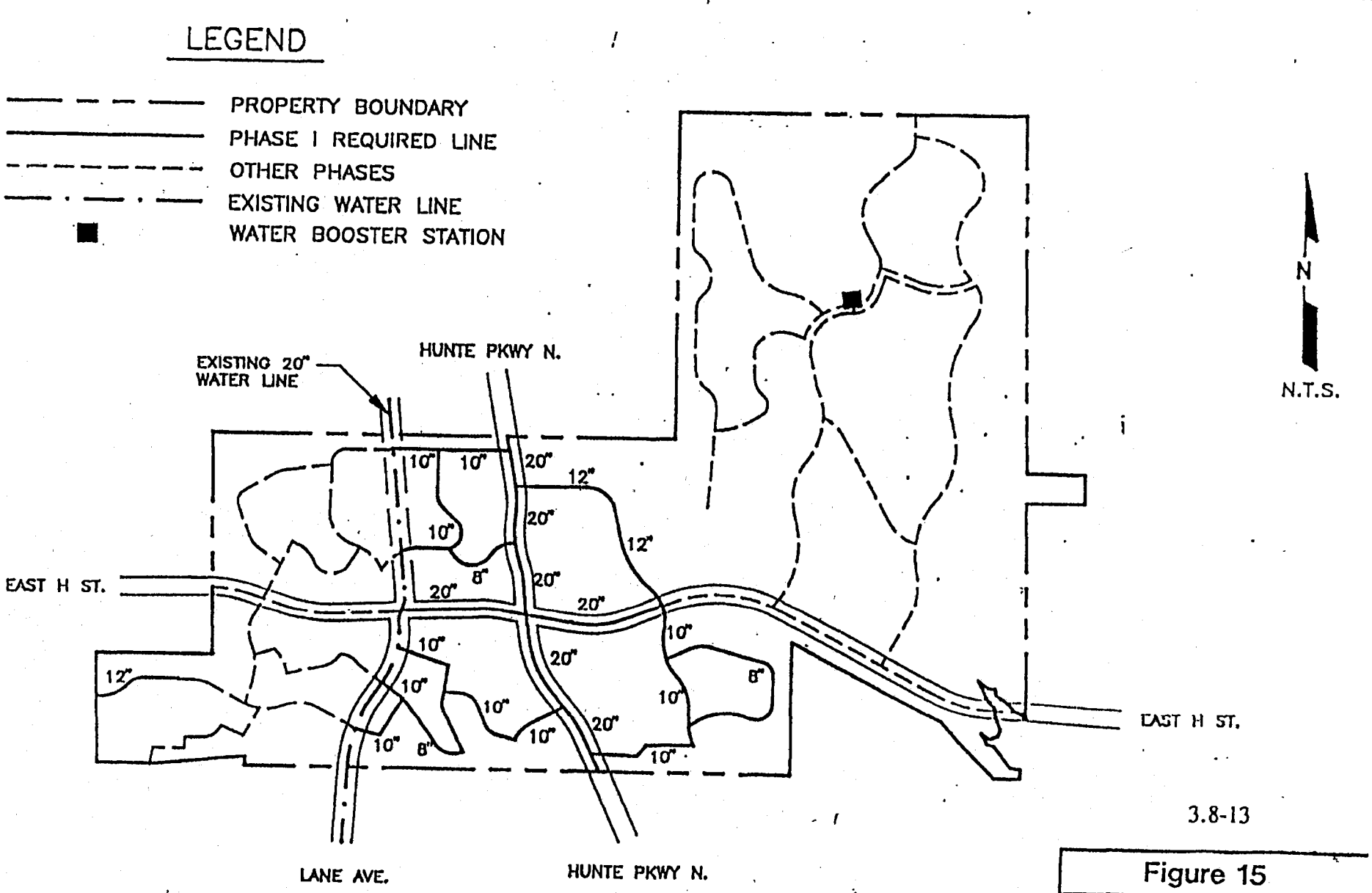
Figure 14 provides a cost estimate for construction of the water facilities required for Phase I. This cost estimate includes all water facilities throughout Phase I. (1992)

FIGURE 14
PHASE I WATER FACILITIES COST ESTIMATE

Facilities Description	Unit Cost	Total Cost
Distribution Lines		
26,000 ft. of 8"	$30/ft.	$ 780,000
10,000 ft. of 10"	$35/ft.	350,000
3,500 ft. of 12"	$40/ft.	140,000
5,300 ft. of 20"	[1]	212,000
1,500 ft. of 24"	[1]	60,000
2,700 ft. of 36"	[1]	108,000
5 mg, 980 Zone Reservoir (28.6%)	$0.70/gal.	1,001,000
41% of 12 MG terminal storage	$0.40/gal.	1,968,000
Regional Distribution Main Oversizing		253,500
TOTAL		$ 4,872,514

(1992)

[1] A unit cost of $40 per foot for a 12-inch line was used for the Salt Creek Ranch prorate share per the Subarea Master Plan.



3.8-13

Figure 15

PHASE I
RECOMMENDED WATER
FACILITIES

WILSON ENGINEERING 605-732

Phase II

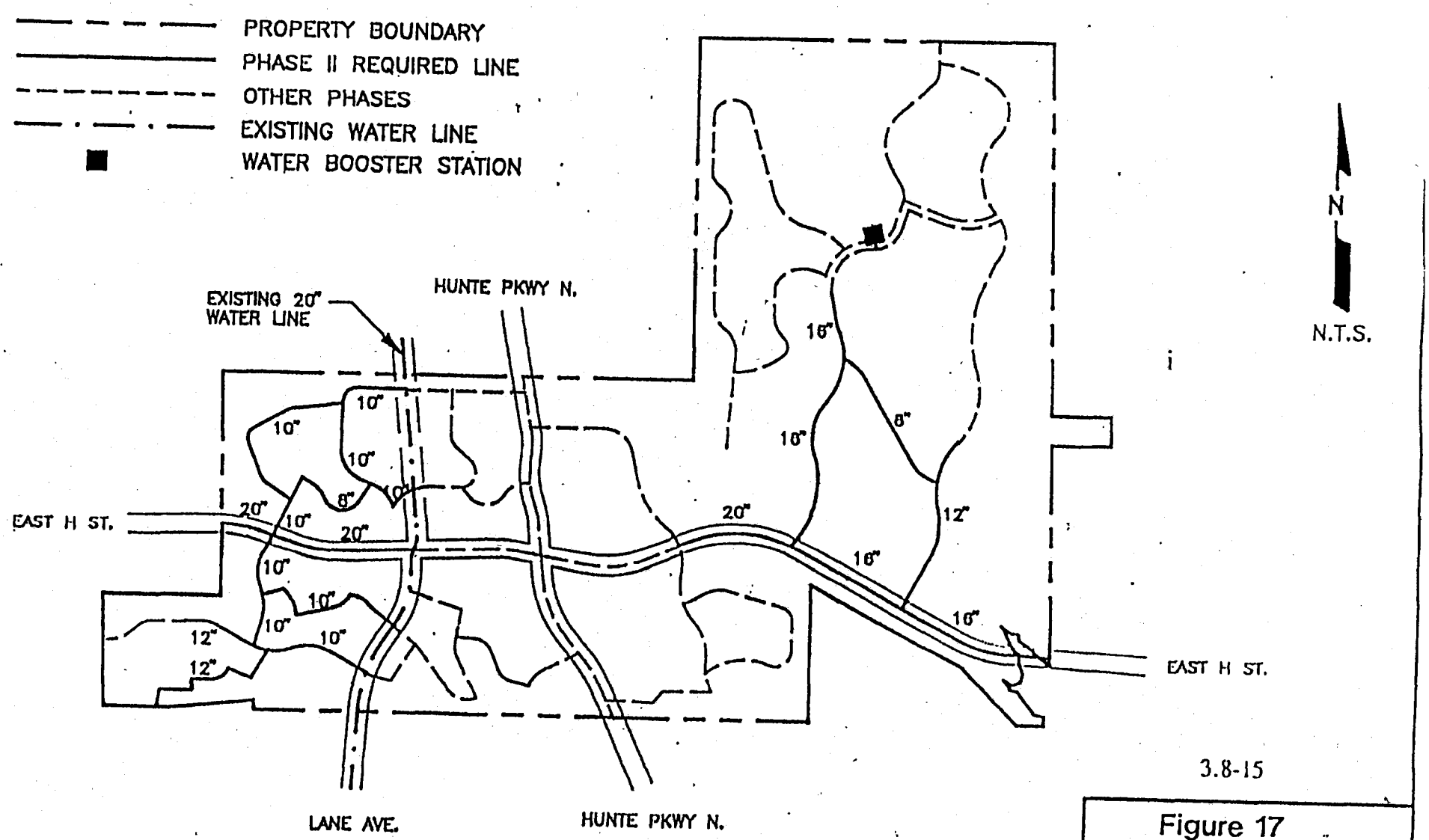
Phase 2 consists of development of 1,184 dwelling units in Neighborhoods 1, 4, 7, 8, and 9. The required facilities consist of a portion of the 36-inch line in Proctor Valley Road, 16-inch piping in Neighborhood 9, and extension of 8-inch lines internal to the neighborhoods.

Figure 16 provides a cost estimate for construction of all domestic water facilities required for Phase II. (1992)

FIGURE 16
PHASE II WATER FACILITIES COST ESTIMATE

Facilities Description	Unit Cost	Total Cost
Distribution Lines		
11,000 ft. of 8"	$30/ft.	$ 330,000
12,800 ft. of 10"	$35/ft.	448,000
2,500 ft. of 12"	$40/ft.	100,000
7,400 ft. of 16"	$50/ft.	370,000
1,300 ft. of 36"	[1]	52,000
980 Zone Pump Station Upgrade		500,000
48% of 12 MG terminal storage	$0.40/gal	2,304,000
TOTAL		$ 4,104,000

[1] A unit cost for a 12-inch line was used for the Salt Creek Ranch prorata share per the Subarea Master Plan.



3.8-15

Figure 17

PHASE II
RECOMMENDED WATER
FACILITIES

WILSON ENGINEERING 805-732

Phase III

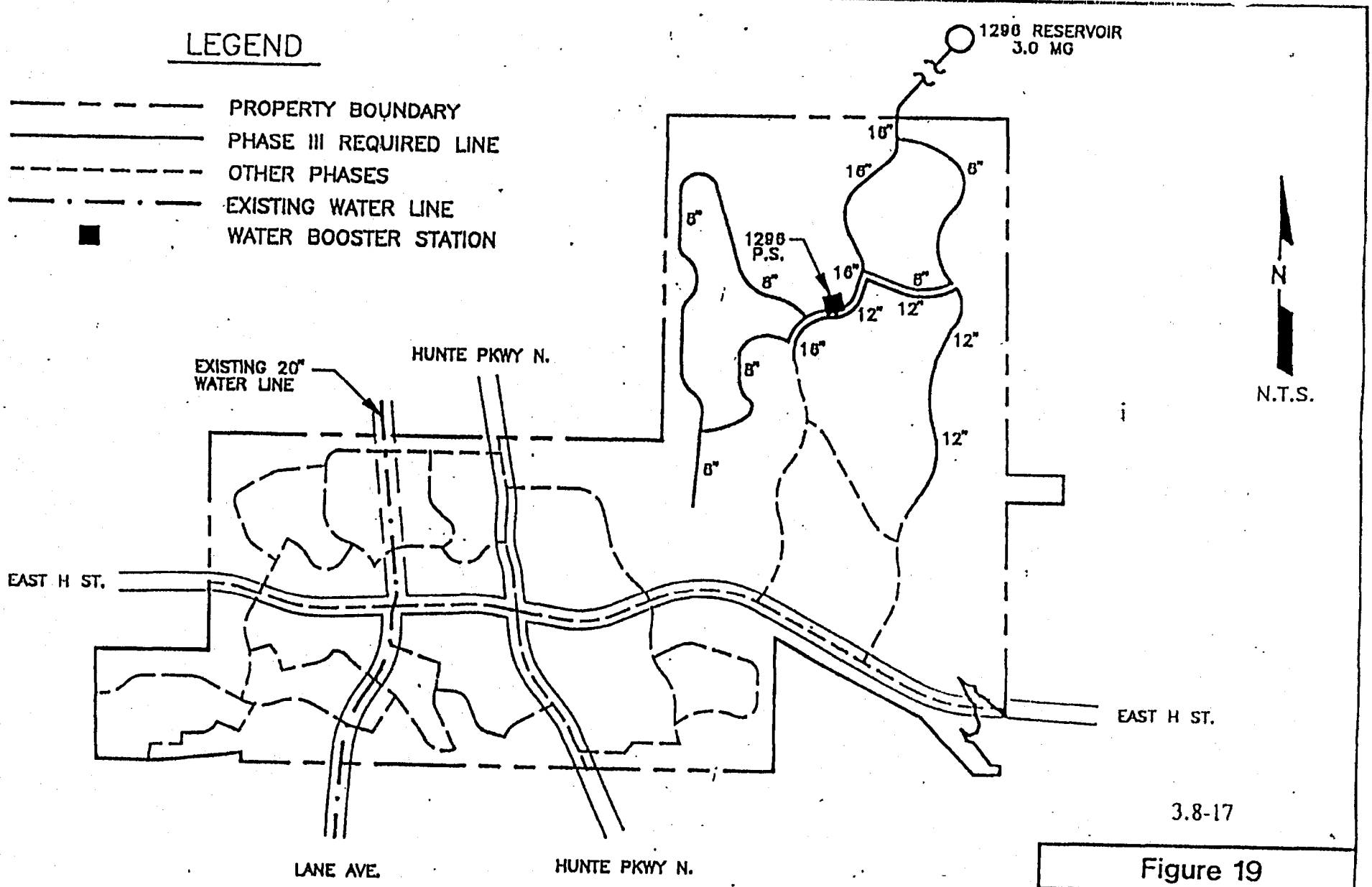
Phase 3 completes buildout of the remaining 295 dwelling units in Neighborhoods 10, 11, 12, and 13 in the eastern portion of the project. Development in this phase requires the construction of 1296 Zone facilities in addition to 980 Zone water lines. Proposed facilities in the 980 Zone consist of 16 and 12-inch lines in the main streets and extension of 8-inch lines to all lots. The 1296 Zone facilities consist of a water booster station and a 1.5 million gallon Otay Water District master planned reservoir. (1996)

Figure 18 provides a cost estimate for construction of all domestic water facilities required for Phase III. (1992)

FIGURE 18
PHASE III WATER FACILITIES COST ESTIMATE

Facilities Description	Unit Cost	Total Cost
Distribution Lines		
9,500 ft. of 8"	$30/ft.	$ 285,000
500 ft. of 10"	$35/ft.	17,500
13,000 ft. of 12"	$40/ft.	520,000
1296 Pump Station	LS	300,000
1.5 mg, 1296 Zone Reservoir (44-.2%)	$0.70/gal.	464,100
11% of 12MG terminal storage	$0.40/gal.	528,000
TOTAL		$ 2,114,600

(1992)



3.8-17

Figure 19

PHASE III
RECOMMENDED WATER
FACILITIES

WILSON ENGINEERING 605-732

3.8.9 Threshold Compliance

Water services allocated to major developments of a master planned community will be determined for a future quarter as a part of an agreement with the Otay Water District for construction of required terminal reservoir storage and other major water facilities. As such, the facilities identified in this plan shall be required of the developer either as constructed facilities or through the payment of fees as indicated. (1992)

3.9 SEWER

3.9 SEWER

3.9.1 Threshold Standard

1. Sewage flows and volumes shall not exceed City Engineering Standards. (1992)

2. The City shall annually provide the San Diego Metropolitan Sewer Authority with a 12-18 month development forecast and request confirmation that the projection is within the City's purchased capacity rights and an evaluation of their ability to accommodate the forecast and continuing growth, or the City Engineering Department staff shall gather the necessary data. The information provided to the GMOC shall include the following: (1992)

   a. Amount of current capacity now used or committed.
   b. Ability of affected facilities to absorb forecast growth.
   c. Evaluation of funding and site availability for projected new facilities.
   d. Other relevant information.

3.9.2 Service Analysis

The City of Chula Vista currently purchases capacity for wastewater treatment through the City of San Diego. Chula Vista oversees the construction, maintenance and the operation of the sewer trunk line system within the boundaries of Chula Vista. The City Engineer is responsible for reviewing proposed developments and ensuring that the necessary sewer facilities are provided with each development project. (1992)

The Sewer Threshold Standard was developed to maintain healthful, sanitary sewer collection and disposal systems for the City of Chula Vista. Individual projects are required to provide necessary improvements consistent with the City of Chula Vista Wastewater Master Plan dated July, 1989 and shall comply with all City Engineering standards. (1992)

Sewer facilities are planned for in the "City of Chula Vista Wastewater Master Plan", dated July 19, 1989. (1992)

Reclaimed water is addressed in the July, 1989 Water Reclamation and Reuse Conceptual Master Plan prepared for the Clean Water Program for Greater San Diego by James M. Montgomery Consulting Engineers, Inc.

A master plan for sewerage was prepared for Salt Creek Ranch by Wilson Engineering dated October, 1991. The master plan was updated by Wilson Engineering in July, 1996. (1992)

3.9.3 Project Processing Requirements

Sectional Planning Area Plan/Public Facilities Finance Plans (1992)

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 on-site and off-site improvements, including reclaimed water facilities in conformance with the "City of Chula Vista Waste Water Master Plan", July 9, 1989.
3. Provide cost estimates for all facilities and proposed financing responsibilities.
4. Identify financing methods.

3.9.4 Existing Conditions

The development of the Salt Creek Ranch project will impact four drainage basins. These include Proctor Valley Basin, Telegraph Canyon Basin, Salt Creek Basin, and Otay Lake Basin. (1992)

3.9.5 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. (1992)

Wastewater Treatment

Since approximately 13.0 million gallons per day (mgd) of wastewater are treated by the City of San Diego and the capacity is 19.2 mgd, there is a capacity surplus of 6.2 mgd. Listed below are land uses for Chula Vista

and the established output of wastewater per day, as shown in the Wastewater Master Plan. (1992)

1.	Residential	216 gallons per Dwelling Unit per day[1]
2.	Commercial	1,500 gallons per acre per day
3.	Industrial	2,000 gallons per acre per day
4.	Institutional	1,200 gallons per acre per day

The sewage generation factors shown above from the Wastewater Master Plan have not been accepted by the City as a design standard. For design purposes, a factor of 280 gpd from the City's *Subdivision Manual* is used. As a compromise between the measured flows in the Telegraph Canyon Basin and the City's Design Standard, a factor of 250 gpd was used in the Telegraph Canyon Sewer Basin Fee Study. For estimating purposes, the 250 gpd factor is used below. (1992)

1.	Residential - SFD	250 gallons per dwelling
2.	Residential - MF	187 gallons per dwelling
3.	Commercial	2,500 gallons per dwelling/acre
4.	Industrial	2,500 gallons per dwelling/acre
5.	Institutional	2,500 gallons per dwelling/acre

The Development Phasing Forecast Summary, as shown on Figure 3 lists 8,723 residential dwelling units, 280.6 acres of industrial, and 69.5 of commercial acres in the Tentative and Final Map approval categories. Using the per day wastewater figures for each land use, equates a total of 3,056,000 gallons per day of wastewater generation to Final and Tentative Maps, reducing the capacity surplus from 6.2 to 3.144 mgd. This surplus capacity, as a comparison, can accommodate approximately 12,600 DU's. (1992)

Land Use	DU or Acres	Total Daily Gallons
Residential	8,723.0 DU	2,180,750
Commercial	69.5 AC	173,750
Industrial	280.6 AC	701,500
	TOTAL	3,056,000

[1] The 216 gallons per D.U. is based on usage by a population average of all the densities in the residential land use categories.

The Federal Clean Water Act requires all Wastewater Discharges to upgrade their Sewerage System Facilities to the secondary treatment level. Chula Vista is working with the City of San Diego's Clean Water Program to formulate an action plan for both treatment upgrade and expansion of capacity. The Clean Water Program for Greater San Diego selected alternative involves the construction of six major water reclamation plants including one in the Otay River Valley. This plant would serve both the Otay Mesa Area and Chula Vista's needs in the eastern territories. (1992)

The City of Chula Vista authorized Dudek Engineering to perform a complete study of wastewater treatment and disposal alternatives as it affects Chula Vista. As a result of this study, Chula Vista will determine whether the Clean Water Program's alternative, or some other option, is in Chula Vista's best interest for providing the required treatment upgrade and/or additional capacity required for the total buildout Residential Dwelling Units plus Industrial and Commercial acres. (1992)

Trunk Sewers

The wastewater master plan evaluates the trunk sewer and peak flow capacities for all basins in the City. The master plan's comparisons were of current sewer flows in relation to the design capacity of each size sewer line. The design capacity is a standard for peak flows based on the sewer line's size. The design capacity flow rate is low compared to actual sewer pipe capacities. But evaluating the design capacity as opposed to the actual flow capacity, establishes an early warning system which will identify where future improvements may be necessary. The report indicates that current peak flows exceed existing design capacities on sections of pipes in the Main Street Basin, Telegraph Canyon Basin, the "G" Street Basin and the Sweetwater Basin. (1992)

In an area subject to substantial development, the City would not allow the design capacity of the trunk sewers to be exceeded. If flows large enough to surpass the design capacity of receiving sewers are anticipated to be generated or worsened as a result of new development, the City would require the construction of relief lines. (1992)

The construction of new sewer trunk lines must be phased with the construction of streets. The wastewater treatment requirements and sewer trunk line system are currently meeting the threshold standard. (1992)

Salt Creek Ranch Sewage Flows

The projected sewage flows by drainage basin for the Salt Creek Ranch Project are shown below. The total average flow projected from the property is estimated at 768,230 gallons per day (gpd). (1996)

Figure 20
Salt Creek Ranch Sewage Flows by Basin (1996)

Drainage Basin	Average Flow, gpd
Proctor Valley	209,745
Telegraph Canyon	250,040
Salt Creek	191,125
Otay Lake	117,320
Total	**768,230**

Offsite Sewage Flows

The projected sewage flows for offsite areas by drainage basin tributary to the Salt Creek Ranch project are shown below. The estimated number of dwelling units were established from the Sweetwater Community Plan and Otay Subregional Planning Area Maps. In addition to the offsite sewage flows, the Salt Creek Basin Sewer System will be designed to include a fail-safe capacity of 1.2 mgd peak flow from the Jamacha Reclamation Plant north of the project to replace Otay Water District capacity in the Frisbie Trunk Sewer. The agreement for this capacity contains an expiration provision which may relieve Salt Creek Ranch from this obligation unless it proves to be otherwise enforceable. (1992)

Figure 21
Offsite Sewage Flows

Drainage Basin	Area, Acres	Density, DU/-Acre	Estimated Number of Dwelling Units	Average Flow, GPD
Proctor Valley	91	0.28	25	7,000
Telegraph Canyon	15	0.28	5	1,400
Salt Creek	650	0.28	182	50,960
Otay Lake	400	0.25	100	28,000
Total	**1,156**		**312**	**87,360**

Proctor Valley Basin

Sewer facilities in the Proctor Valley Basin include a 15-inch sewer main south of the intersection of San Miguel Road and Proctor Valley Road which conveys flow to the Spring Valley Outfall. This 15-inch gravity sewer line is part of the County of San Diego's Spring Valley Sanitation District sewerage system. (1992)

Telegraph Canyon Basin

Telegraph Canyon Basin sewer facilities follow Telegraph Canyon Road/Otay Lakes Road east to EastLake Parkway. A 10-inch sewer extends northerly along EastLake Parkway to Miller Drive in the EastLake Business Center. A 10-inch sewer stub is located in Boswell Court, west of Miller Drive. A 12-inch sewer line in Lane Avenue stubs northerly to the Salt Creek Ranch boundary. The Telegraph Canyon Sewer facilities ultimately deliver flow to the 90-inch Metropolitan Interceptor Sewer west of Interstate 5. (1992)

Salt Creek Basin

There are no existing facilities in the Salt Creek drainage basin. It is anticipated, however, that the Salt Creek Interceptor will be constructed and available for sewage flows from the Salt Creek Ranch project. However, the Salt Creek Interceptor will not accept such flows until the Otay Valley Water Reclamation Plant downstream of the interceptor is operational. This will not occur until 1997 at the earliest. Design and construction of the interceptor is also dependant on development within EastLake and the Otay Ranch. (1992)

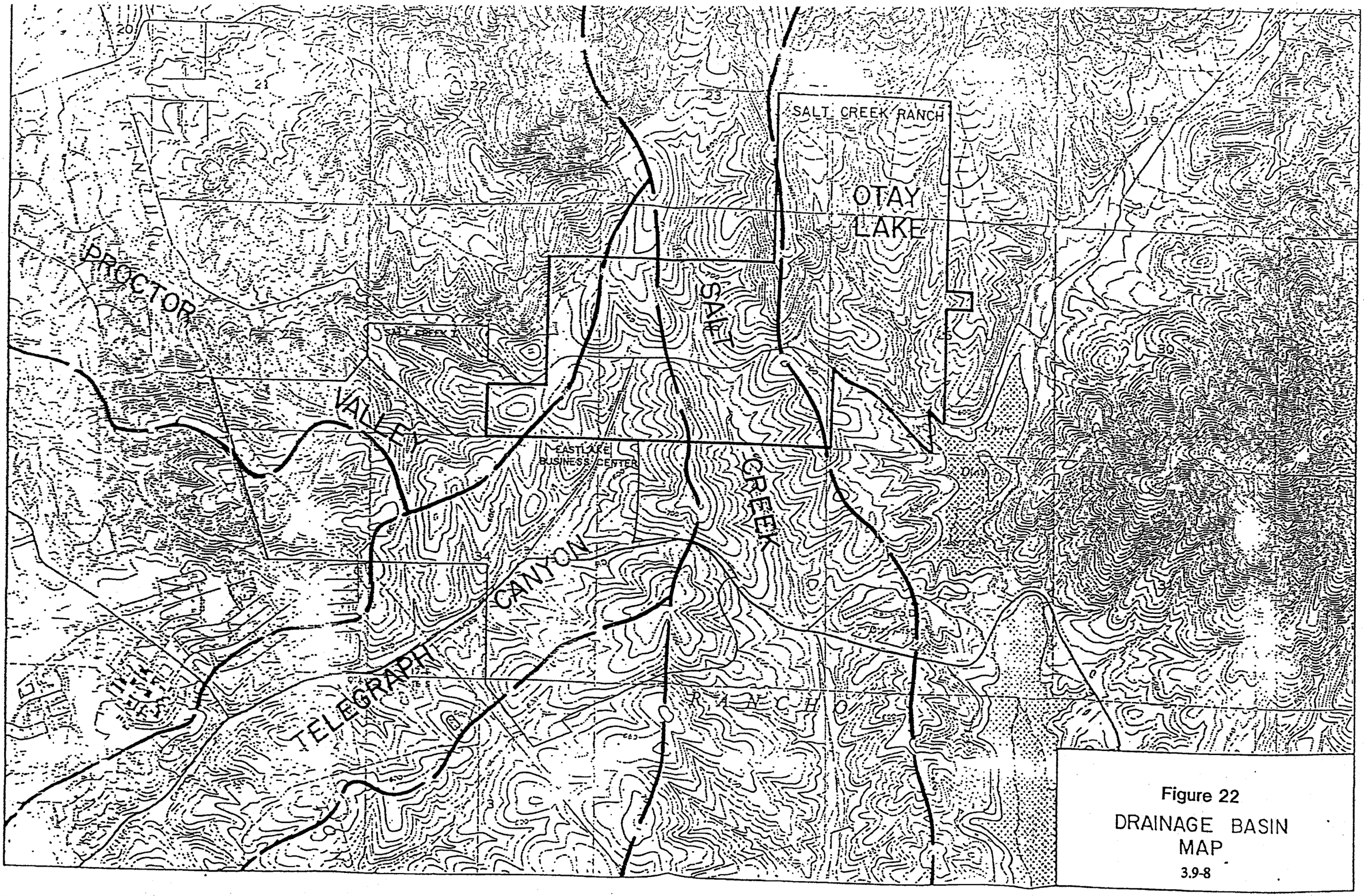


Figure 22

DRAINAGE BASIN MAP

3.9-8

Otay Lake Basin

There are no existing sewerage facilities in the Otay Lake Basin. Flows generated within the Otay Lake Drainage Basin will have to be pumped to the Salt Creek Basin because this basin naturally drains to the Upper Otay Reservoir. (1992)

Reclaimed Water

Reclaimed water service for the project will initially be provided by the Otay Water District. Areas on the project proposed to be irrigated with reclaimed water range in elevation from approximately 575 feet to 700 feet. For this reason, reclaimed water service can be provided to the project from the District's existing 980 Zone system. (1992)
It is expected that reclaimed water will be utilized to irrigate the landscaped portions of multi-family residential units, schools, churches, fire station, street parkway landscaping and manufactured slopes along open space areas. The parkway landscaping and manufactured slopes along open space areas are expected to be 100 percent irrigated with reclaimed water. The reclaimed water duty factor for the irrigated areas is 3,570 gpd/acre. (1992)

The potential reclaimed water use areas are located on the western portion of the project only. This is because the eastern portion of the property lies within the Otay Lake Drainage Basin which is tributary to the Upper and Lower Otay Reservoirs. Currently, the use of reclaimed water on lands tributary to a potable drinking water source is not recommended. (1992)

Reclaimed Water Facilities

The Otay Water District has nine reclaimed water storage ponds on its Reclamation Property. These ponds are filled with secondary effluent pumped from the Otay Water District's Jamacha Wastewater Reclamation Facility. From these ponds, a 20-inch reclaimed water line travels south through the Salt Creek Ranch property and ties into Lane Avenue. The 20-inch reclaimed water line was built by the EastLake Development Company to deliver irrigation water to its future golf course. Prior to development of the Salt Creek Ranch project, a 16-inch reclaimed water line will be constructed in East "H" Street within the Salt Creek I project boundary to serve the needs of the Salt Creek I development. (1992)

The Jamacha plant has an existing capacity of 1.2 million gallons per day (MGD). An expansion capability study was prepared which states that the plant could be expanded to 2.6 MGD. As development continues in

EastLake, Salt Creek I, and Salt Creek Ranch, the demand for reclaimed water will exceed the available supply from the Otay Water District's facility. If the reclaimed water supply is insufficient, potable water may be used in the system. (1992)

3.9.6 Recommended Sewerage Facilities

The onsite collection system consists of gravity sewer lines, ranging from 8 to 18 inches in size, and two lift stations and force mains. The lift station in the Otay Lake Basin pumps sewage westerly to the Salt Creek Basin. The other lift station, located at the southern end of the project, is to be constructed for phasing reasons so that, on an interim basis, sewage from the Salt Creek Basin can be pumped to the Telegraph Canyon Basin and flow down the existing Telegraph Canyon Interceptor. Once the Salt Creek Interceptor is constructed, this pump station can be abandoned and this sewage will flow down the Salt Creek Interceptor. As stated previously, the Salt Creek Interceptor will not become operational until completion of the Otay Valley Water Reclamation Plan Facilities. (1992)

The alignment of the recommended gravity sewer lines is based on the proposed street alignments taken from the preliminary grading plan for the Salt Creek Ranch project. There are six locations, however, where sewer lines do not follow road alignments and there is a manhole outside of the alignment of the road. In addition, there are a few other areas where a sewer line does not fall within a road. In each of these cases, however, the manholes for these sewer lines are located within a proposed road alignment so access to the manholes will not be a problem. (1992)

The recommended onsite collection system has been sized to handle additional flows from the offsite tributary areas. The additional flows generated from these offsite areas do not cause oversizing of the gravity sewer lines except in the Salt Creek Basin where the sewer line in Hunte Parkway was oversized to provide a fail safe capacity of 1.2 mgd for the Jamacha Reclamation Plant. (1992)

<u>Proctor Valley Basin</u>

There are 711 residential dwelling units within the Proctor Valley Drainage Basin of the Salt Creek Ranch project. The average daily flow from the Proctor Valley Basin of Salt Creek Ranch is estimated at 209,745 gpd. The offsite tributary area will generate an average flow of 7,000 gpd; although the offsite Proctor Valley Drainage Basin covers a much larger area, only a small subasin is tributary to the Salt Creek Ranch. (1996)

The onsite collection system for the Proctor Valley Basin of Salt Creek Ranch will convey flow to the proposed Salt Creek I collection system and to the proposed 12-inch gravity sewer line in Proctor Valley Road. This 12-inch sizing recommendation is based on flows from the Salt Creek Ranch and Salt Creek I projects only. This proposed gravity sewer line will tie into the existing 15-inch gravity line within the Spring Valley Sanitation District which conveys flow to the Spring Valley Outfall. (1992)

The offsite sewer line sizes for the proposed Proctor Valley Sewer were established in a report titled Proctor Valley Basin Gravity Sewer Analysis for the Salt Creek I Project prepared by Wilson Engineering in January, 1991. Construction of this proposed sewer line will provide enough capacity to convey Salt Creek Ranch Flows in the Proctor Valley Basin to the Spring Valley Outfall. (1992)

Telegraph Canyon Basin

There are 893 residential dwelling units within the Telegraph Canyon Drainage Basin of the Salt Creek Ranch project. The average daily flow from the Telegraph Canyon Basin of Salt Creek Ranch is estimated at 250,040 gpd. The offsite tributary area will generate an average daily flow of 1,400 gpd. Portions of the gravity sewer lines in the Telegraph Canyon Basin have been sized as 10-inch and 12-inch. (1992)

Telegraph Canyon Basin flows will be collected and conveyed offsite to the existing gravity lines in the adjacent EastLake Business Center. These existing lines in the EastLake Business Center convey flow to the Telegraph Canyon Interceptor. A computer model was set up to analyze the available capacity in the gravity sewer lines in the EastLake Business Center. Analysis indicates that during the second phase of development, a 1,500 foot section of 12-inch sewer line in the EastLake Business Center will reach its capacity and require replacement with a 15-inch line. It should be noted that this 12-inch sewer line has enough capacity to handle Salt Creek Ranch flows within the Telegraph Canyon Basin; the flow that gets pumped over from the Salt Creek Basin causes flow in the pipe to exceed its capacity. All other reaches of pipe in the computer model have adequate capacity to convey flows from the Salt Creek Ranch project to the Telegraph Canyon Interceptor. (1992)

The Telegraph Canyon Interceptor ultimately delivers flow to the 90-inch Metropolitan Interceptor, west of Interstate 5. The City of Chula Vista has capacity rights of 19.2 mgd in the 90-inch Metropolitan Interceptor Sewer. (1992)

NOTE: ALL ONSITE GRAVITY LINES ARE 8-INCH UNLESS OTHERWISE SHOWN.

SCALE: 1" = 2,000'

N

OUTFALL

VALLEY SPRING

EXISTING 39"

EX. 15"

EX. 15"

PROPOSED 15"

PROCTOR VALLEY SEWER

12"

10"

SALT CREEK RANCH

12"

12" 26

15"

6" FM

10"

10"

10"

18"

18"

SALT CREEK T

10"

12"

10"

10"

12"

8" FM

10"

12"

10"

PROPOSED SALT CREEK INTERCEPTOR

EXISTING TELEGRAPH CANYON INTERCEPTOR

15"

15"

15"

3.9-12

LEGEND

- EXISTING SEWER LINE
- PROPOSED SEWER LINE
- PROPOSED FORCE MAIN
- PROPOSED LIFT STATION
- DIRECTION OF FLOW

Figure 23

RECOMMENDED FACILITIES

According to Elizabeth Chopp, City of Chula Vista Engineering, the average flow for 1990 from the City of Chula Vista into the Metro Sewer was 12.8 mgd. The 1991 average is approximately 11.2 mgd due to current water conservation efforts. The estimated average day flow from Salt Creek Ranch is 0.75 mgd. (1992)

A study was prepared by Willdan Associates as a requirement of EastLake Development Corporation to determine interim and ultimate capacity in the Telegraph Canyon Sewer. Both a gravity flow study and temporary pumping study were prepared for the Telegraph Canyon Sewer. (1996)

Based on the Willdan studies, the City of Chula Vista has established a fee to fund the improvements required for flows in the Telegraph Canyon Basin. Flows from the Telegraph Canyon Basin of Salt Creek Ranch are subject to the fee established in the gravity flow report. Flows from the Salt Creek Basin and Otay Lakes Basin of Salt Creek Ranch will be subject to the fee established in the temporary pumping study. (1996)

Otay Lake Basin

There are 404 residential dwelling units within the Otay Lake Basin of the Salt Creek Ranch project. The average daily flow from the Otay Lake Basin of Salt Creek Ranch is estimate at 117,320 gpd. The offsite tributary area will generate an average flow of 821,000 gpd. (1996)

As mentioned previously, flows from within this basin naturally drain to Upper Otay Reservoir. Therefore, Salt Creek Ranch will need a permanent lift station in the Otay Lake Basin to pump sewage flows to the Salt Creek Basin. (1992)

Based on the preliminary grading plan, flow from approximately 404 units onsite will require pumping. The required pumping capacity will be 189 gpm at a total dynamic head of 105 feet. A 10-horsepower lift station and 6-inch force main, 2,800 feet in length, will adequately pump the onsite sewage flows. (1996)

Salt Creek Basin

There are 608 residential dwelling units within the Salt Creek Basin of the Salt Creek Ranch project. The average flow from the Salt Creek Basin of Salt Creek Ranch is estimated at 191,125 gpd. The offsite tributary area will generate an estimated 50,960 gpd. As discussed in the previous section of this chapter, flows from the Otay Lake Basin will be pumped to allow gravity flow through the Salt Creek Basin. The recommended collection system for the Salt Creek Basin has been sized to handle these additional flows. (1996)

Sewage from this subbasin will ultimately flow down the proposed Salt Creek Interceptor. This interceptor will deliver sewage flows to the future Otay Ranch Reclamation Plant or be extended west to the Metropolitan Sewer System at the coast. (1996)

As mentioned previously, flows from the Salt Creek and Otay Lake Basin will be pumped to the Telegraph Canyon Basin until the Salt Creek Interceptor is constructed. This will involve the pumping of approximately 1,012 units in the Salt Creek and Otay Lake Basins. Based on 1,012 units and miscellaneous land uses, the required peak pumping capacity for Salt Creek Ranch will be 650,220 gpd (452 gpm). (1996)

In order to convey flows to the Eastlake Lift Station, the first reach of the Salt Creek Interceptor, a 15-inch gravity sewer line, must be constructed in Hunte Parkway from the southern boundary of the project to Telegraph Canyon Road. The southern half of this reach will be located in an easement outside Hunte Parkway to the east to allow gravity flow to the station. (1996)

Also, as discussed previously, the gravity sewer line in Hunte Parkway was oversized to provide 1.2 mgd of fail safe capacity for the Jamacha Reclamation Plant. Recommended line sizes in Hunte Parkway range from 12 to 18 inches. The Salt Creek Ranch project will be eligible for reimbursement for the extra cost incurred due to constructing larger lines than their project alone would require. (1992)

Sewage from this subasin will ultimately flow down the proposed Salt Creek Interceptor. This interceptor will deliver sewage flows to the future Otay Ranch Reclamation Plant which is scheduled to begin operation in 1997.

FIGURE 24
SUMMARY OF SEWAGE FLOWS SALT CREEK INTERCEPTOR
(1992)

Reach	Average Flow, gpd				
	Salt Creek Ranch	Otay Ranch	EastLake	Other Properties	Cumulative Flows, gpd
1	312,750[1]		276,865	45,500	635,115
2		2,404,509	938,133	144,410	4,122,167
3		768,728	357,204		5,248,099
4		3,478,150			8,726,249
6		4,996,738			13,722,987
7					
Total	312,750	11,648,125[2]	1,572,202[3]	189,910[4]	13,722,987

1 1,251 EDU's @ 250 GPD/EDU.
2 Otay Ranch flows were taken from 3-27-90 letter to The Baldwin Company from Wilson Engineering. Flows were reduced by 10.7% because the flow generation factor was reduced from 280 GPD/EDU to 250 GPD/EDU.
3 From 2-7-91 telephone conversation with EastLake Development Company.
4 Flows for other properties were estimated using development density of 0.28 EDU's/acre.

This plant will initially have a capacity of 6 mgd with the capacity of expanding to 12 mgd in the future. There will be capacity at this plant to treat Salt Creek Ranch flows. (1992)

A study will be performed to determine the cost distribution for each of the major developments that will utilize the Salt Creek Interceptor. Initial cost estimates indicate that the Salt Creek Ranch share of funding this interceptor will be approximately $800,000 as shown on Figure 25. (1992)

Reclaimed Water Facilities

A 16-inch reclaimed water line should be constructed in East "H" Street and tied into the existing 20-inch reclaimed water line in Lane Avenue. This 16-inch line should be extended to the western project boundary to provide service to Salt Creek I. A 16-inch reclaimed water line should be constructed in Hunte Parkway south of East "H" Street for service to future development south of the project. North of East "H" Street a 24-inch reclaimed water line should be constructed in Hunte Parkway to provide service to the proposed school site and street parkway landscaping and allow a future extension north to the reclaimed water ponds. (1992)

FIGURE 25
SALT CREEK RANCH INTERCEPTOR PRORATA COST SUMMARY
(1992)

		Salt Creek Ranch	Otay Ranch	EastLake	Other Properties	Size/ inches	Length/ feet	Unit Cost $/foot	Total Cost
Reach 1	%	49.2		43.6	7.2	12	3,800	90	342,000
	$	168,264		149,112	24,624				
Reach 2	%	7.6	58.3	29.5	4.6	21	5,000	135	675,000
	$	51,300	393,525	199,125	31,050				
Reach 3	%	6.0	60.4	30.0	3.6	21	12,300	135	1,660,500
	$	99,630	1,002,942	498,150	59,778				
Reach 4	%	3.6	76.2	18.0	2.2	30	4,850	200	970,000
	$	34,920	739,140	174,600	21,340				
Reach 6	%	2.3	84.9	11.4	1.4	42	13,500	275	3,712,500
	$	85,388	3,151,912	423,225	51,975				
Reach 7	%	2.3	84.9	11.4	1.4	42	30,500	275	8,387,500
	$	192,913	7,120,987	956,175	117,425				
Subtotal		632,415	12,408,506	2,400,387	306,192				15,747,500
25% Contingency		158,104	3,102,127	600,097	76,548				3,936,875
Total		790,519	15,510,633	3,000,484	382,740				19,684,375

In addition, an 8-inch loop is recommended along the property boundary throughout the western portion of the project. Although an 8-inch line is shown in East "H" Street east of Hunte Parkway, this line is to provide service for the Salt Creek Ranch only. This line is not oversized to supply areas to the east because it is tributary to the Upper and Lower Otay Reservoirs. If it is determined that the use of reclaimed water is permitted in the Otay Lake Drainage Basin, coordination with the District will be pursued to establish the line size to accommodate future users to the east. (1992)

The Otay Water District Jamacha Plant is to be expanded to 2.6 MGD and ultimately 4.5 MGD. The Jamacha Plant is being upgraded to provide tertiary treatment by May, 1992. The Otay Valley Reclamation plant is planned to have an ultimate capacity of 14.0 MGD with an initial 6.0 MGD phase expected to be completed by 1997. It is anticipated that ultimate reclaimed water service to the project will be supplied from the future Otay Valley Water Reclamation plant. Initially, however, it is not known whether or not the Otay Water District facility will be able to supply the initial reclaimed water demand to Salt Creek Ranch. (1992)

3.9.7 Financing Sewerage Facilities

Phase I

The first phase of development consisting of 1,387 dwelling units will occur within Proctor Valley, Telegraph Canyon and Salt Creek Basins. The only exceptions are the school, neighborhood park and 293 multi-family units in neighborhood 4a near the western boundary of the project which are located in the Proctor Valley Basin. The lift station in the Salt Creek Basin will need to be constructed so that sewage from this basin can be pumped into the Telegraph Canyon Basin. (1996)

One hundred one multi-family units in Neighborhood 4a can develop in Phase I with no additional cost impact for sewer facilities as described in the sewer master plan for Salt Creek Ranch. Sewer service will be provided through either the existing 10-inch gravity line which sewers south to Boswell Court and ultimately to the Telegraph Canyon interceptor or to the Phase I, 8-inch line proposed in the street which borders in the northern boundary of Neighborhood 4a and sewers west to the 10-inch line in Mount Miguel Road and ultimately in the Proctor Valley Sewer; it is anticipated that a portion of Neighborhood 4a will sewer in each direction dependent on final grading. (1996)

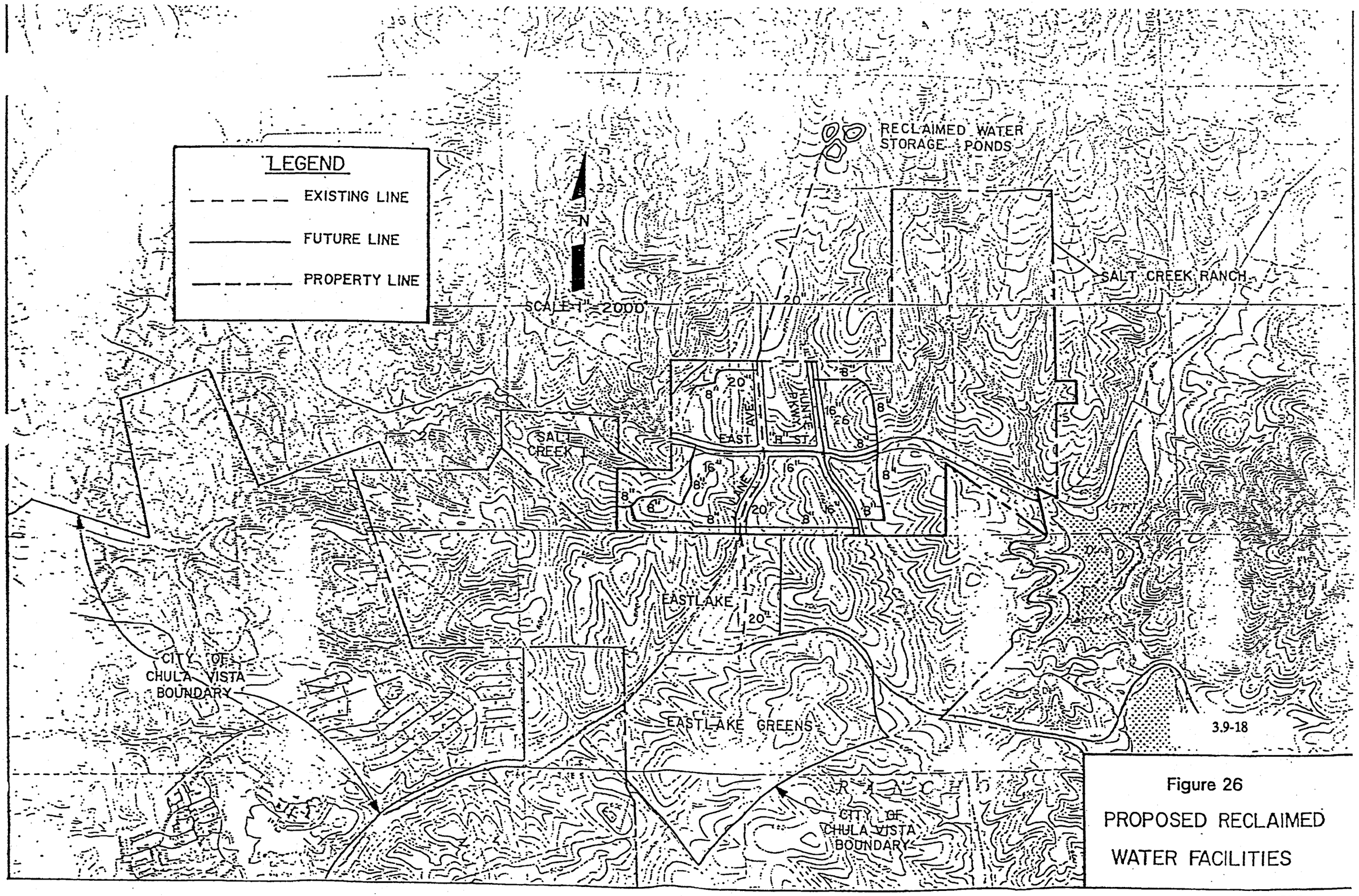


Figure 26

PROPOSED RECLAIMED WATER FACILITIES

Figure 27 provides a cost estimate for the sewer facilities proposed to be constructed in Phase I. The total cost for construction of these facilities is estimated to be $2,706,500. Salt Creek Ranch will be reimbursed at a later date for the oversizing of the sewer facilities caused by offsite sewage flows. (1992)

FIGURE 27
PHASE I SEWER FACILITIES COST ESTIMATE
(1992)

Length/Feet	Required Size	Unit Cost/$/foot	Total Cost
Gravity Sewers			
39,000'	8"	$40	$1,560,000
2,000'	10"	45	90,000
3,000'	12"	55	165,000
700'	15"	65	45,500
2,200'	18"	75	165,000
Force Main			
1,800	8"	45	81,000
Lift Station			
	25 HP		600,000
		Total	$2,706,500

(1992)

Although the Salt Creek Ranch project is developing in three phases, the recommended reclaimed water facilities are in the first two phases only, as the third phase is in the east where the use of reclaimed water is not recommended. (1992)

The reclaimed water facilities required to service the first phase of development consist of the 16-inch line in East "H" Street which will connect to the existing 20-inch line at Lane Avenue. The 16-inch main and 24-inch main in Hunte Parkway should be constructed along with the portion of the 8-inch loop as shown. Otay Water district will require these and any other planned pipelines to be installed at the time the roads are constructed. (1992)

FIGURE 28
PHASE I RECOMMENDED RECLAIMED WATER FACILITIES
(1992)

Facilities Description		Unit Cost	Total Cost
Distribution Lines			
9,500	ft. of 8"	$30/ft.	$ 285,000
3,400	ft. of 16"	$50/ft.	170,000
2,200	ft. of 24"	$70/ft.	154,000
TOTAL			$ 609,000

(1992)

Phase II

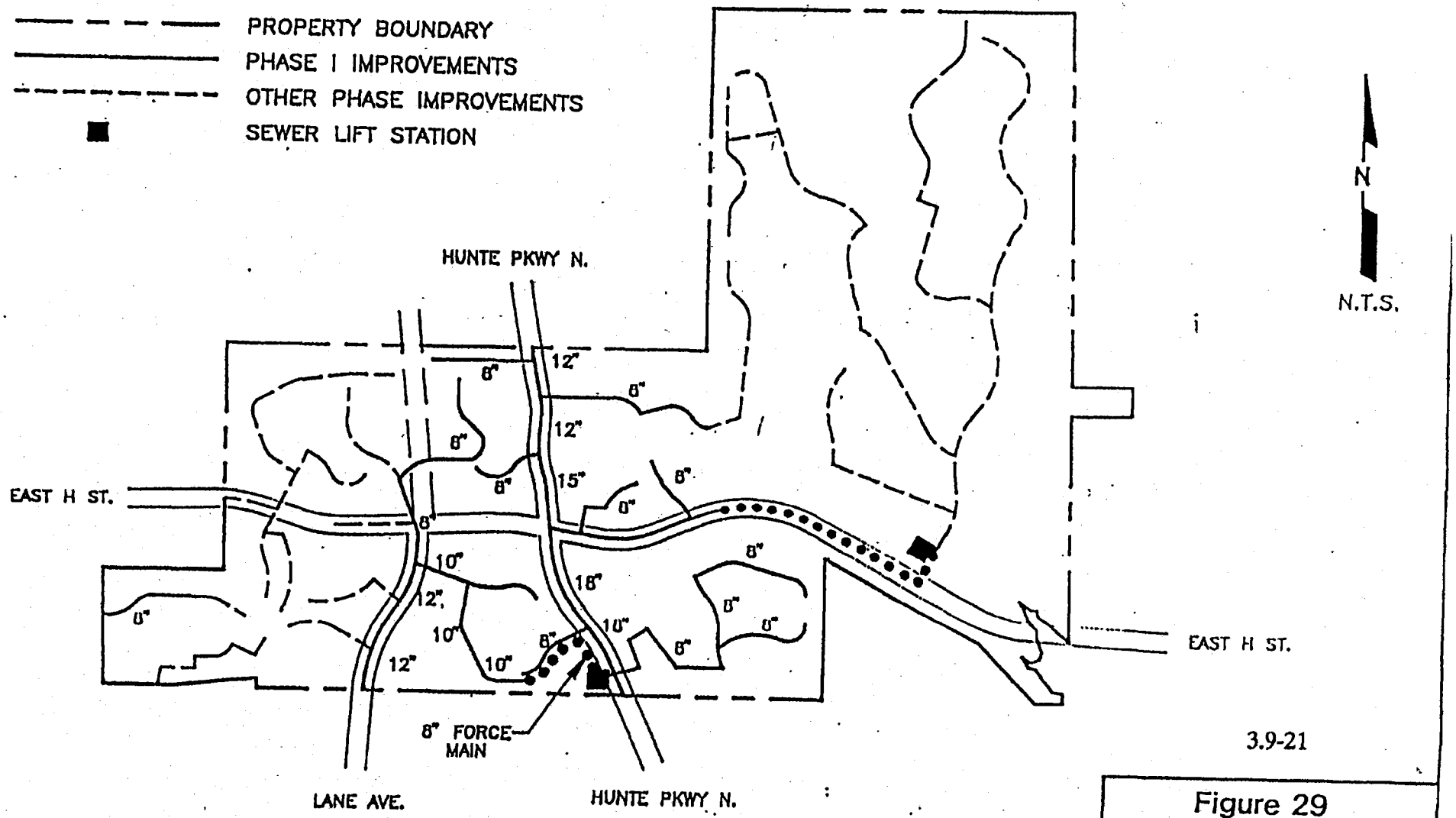
With the completion of Phase II development, almost all of the Proctor Valley, Telegraph Canyon, and Salt Creek Basins will have been developed. In addition, some development will take place in the Otay Lake Basin requiring a lift station to pump sewage from this basin into the Salt Creek Basin. In addition to these facilities, there is a section of 12-inch pipe in the EastLake Business Center that will need to be up-sized to a 15-inch line to handle proposed flows. (1992)

Figure 31 provides a cost estimate for the sewer facilities proposed to be constructed in Phase II. The total cost for construction of these facilities is estimated to be $2,175,500. Salt Creek Ranch will be reimbursed for the cost of oversizing facilities to handle offsite sewage flows. (1992)

The reclaimed water facilities required to service the second phase of development consist of the 16-inch line in East "H" Street west of Lane Avenue to the western boundary which will be extended to Salt Creek I. Similar to Phase I, an 8-inch loop is also necessary along the western boundary to service the multi-family, school, and open space areas. Portions of these pipelines may need to be installed earlier to match road construction schedules. (1992)

Phase III

Most of the Phase III development will occur in the Otay Lake Basin and sewage flows will be pumped to the Salt Creek Basin by the lift station constructed in the previous phase of development. (1992)

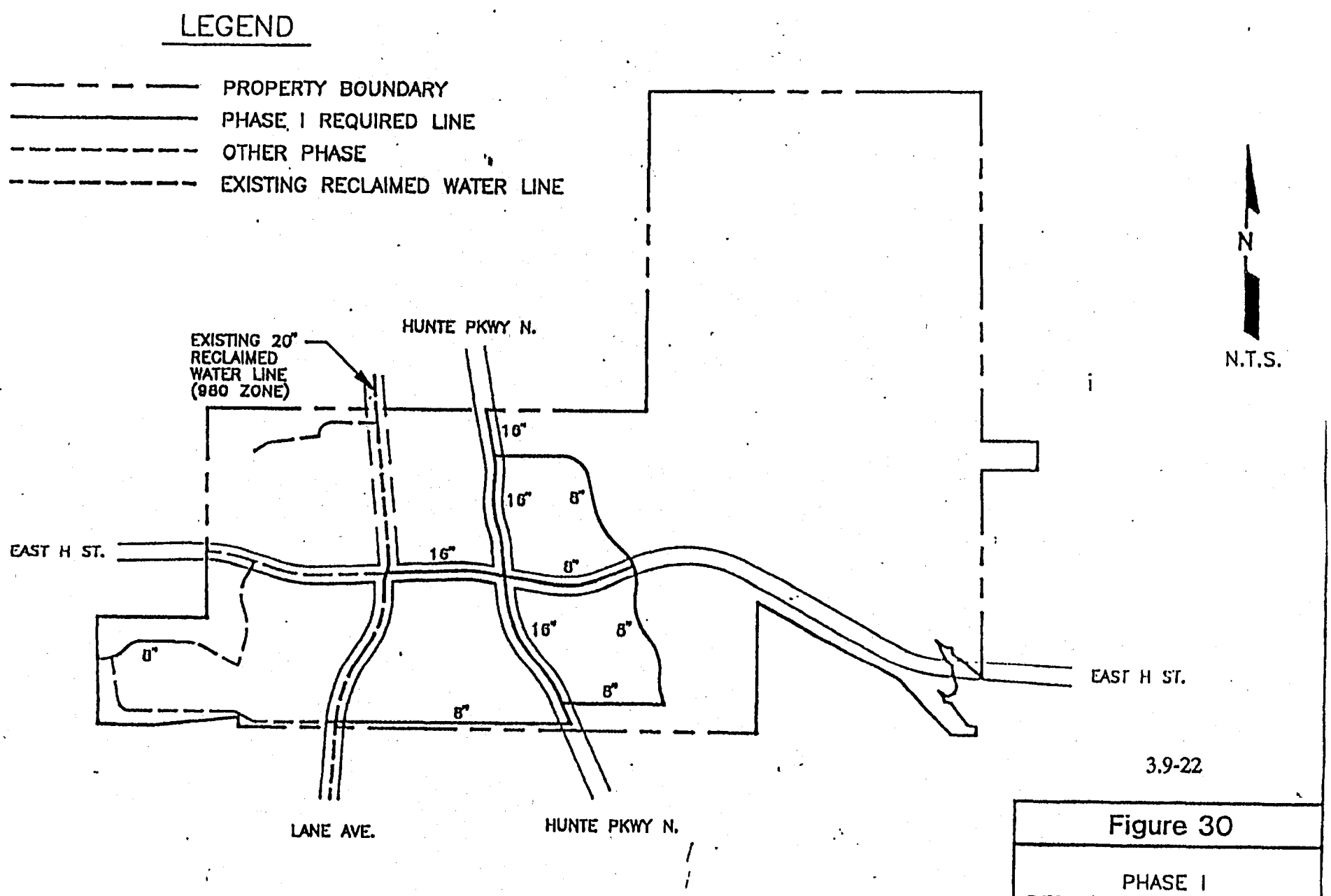


3.9-21

Figure 29

PHASE I
RECOMMENDED SEWER
IMPROVEMENTS

WILSON ENGINEERING 605-733



3.9-22

Figure 30

PHASE I
RECOMMENDED RECLAIMED WATER FACILITIES

WILSON ENGINEERING 805-735

FIGURE 31
PHASE II SEWER FACILITIES COST ESTIMATE
(1992)

Length/Feet	Required Size	Unit Cost/$/foot	Total Cost
Gravity Sewers			
37,000'	8"	$40	$1,480,000
Force Main			
2,800	6"	35	98,000
Lift Station			
	10 HP		500,000
Offsite Gravity Sewers			
1,500	15"	65	97,500
		Total	$2,175,500

(1992)

FIGURE 32
PHASE II RECOMMENDED RECLAIMED WATER FACILITIES
(1992)

Facilities Description	Unit Cost	Total Cost
Distribution Lines		
9,500 ft. of 8"	$30/ft.	$ 285,000
2,200 ft. of 16"	$50/ft.	110,000
TOTAL		$ 395,000

(1992)

Figure 33 provides a cost estimate for the proposed Phase III sewer facilities. The total cost for these facilities is estimated to be $920,000. None of the Phase III facilities are oversized to accommodate offsite sewage flows so Salt Creek Ranch will be required to pay for the entire cost of these improvements. Also, at a future date, Salt Creek Ranch will need to pay approximately $800,000 for its share of funding the Salt Creek Basin Interceptor. (1992)

FIGURE 33
PHASE III SEWER FACILITIES COST ESTIMATE
(1992)

Length/Feet	Required Size	Unit Cost/$/foot	Total Cost
Gravity Sewers			
23,000	8"	$40	$920,000

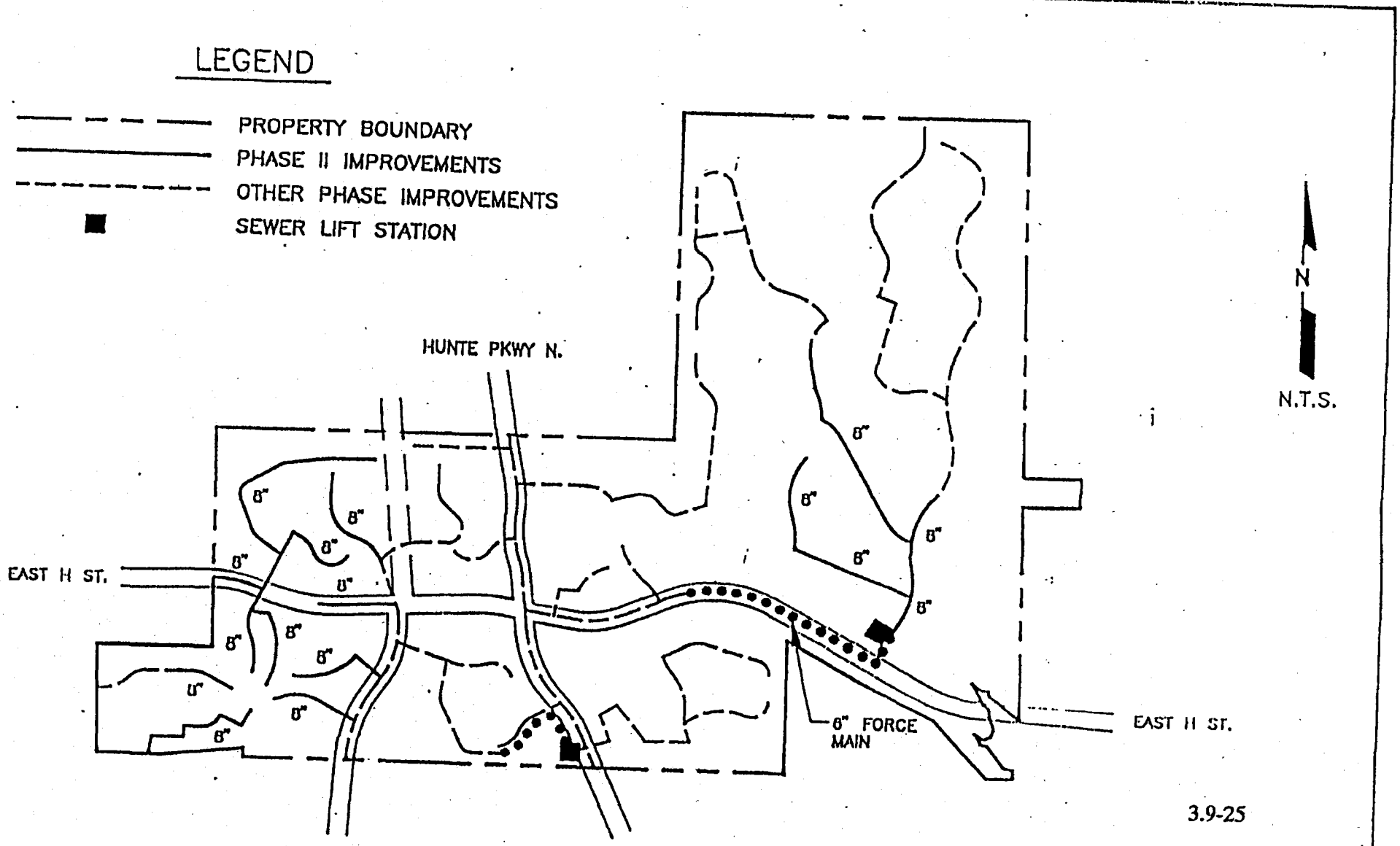
(1992)

3.9.8 Threshold Compliance

Facilities to accommodate sewer flows and the use of reclaimed water have been identified by phase. The City will not allow the design capacity of trunk sewers to be exceeded. If flows large enough to surpass the design capacity of receiving sewers are anticipated as the result of new development, the City could require the construction of relief lines. The construction of new sewer trunk lines must be phased with the construction of streets. As such, the facilities identified in this plan shall be required of the developer either as constructed facilities or through the payment of fees. (1992)

The Salt Creek Ranch will also share in the cost of the Salt Creek Interceptor. Initial cost estimates indicate that the project's share of this interceptor will be approximately $800,000. Other fees and charges may arise from future studies to solve trunk line capacity problems. (1992)

The City intends to perform a study of the additional sewer capacity needed in the Telegraph Canyon Basin due to the interim pumping out-of-basin from the Salt Creek Basin. Any fees resulting from this study shall be applied to development in accordance with the study as adopted by the City Council. (1992)



3.9-25

Figure 34

PHASE II
RECOMMENDED SEWER
IMPROVEMENTS

WILSON ENGINEERING 005-733

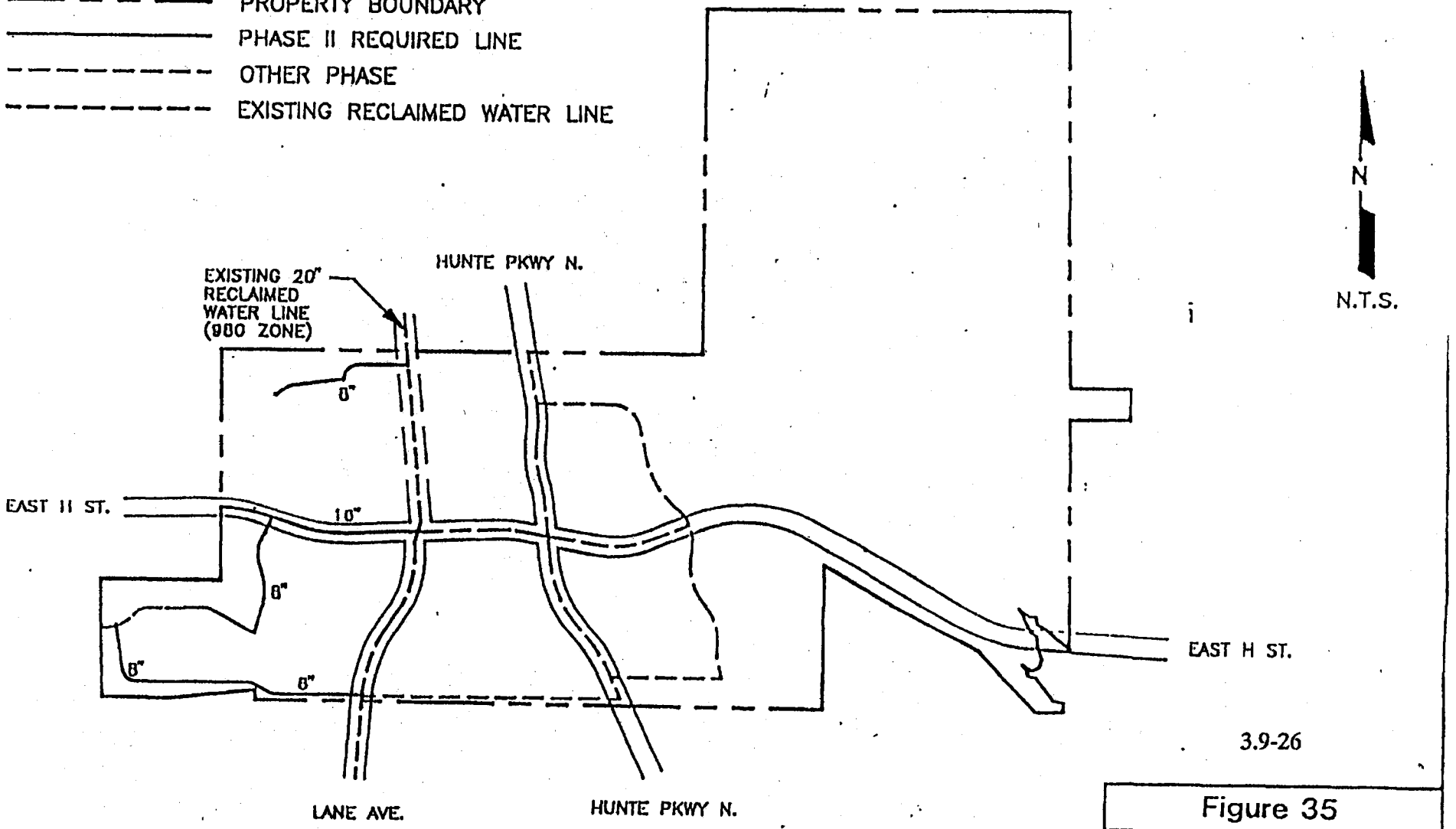
LEGEND

PROPERTY BOUNDARY

PHASE II REQUIRED LINE

OTHER PHASE

EXISTING RECLAIMED WATER LINE



3.9-26

Figure 35

PHASE II
RECOMMENDED RECLAIMED WATER FACILITIES

WILSON ENGINEERING 605-735

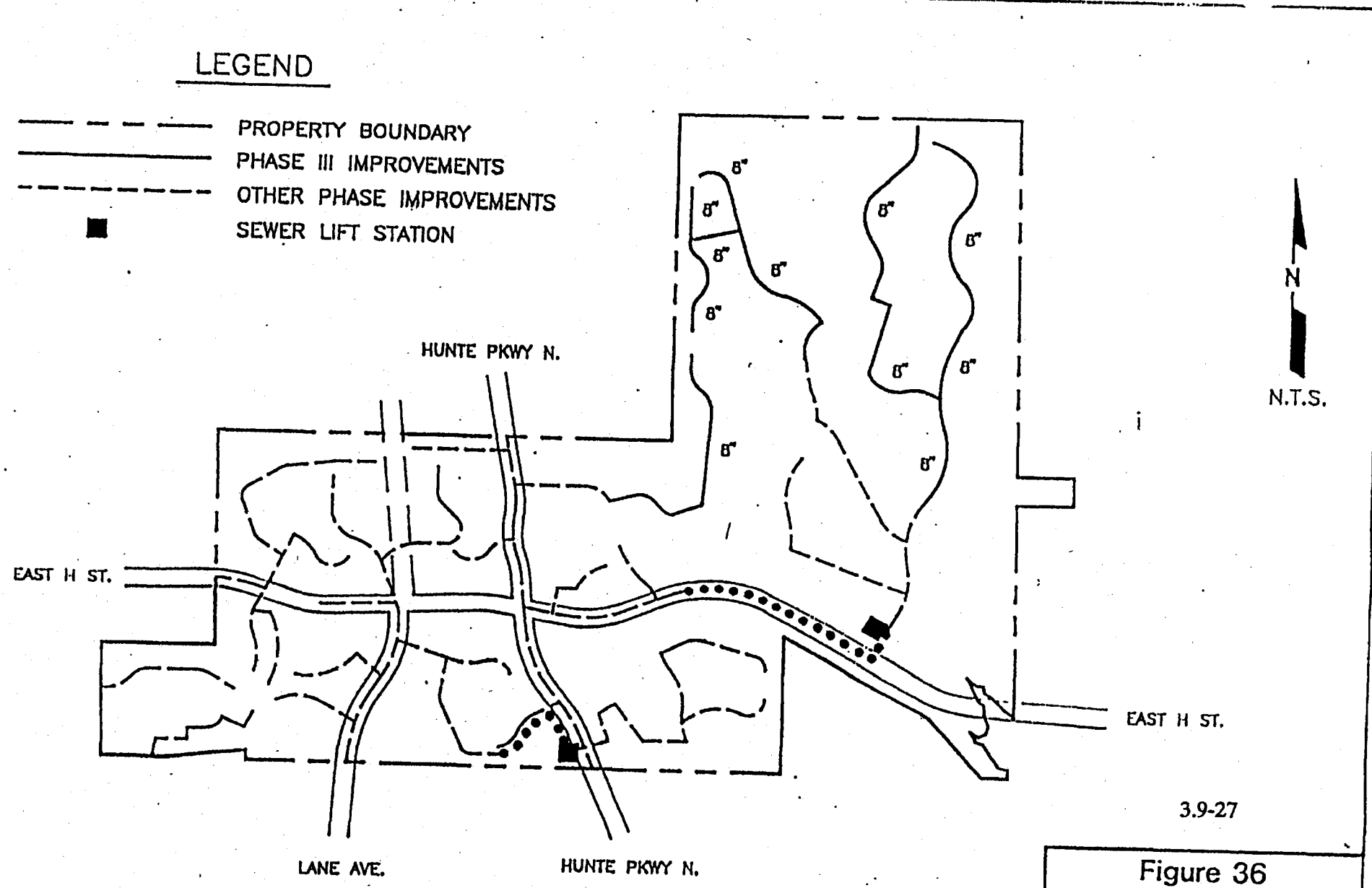


Figure 36

PHASE III
RECOMMENDED SEWER
IMPROVEMENTS

WILSON ENGINEERING 005-733

3.10 DRAINAGE

3.10 DRAINAGE

3.10.1 Threshold Standard

1. Storm water flows and volumes shall not exceed City Engineering Standards.

2. The GMOC shall annually review the performance of the City's storm drain system to determine its ability to meet the City's goals and objectives.

3.10.2 Service Analysis

The City of Chula Vista, through its 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 shall 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. (1992)

Drainage facilities are planned for in the "City of Chula Vista Public Facilities Plan Flood Control Summary Report, dated March 1989 (Phase II)". (1992)

A report titled *Hydrological Analysis for Salt Creek Ranch* dated November, 1991 was prepared by the McIntyre Group, Inc. (1992)

A master plan for urban runoff protection was prepared for Salt Creek Ranch by Wilson Engineering dated August, 1991. (1992)

3.10.3 Project Processing Requirements

<u>Sectional Planning Area Plan/Public Facilities Finance Plans</u> (1992)

1. Identify phased demands.
2. Identify locations of facilities for on-site and off-site improvements.
3. Provide cost estimates.
4. Identify financing methods.

3.10.4 Existing Conditions

The City of Chula Vista Public Facilities Plan, Flood Control Summary Report, March, 1989, 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 Interstate 805 with one of the basins, Long Canyon, 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. (1992)

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. (1992)

3.10.5 Proposed Facilities

Salt Creek Ranch is defined by four drainage basins which are basically consistent with the four proposed sewer basins on the site. These basins are referred to as Basins A, B, C, and D and are shown on the proposed Sewer Plan Map. Detailed drawings of the existing and proposed hydrology are contained in the Preliminary Hydrology Analysis, November, 1990, prepared by the McIntyre Group, Inc. The property does not currently have any improved drainage facilities, except for a drainage crossing located on the existing alignment of Proctor Valley Road. (1992)

Basin A — West Upper Otay Lake

Drainage Flows are intended to utilize the proposed road crossing points for outlets into the natural channel flow. The actual structure types required to convey stream flows under access roads will be determined when a more detailed engineering analysis is performed. This future analysis will consider utilizing an existing dam that had been used to retain water for livestock consumption. (1992)

It is intended that the overall drainage of this basin will remain primarily unaltered and remain within the existing natural stream channels. (1992)

Basin B — Salt Creek

The natural drainage basin encompasses the headwaters of Salt Creek, an area of approximately 609 acres. There are two Salt Creek crossing points, East "H" Street and a northerly access road. It is intended that the East "H" Street crossing incorporate a suitable drainage structure accommodating the proposed trail system. The northerly structure will be determined with a future more detailed study. It is intended to drain developed sites via storm drain systems to outlet points adjacent to Salt Creek. It is also intended that the overall drainage of Salt Creek remain unaltered. (1992)

Basin C_1 — Telegraph Canyon

Based upon the land use plan, the project site shows development of all the upper reaches of this basin. It will be necessary to construct a storm drain system within Lane Avenue to convey runoff to existing facilities constructed by the EastLake I project. (1992)

Basin C_2 — Telegraph Canyon

This is a small tributary area annexed from the primary drainage channel by development of the EastLake Business Center. EastLake I development provides a 36-inch RCB storm drain system connected to the Boswell Court system to accommodate this drainage. (1992)

Basin D — Sunnyside Basin (Proctor Valley)

This basin contains three contributing areas described as follows:

Area D_1 — This basin consists of the largest sub-area of approximately 212 acres. A 60-inch RCB storm drain is proposed to carry flows from an inlet at the northeasterly corner of Salt Creek I project within the alignment of Proctor Valley Road to an outlet point west of the site. (1992)

Area D_2 — This basin is approximately 53 acres. A 42-inch RCB storm drain is proposed to carry flows from this area, combined with additional flow entering from the west. (1992)

Area D_3 — This basin consists of approximately 17 acres. A 24-inch RCB storm drain system is proposed to convey this additional drainage from the west via the Salt Creek I drainage system to an outlet structure adjacent to the proposed State Route 125 and East "H" Street intersection. (1992)

Urban Runoff Facilities

The western portion of Salt Creek Ranch drains to the north to the Sweetwater River. The middle portion of the project drains south through the Salt Creek Drainage Basin to the Otay River. The far eastern portion of the project drains toward the Upper Otay Reservoirs. Since the Otay Reservoir is a source of drinking water to the residents of the City of San Diego, a water quality protection program needs to be installed when the eastern portion of the project is developed to ensure that the runoff from the developed watershed does not degrade water quality in Upper or Lower Otay Reservoir. A water quality protection and monitoring program is proposed to protect this source of drinking water. The monitoring program will assess the quality of water leaving the project to assure that the water quality in Upper and Lower Otay is not degraded. (1992)

Approximately 606 acres and 405 dwelling units of Salt Creek Ranch are within the drainage area. Based on the County of San Diego General Development Plan for Land Use within the study area, approximately 100 additional single family dwelling units could be constructed in the remainder of the drainage area. This amounts to a total of 505 potential dwelling units for the drainage area at an average land use density of 2.34 acres per dwelling unit. (1992)

To avoid unnecessary expenditure of energy by large pump and diversion systems, to minimize land form alteration, and maximize the amount of resource, the water quality goal at Lower Otay Reservoir is the present water quality. Thus, as urbanization occurs in the basin, the quality in the Lower Otay Reservoir should be maintained at its present level. (1992)

The program recommended in Wilson Engineering's report should be considered an interim program which should eventually be incorporated into a comprehensive watershed management for the 62,720 acre contributing to the Lower Otay Reservoir. (1992)

The proposed Urban Runoff Protection programs involves structural as well as non-structural features. The proposed system does not provide a comprehensive protection system for upper and lower Otay Reservoirs. For this reason, the Master Plan recommends a fee be paid to the City of San Diego for development of the comprehensive system at a later date. The system proposed would allow the Salt Creek Ranch Development to proceed and provide protection for the urban runoff generated from the Salt Creek Ranch development while providing a framework for the ultimate system. (1992)

Although it is anticipated that the City of San Diego will be installing a more comprehensive system of structural control programs in the future,

the Master Plan recommends the installation of a storm water diversion system for the estimated peak dry weather flow of 137 gallons per minute plus the peak sewage flow in the basin of 231.5 for a total design capacity of 368.5 gpm. This water will be diverted from the Otay Reservoir Basin into the Salt Creek Basin. This pump will be designed as a variable speed pump so that its flow may be decreased to reduce the amount of water diverted away from the reservoir. It is anticipated that this pump would remain in place until structural controls are installed by the City of San Diego as part of a more comprehensive system to protect the entire Upper and Lower Otay Lakes Basin. (1992)

A number of nonstructural controls have been designed into the Salt Creek Ranch SPA plan, and a number of others are recommended to be instituted. These recommended nonstructural controls are listed below. (1992)

Watershed Inspection Program

The master plan recommends that a watershed inspection program be set up to provide periodic inspections of the watershed to ensure that the maintenance and public education program are successful in reducing and restricting practices which are not advisably upstream of the potable water reservoir. The master plan recommends that the watershed inspection program be performed by the City of San Diego through agreements with the City of Chula Vista and the County of San Diego. Funding for this inspection program is discussed below. (1992)

Open Space and Drainage Course Management

The project, as designed, in the Otay Lakes Basin contains large areas of open space. This open space generally follows the drainage courses draining the site. All storm water is collected in streets and then discharged into the natural open space, and no concrete lining of pipes except at road crossings that are within the open space area. Including an estimate of building footprints and driveways, the total impervious acreage estimated on Salt Creek Ranch for the Otay Lakes Drainage Basin is 100 acres. This amounts to 16.5 percent of the total acreage. (1992)

Public Education

The public education program should be developed for the portion of the Salt Creek Ranch which lies within the area contributing to the

Otay Lakes Basin. A public education program provides information to the public on practices that are recommended in areas contributing to potable water supplies. The first part of this program is to educate the public that the storm water originating on their lots and on the streets in front of their houses eventually makes its way into the potable water supply. The program will then further educate the public to proper methods of fertilization, pest control, and even swimming pool drainage in areas contributing to potable water reservoirs. This program should include fliers with their water bills and information disseminated on sale of houses and resale of houses. This program will serve as a model program for the rest of the basin as development proceeds. (1992)

Zoning Controls

The project, as proposed, has only 505 lots within the 600 acres contributory to the Upper Otay Reservoir. These are the largest lots within the planned development. All commercial activities have been placed out of this basin and the plan as presented provides for large lot residential zoning of the watershed. (1992)

Interagency Agreements

In order to assure the joint cooperation of the City of Chula Vista, the property owner, the City of San Diego, and the County of San Diego, an interagency agreement establishing the watershed inspection, public education programs, and maintenance of the drainage courses and diversion systems should be established. (1992)

3.10.6 Financing Drainage Facilities

On-Site Facilities

City policy requires that all master planned developments provide for the conveyance of storm waters throughout the project to City engineering standards. As such, Salt Creek Ranch will be required to construct those facilities identified in Section 3.10 through the subdivision exaction process. (1992)

Off-Site Facilities

A portion of Salt Creek Ranch drains into the Telegraph Canyon Basin. The McIntyre Report calculates this drainage area to be 177.8 acres. In accordance with Chula Vista Ordinance 2384 approved August 7, 1990, Salt Creek Ranch is required to pay the Telegraph Canyon Drainage Fee of $3,922 per gross benefit acre. For the 177.8 acres, this fee equals $697,332. The fee is payable as defined by the Ordinance 2384. (1992)

Urban Runoff Facilities

The structural improvements identified in the Wilson Engineering report are estimated to cost $500,000 as shown below. (1992)

Salt Creek Ranch Urban Runoff Protection System Cost Estimate	
Urban Runoff Diversion Pump Station	$400,000
Wet Pond	100,000
Total	$500,000
* Based upon proposed system in Draft Urban Runoff Report, Wilson Engineering, August 1991	

At this time, no estimate for the cost of the non-structural program elements has been developed. (1992)

3.10.7 Threshold Compliance

Salt Creek Ranch shall be responsible for the conveyance of storm water flows in accordance with City Engineering standards. The City Engineering Division shall review all plans to ensure compliance with City Engineering Standards. In addition, the project shall fund the interim urban runoff facilities as well as participate in more long term facilities to be identified by the City of San Diego at a future date. (1992)

3.11 AIR QUALITY

3.11 AIR QUALITY

3.11.1 Service Analysis

Air Quality Improvement Plan

A Air Quality Improvement Plan is required for all major development projects (50 dwelling units or greater, or commercial and industrial projects with 50 EDU's 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 Air Pollution Control District is updating the Air Quality Maintenance Program to comply with the California Clean Air Act. There is no local Master Plan for Air Quality.

The Air Quality Improvement Plan will not be prepared as part of the Public Facilities Financing Plan. This plan is being prepared as part of the plan for Salt Creek Ranch and PFFP.

3.11.2 Threshold Standard

The City shall annually provide the San Diego Air Pollution Control District (APCD) with a 12-18 month development forecast and request an evaluation of its impact on current and future air quality management programs, along with recent air quality data. The growth forecast and APCD response letters shall be provided to the GMOC for inclusion in its annual review.

3.11.3 Threshold Compliance

The City continues to provide a development forecast to the APCD in conformance with the threshold standard. A separate Air Quality Improvement Plan is provided as part of the SPA document.

3.12 FISCAL

3.12 FISCAL

3.12.1 Facility Master Plan

There is no existing Master Plan for fiscal issues. However, an economic base study and a long range fiscal impact study was prepared by P&D Technologies as part of the Chula Vista General Plan.

3.12.2 Project Processing Requirements

Sectional Planning Area Plan/Public Facilities Finance Plans

1. Prepare a phased fiscal/economic report dealing with revenue-v-expenditures including maintenance and operations.

3.12.3 Threshold Standard

1. The GMOC shall be provided with an annual fiscal impact report which provides an evaluation of the impacts of growth on the City, both in terms of operations and capital improvements. This report should evaluate actual growth over the previous 12-month period, as well as projected growth over the next 12-18 month period, and 3-5 year period.

2. The GMOC shall be provided with an annual "economic monitoring report" which provides an analysis of economic development activity and indicators over the next previous 12-month period, as well as projected growth over the next 12-18 month period, and 3-5 year period.

3.12.4 Threshold Compliance

Section 4.0 of this Public Facilities Financing Plan contains an analysis of the fiscal impacts the development of Salt Creek Ranch will have on the operation and maintenance budgets of the City of Chula Vista, the Otay Water District, the Chula Vista City School District, and the Sweetwater Union High School District.

The results of the analysis are contained in Section 4.0 and will be included in the next annual fiscal and economic report prepared for the City's Growth Management Oversight Commission.

3.13 CIVIC CENTER

3.13 CIVIC CENTER

3.13.1 Threshold Standard

There is no adopted threshold standard for this facility. The facility information is being provided in this report to aid the City in establishing operational benchmarks which will determine construction phasing of the Civic Center. (1992)

3.13.2 Service Analysis

Although the existing Civic Center successfully accommodated city administration offices prior to the mid-1980's population growth, increase in City staff to meet new demands of growth has caused increasing congestion problems. Most staff in the Public Services Building experience space shortages, lack of privacy and storage, and frequent noise distractions. This was reported in a survey which is included in the Civic Center Master Plan dated May 8, 1989. Site Alternative Three "The Suburban Scheme" was selected from the master plan at a council conference on June 22, 1989. (1992)

3.13.3 Existing Conditions

Civic Facilities Inventory

Figure 37
Civic Facilities Inventory

Existing Facilities (1992)

Civic Center	111,940 square feet
Previous County Health Center	3,120 square feet
Future Public Works Inspection Division (off-site)	1,200 square feet
TOTAL	116,260 square feet
Parking Lots	333 spaces

Future Facilities Cost		Size	Estimated
1.	City Hall	25,765 sf[1]	$ 2,203,300
2.	Public Services Facility	40,615 sf[1]	3,023,500
3.	New City Hall Annex	28,925 sf[1]	3,023,600
4.	Legislative Offices	6,000 sf[1]	1,330,000
5.	Subterranean Parking	126 spaces	1,008,000
6.	Parking Structure	359 spaces	2,872,000
7.	Demolition	5,920 sf	83,600
8.	Surface Parking	45,425 sf	227,100
9.	Misc. Site Improvements	15,000 sf	180,000
10.	Landscaping	55,000 sf	698,500
11.	Land Acquisition (459 F Street)	---	---
12.	Master Plan	---	65,250
	TOTAL (1992)		$15,459,300

3.13.4 Adequacy Analysis

The Master Plan for the Chula Vista Civic Center shows 126,990 square feet of Civic Center facilities are needed to serve the population in 1988. This identifies an existing space deficiency of 15,050 square feet. Since the writing of the Master Plan, the City has acquired the 3,120 square foot County Health building and a 1,200 square foot Public Works office. They are both listed under Existing Facilities. Because of this increase in square footage, the deficiency is reduced to 10,730 square feet. (1992)

The need for the Civic Center can not be easily related to population figures or acres of commercial and industrial land which will be developed in the future. The facilities, according to the master plan, are currently inadequate because of the lack of space. This inadequacy will worsen as employee numbers and their workloads increase in response to demands for services, which are generated by new development. (1992)

Currently (FY 1990-91) the City is moving ahead to implement Phase #1 of the Civic Center Master Plan by acquiring additional land to the west of the existing Civic Center for the proposed parking garage. (1992)

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1 SOME OF THE SIZE FIGURES REPRESENT A COMBINATION OF REMODELED EXISTING SQUARE FOOTAGE AND NEWLY CONSTRUCTED SQUARE FOOTAGE. THE COMPLETED CIVIC FACILITIES WILL TOTAL 149,120 SQUARE FEET WITH 625 PARKING SPACES.

3.13.5 Financing Civic Center Facilities

In January, 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Development Impact Fee to pay for various public facilities within the City of Chula Vista. The facilities are required to support future development within the City. The current fee adopted in accordance with Government Code Section 66000 is $2,150 per equivalent dwelling unit. (1992)

The Salt Creek Ranch project is within the boundaries of the public facilities DIF program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current Civic Center fee rate of $527 per equivalent dwelling unit and $20.10/EDU for administration. The Salt Creek Ranch obligation at buildout is $1,442,703. (1996)

Development Phase	EDU's	Civic Center Fee @ $527/EDU	DIF Admin. Allotment @ $20.10/EDU	Total Civic Center Fee
I	1,137 DU	$ 599,199	$ 22,854	$ 622,053
II	1,205 DU	635,035	24,221	659,256
III	295 DU	155,465	5,930	161,395
TOTAL	2,637 EDU	$ 1,389,699	$ 53,004	$ 1,442,703

(1996)

3.13.6 Threshold Compliance

Civic Center facilities will be funded through the collection of the public facilities fee. (1992)

3.14 CORPORATION YARD

3.14 CORPORATION YARD

3.14.1 Threshold Standard

There is no adopted threshold standard for this facility. The facility information is being provided in this report to aid the City in establishing operational benchmarks which will determine construction phasing of the corporation yard. (1992)

3.14.2 SERVICE ANALYSIS

The corporation yard is currently operating beyond capacity. New development, with its resultant increase in required maintenance services, creates a need for a larger corporation yard. The new yard may be located east of Interstate 805 because of the availability of centrally located large parcels. A City staff memo dated November 11, 1987 states that 15 acres are needed to accommodate 85,010 square feet of office and storage and 228,000 square feet of parking. (1992)

3.14.3 EXISTING CONDITIONS

Figure 38
Corporation Yard Inventory

Existing Facilities	Location
Corporation Yard	707 "F" Street

Future Facilities		Cost Estimate
1.	Buildings	$ 4,699,491
2.	Outside Storage	1,031,362
3.	Parking	543,598
4.	Site preparation and grading	4,000,000
5.	Site development, utilities, and landscaping	1,181,260
6.	Site acquisition	1,995,000
	TOTAL (1992)	$ 13,450,711

3.14.4 Adequacy Analysis

The growth in population, increase in street miles and the expansion of developed areas in Chula Vista, requires more equipment for maintenance as well as more space for storage and the administration of increased numbers of employees. The need for a larger Corporation Yard can be specifically related to new development and its effect on all of these subjects. (1992)

The existing corporation yard located at "F" Street and Woodlawn no longer accommodates present demands. The City Council approved an agreement on May 22, 1990 between the City and Rancho Del Sur (Sunbow). The agreement grants the City an option to acquire "15 net usable acres" within the 46 acre site referred to in the Phase II Tentative Map, Chula Vista Tract Map 90-7 as Unit 19. The City must close the purchase transaction prior to June 1, 1992 according to the agreement. This area of Sunbow is being considered because it provides a central location as the City grows to buildout and because a large parcel of land is available east of Interstate 805 which is suitable for a corporation yard. (1992)

3.14.5 Financing Corporation Yard Facilities

The Civic Center Expansion with an accompanying threshold standard was not one of the facilities originally considered by the Growth Management Oversight Commission. The Facility information is being provided in this report to aid the City in establishing operational benchmarks which will determine construction phasing of the Civic Center. (1992)

In January, 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Development Impact Fee to pay for various public facilities within the City of Chula Vista. The facilities are required to support future development within the City and the fee schedule has been adopted in accordance with Government Code Section 66000. The current fee is $2,150 per equivalent dwelling unit. (1992)

The Salt Creek Ranch project is within the boundaries of the public facilities DIF program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current fee rate, the Salt Creek Ranch obligation at buildout is $1,409,872. (1996)

Development Phase	EDU's	Corporation Yard Fee @ $515/EDU	DIF Admin. Allotment @ $19.65/EDU	Total Corporation Yard Fee
I	1,137 EDU	$ 585,555	$ 22,342	$ 607,897
II	1,205 EDU	620,575	23,678	644,253
III	295 EDU	151,925	5,797	157,722
Total	2,637 EDU	$ 1,358,055	$ 51,817	$ 1,409,872

(1996)

3.14.6 Threshold Compliance

Compliance will be satisfied with the payment of public facility fees at the rate in effect at the time building permits are issued. (1992)

3.15 OTHER PUBLIC FACILITIES

3.15 OTHER PUBLIC FACILITIES

3.15.1 Threshold Standard

There is no adopted threshold standard for these facilities which are part of the Public Facilities Development Impact Fee Program and include GIS, Mainframe Computer, Telephone System Upgrade, and Records Management. The information regarding these capital items is being provided in this section of the PFFP to aid the City and the developer in calculating the PFDIF fees to be paid by the Salt Creek Ranch project. (1996)

3.15.2 Service Analysis

The public facilities identified in Section 3.15.1, above, are described in the report entitled *Development Impact Fee for Public Facilities* dated April 20, 1993, known as document number C093-075. (1996)

3.15.3 Existing Conditions

The City continues to collect funds from building permit issuances in the Eastern Territories for deposit to the accounts associated with these facilities. (1996)

3.15.4 Financing Other Public Facilities

This information is being provided to aid the City and the developer in calculating the level of funds to be received from the payment of fees associated with this "Other Public Facilities" category. (1996)

In January, 1991, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Development Impact Fee to pay for various public facilities within the City of Chula Vista. The facilities are required to support future development within the City and the fee schedule has been adopted in accordance with Government Code Section 66000. The current fee is $2,150 per equivalent dwelling unit. The component of the fee attributable to "Other Public Facilities" as described above is $113.16 per EDU which includes $4.16 per EDU for PFDIF administration at 2%. (1996)

The Salt Creek Ranch project is within the boundaries of the public facilities DIF program and, therefore, the project will be subject to the payment of the fee at the rate in effect at the time building permits are issued. At the current fee rate, the project's obligation at buildout is $298,403 as shown on the following table.

PUBLIC FACILITIES FEES FOR OTHER PUBLIC FACILITIES (1996)				
Development Phase	EDU's	Other Public Facilities Fee @ $109/EDU	DIF Admin. Allotment @ $4.16/EDU	Other Public Facilities Fee Per Phase
I	1,137	$123,933	$4,730	$128,663
II	1,205	131,345	5,013	136,358
III	295	32,155	1,227	33,382
Total	2,637	$287,433	$10,970	$298,403

(1996)

3.15.5 Threshold Compliance

Other Public Facilities will be funded through the collection of public facility fees at the rate in effect at the time building permits are issued.

4.0 FISCAL ANALYSIS

4.0 FISCAL IMPACT

This analysis demonstrates the fiscal impact that development in Salt Creek Ranch will have on the operation and maintenance budgets of the City of Chula Vista, the Otay Water District, the Chula Vista Elementary School District, and the Sweetwater Union High School District. The analysis covers a period of 15 years, 10 years of which depict the development phase of the project, and 5 years which depict the impact of the completed project.

The information and observations contained in this report are based on the SPA plan of November 1991, and the current socioeconomic and fiscal conditions of the affected jurisdictions. Projections made in this section are based on hypothetical assumptions and current public finance policies. As such, there are usually differences between the projections and the actual results.

4.1 DESCRIPTION OF THE PROJECT

The Salt Creek Ranch will contain a total of 2,662 housing units including 2,161 single family units, 111 townhouse units, and a 390-unit apartment complex. The project will be implemented in three phases, with some over-lap of construction activity between the phases. Table 4.1-1 details the project components showing the type, size, and average market price of the units in each neighborhood. It also shows the phase of the project when each neighborhood is expected to be developed.

The phasing of the project is further detailed in the absorption schedule developed by The Baldwin Company, shown in Table 4.1-2. This schedule shows the expected annual absorption of each project component during the 10-year development period. Annual absorption is expected to peak in the third and fourth years of the project with absorption of about 455 units. Sales are projected to slow in the latter four years of the development period when the larger, custom homes will be built. For the purpose of this analysis, absorption represents new units being sold (or rented), and occupied.

TABLE 4.1-1

SALT CREEK RANCH
DEVELOPMENT DESCRIPTION

Neighborhood	Product	Project Phase	Housing Units	Unit Type	Gross Acres	Average Lot Size (Gross Acres)	Average Market Price
1	1	2	250	SF	85.5	0.27	$280,000
1	2	2	74	SF		0.21	$265,000
1	3	2	17	SF		0.19	$265,000
2	1	1	156	SF	58.7	0.28	$280,000
2	2	1	60	SF		0.22	$265,000
2	3	1	7	SF		0.20	$265,000
3	1	2	263	SF	50.3	0.19	$210,000
4A	1	1&2	390	MF	21.7	0.06	$80,000
4B	2	2	134	SF	25.9	0.19	$190,000
5A	1	1	100	SF	22.7	0.23	$225,000
5B	2	1	111	TH	12.3	0.11	$160,000
6	1	1	222	SF	49.0	0.22	$225,000
7A	1	1	58	SF	14.2	0.24	$265,000
7B	2	1	138	SF	42.8	0.31	$280,000
8	1	1	242	SF	76.5	0.32	$300,000
9	1	2	143	SF	88.6	0.62	$375,000
10A	1	3	56	SF	42.4	0.76	$425,000
10B	2	3	16	SF	15.2	0.95	$500,000
11	1	3	85	SF	72.7	0.86	$430,000
12	1	3	56	SF	55.3	0.58	$430,000
12	2	3	41	SF		0.58	$550,000
13	1	3	43	SF	20.2	0.47	$600,000
TOTAL			2,662		754.0	0.28	

Source: The Baldwin Company, 1991.

TABLE 4.1-2

SALT CREEK RANCH
MINIMUM ABSORPTION SCHEDULE

Neighborhood	Housing Units	Annual Absorption	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	156	60	60	60	36							
2	60	60	54	6								
2	7	(1)	6	1								
5A	100	75			3	75	22					
5B	111	100		100	11							
6	222	75	75	75	72							
7A	58	60		53	5							
7B	138	60			24	60	54					
8	242	50		50	50	50	50	42				
1	250	60					6	60	60	60	60	4
1	74	60			45	29						
1	17	(1)			10	7						
3	263	75			75	75	75	38				
4A	390	n/a		50	50	50	150	30	30	30		
4B	134	75			75	59						
9	143	50				50	50	43				
10A	56	50							50	6		
10B	16	25								9	7	
11	85	50									38	47
12	56	50								44	12	
12	41	25							25	16		
13	43	25									18	25
	2,662		195	395	456	455	407	213	165	165	135	76

The Baldwin Company, 1991.

4.2 PROJECT DEMOGRAPHICS

Since many of the impacts of the project are based on the population residing in Salt Creek Ranch, it was necessary to project population levels resulting from the absorption of new units. This includes total population, as well as enrollment so that the impacts on school districts could be assessed.

Table 4.2-1 shows the household size factors and student generation rates applied to the absorption of new units to calculate population projections for Salt Creek Ranch. Population per dwelling unit assumptions were obtain from Duane Bazzel, of the City of Chula Vista Planning Department in a letter to Thomas Bandy of Willdan Associates dated December 16, 1991. The rates, based on total inventory, are as follows: single-family homes 3.24; Duplex (Single Family - attached) homes 3.04; and apartment units 2.31.

Student generation rates, also shown in Table 4.2-1, were obtained in interviews with the Chula Vista Elementary School District and the Sweetwater Union High School District. Student generation rates estimate the number of elementary and high school students that would be expected to result from the addition of one new housing unit. Elementary and high school student generation rates used in this analysis were 0.30 and 0.29 students per housing unit, respectively.

Since some revenue line items are best estimated using the number of occupied housing units, so it was also necessary to make assumptions about the long term occupancy rates in Salt Creek Ranch. Single family occupancy rates were assumed to be 97 percent, while duplex and multifamily occupancy rates were assumed to be 95 percent and 90 percent, respectively. These assumptions were based on data from the 1990 Census, and our experience with Southern California real estate markets.

TABLE 4.2-1

SALT CREEK RANCH
SOCIOECONOMIC CHARACTERISTICS

Neighborhood	Unit Type	Average Market Price	Household Size	School-age Population	
				Grades 7-12	Grades K-6
1	SF	$280,000	3.240	0.29	0.30
1	SF	$265,000	3.240	0.29	0.30
1	SF	$265,000	3.240	0.29	0.30
2	SF	$280,000	3.240	0.29	0.30
2	SF	$265,000	3.240	0.29	0.30
2	SF	$265,000	3.240	0.29	0.30
3	SF	$210,000	3.240	0.29	0.30
4A	MF	$80,000	2.310	0.29	0.30
4B	SF	$190,000	3.240	0.29	0.30
5A	SF	$225,000	3.240	0.29	0.30
5B	Duplex	$160,000	3.040	0.29	0.30
6	SF	$225,000	3.240	0.29	0.30
7A	SF	$265,000	3.240	0.29	0.30
7B	SF	$280,000	3.240	0.29	0.30
8	SF	$300,000	3.240	0.29	0.30
9	SF	$375,000	3.240	0.29	0.30
10A	SF	$425,000	3.240	0.29	0.30
10B	SF	$500,000	3.240	0.29	0.30
11	SF	$430,000	3.240	0.29	0.30
12	SF	$430,000	3.240	0.29	0.30
12	SF	$550,000	3.240	0.29	0.30
13	SF	$600,000	3.240	0.29	0.30

Sources:
The Baldwin Company, 1991.
City of Chula Vista, Planning Department, 1991.
Chula Vista Elementary School District, Interview, 1991.
Sweetwater Union High School District, Interview, 1991.
Economic Strategies Group, 1991.

4.3 IMPACT ON THE CITY OF CHULA VISTA

This portion of the analysis will address the fiscal impact of the development on the operation and maintenance budget of the City. The analysis assumes the constraints and limitations imposed by existing State laws, including Proposition 13.

In general, the methodology employed in this analysis is driven by socioeconomic and other planning variables suitable for predicting revenues from a particular source or expenditures in a particular department. By applying the ratio of Salt Creek Ranch to the City of Chula Vista for each variable, the impact on revenues and expenditures as a result of the development can be projected.

Table 4.3-1 shows the set of socioeconomic and planning variables compiled for Chula Vista for the purpose of this impact analysis. Levels for each variable shown in the table are for January 1, 1991, with the exception of employment which is a 1988 estimate from SANDAG. Also an integral part of the expenditure side of this analysis is the calculation of total Equivalent Dwelling Units (EDUs), for the City of Chula Vista.

The EDU factor is based on the concept that public services are delivered to a community which consists of both residences and businesses. It is an adaptation of the equivalent connection unit concept used in utility rate analysis and utility billings. It provides a unit-cost measure with a common base for all activities, a measure computed by dividing expenditures by a base factor of EDUs.

TABLE 4.2-2

SALT CREEK RANCH
OCCUPIED HOUSING UNIT PROJECTION

Project Phase	Neighborhood	Long Run Occupancy	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11-15
1	2	97%	60	118	152	151	151	151	151	151	151	151	151
1	2	97%	54	58	58	58	58	58	58	58	58	58	58
1	2	97%	6	7	7	7	7	7	7	7	7	7	7
1	5A	97%			3	78	98	97	97	97	97	97	97
1	5B	95%		100	106	105	105	105	105	105	105	105	105
1	6	97%	75	148	218	215	215	215	215	215	215	215	215
1	7A	97%		53	56	56	56	56	56	56	56	56	56
1	7B	97%			24	83	135	134	134	134	134	134	134
1	8	97%		50	99	147	196	236	235	235	235	235	235
2	1	97%					6	66	124	182	240	243	243
2	1	97%			45	73	72	72	72	72	72	72	72
2	1	97%			10	17	16	16	16	16	16	16	16
2	3	97%			75	148	221	256	255	255	255	255	255
1&2	4A	90%		50	95	140	285	300	327	354	351	351	351
2	4B	97%			75	132	130	130	130	130	130	130	130
2	9	97%				50	99	140	139	139	139	139	139
3	10A	97%							50	55	54	54	54
3	10B	97%								9	16	16	16
3	11	97%									38	84	82
3	12	97%								44	55	54	54
3	12	97%							25	40	40	40	40
3	13	97%									18	42	42
	TOTAL		195	584	1,023	1,460	1,850	2,041	2,197	2,355	2,483	2,555	2,553

Source: Economic Strategies Group, 1991.

TABLE 4.2-3

SALT CREEK RANCH
POPULATION PROJECTION

Project Phase	Neigh-borhood	Population per Occupied Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11-15
1	2	3.34	200	395	509	506	506	506	506	506	506	506	506
1	2	3.34	180	195	194	194	194	194	194	194	194	194	194
1	2	3.34	20	23	23	23	23	23	23	23	23	23	23
1	5A	3.34	0	0	10	260	326	324	324	324	324	324	324
1	5B	3.20	0	320	339	338	338	338	338	338	338	338	338
1	6	3.34	251	494	727	720	720	720	720	720	720	720	720
1	7A	3.34	0	177	188	188	188	188	188	188	188	188	188
1	7B	3.34	0	0	80	278	453	447	447	447	447	447	447
1	8	3.34	0	167	329	491	653	789	784	784	784	784	784
2	1	3.34	0	0	0	0	20	220	414	609	803	811	810
2	1	3.34	0	0	150	243	240	240	240	240	240	240	240
2	1	3.34	0	0	33	56	55	55	55	55	55	55	55
2	3	3.34	0	0	251	494	737	856	852	852	852	852	852
1&2	4A	2.57	0	128	244	359	732	770	840	909	901	901	901
2	4B	3.34	0	0	251	440	434	434	434	434	434	434	434
2	9	3.34	0	0	0	167	329	468	463	463	463	463	463
3	10A	3.34	0	0	0	0	0	0	167	182	181	181	181
3	10B	3.34	0	0	0	0	0	0	0	30	53	52	52
3	11	3.34	0	0	0	0	0	0	0	0	127	280	275
3	12	3.34	0	0	0	0	0	0	0	147	183	181	181
3	12	3.34	0	0	0	0	0	0	84	134	133	133	133
3	13	3.34	0	0	0	0	0	0	0	0	60	142	139
	TOTAL		651	1,899	3,328	4,757	5,948	6,572	7,073	7,579	8,009	8,249	8,240

Source: *Economic Strategies Group, 1991.*

TABLE 4.2-4

SALT CREEK RANCH
ELEMENTARY SCHOOL ENROLLMENT
(Grades K-6)

Project Phase	Neighborhood	Elementary Students per Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11-15
1	2	0.30	19	37	47	47	47	47	47	47	47	47	47
1	2	0.30	17	18	18	18	18	18	18	18	18	18	18
1	2	0.30	2	2	2	2	2	2	2	2	2	2	2
1	5A	0.30	0	0	1	24	30	30	30	30	30	30	30
1	5B	0.30	0	32	33	33	33	33	33	33	33	33	33
1	6	0.30	23	46	67	67	67	67	67	67	67	67	67
1	7A	0.30	0	16	17	17	17	17	17	17	17	17	17
1	7B	0.30	0	0	7	26	42	41	41	41	41	41	41
1	8	0.30	0	15	30	45	60	73	73	73	73	73	73
2	1	0.30	0	0	0	0	2	20	38	56	74	75	75
2	1	0.30	0	0	14	22	22	22	22	22	22	22	22
2	1	0.30	0	0	3	5	5	5	5	5	5	5	5
2	3	0.30	0	0	23	46	68	79	79	79	79	79	79
1&2	4A	0.30	0	17	32	47	95	100	109	118	117	117	117
2	4B	0.30	0	0	23	41	40	40	40	40	40	40	40
2	9	0.30	0	0	0	15	30	43	43	43	43	43	43
3	10A	0.30	0	0	0	0	0	0	15	17	17	17	17
3	10B	0.30	0	0	0	0	0	0	0	3	5	5	5
3	11	0.30	0	0	0	0	0	0	0	0	12	26	26
3	12	0.30	0	0	0	0	0	0	0	14	17	17	17
3	12	0.30	0	0	0	0	0	0	8	12	12	12	12
3	13	0.30	0	0	0	0	0	0	0	0	6	13	13
	TOTAL		61	183	317	455	578	637	687	737	777	799	799

Source: Economic Strategies Group, 1991.

TABLE 4.2-5

SALT CREEK RANCH
HIGH SCHOOL ENROLLMENT
(Grades 7-12)

Project Phase	Neighborhood	High School Students per Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11-15
1	2	0.29	18	35	46	45	45	45	45	45	45	45	45
1	2	0.29	16	17	17	17	17	17	17	17	17	17	17
1	2	0.29	2	2	2	2	2	2	2	2	2	2	2
1	5A	0.29	0	0	1	23	29	29	29	29	29	29	29
1	5B	0.29	0	31	32	32	32	32	32	32	32	32	32
1	6	0.29	22	44	65	64	64	64	64	64	64	64	64
1	7A	0.29	0	16	17	17	17	17	17	17	17	17	17
1	7B	0.29	0	0	7	25	41	40	40	40	40	40	40
1	8	0.29	0	15	29	44	58	71	70	70	70	70	70
2	1	0.29	0	0	0	0	2	20	37	54	72	73	73
2	1	0.29	0	0	13	22	21	21	21	21	21	21	21
2	1	0.29	0	0	3	5	5	5	5	5	5	5	5
2	3	0.29	0	0	22	44	66	77	76	76	76	76	76
1&2	4A	0.29	0	16	31	45	92	97	105	114	113	113	113
2	4B	0.29	0	0	22	39	39	39	39	39	39	39	39
2	9	0.29	0	0	0	15	29	42	41	41	41	41	41
3	10A	0.29	0	0	0	0	0	0	15	16	16	16	16
3	10B	0.29	0	0	0	0	0	0	0	3	5	5	5
3	11	0.29	0	0	0	0	0	0	0	0	11	25	25
3	12	0.29	0	0	0	0	0	0	0	13	16	16	16
3	12	0.29	0	0	0	0	0	0	7	12	12	12	12
3	13	0.29	0	0	0	0	0	0	0	0	5	13	12
	TOTAL		58	176	307	439	559	618	662	710	748	771	770

Source: Economic Strategies Group, 1991.

An EDU is equivalent to one residential unit. The total number of residential EDUs is calculated by dividing the population by the average persons per household. Businesses are factored in by dividing total local employment by the average persons per household as shown in Table 4.3-1. The residential EDUs (51,671) plus the business EDUs (17,539) make up the total EDUs in the City of Chula Vista (69,210).

4.3.1 Revenues

With two exceptions, revenue information for the City of Chula Vista included in this analysis is based on actual fiscal year 1990-91 data obtained from the Schedule of Revenues. Revenues from the Ordinance Violations and Cigarette Tax were based on 1991-92 revenue estimates of $100,000 and $122,000, respectively as recommended by the City of Chula Vista Department of Finance. Accordingly, results of the impact analysis are expressed on constant 1991 dollars. However, both the general rate of inflation and property value appreciation rates will have an effect on the results of the analysis relative to Proposition 13. For this analysis, both rates are assumed to be 4.5 percent per annum.

Table 4.3-2 displays the current General Fund revenue information for the City of Chula Vista by source. Also shown in this table are the assumptions made to estimate the generation of revenues resulting from the Salt Creek Ranch development. Four sources of revenue are explicitly calculated based on current tax regulations: property tax, property transfer tax, franchise taxes, and utility taxes. Calculation of these revenues is detailed in the text below. Six sources of revenues were identified as not being directly impacted by development in Salt Creek Ranch, including: current unsecured property taxes; delinquent property taxes; transient lodging; business licenses; other revenue from other agencies; and other revenues. Most of these revenues are either from sources which would be unaffected by any specific development, or they are excluded because of the purely residential composition of Salt Creek Ranch. The remaining revenue sources, including sales tax, are estimated on a per-capita basis.

Property Tax

Property tax is a function of the property tax rate and the total assessed value of the development. The property tax rate limit of one percent of total assessed value (TAV) is shared out to jurisdictions according to

Annual Tax Increment ratios. This analysis utilizes a rate of 13.85 percent, the average ratio of TAV for Salt Creek Ranch.

Due to Proposition 13, assessed value can only increase at the rate of 2 percent per year, unless the property is sold. Therefore, the calculation of projected assessed value must take into consideration not only original sales price and the rate of inflation, but also the rate a which housing units are re-sold. If we assume that the rate of housing appreciation is equal to the rate of inflation, then as time goes on, the total assessed value of any property will decline unless the rate of inflation is less than 2 percent or all properties sell each year. In order to simulate this process, it is necessary to determine the rate of turnover for each component of development. Turnover rates developed by Angus McDonald & Associates for the Macroanalysis for Otay Ranch were used in this analysis for Salt Creek Ranch. Table 4.3-3 shows the application of these rates in terms of the number of housing unit re-sales in Salt Creek Ranch.

When a unit is re-sold, its increase in assessed value is equal to the difference between 1) the selling price, and 2) its previous selling price inflated at 2% per year. Therefore, it is necessary to determine the period of time since a unit was last sold. The reciprocal of the turnover rate yields the average time since a unit was last sold— a seven percent turnover rate implying resale every 14.3 years. However, this rate cannot be used in the early years of a development since none of the units will be old enough to have been sold 14 years ago. As a result, no re-sale of units occurs in the first year of development, and the average age at resale increases with the age of the development until the later years of the analysis. The total number of sales (re-sales) stabilizes in the post development period at 226 units annually, or about 8.5 percent of the project inventory.

Total assessed value becomes the sum of the value of each unit at the original time of sale, plus the increase in assessed value at the time of resale, using prices inflated at the rate of 4.5 percent per year. Therefore the projections of total assessed value must be deflated at the rate of inflation to keep the analysis in constant 1991 dollars. This method represents a conservative approach to property value appreciation which could tend to understate resulting property tax revenues.

Table 4.3-4 shows the calculation of total assessed value for Salt Creek Ranch in thousands of dollars based on the assumptions outlined above. In constant dollars the total assessed value of Salt Creek Ranch peaks in

the last of year of development (year 10), at over $651 million. The assessed value then begins to gradually decline as the rate of inflation begins to outstrip the 2 percent increase in value experienced on most units. Using the current allocation of property tax dollars to the City of Chula Vista, the peak year would generate about $902,500 in property tax revenues for the City.

Sales Tax

Sales tax generated by residents of Salt Creek Ranch is based on $42.43 per person, which is based on 50 percent of the total sales tax collections in the City of Chula Vista divided by the resident population. The remaining 50 percent of sales tax collections is assumed to be a function of retail development, of which Salt Creek Ranch has none. However, using the rate of $42.43 per person, residents of Salt Creek Ranch will still generate about $350,000 of sales tax at build-out.

Property Transfer Tax

Sales of real property in San Diego County are taxed at the rate of $1.10 per $1, 000 of the sales price. Chula Vista would receive 50 percent of revenues resulting from this tax. Table 4.3-5 shows the sales and re-sales of housing units in Salt Creek Ranch. These sales multiplied by the average market price for that year, and the tax rate, yield projections of property transfer taxes resulting from Salt Creek Ranch as shown in Table 4.3-6. As with property taxes, the total value of the collections must be deflated at the rate of inflation to retain constant 1991 dollars in the analysis.

Franchise Taxes

Calculation of franchise taxes for Salt Creek Ranch are based on the assumptions established by Angus McDonald & Associates in Macroanalysis report. Franchise taxes in the City of Chula Vista are collected for sales of natural gas, electricity, cable television, and trash collection. Gross revenues for each dwelling unit were estimated by Angus McDonald be $250 for gas, $469 for electricity, $252 for cable television, and $144 for trash collection. These revenues are currently taxed at a rate of 2.0 percent, 1.1 percent, 3.0 percent, and 7.0 percent, respectively. For Salt Creek Ranch this translates into about $65,200 annually for the City of Chula Vista when the development is complete.

Utility Users' Taxes

Calculation of utility users' taxes for Salt Creek Ranch are based on the assumptions established by Angus McDonald & Associates in Macroanalysis report. Utility users' taxes in the City of Chula Vista are collected for the use of natural gas, electricity, and telephone service. The tax is based on 5.0 percent of telephone revenues, $0.00919 per therm of natural gas, and $0.0025 per kilowatt of electricity. Annual consumption of these utilities by a residential unit was determined by Angus McDonald to be $540 of telephone revenue, 480 therms of gas, and 4,800 kilowatts of electricity. In the case of Salt Creek Ranch utility users' taxes generate a total of over $110,800 annually for the City of Chula Vista in the build-out stage of the project.

Total Revenues

Combining the revenue generation of the four individually modeled sources with the per capita based revenues yields total annual revenue resulting from Salt Creek Ranch. As shown in Table 4.3-7, total revenues grow from $186,962 in the first year of the project to a high of about $1,897,698 in year 10. In latter years, the total revenue declines slightly due to the slow decline of real assessed value.

4.3.2 Expenditures

Expenditure information for the City of Chula Vista included in this analysis is based on actual data for fiscal year 1990-91 obtained from the Schedule of Expenditures. General fund expenditures by department are used to quantify the operation and maintenance costs of providing services. The projection of costs in this analysis assumes no significant, or predictable, changes in the service standards of the City of Chula Vista.

Table 4.3-8 displays the current General Fund expenditure information for the City of Chula Vista by department. Cost items are separated into two groups, Line Operations and Overhead Functions. Overhead functions include all general government functions, as well as the building and custodial maintenance functions of public works. These items currently represent 17.45 percent of all city expenditures, or 21.1 percent of the total Line Operations. So as not to burden Salt Creek Ranch with overhead charges for departments not impacted by the development, overhead cost are calculated as 21.1 percent of the Line Operation impact of the project.

The impact of Salt Creek Ranch on most of the Line Operations are estimated using population and the Equivalent Dwelling Unit (EDU) measure, discussed previously. However, for some public services, such as street maintenance, specific factors like miles of street are acknowledged as preferable indicators of cost.

Not included in the analysis are departments which are generally self-supporting, or whose fees are calculated to exactly cover the cost of providing the services. Specifically, these include: Economic and Community Development; Building and Housing; and Sanitary Sewer and Waste Water Maintenance departments. The following sections review the impact assumptions for the Line Operations which would be impacted by Salt Creek Ranch.

Planning

Expenditures for non-current planning activities are projected using EDUs. As shown in Table 4.3-8, these planning activities currently require expenditures of $612,355 annually, or $8.85 per EDU city-wide. This rate translates into an impact of $23,559 per year for Salt Creek Ranch when fully developed (year 10 and beyond).

Police and Fire Protection

Expenditure projections for police and fire protection are projected using EDUs. As shown in Table 4.3-8, Police Protection and Animal Control services are $212.19 per EDU, resulting in an annual impact of about $564,850 in the build-out stage of the project. Fire Protection is estimated to cost $83.64 per EDU, translating into an annual impact of about $222,650 for Salt Creek Ranch at buildout.

TABLE 4.3-1

SALT CREEK RANCH FISCAL IMPACT
CITY OF CHULA VISTA
ANALYSIS PARAMETERS

GENERAL

Chula Vista	
Population	139,150
Occupied Housing Units	51,570
Employment (1988)	47,233
Street Miles	281.5
Total ADTs	1,148,035
Park Acres	317.4
Open Space Acres	700.0
Salt Creek Ranch	
Park Acres	24.72
Public Street Miles	29.45
Open Space Acres	357.65

EQUIVALENT DWELLING UNIT CALCULATION

Residential EDUs	=	# of Residents / Persons per Dwelling Unit	=	139,150 / 2.693	=	51,671
Nonresidential EDUs	=	# of Locally Employed / Persons per Dwelling Unit	=	47,233 / 2.693	=	17,539
Total EDUs					=	69,210

Sources:
California Department of Finance, 1991.
SANDAG, Series 7 Projections, 1989.
City of Chula Vista, Planning Department, 1991.
City of Chula Vista, Transportation Department, 1991.
Government Finance Review, "The Equivalency Factor", 1990.
Economic Strategies Group, 1991.

TABLE 4.3-2

SALT CREEK RANCH FISCAL IMPACT
REVENUE GENERATION ASSUMPTIONS

	City of Chula Vista Actual 90-91 Revenues		
	Amount	Percent	Salt Creek Ranch Generation
Property Taxes			
Current Secured	7,669,922.70	19.67%	Based on 13.85% of 1% of TAV
Current Unsecured	432,372.08	1.11%	Not Applicable
Delinquent	271,190.92	0.70%	Not Applicable
Other Taxes			
Sales & Use Taxes (1)	11,808,279.30	30.28%	$42.43 per Capita
Franchise Fees	1,664,911.49	4.27%	Based on Gross Revenue per Unit and Tax Rates
Transient Lodging	1,185,488.67	3.04%	Not Applicable
Property Transfer	251,492.47	0.64%	Based on Turn-over Driven Simulation
Utility Taxes	2,628,419.54	6.74%	Based on Consumption/Revenues and Tax Rates
Licenses and Permits			
Business Licenses	652,738.67	1.67%	Not Applicable
Animal Licenses	51,840.50	0.13%	$0.373 per Capita
Bicycle Licenses	16,106.05	0.04%	$0.116 per Capita
Fines, Penalities and Foreitures			
Ordinance Violations	154,099.41	0.40%	$0.720 per Capita (1991-92 @ $100,000)
Library Fines	93,343.73	0.24%	$0.671 per Capita
Use of Money	684,880.00	1.76%	Based on 7 percent of the previous year net fiscal impact for Salt Creek Ranch (if positive).
Revenues from Other Agencies			
State HOPTR	194,890.38	0.50%	$1.401 per Capita
Motor Vehicle Licenses	4,718,623.64	12.10%	$33.91 per Capita
Cigarette Tax	222,994.05	0.57%	$0.880 per Capita (1991-92 @ $122,000)
Gas Tax (2)			$10.71 per Capita
Other	259,660.00	0.67%	Not Applicable
Charges for Current Services			
Swimming Pools	107,308.40	0.28%	$0.771 per Capita
Recreation Programs	18,009.72	0.05%	$0.129 per Capita
Park Reservation Fees	19,465.00	0.05%	$0.140 per Capita
Other Park & Recreation Fees	8,212.62	0.02%	$0.059 per Capita
Misc. Service Charges	6,721.09	0.02%	$0.048 per Capita
Other Revenues	5,880,509.00	15.08%	Not Applicable
Total Recurring Fund Revenue	39,001,479.43	100.00%	

Sources: City of Chula Vista, Statement of Revenue, 1991.
Economic Strategies Group, 1991.

16-Jan-92

(1) Based on 50 percent of total collections.
(2) Based on the 70 percent of $15.30 per capita Gas Tax revenues allocated to the General Fund.

Public Works

The basis for allocating the cost of Public Works administration included only Operations Administration ($370,819), and Communications ($172,04-5), resulting in an allocation rate of $7.84 per EDU city-wide. Street and traffic operation and maintenance costs are projected using street miles and average daily trips (ADTs) as per the analyses completed by John McTighe for the City of Chula Vista. Cost factors were updated based on actual 1990-91 expenditures. Expenditures in the areas of Traffic Signal Maintenance, Street Sweeping, and Street Tree Maintenance are projected based purely on total street miles. Using Chula Vista's total of 281.5 street miles, these services are projected to cost $3,168, $1,317, and $1,885 per mile, respectively. For Salt Creek Ranch this translates into total expenditures of about $187 thousand annually at build-out of the project based on an estimated of 29.45 miles of public roads.

Traffic Operations and Street Maintenance functions are projected based 50 percent on street miles and 50 percent on average daily trip rates. Trip generation rates for Salt Creek Ranch were estimated using the projected mix of units by type, and the Traffic Generation Rates for the San Diego Region issued by SANDAG. Based on these trip standards, and the number of street miles, Salt Creek Ranch will require annual expenditures of about $105,250 for traffic and street operation and maintenance. Note that street maintenance costs do not enter the impact analysis until the seventh year of the project since no maintenance will be required before then.

Parks, Recreation and Library

The expenditure cost allocation assumptions for these departments are as follows:

- Allocation of park administration and maintenance costs are based on the total number of park acres
- Administration costs for open space are not applicable because they will be paid through a lighting and landscaping district.
- All recreation and library expenditures are on a per-capita basis.

TABLE ...3-3

SALT CREEK RANCH
TURNOVER OF RESIDENTIAL UNITS

Project Phase	Neighborhood	Turnover Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1	2	7.0%	0	4	8	11	11	11	11	11	11	11	11	11	11	11	11
1	2	7.0%	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1	2	7.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	5A	7.0%	0	0	0	0	5	7	7	7	7	7	7	7	7	7	7
1	5B	12.5%	0	0	13	14	14	14	14	14	14	14	14	14	14	14	14
1	6	7.0%	0	5	11	16	16	16	16	16	16	16	16	16	16	16	16
1	7A	7.0%	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4
1	7B	7.0%	0	0	0	2	6	10	10	10	10	10	10	10	10	10	10
1	8	7.0%	0	0	4	7	11	14	17	17	17	17	17	17	17	17	17
2	1	7.0%	0	0	0	0	0	0	5	9	13	17	18	18	18	18	18
2	1	7.0%	0	0	0	3	5	5	5	5	5	5	5	5	5	5	5
2	1	7.0%	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
2	3	10.0%	0	0	0	8	15	23	26	26	26	26	26	26	26	26	26
1&2	4A	12.5%	0	0	6	13	19	38	41	45	49	49	49	49	49	49	49
2	4B	10.0%	0	0	0	8	13	13	13	13	13	13	13	13	13	13	13
2	9	7.0%	0	0	0	0	4	7	10	10	10	10	10	10	10	10	10
3	10A	7.0%	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4
3	10B	7.0%	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
3	11	7.0%	0	0	0	0	0	0	0	0	0	3	6	6	6	6	6
3	12	7.0%	0	0	0	0	0	0	0	0	3	4	4	4	4	4	4
3	12	7.0%	0	0	0	0	0	0	0	2	3	3	3	3	3	3	3
3	13	7.0%	0	0	0	0	0	0	0	0	0	1	3	3	3	1	1
	TOTAL		0	14	50	89	128	167	185	198	211	220	226	226	226	226	226

Source: Economic Strategies Group, 1991.

TABLE 4.3-4

SALT CREEK RANCH
ASSESSED VALUE
(000's of 1991 $)

Project Phase	Neighborhood	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1	2	16,800	35,507	47,825	48,991	50,261	51,642	53,141	54,767	56,528	58,433	60,493	62,718	65,119	67,706	70,493
1	2	14,310	16,354	16,730	17,142	17,590	18,078	18,610	19,187	19,813	20,491	21,226	22,020	22,877	23,802	24,800
1	2	1,590	1,914	1,958	2,006	2,058	2,115	2,177	2,245	2,318	2,397	2,483	2,576	2,676	2,784	2,901
1	5A			737	20,877	27,522	28,191	28,918	29,708	30,564	31,492	32,496	33,582	34,755	36,021	37,386
1	5B		31,350	35,827	36,736	37,770	38,938	40,251	41,719	43,354	45,058	46,949	49,040	51,346	53,882	56,663
1	6	16,875	35,666	54,971	56,311	57,769	59,353	61,073	62,938	64,958	67,144	69,506	72,057	74,809	77,775	80,969
1	7A		8,862	9,965	10,194	10,445	10,718	11,016	11,340	11,692	12,073	12,487	12,934	13,418	13,941	14,505
1	7B			6,945	26,056	44,485	45,567	46,744	48,022	49,408	50,911	52,538	54,297	56,198	58,250	60,463
1	8		14,630	30,921	48,325	66,950	83,992	86,280	88,762	91,449	94,357	97,501	100,896	104,560	108,509	112,762
2	1					2,003	23,924	47,334	72,374	99,201	103,630	106,593	109,801	113,269	117,016	121,060
2	1			13,022	22,467	22,983	23,545	24,159	24,826	25,551	26,338	27,191	28,115	29,114	30,194	31,360
2	1			2,894	5,168	5,287	5,416	5,557	5,711	5,877	6,058	6,254	6,467	6,697	6,945	7,213
2	3			17,199	36,362	56,869	68,754	70,701	72,856	75,232	77,847	80,717	83,861	87,296	91,044	95,126
1&2	4A		4,180	8,828	13,798	29,101	33,034	37,303	41,944	43,432	45,085	46,914	48,932	51,152	53,589	56,257
2	4B			30,713	57,778	59,176	60,737	62,473	64,396	66,521	68,861	71,433	74,253	77,338	80,706	84,377
2	9				10,841	22,913	34,078	34,909	35,813	36,796	37,862	39,019	40,272	41,628	43,093	44,675
3	10A							27,999	32,270	33,012	33,823	34,708	35,672	36,720	37,858	39,094
3	10B								5,267	9,853	10,079	10,326	10,594	10,887	11,204	11,549
3	11									29,722	70,505	72,121	73,884	75,803	77,891	80,158
3	12								35,927	47,399	48,489	49,679	50,976	52,389	53,924	55,592
3	12							13,837	23,804	24,351	24,947	25,597	26,304	27,072	27,906	28,810
3	13									12,799	32,486	33,231	34,043	34,927	35,888	36,932
Undeveloped Land (1)		11,725	10,909	9,674	7,871	6,393	5,342	4,074	2,784	1,248	0	0	0	0	0	0
TOTAL		61,300	159,371	288,209	420,923	519,575	593,426	676,554	776,657	881,078	968,369	999,463	1,033,293	1,070,049	1,109,929	1,153,145
Deflated to 1991 $		61,300	152,508	263,922	368,853	435,696	476,195	519,523	570,710	619,561	651,619	643,582	636,714	630,969	626,302	622,667

Inflation/Deflation Rate: 4.5%

Source: Economic Strategies Group, 1991.

(1) Based on the value of the 754 acres of land to be consumed by residential development.

These assumptions, actual City-wide expenditures, and the ratio of Salt Creek Ranch to the City of Chula for each variable yield projected expenditures. Currently, the City of Chula Vista has 317.4 acres of park, about 700 acres of open space, and a population of 139,150, as shown in Table 4.3-1. Salt Creek Ranch will be responsible for 24.72 acres of park, 3,517.65 acres of open space and a total population of about 8,240. This results in total annual expenditures for Salt Creek Ranch for parks, recreation and library of about $406,134 annually when the development is complete.

Total Expenditures

Total City operation and maintenance expenditures resulting from Salt Creek Ranch are projected to just exceed $1.85 million dollars annually, as shown in Table 4.3-9. Expenditures are projected to increase steadily during the development phase beginning with about $132,912 dollars in the first year, and swelling to over $1.26 million by year 5. Expenditures reach a plateau in year 11, after the development period is over.

4.3.3 Net Fiscal Impact

Table 4.3-10 shows the net fiscal impact of Salt Creek Ranch on the City of Chula Vista during its first fifteen years. Revenues are projected to exceed expenditures through the first six years of the project -- prior to street maintenance costs beginning in year seven. The net balance for year seven may be slightly negative, but is projected to become positive again in years eight through ten. This is due to the high value of the housing units added during that period. Beyond the development period (beginning in year 11), the net fiscal balance may drop slightly negative again as inflation out-steps the increase in the assessed value of the project.

The annual net balances range from a gain of $133,705 in year 4, to a loss of $24,371 in year 15. The total accumulated net fiscal balance of the Salt Creek Ranch for the fifteen year period covered by the analysis is estimated at $564,769.

TABLE 4.3-5

SALT CREEK RANCH
TURNOVER OF RESIDENTIAL UNITS

Project Phase	Neighborhood	Turnover Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1	2	7.0%	60	64	44	11	11	11	11	11	11	11	11	11	11	11	11
1	2	7.0%	54	10	4	4	4	4	4	4	4	4	4	4	4	4	4
1	2	7.0%	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1	5A	7.0%			3	75	27	7	7	7	7	7	7	7	7	7	7
1	5B	12.5%		100	24	14	14	14	14	14	14	14	14	14	14	14	14
1	6	7.0%	75	80	83	16	16	16	16	16	16	16	16	16	16	16	16
1	7A	7.0%		53	9	4	4	4	4	4	4	4	4	4	4	4	4
1	7B	7.0%			24	62	60	10	10	10	10	10	10	10	10	10	10
1	8	7.0%		50	54	57	61	56	17	17	17	17	17	17	17	17	17
2	1	7.0%					6	60	65	69	73	21	18	18	18	18	18
2	1	7.0%			45	32	5	5	5	5	5	5	5	5	5	5	5
2	1	7.0%			10	8	1	1	1	1	1	1	1	1	1	1	1
2	3	10.0%			75	83	90	61	26	26	26	26	26	26	26	26	26
1&2	4A	12.5%		50	56	63	169	68	71	75	49	49	49	49	49	49	49
2	4B	10.0%			75	67	13	13	13	13	13	13	13	13	13	13	13
2	9	7.0%				50	54	50	10	10	10	10	10	10	10	10	10
3	10A	7.0%							50	10	4	4	4	4	4	4	4
3	10B	7.0%								9	8	1	1	1	1	1	1
3	11	7.0%									38	50	6	6	6	6	6
3	12	7.0%								44	15	4	4	4	4	4	4
3	12	7.0%							25	18	3	3	3	3	3	3	3
3	13	7.0%									18	26	3	3	3	3	3
	TOTAL		195	409	506	544	535	380	350	363	346	296	226	226	226	226	226

Source: Economic Strategies Group, 1991.

TABLE 4.3-6

SALT CREEK RANCH
CHULA VISTA PROPERTY TRANSFER TAX

Project Phase	Neighborhood	1991 Value	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1	2	$280,000	9,656	10,797	7,803	2,005	2,096	2,190	2,289	2,392	2,499	2,612	2,729	2,852	2,980	3,114	3,255
1	2	$265,000	8,225	1,557	699	730	763	797	833	871	910	951	993	1,038	1,085	1,134	1,185
1	2	$265,000	914	226	81	85	89	93	97	102	106	111	116	121	127	132	138
1	5A	$225,000	0	0	424	11,099	4,235	1,128	1,179	1,232	1,287	1,345	1,406	1,469	1,535	1,604	1,676
1	5B	$300,000	0	18,018	4,425	2,730	2,853	2,981	3,116	3,256	3,402	3,555	3,715	3,883	4,057	4,240	4,431
1	6	$225,000	9,699	10,845	11,651	2,293	2,397	2,504	2,617	2,735	2,858	2,986	3,121	3,261	3,408	3,561	3,722
1	7A	$160,000	0	5,093	875	426	445	465	486	508	531	555	580	606	633	662	691
1	7B	$265,000	0	0	3,992	10,721	10,876	1,834	1,916	2,002	2,092	2,186	2,285	2,388	2,495	2,607	2,725
1	8	$280,000	0	8,409	9,402	10,468	11,611	11,231	3,550	3,710	3,877	4,051	4,234	4,424	4,623	4,831	5,049
2	1	$280,000	0	0	0	0	1,151	12,117	13,543	15,072	16,711	5,075	4,374	4,570	4,776	4,991	5,216
2	1	$265,000	0	0	7,485	5,588	941	983	1,027	1,074	1,122	1,172	1,225	1,280	1,338	1,398	1,461
2	1	$265,000	0	0	1,663	1,338	216	226	236	247	258	269	281	294	307	321	336
2	3	$210,000	0	0	9,885	11,363	12,954	9,100	4,134	4,320	4,514	4,717	4,930	5,151	5,383	5,626	5,879
2	4A	$80,000	0	2,402	2,824	3,279	9,253	3,868	4,266	4,693	3,188	3,331	3,481	3,638	3,801	3,972	4,151
2	4B	$375,000	0	0	17,652	16,356	3,444	3,599	3,761	3,930	4,107	4,292	4,485	4,687	4,898	5,118	5,349
2	9	$190,000	0	0	0	6,231	6,967	6,804	1,424	1,488	1,555	1,624	1,698	1,774	1,854	1,937	2,024
3	10A	$430,000	0	0	0	0	0	0	16,092	3,195	1,378	1,440	1,505	1,572	1,643	1,717	1,794
3	10B	$430,000	0	0	0	0	0	0	0	3,027	2,682	411	430	449	469	491	513
3	11	$550,000	0	0	0	0	0	0	0	0	17,083	23,329	2,921	3,052	3,190	3,333	3,481
3	12	$600,000	0	0	0	0	0	0	0	20,649	7,395	2,009	2,099	2,194	2,293	2,396	2,503
3	12	$425,000	0	0	0	0	0	0	7,953	5,900	997	1,042	1,089	1,138	1,189	1,242	1,298
3	13	$500,000	0	0	0	0	0	0	0	0	7,356	11,215	1,343	1,404	1,467	1,533	1,602
	TOTAL:		$28,493	$57,347	$78,861	$84,714	$70,290	$59,921	$68,518	$80,400	$85,908	$78,280	$49,039	$51,246	$53,552	$55,962	$58,480
	Deflated to 1991 $:		$28,493	$54,877	$72,215	$74,234	$58,943	$48,083	$52,615	$59,081	$60,409	$52,675	$31,578	$31,578	$31,578	$31,578	$31,578

Inflation / Deflation Rate: 4.5%

Source: Economic Strategies Group, 1991.

4.4 OTAY WATER DISTRICT

Order of magnitude operation and maintenance fiscal impacts of Salt Creek Ranch on the Otay Water District were also projected as part of this analysis. Table 4.4-1 shows the basic characteristics of the District, as well as its operating revenues and expenditures based on water operations only. Sewer services in the Salt Creek Ranch area will be provided by the City of Chula Vista. All cost and revenue allocation projections are based on the fact that 51 percent of water consumption in the District is by residences.

Allocation of revenues accruing to the Otay Water District from development in Salt Creek Ranch are based on current average sales per household of $459.76 annually. Cost allocation factors for most expenditure classes are based on residential consumption expressed in terms of dollars per average daily gallons consumed. However, the share of expenses attributable to paid-services billed through work orders are calculated as follows: payroll allocated to work orders is assumed to be 27.6 percent of total payroll as per 1990-91 actual performance. Reimbursed overhead and equipment expenditures are projected to be 43.0 percent and 7.5 percent of work order-related payroll, also based on actual 1990-91 numbers.

Application of these revenue and cost allocation factors to development in Salt Creek Ranch result in a net fiscal loss of about $5,000 annually at the build-out stage of the project (see Table 4.4-2). However, since this represents only about 0.4 percent of the revenues and costs resulting from the development, it is reasonable to expect that virtually no net impact will be experienced. This is also consistent with comments made by Otay Water District staff who indicated that rates would be adjusted as needed to balance revenues and operation and maintenance expenditures.

4.5 CHULA VISTA ELEMENTARY SCHOOL DISTRICT

Operation and maintenance impacts on the Chula Vista Elementary School District were projected based on the number of students generated by development of Salt Creek Ranch. The methodology used to project school enrollment was described in Section 4.2. Revenues and expenditures per student for the District were calculated using 1990-91 average daily attendance of 17,501, and actual revenues and expenditures for 1990-91 as shown in the 1991-92 Budget. Further, Chula Vista Elementary School District staff were consulted to discuss which, if any, revenue or expenditure

items would not be sensitive to the number of students from Salt Creek Ranch.

Projections of revenues accrued due to Salt Creek Ranch are based on per student rates for revenue limit sources, Federal revenue, and a portions of other State revenues totalling $3,351 per annum, as shown in Table 4.5-1. Revenue limit sources are not directly affected by assessed value in the District since revenues in this category are limited by the State. Certain revenue sources were excluded from the projections because they would not impacted by an increase in the student population.

Allocation of expenditures to development in Salt Creek Ranch was also based on per student rates with the exception of capital outlay and other outgo. These items were identified by staff as not being impacted by the number of children resulting from Salt Creek Ranch, especially in light of the capital improvement funding that is being established. Total per student expenditures were estimated to be $3,400 annually as shown in Table 4.5-1.

The rate for revenues and expenditures per student multiplied by the number of elementary school children in Salt Creek Ranch at build-out, results in annual net fiscal loss of about $39,000. However, as shown in Table 4.5-2, this amount corresponds to about 1.5 percent of total revenues of $2.7 million.

4.6 SWEETWATER UNION HIGH SCHOOL DISTRICT

The impacts of Salt Creek Ranch on the operation and maintenance budget of the Sweetwater Union High School District were projected based on the projected number of high school students. The methodology used to project high school enrollment was described in Section 4.2. Per student revenues and expenditures for the District were calculated using 1990-91 average daily attendance of 27,894, and actual revenues and expenditures for 1990-91 as shown in Table 4.6-1.

Revenue streams resulting from Salt Creek Ranch are based on per student rates for revenue limit sources, Federal revenue, and portions of other State revenues totalling $4,120 per annum. Certain revenue sources were excluded from the projections because they would not be impacted by an increase in the student population.

Allocation of District expenditures resulting from development in Salt Creek Ranch was also based on per student rates with the exception of Capital Outlay and Other Outgo. Total per student expenditures were estimated to be $4,090 annually.

The rate for revenues and expenditures per student multiplied by the number of high school children in Salt Creek Ranch at build-out, results in annual net fiscal gain of about $23,000. However, as shown in Table 4.6-2 this amount corresponds to about 0.75 percent of total revenues of $3.2 million.

TABLE 4.3-7

SALT CREEK RANCH
CITY OF CHULA VISTA REVENUE IMPACT
1991 Dollars

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Property Taxes	$84,900	$211,224	$365,532	$510,862	$603,438	$659,531	$719,540	$790,433	$858,092	$902,493	$891,361	$881,849	$873,892	$867,428	$862,394
Current Secured	84,900	211,224	365,532	510,862	603,438	659,531	719,540	790,433	858,092	902,493	891,361	881,849	873,892	867,428	862,394
Other Taxes	$69,559	$175,724	$283,936	$376,757	$438,877	$467,613	$504,192	$543,016	$571,411	$578,821	$557,184	$557,184	$557,184	$557,184	$557,184
Sales & Use Taxes	27,622	80,575	141,207	201,840	252,374	278,850	300,107	321,577	339,822	350,005	349,623	349,623	349,623	349,623	349,623
Franchise Fees	4,979	14,914	26,113	37,285	47,239	52,097	56,093	60,126	63,392	65,229	65,171	65,171	65,171	65,171	65,171
Gas	975	2,921	5,114	7,302	9,251	10,203	10,985	11,775	12,415	12,775	12,763	12,763	12,763	12,763	12,763
Electricity	1,006	3,014	5,277	7,534	9,545	10,527	11,335	12,149	12,810	13,181	13,169	13,169	13,169	13,169	13,169
Cable	1,032	3,091	5,413	7,728	9,792	10,799	11,627	12,463	13,140	13,521	13,508	13,508	13,508	13,508	13,508
Trash	1,966	5,888	10,310	14,721	18,651	20,569	22,146	23,738	25,028	25,753	25,730	25,730	25,730	25,730	25,730
Transient Lodging	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Transfer	28,493	54,877	72,215	74,234	58,943	48,083	52,615	59,081	60,409	52,675	31,578	31,578	31,578	31,578	31,578
Utility Taxes	8,465	25,359	44,401	63,398	80,322	88,582	95,377	102,233	107,788	110,911	110,812	110,812	110,812	110,812	110,812
Licenses and Permits	$318	$929	$1,627	$2,326	$2,909	$3,214	$3,459	$3,706	$3,916	$4,034	$4,029	$4,029	$4,029	$4,029	$4,029
Business Licenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Animal Licenses	243	708	1,241	1,774	2,219	2,451	2,638	2,827	2,987	3,077	3,074	3,074	3,074	3,074	3,074
Bicycle Licenses	76	220	386	552	690	762	820	879	929	957	956	956	956	956	956
Fines, Penalties and Forefitures	$906	$2,642	$4,629	$6,617	$8,274	$9,142	$9,839	$10,542	$11,141	$11,474	$11,462	$11,462	$11,462	$11,462	$11,462
Ordinance Violations	469	1,367	2,396	3,425	4,283	4,732	5,093	5,457	5,766	5,939	5,933	5,933	5,933	5,933	5,933
Library Fines	437	1,274	2,233	3,192	3,991	4,410	4,746	5,086	5,374	5,535	5,529	5,529	5,529	5,529	5,529
Use of Money/Property	$0	$3,960	$6,830	$9,648	$10,782	$7,860	$6,356	$1,504	$2,755	$4,528	$5,450	$3,215	$2,392	$1,778	$1,282
Revenues from Other Agencies	$30,533	$89,065	$156,087	$223,108	$278,967	$308,233	$331,731	$355,463	$375,630	$386,886	$386,464	$386,464	$386,464	$386,464	$386,464
State HOPTR	912	2,660	4,663	6,665	8,333	9,207	9,909	10,618	11,221	11,557	11,544	11,544	11,544	11,544	11,544
Motor Vehicle Licenses	22,075	64,395	112,852	161,310	201,697	222,857	239,845	257,004	271,585	279,724	279,418	279,418	279,418	279,418	279,418
Cigarette Tax	573	1,671	2,929	4,186	5,234	5,783	6,224	6,670	7,048	7,259	7,251	7,251	7,251	7,251	7,251
Gas Tax	6,972	20,338	35,643	50,947	63,703	70,386	75,752	81,171	85,776	88,347	88,250	88,250	88,250	88,250	88,250
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Charges for Current Services	$747	$2,178	$3,817	$5,456	$6,822	$7,538	$8,113	$8,693	$9,186	$9,462	$9,451	$9,451	$9,451	$9,451	$9,451
Swimming Pools	502	1,464	2,566	3,668	4,586	5,067	5,453	5,843	6,175	6,360	6,353	6,353	6,353	6,353	6,353
Recreation Programs	84	245	429	614	767	848	912	978	1,033	1,064	1,063	1,063	1,063	1,063	1,063
Park Reservation Fees	91	266	466	666	833	920	990	1,061	1,121	1,155	1,154	1,154	1,154	1,154	1,154
Other Park & Recreation Fees	38	112	196	281	351	388	417	447	473	487	486	486	486	486	486
Misc. Service Charges	31	91	160	228	286	315	340	364	384	396	396	396	396	396	396
Total Recurring Revenues	$186,962	$485,722	$822,459	$1,134,774	$1,350,069	$1,463,130	$1,583,228	$1,713,358	$1,832,131	$1,897,698	$1,865,402	$1,853,655	$1,844,876	$1,837,796	$1,832,267

Sources: City of Chula Vista, Statement of Revenue, 1991.
Economic Strategies Group, 1991.

TABLE 4.3-8

SALT CREEK RANCH FISCAL IMPACT
COST ALLOCATION ASSUMPTIONS

	City of Chula Vista Actual 90-91 Expenditures		
	Amount	Percent	Salt Creek Ranch Allocation
OVERHEAD FUNCTIONS			
General Government	6,820,892	14.90%	18.0% of Line Operations
City Council	242,257	0.53%	
Boards and Commissions	37,250	0.08%	
Community Presentations	23,276	0.05%	
City Attorney	741,012	1.62%	
City Clerk / Elections	362,334	0.79%	
Administration	895,881	1.96%	
Managment Services	1,162,139	2.54%	
Personnel Operations	896,641	1.96%	
Finance / Purchasing	1,117,778	2.44%	
Insurance	789,029	1.72%	
Non-Departmental	553,295	1.21%	
Public Works	1,168,681	2.55%	3.1% of Line Operations
Building Maintenance	638,699	1.40%	
Custodial Maintenance	529,982	1.16%	
TOTAL	7,989,573	17.45%	21.1% of Line Operations
LINE OPERATIONS			
Economic and Community Development	940,351	2.05%	Not Applicable
Planning (Non-Current)	612,335	1.34%	$8.85 per EDU
Police / Animal Control	14,685,988	32.08%	$212.19 per EDU
Fire Protection	5,788,588	12.64%	$83.64 per EDU
Building and Housing	1,037,071	2.27%	Non-recurring
Public Works	7,944,759	17.35%	
Administration / Planning (1)	3,529,101	7.71%	$7.844 per EDU
Traffic Signal Maintenance	891,722	1.95%	$3,167.75 per Mile of Street
Traffic Operations	388,584	0.85%	50% - $1,380.41 per Mile of Street 50% - $0.338 per ADT
Street Maintenance (2)	1,272,364	2.78%	50% - $4,519.94 per Mile of Street 50% - $1.108 per ADT
Street Sweeping	370,749	0.81%	$1,317.05 per Mile of Street
Street Tree Maintenance	530,584	1.16%	$1,884.85 per Mile of Street
Sanitary Sewer Maintenance	808,624	1.77%	Self-Supporting
Waster Water Maintenance	153,030	0.33%	Self-Supporting

TABLE 4.3-8
(Continued)
SALT CREEK RANCH FISCAL IMPACT
COST ALLOCATION ASSUMPTIONS

	City of Chula Vista Actual 90-91 Expenditures		
	Amount	Percent	Salt Creek Ranch Allocation
Parks and Recreation	3,905,704	8.53%	
Administration - Parks	319,246	0.70%	$1,005.82 per Park Acre
Administration - Open Space	148,687	0.32%	Provided by Lighting and Landscaping District
Maintenance	1,724,422	3.77%	
General	1,556,063	3.40%	$4,902.53 per Park Acre
Marina Park Maintenance	168,360	0.37%	Not Applicable
Recreation	1,713,348	3.74%	$12.313 per Capita
Athletics	126,768	0.28%	$0.911 per Capita
Aquatics	478,701	1.05%	$3.440 per Capita
Senior Citizens	258,056	0.56%	$1.855 per Capita
General	530,577	1.16%	$3.813 per Capita
Administration - Recreation	319,246	0.70%	$2.294 per Capita
Library	2,678,184	5.85%	$19.25 per Capita
Otay Ranch Project	200,611	0.44%	Not Applicable
TOTAL	37,793,591	82.55%	
TOTAL EXPENDITURES	45,783,164	100.00%	

Sources: City of Chula Vista, Statement of Expenditures, 1991. 10-Feb-92
Economic Strategies Group, 1991.

(1) EDU allocation base includes only Public Works Operations Administration ($370,819), and Communications ($172,045)
(2) Street Maintenance expenditures would not be incurred until year 7 of the project.

TABLE 4.3-9

SALT CREEK RANCH
CITY OF CHULA VISTA EXPENDITURES IMPACT
1991 Dollars

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Line Operations:															
Planning (Non-Current)	$1,726	$3,222	$9,257	$13,284	$16,886	$18,771	$20,231	$21,691	$22,886	$23,559	$23,559	$23,559	$23,559	$23,559	$23,559
Police / Animal Control	$41,377	$125,192	$221,951	$318,497	$404,859	$450,055	$485,066	$520,078	$548,723	$564,850	$564,850	$564,850	$564,850	$564,850	$564,850
Fire Protection	$16,310	$49,348	$87,487	$125,544	$159,585	$177,400	$191,201	$205,002	$216,293	$222,650	$222,650	$222,650	$222,650	$222,650	$222,650
Public Works	$18,267	$53,479	$93,814	$134,140	$168,010	$185,730	$269,156	$288,428	$304,720	$313,805	$313,805	$313,805	$313,805	$313,805	$313,805
Administration / Planning	1,530	4,628	8,205	11,774	14,966	16,637	17,931	19,226	20,285	20,881	20,881	20,881	20,881	20,881	20,881
Traffic Signal Maintenance	7,362	21,476	37,637	53,798	67,268	74,325	79,991	85,713	90,576	93,290	93,290	93,290	93,290	93,290	93,290
Traffic Operations - per Mile	1,604	4,679	8,201	11,722	14,657	16,194	17,429	18,676	19,735	20,327	20,327	20,327	20,327	20,327	20,327
Traffic Operations - per ADT	330	987	1,729	2,468	3,127	3,449	3,713	3,980	4,196	4,318	4,314	4,314	4,314	4,314	4,314
Street Maintenance - per Mile	0	0	0	0	0	0	57,068	61,150	64,620	66,556	66,556	66,556	66,556	66,556	66,556
Street Maintenance - per ADT	0	0	0	0	0	0	12,172	13,047	13,756	14,154	14,142	14,142	14,142	14,142	14,142
Street Sweeping	3,061	8,929	15,648	22,368	27,968	30,902	33,258	35,637	37,659	38,787	38,787	38,787	38,787	38,787	38,787
Street Tree Maintenance	4,381	12,779	22,395	32,011	40,025	44,224	47,595	51,000	53,894	55,509	55,509	55,509	55,509	55,509	55,509
Parks and Recreation	$19,542	$57,006	$99,902	$142,799	$178,551	$197,283	$212,322	$227,512	$240,420	$247,624	$247,514	$247,514	$247,514	$247,514	$247,514
Park Administration	1,962	5,724	10,031	14,338	17,928	19,809	21,319	22,844	24,140	24,864	24,864	24,864	24,864	24,864	24,864
Park Maintenance	9,564	27,899	48,893	69,888	87,385	96,553	103,913	111,347	117,665	121,191	121,191	121,191	121,191	121,191	121,191
Recreation	6,522	19,026	33,343	47,660	59,593	65,845	70,864	75,934	80,242	82,647	82,537	82,537	82,537	82,537	82,537
Recreation Administration	1,493	4,356	7,634	10,913	13,645	15,076	16,225	17,386	18,373	18,923	18,903	18,903	18,903	18,903	18,903
Library	$12,532	$36,556	$64,064	$91,572	$114,499	$126,511	$136,155	$145,896	$154,173	$158,793	$158,620	$158,620	$158,620	$158,620	$158,620
Total Line Operations	$109,734	$326,801	$576,476	$825,836	$1,042,390	$1,153,751	$1,314,132	$1,408,606	$1,487,215	$1,531,297	$1,530,997	$1,530,997	$1,530,997	$1,530,997	$1,530,997
Overhead Functions (21.1%)	$23,158	$68,955	$121,636	$174,251	$219,944	$243,863	$277,282	$297,216	$313,802	$323,104	$323,040	$323,040	$323,040	$323,040	$323,040
Total Recurring Expenditures	$132,912	$395,756	$698,112	$1,000,088	$1,262,334	$1,399,614	$1,591,414	$1,705,822	$1,801,018	$1,854,401	$1,854,037	$1,854,037	$1,854,037	$1,854,037	$1,854,037

Sources: City of Chula Vista, *Statement of Expenditures*, 1991.
Economic Strategies Group, 1991.

TABLE 4.3-10

SALT CREEK RANCH
NET FISCAL IMPACT
CITY OF CHULA VISTA
1991 Dollars

Year	Revenues	Expenditures	Net Balance	Revenue-Expenditure Ratio	Accumulated Balance
1	$186,962	$132,912	$54,051	140.7%	$54,051
2	$485,545	$395,756	$89,789	122.7%	$143,840
3	$821,914	$698,112	$123,801	117.7%	$267,641
4	$1,133,793	$1,000,088	$133,705	113.4%	$401,346
5	$1,348,646	$1,262,334	$86,312	106.8%	$487,658
6	$1,461,312	$1,399,614	$61,698	104.4%	$549,356
7	$1,581,191	$1,591,414	($10,223)	99.4%	$539,133
8	$1,711,138	$1,705,822	$5,315	100.3%	$544,448
9	$1,829,748	$1,801,018	$28,731	101.6%	$573,179
10	$1,895,181	$1,854,401	$40,780	102.2%	$613,959
11	$1,862,806	$1,854,037	$8,769	100.5%	$622,728
12	$1,851,054	$1,854,037	($2,983)	99.8%	$619,745
13	$1,842,274	$1,854,037	($11,763)	99.4%	$607,982
14	$1,835,195	$1,854,037	($18,842)	99.0%	$589,140
15	$1,829,666	$1,854,037	($24,371)	98.7%	$564,769
Total	$21,676,425	$21,111,656	$564,769		

Source: Economic Strategies Group, 1991.

TABLE 4.4-1

SALT CREEK RANCH
OTAY WATER DISTRICT
O&M ASSUMPTIONS
1991

STATISTICS

Total Residential Customers	16,331
Average Daily Delivery - Residential and Commercial (Gallons)	12,808,889
Average Daily Delivery - Residential (Gallons)	6,532,533
Residential Share of Total Sales	51.0%
Gallons Per EDU Per Day	400

OPERATING COSTS AND REVENUES - WATER

Line Item		Salt Creek Ranch Allocation
Revenue	14,972,500	
Water Sales	14,722,500	$459.76 per Household
Meter Fees	250,000	One Time
Expenditures	14,881,000	
Payroll	6,732,950	$0.526 per Average Daily Gallon
Payroll Allocated to WO's	(1,860,000)	-27.6% of Total Payroll
Water Purchases	6,275,000	$0.490 per Average Daily Gallon
Reclaimed Water Purchases	100,000	Not Applicable
Power	832,500	$0.065 per Average Daily Gallon
Material & Maintenance	1,118,000	$0.087 per Average Daily Gallon
Administration	1,318,800	$0.103 per Average Daily Gallon
Replacement Reserve	1,302,750	$0.102 per Average Daily Gallon
Overhead Allocation to WO's	(800,000)	43.0% of WO Payroll
Equipment Distribution to WO's	(139,000)	7.5% of WO Payroll

Sources: Otay Water District, Operating Budget, 1991.
Economic Strategies Group, 1991.

TABLE 4.4-2

SALT CREEK RANCH
OTAY WATER DISTRICT O&M IMPACT
1991 Dollars

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11-15
Revenue	$89,653	$268,569	$470,243	$671,434	$850,671	$938,159	$1,010,116	$1,082,735	$1,141,561	$1,174,641	$1,173,593
Water Sales	89,653	268,569	470,243	671,434	850,671	938,159	1,010,116	1,082,735	1,141,561	1,174,641	1,173,593
Expenditures	$90,052	$269,763	$472,333	$674,419	$854,453	$942,330	$1,014,607	$1,087,549	$1,146,636	$1,179,863	$1,178,810
Payroll	41,028	122,905	215,197	307,268	389,293	429,330	462,259	495,492	522,413	537,551	537,071
Payroll Allocated to WO's	(11,324)	(33,922)	(59,394)	(84,806)	(107,445)	(118,495)	(127,584)	(136,756)	(144,186)	(148,364)	(148,232)
Water Purchases	38,220	114,493	200,469	286,238	362,649	399,946	430,622	461,580	486,658	500,760	500,314
Reclaimed Water Purchases	0	0	0	0	0	0	0	0	0	0	0
Power	5,070	15,188	26,593	37,970	48,107	53,054	57,123	61,230	64,557	66,427	66,368
Material & Maintenance	6,786	20,328	35,593	50,822	64,389	71,011	76,457	81,954	86,407	88,911	88,831
Administration	8,034	24,067	42,139	60,168	76,230	84,070	90,518	97,026	102,298	105,262	105,168
Replacement Reserve	7,956	23,833	41,730	59,584	75,490	83,254	89,640	96,084	101,304	104,240	104,147
Overhead Allocation to WO's	(4,869)	(14,586)	(25,540)	(36,467)	(46,201)	(50,953)	(54,861)	(58,805)	(62,000)	(63,797)	(63,740)
Equipment Distribution to WO's	(849)	(2,544)	(4,455)	(6,360)	(8,058)	(8,887)	(9,569)	(10,257)	(10,814)	(11,127)	(11,117)
Net Balance	($399)	($1,194)	($2,091)	($2,985)	($3,782)	($4,171)	($4,491)	($4,814)	($5,075)	($5,222)	($5,218)

Sources: Economic Strategies Group, 1991.

TABLE 4.5-1

SALT CREEK RANCH
CHULA VISTA ELEMENTARY SCHOOL DISTRICT
O&M ASSUMPTIONS
1991

STATISTICS

Total Students (ADA)	17,501
Total Assessed Valuation (91-92)	6,709,878,239

OPERATING COSTS AND REVENUES

Line Item	90-91 Actual	Salt Creek Ranch Allocation
Total Revenues	$61,235,460	
Revenue limit Sources	50,129,459	$2,864.38 per Student
Federal Revenue	762,850	$43.59 per Student
Other State Revenue	8,961,364	
Variable	7,760,107	$443.41 per Student
Fixed	1,201,257	No Impact
Other Local Revenue	1,381,787	No Impact
Expenditures	$60,294,610	
Certified Salaries	36,304,657	$2,074.43 per Student
Classified Salaries	9,399,454	$537.08 per Student
Employee Benefits	9,417,020	$538.08 per Student
Books and Supplies	2,056,255	$117.49 per Student
Services / Other Expenditures	2,334,876	$133.41 per Student
Capital Outlay	137,151	No Impact
Other Outgo	645,197	No Impact
Net Balance	$940,850	

Sources: Chula Vista Elementary School District, 1991-92 Budget, September, 1991.
Economic Strategies Group, 1991.

TABLE 4.5-2

SALT CREEK RANCH
CHULA VISTA ELEMENTARY SCHOOL DISTRICT IMPACT
1991 Dollars

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11-15
Total Revenues	$204,434	$613,303	$1,062,387	$1,524,878	$1,937,098	$2,134,829	$2,302,398	$2,469,967	$2,604,022	$2,677,753	$2,677,753
Revenue limit Sources	174,727	524,182	908,008	1,303,293	1,655,612	1,824,610	1,967,829	2,111,048	2,225,623	2,288,640	2,288,640
Federal Revenue	2,659	7,977	13,818	19,833	25,195	27,767	29,946	32,126	33,869	34,828	34,828
Other State Revenue	27,048	81,144	140,561	201,752	256,291	282,452	304,623	326,793	344,530	354,285	354,285
Expenditures	$207,430	$622,290	$1,077,955	$1,547,223	$1,965,483	$2,166,112	$2,336,137	$2,506,161	$2,642,181	$2,716,992	$2,716,992
Certified Salaries	126,540	379,621	657,594	943,866	1,199,021	1,321,412	1,425,133	1,528,855	1,611,832	1,657,470	1,657,470
Classified Salaries	32,762	98,286	170,254	244,371	310,432	342,120	368,974	395,828	417,311	429,127	429,127
Employee Benefits	32,823	98,469	170,571	244,826	311,010	342,757	369,661	396,565	418,088	429,926	429,926
Books and Supplies	7,167	21,501	37,244	53,458	67,909	74,841	80,716	86,590	91,290	93,875	93,875
Services / Other Expenditures	8,138	24,414	42,291	60,702	77,111	84,982	91,653	98,323	103,660	106,595	106,595
Net Balance	($2,996)	($8,987)	($15,568)	($22,345)	($28,386)	($31,283)	($33,739)	($36,194)	($38,158)	($39,239)	($39,239)

Sources: Economic Strategies Group, 1991.

TABLE 4.6-1

SALT CREEK RANCH
SWEETWATER UNION HIGH SCHOOL DISTRICT
O&M ASSUMPTIONS
1991

STATISTICS

Total Students (ADA)	27,894

OPERATING COSTS AND REVENUES

Line Item	90-91 Actual	Salt Creek Ranch Allocation
Total Revenues	$121,351,465	
Revenue limit Sources	93,893,006	$3,366.06 per Student
Federal Revenue	4,551,068	$163.16 per Student
Other State Revenue	18,973,488	
Variable	16,506,935	$591.77 per Student
Fixed	2,466,553	No Impact
Other Local Revenue	2,868,869	No Impact
Transfers In	1,065,034	No Impact
Expenditures	$117,341,051	
Certified Salaries	65,946,392	$2,364.18 per Student
Classified Salaries	18,441,613	$661.13 per Student
Employee Benefits	17,795,983	$637.99 per Student
Books and Supplies	5,161,342	$185.03 per Student
Services / Other Expenditures	6,779,929	$243.06 per Student
Capital Outlay	1,362,493	No Impact
Other Outgo	1,853,299	No Impact
Net Balance	$4,010,414	

Sources: Sweetwater Union High School District, 1991-92 Budget.
Economic Strategies Group, 1991.

TABLE 4.6-2

SALT CREEK RANCH
SWEETWATER UNION HIGH SCHOOL DISTRICT IMPACT
1991 Dollars

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11-15
Total Revenues	$239,017	$725,294	$1,265,144	$1,809,115	$2,303,633	$2,546,772	$2,728,095	$2,925,903	$3,082,501	$3,177,283	$3,173,162
Revenue limit Sources	195,231	592,427	1,033,380	1,477,700	1,881,628	2,080,225	2,228,332	2,389,903	2,517,813	2,595,232	2,591,866
Federal Revenue	9,463	28,716	50,090	71,627	91,206	100,833	108,012	115,844	122,044	125,796	125,633
Other State Revenue	34,323	104,152	181,673	259,787	330,799	365,714	391,752	420,157	442,644	456,255	455,663
Expenditures	$237,301	$720,085	$1,256,057	$1,796,120	$2,287,087	$2,528,479	$2,708,500	$2,904,887	$3,060,360	$3,154,462	$3,150,370
Certified Salaries	137,122	416,096	725,803	1,037,875	1,321,577	1,461,063	1,565,087	1,678,568	1,768,407	1,822,783	1,820,419
Classified Salaries	38,346	116,359	202,967	290,236	369,572	408,578	437,668	469,402	494,525	509,731	509,070
Employee Benefits	37,003	112,286	195,863	280,078	356,636	394,278	422,349	452,973	477,217	491,890	491,252
Books and Supplies	10,732	32,565	56,804	81,228	103,432	114,349	122,490	131,371	138,402	142,658	142,473
Services / Other Expenditures	14,097	42,779	74,619	106,703	135,871	150,211	160,906	172,573	181,809	187,399	187,156
Net Balance	$1,717	$5,210	$9,087	$12,994	$16,546	$18,293	$19,595	$21,016	$22,141	$22,822	$22,792

Sources: Economic Strategies Group, 1991.

5.0 PUBLIC FACILITY FINANCE

5.1 PUBLIC FACILITY FINANCE

5.1.1 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 Salt Creek Ranch 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 Salt Creek Ranch project to construct and finance public facilities.

5.1.2 Subdivision Exactions

Neighborhood level public improvements will be developed simultaneously with related residential and non-residential subdivisions. Through the use of 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.

5.1.3 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.

Salt Creek Ranch, through policy decisions of the City of Chula Vista and other governing agencies, is subject to fees established to help defray costs of facilities which will benefit Salt Creek Ranch and areas beyond this specific project. These fees include but may not be limited to:

1. *Eastern Chula Vista Transportation Impact Fee* — Street DIF established to provide financing for circulation element road projects of regional significance in the area east of Interstate 805.

2. *Public Facilities Development Impact Fee* — Public Facilities DIF establishes to collect funds for Civic Center Facilities, Police Facility Remodeling, Corporation Yard Relocation, Libraries, Fire Suppression System, Geographical Information System, Mainframe Computer, Telephone System Upgrade and a Records Management System.

3. *Park Acquisition and Development Fees* — PAD Fee established to pay for the acquisition and development of park facilities.

4. *Traffic Signal Fees* — to pay for traffic signals associated with circulation element streets.

5. *Telegraph Canyon Drainage Basin Fee* — to pay for constructing drainage channel improvements.

6. *Telegraph Canyon Sewer Basin Fee* — the City is contemplating the adoption of this fee in early 1992 to pay for sewer basin improvements necessitated by future development in the basin.

7. *State Mandated School Impact Fees* — payable to the Chula Vista City School District and Sweetwater Union High School District. It should be noted that both school districts generally require development projects to annex into existing Mello Roos Community Facilities Districts in lieu of paying State mandated school fees.

8. *Otay Water District Fees* — It should be noted that the Water District may require the formation of or annexation to an existing improvement district or creation of some other finance mechanism which may result in specific fees being waived.

5.1.4 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, 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.

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 which 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.

5.1.5 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.

The City was recently awarded a $6 million State Grant to construct the Montgomery/Otay Library.

Dedications

Dedication of sites by developers for public capital facilities is a common financing tool used by many cities. In the case of Salt Creek Ranch,the following public sites are proposed to be dedicated:

1. Roads
2. Neighborhood and Community Park sites (subject to PAD fee credits)
3. Open space and public trail systems
4. Two Elementary school sites (subject to agreement with School District)
5. Fire station site — reservation only

Homeowners Associations

Community Homeowner Associations will be formed to manage, operate and maintain private facilities within Salt Creek Ranch.

Developer Reimbursement Agreements

Certain facilities that are off-site of Salt Creek Ranch and/or provide regional benefits may be constructed in conjunction with the development of Salt Creek Ranch. In such instances, developer reimbursement agreements may be executed by the City Council to provide for a future payback to the developer for the additional cost of these facilities. Future developments are required to pay back their fair share of the costs for the shared facility when development occurs.

Special Agreements/Development Agreement

This category includes special development programs for financing construction of Telegraph Canyon Road and State Route 125. It also includes any other special arrangements between the City and the developer such as credits against fees, waiver of fees, or charges for the construction of specific facilities.

A development agreement can play an essential role in the implementation of the Public Facilities Financing Plan. The Public Facilities Financing Plan clearly details all public facility responsibilities and assures that the construction of all necessary public improvements will be appropriately phased with actual development, while the development agreement identifies the obligations and requirements of both parties.

5.1.6 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.

5.1.7 Cumulative Debt

The City of Chula Vista has an established policy limiting the maximum debt to be placed on a residential dwelling unit to an additional one percent above the property tax. This policy was restated in the adopted Growth Management Program.

Like many other cities, Chula Vista has long understood that it is not the only agency which can utilize public finance mechanisms and, therefore, can not always guarantee that the total debt will remain at or below a maximum of 2 percent. The City needs to coordinate its debt finance programs with the other special districts which provide service to the

residents of Chula Vista. Finance requirements to ensure that the cumulative debt does not become excessive. Coordination is also necessary to guarantee all public facilities needed to support a development can be financed and constructed as needed.

The following table summarizes the phased assessed valuation and overall estimated debt capacity of the Salt Creek Ranch Project. This information is displayed in graphic form on the next two pages.

Salt Creek Ranch
Assessed Valuation and Debt Capacity Estimate

Year	Assessed Valuation	2 Percent Debt Limit	Annual Debt Service Capacity
1	61,300	1,226	613
2	159,731	3,195	1,597
3	288,209	5,764	2,882
4	420,923	8,418	4,209
5	519,575	10,392	5,196
6	593,426	11,869	5,934
7	676,554	13,531	6,766
8	776,657	15,533	7,767
9	881,078	17,622	8,811
10	968,369	19,367	9,684
11	999,463	19,989	9,995
12	1,033,293	20,666	10,333
13	1,070,049	21,401	10,700
14	1,109,929	22,199	11,099
15	1,153,145	23,063	11,531

Figure 39 below depicts the estimated assessed valuation for each year of development assumed for the Salt Creek Ranch project.

Figure 39

Salt Creek Ranch
Estimated Assessed Valuation

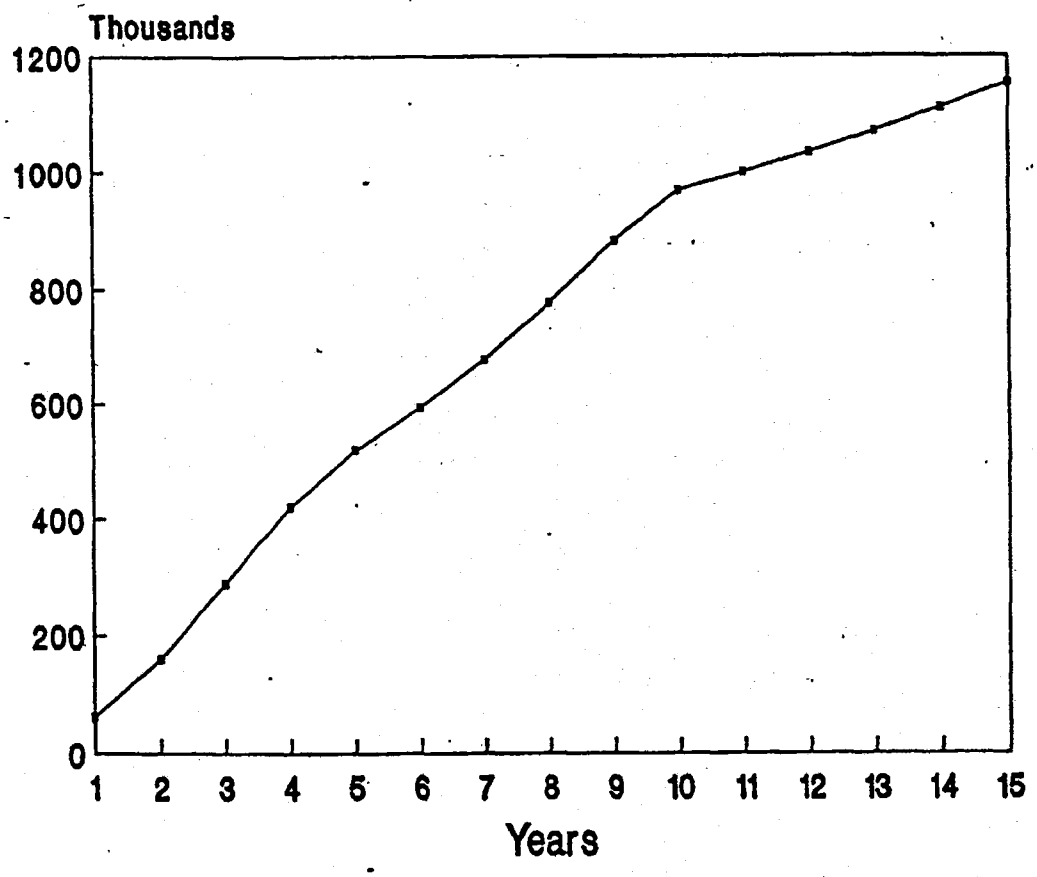

Figure 40

Salt Creek Ranch Debt Capacity

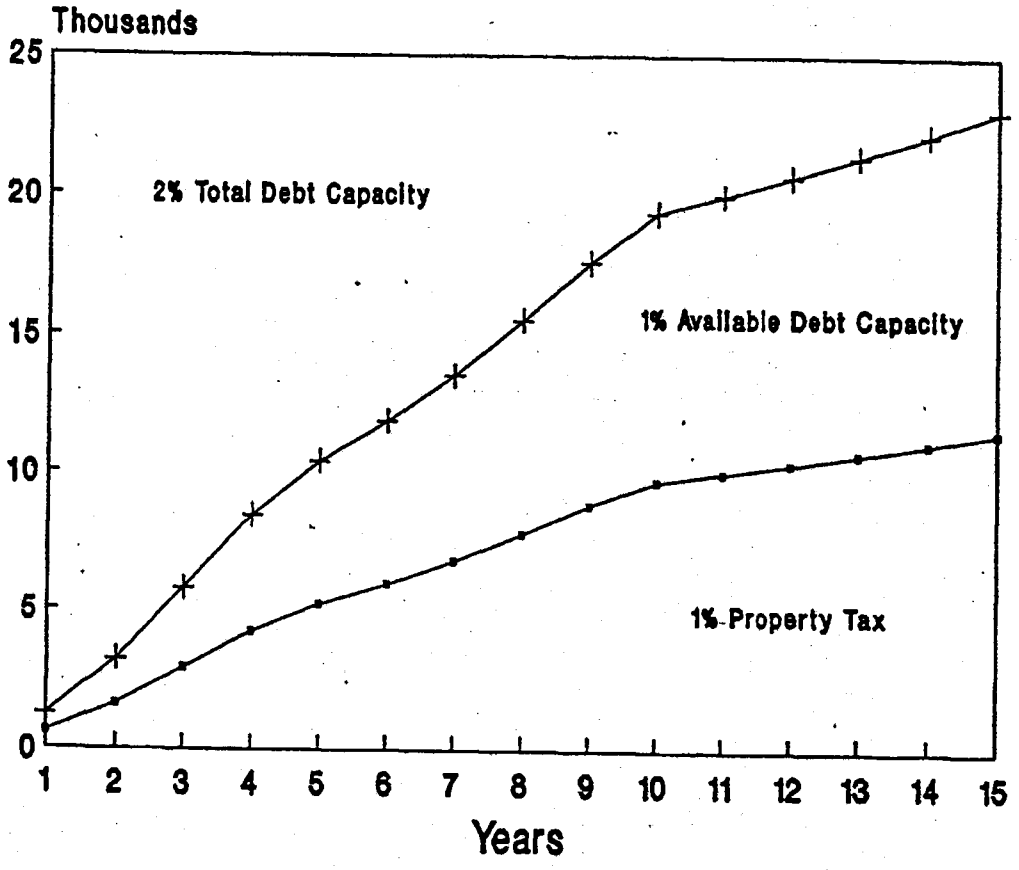

Figure 40 above depicts the maximum 2 percent debt limit as established by the Chula Vista City Council based upon a 15 year phased build out of the Salt Creek Ranch Project. In addition, this figure shows the 1 percent property tax revenues.

The analysis is limited by assumptions regarding absorption, special district benefit boundaries, bond interest rates, and other factors which would affect the actual calculations.

The Public Works Department generally requires the preparation of an assessment district feasibility plan for the buildout of a master planned community prior to initiation of the first assessment district in order to determine the debt capacity limits and benefit zones related to using public financing to fund infrastructure improvements.

5.1.8 Lifecycle Cost

Section 19.09.060 Analysis subsection F(2) of the Growth Management Ordinance requires the following:

> "...The inventory shall include Life Cycle Cost ("LCC") projections for each element in 19.09.060(E)...as they pertain to City fiscal responsibility. The LCC projections shall be for estimated life cycle for each element analyzed. The model used shall be able to identify and estimate initial and recurring life cycle costs for the...elements..."

Background

The following material presents information on the general aspects of life cycle cost analysis as well as its specific application to the City of Chula Vista operations. The discussion regarding the general benefits and process of LCC is meant to provide a common base of understanding upon which further analysis can take place.

Life cycle 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.

The term "capital budgeting" is defined as the process of analyzing expenditures on assets (expected to provide returns beyond a year) to determine if they should be included in the capital budget. The outlays may be for facilities which are either revenue-producing or nonrevenue producing.

Life cycle costing is not something different from capital budgeting but, rather, is generally understood to be the application of capital budgeting to nonrevenue-producing projects. Capital budgeting is a term more familiar to industry while life cycle costing is more familiar to government. The principles are the same, however, regardless of the terminology since the objective is to maximize benefits and minimize costs. For nonrevenue-producing projects such questions arise as:

"Will it pay for itself?"
"If so, in what period of time?"
"Which of several alternatives will cost the least or save the most?"
"Should it be leased or bought?"

"Should it be replaced?"

These are questions which can be answered by the application of life cycle costing methods.

Capital has a cost, regardless of whether it comes from an investor voluntarily or from a taxpayer involuntarily. A business derives its capital from retained profits, borrowed funds, and sale of shares in the business. The overall cost of its financing is referred to as the "cost of capital." Government obtains funds primarily from taxation, sale of bonds and through the process of development exactions, and although the "cost of capital" definition is not exactly parallel, the application to capital analysis is similar.

As long as capital can be employed in other projects and earn a return, it is not free — it has an opportunity cost. "Opportunity cost" refers to the cost sacrificed by not investing in an alternative project. This applies even where the capital takes the form of assets other than cash as long as a cash-equivalent can be established for the assets. To say that capital has an opportunity cost is another way of saying that money has a time value. The present worth of money due in the future is calculated by a process known as discounting. The discounting process facilitates the translation of future values to present values. If the total cost of owning an asset is its initial cost and all subsequent costs, the latter must be discounted to present value before they are combined with initial cost to obtain the life cycle cost.

All life cycle cost analysis must be performed in terms of compatible dollars, that is, dollars dated as of a point in time or a period of time. The tools of life cycle cost analysis by which dollar values are shifted in time are based upon six basic interest formulas. The symbols used in these formulas are:

i = interest rate per period
n = number of interest periods
P = present worth (or present value)
F = future worth (or future value)
A = uniform sum of money in each time period

Using these tools of life cycle cost analysis and the concept of the time value of money, two methods of life cycle costing are generally available. They are the "present worth method" and the "uniform annual cost method." When the "present worth method" is used, all expenditures, regardless of when they occur, are compared during a common year; that is, baseline

year. Future expenditures are properly discounted to reflect their time value using the six basic formulas. Once these future expenditures are discounted, they may be compared properly to expenditures incurred "today," or during the "baseline year." Once this discounting is accomplished, all expenditures are weighed on a common basis and may be added together to obtain a total present worth value.

The other method, "uniform annual cost method," reduces each alternative cost to the equivalent base of a uniform annual cost. By using this method, both present dollars and future dollars are converted to a uniform annual cost while taking into account the time value of money at a particular interest rate. All present costs are broken down into equivalent yearly payments throughout the life cycle. All future costs spent at any time during the life cycle are also broken down into equivalent yearly payments throughout the life cycle. All the equivalent yearly costs are then added together to establish the total uniform annual cost.

When comparing alternatives, the same result will be achieved whether the present worth method or uniform annual cost method is used. The same relative cost advantage will result from either method of calculation.

An important step in life cycle cost analysis is the development of an all-inclusive listing of all costs and dollar benefits associated with a given facility. This listing must include all dollar flows from the first outlay to disposal of the facility and must be categorized by stage of ownership to facilitate the LCC analysis as follows:

1. Initial Cost Period— Conceptual studies, design, planning, acquisition, installation, testing, training, financing of pre-operational phase. Expenditures made prior to the LCC analysis (called "sunk costs") are not included.

2. Use Period -

    a. Operating costs— staffing, energy, insurance, security, increases in working capital, personnel training.

    b. Maintenance Costs — parts used, repair, cleaning, painting, all corrective and preventive maintenance.

    c. Replacement costs.

3. Disposal Period— Costs of removal and restoration, salvage value and release of working capital are benefits (i.e., negative costs).

Shouldn't the wear (depreciation) on a piece of equipment be included as a cost? The answer is no, since there is no cash outlay for depreciation. The cash was paid initially for the purchase and to include depreciation as a cost would be counting it twice. Purchasers in the private sector who are subject to federal income tax may deduct depreciation as an expense, provided an approved method of accounting for the depreciation is used.

One of the objections to the use of life cycle costing is that the estimation of future costs is too difficult. Aren't the estimates merely guesses? And why should decisions be based on guesses? If life cycle costing is based on dubious estimates, how useful can it be?

In response to these questions, it can be argued that there is no alternative to life cycle costing. Buying on initial cost is not an alternative to buying on life cycle cost. All purchases are made for a life cycle and the only difference between initial cost and life cycle cost purchasing is in the judgement about the treatment of future costs. Life cycle costing, if done correctly, recognizes that post-purchase costs matter, that they do have value, and that a considered estimate of those costs is likely to be closer to true value than the zero value presumption. In either case, a judgement about future costs cannot be avoided. The only real issue is what the judgement will be.

Undeniably there is some guesswork in predicting costs, but often information can be obtained which will reduce the uncertainty of the estimates. It may be that an estimate can be narrowed down to a range, but even that information is useful.

The following is a step-by-step description for completing the Life Cycle Cost Analysis (in short form).

1. Initial Costs —

   a. Base Cost — Enter basic initial cost of equipment/asset.
   b. Interface and Auxiliary Costs — Enter cost of such items as:

      I. Additional Construction
      II. Additional Plumbing
      III. Additional Electrical
      IV. Fuel Storage Tanks
      V. Any other costs associated with the item under construction

   c. Total Initial Cost = Total of 1a and 1b
   d. Difference in Initial Cost — Subtract low initial cost from high initial cost alterative from respective alternatives.

2. Operating Cost, Present Worth

   a. Fuel Cost = Present Fuel Cost x Discount-Escalation Factor
   b. Operating Labor Cost = Present Labor Cost x Discount-Escalation Factor
   c. Maintenance Cost = Present Maintenance Cost x Discount-Escalation Factor
   d. Replacement Cost = Future Replacement Cost x Single Present Worth
   e. Salvage Value = Future Salvage x Single Present Worth
   f. Add whatever annual costs that are not considered above.
   g. Tax benefits from depreciation and from expense deductions may be included here but must be deducted from costs
   h. Total Operating Cost = 2a + 2b + 2c + 2d + 2e + 2f + 2g

3. Total Operating and Initial Cost = 1c + 2h

4. Uniform Initial Cost = 1c x UCR

5. Uniform Operating Cost = 2h x UCR

6. Total = 4 + 5

<u>Applications for LCC Analysis</u>

The City of Chula Vista currently utilizes 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. The use of LCC techniques takes place 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.

There are no project facilities that are not covered by LCC analysis. In addition to these existing processes, the City should require the use of LCC analysis prior to or concurrent with the design of public facilities required by new development. Such a requirement will assist in the determination of the most cost effective selection of public facilities.

5.1.9 Salt Creek Ranch Project

The following tables identify and summarize the various facility costs associated with development of the Salt Creek Ranch project. The facilities and their cost are identified in detail in Section 3 of this Public Facilities Financing Plan. The tables indicate a recommended financing alternative based upon current City 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.

FIGURE 41
SUMMARY OF FACILITY COSTS

TRAFFIC FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
Base Condition						
1	Interconnect all traffic signals	$ 100,000	Phase I	Subdivision exaction/reimbursement from potential future DIF	Traffic Signal Fund or DIF	Consider adding improvements during the next DIF update
2	Intersection improvements @ Telegraph Canyon Road/EastLake Parkway			Subdivision exaction/reimbursement from potential future DIF	Assessment District/DIF	Consider adding improvements during the next DIF update
	a. Widen southbound approach and restripe	50,000	Phase I			
	b. Construct driveway	15,000	Phase I			
3	Intersection Improvement @ East "H" Street/Hidden Vista Drive			Subdivision exaction/reimbursement from potential future DIF	Potential DIF	Consider adding improvements during the next DIF update
	a. Widen east and westbound approach and restripe	80,000	Phase I			
4	Intersection Improvements @ East "H" Street/Otay Lakes Road			Subdivision exaction/reimbursement from potential future DIF	Assessment District/DIF	Consider adding improvements during the next DIF update
	a. Widen east and westbound approaches	80,000	Phase I			
	b. Widen northbound approach	40,000	Phase I			
	c. Widen southbound approach	40,000	Phase I			
5	Intersection improvements @ Bonita Road/Otay Lakes Road			Subdivision exaction/reimbursement from potential future DIF	Potential DIF	Consider adding improvements during the next DIF update
	a. Widen westbound approach and restripe	50,000	Phase I			

TRAFFIC FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
6	Intersection Improvements @ Otay Lakes Road/Elmhurst Drive a. Widen north and southbound approaches	 50,000	 Phase I	Subdivision exaction/reimbursement from potential future DIF	Potential DIF	Consider adding improvements during the next DIF update
7	Add three through lanes each direction on Otay Lakes Road: Telegraph Canyon Road to north of East "H" Street	80,000	Phase I	Subdivision exaction/reimbursement from potential future DIF	Assessment District	Consider adding improvements during the next DIF update
	Base Condition Subtotal	**$ 585,000**				
Scenario 1/1A						
1	Construct East "H" Street through Salt Creek Ranch (SCR)	12,000,000	Phase I	Street DIF	Assessment District	1990 DIF (Project 15) includes East "H" Street from San Miguel Road to Hunte Parkway
1a	Construct two-lane connector from "H" Street to Salt Creek 1	700,000	Phase I	Subdivision exaction	Subdivision exaction	1
2	Construct Hunte Parkway through SCR to Telegraph Canyon Road	2,000,000	Phase I	Street DIF	Assessment District	1990 DIF (Project 20) includes Hunte Parkway from East "H" Street to Telegraph Canyon Road
3	Construct Lane Avenue from East "H" Street south to current terminus	1,000,000	Phase I	Subdivision exaction	Subdivision exaction	
4	Install or bond traffic signals @					
	♦ East "H" Street/Lane Avenue	100,000	Phase I	Traffic signal fee	Assessment District	City traffic signal fee program
	♦ East "H" Street/Hunte Parkway	100,000	Phase I	Traffic signal fee	Assessment District	City traffic signal fee program
	♦ Lane Avenue/Telegraph Canyon Road	100,000	Phase I	Traffic signal fee	Assessment District	City traffic signal fee program
	♦ Hunte Parkway/Telegraph Canyon Road	100,000	Phase I	Traffic signal fee	Assessment District	City traffic signal fee program

TRAFFIC FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
5	Implement transit demand management strategies	100,000	Phase I	Subdivision exaction	Subdivision exaction	
	Scenario 1/1A Subtotal	$6,200,000				
Scenario 2						
1	Implement Scenario 1	$6,200,000	Phase I	As shown above	As shown above	N/A
2	Construct State Route 125 as four lanes between East "H" Street and State Route 54	N/A	see note[1]	---	---	Timing and funding dependent upon completion of State Route 125 finance study
3	Construct East "H" Street as a four lane major from western boundary to existing terminus	2,000,000	---	---	---	
	Scenario 2 Subtotal	$8,200,000				

1 HNTB STUDY TO PROVIDE THESE ESTIMATES.

SEWER FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE[1] MECHANISM	NOTES
Phase I						
1	Various size gravity sewers	$ 2,025,-500	Phase I	Subdivision exaction	N/A	
2	8" force main	81,000	Phase I	Subdivision exaction	N/A	Reimbursement due SCR for oversizing force main from 6" to 8"
3	Lift station	600,000	Phase I	Subdivision exaction	N/A	Reimbursement due SCR for oversizing pump from 20 hp to 25 hp
4	Reclaimed water facilities	609,000				
	Subtotal Phase I	**$3,315,5-00**				
5	8" gravity sewer	1,480,-000	Phase II	Subdivision exaction	N/A	
6	6" force main	98,000	Phase II	Subdivision exaction	N/A	Reimbursement due SCR for oversizing force main from 4" to 6"
7	Lift station	500,000	Phase II	Subdivision exaction	N/A	Reimbursement due SCR for oversizing pump to 10 hp
8	Offsite gravity sewers	97,500	Phase II	Subdivision exaction	N/A	Reimbursement due SCR for oversizing gravity sewer from 12" to 15"
9	Reclaimed water facilities	395,000				
	Subtotal Phase II	**$ 2,570,-500**				
10	8" gravity sewer	920,000	Phase III	Subdivision exaction	N/A	
	Subtotal Phase III	**$920,000**				
11	Share of Salt Creek Interceptor	800,000	N/A	Subdivision exaction	Assessment District	Requirement of tentative map to pay cash or provide L.C.
	Sewer Facilities Total	**$ 7,606,-000**				

1 **BACKBONE WATER FACILITIES MAY BE FINANCED USING ASSESSMENT DISTRICTS.**

DRAINAGE FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE[1] MECHANISM	NOTES
1	On-site facilities	N/A	Consistent with phasing and street construction	Subdivision exaction	N/A	
2	Telegraph Canyon drainage basin improvements	697,332	Tentative Map	Payment of fees	N/A	Construction of off-site facilities provided by others-/city
3	Urban runoff facilities and program	500,000	Consistent with phasing of development	Subdivision exaction	N/A	Interim facilities provided by SCR pending design and construction of ultimate solution by others.
	Drainage Total	$1,197,332				

1 BACKBONE WATER FACILITIES MAY BE FINANCED USING ASSESSMENT DISTRICTS.

WATER FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE[1] MECHANISM	NOTES
Phase I						
1	Various size water lines	$ 1,650,000	Phase I	Subdivision exaction	Assessment District	
2	Share of 5 MG, 980 zone reservoir	1,001,000	Phase I	Fee	N/A	SCR to pay $1,001,000 in fees to OWD representing 28.6% of capacity
3	Regional Dist. Main oversizing	253,500	Phase I	Subdivision exaction	Assessment District	
4	41% of 12 MG terminal storage	1,968,000	Phase I	Connection Fee	N/A	
	Subtotal Phase I	**$2,846,000**				
Phase II						
4	Various size water lines	1,300,000	Phase II	Subdivision exaction	Assessment District	
5	980 zone pump upgrade	500,000	Phase II	Subdivision exaction	Assessment District	
6	48% of 12 MG terminal storage	2,304,000	Phase II	Connection Fee	N/A	
	Subtotal Phase II	**$4,104,000**				
Phase III						
7	Various size water lines	805,000	Phase III	Subdivision exaction	Assessment District	
8	1296 zone pump station	300,000	Phase III	Subdivision exaction	Assessment District	
9	Share of 1.5 MG, 1296 zone reservoir	464,100	Phase III	Subdivision exaction	Assessment District	
10	11% of 12 MG terminal storage	528,000	Phase III	Connection Fee	N/A	
	Subtotal Phase III	**$ 2,097,100**				
	Water Facilities Total	**$ 9,047,100**				

1 **BACKBONE WATER FACILITIES MAY BE FINANCED USING ASSESSMENT DISTRICTS.**

POLICE FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
All Phases						
1	Pay police allocation of PFDIF	$1,022,608	Pay at building permit issuance	PFDIF	N/A	
	Police Total	$1,022,608				

FIRE FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
All Phases						
1	Pay Fire/EMS allocation of PFDIF	$ 313,823	Pay at building permit issuance	PFDIF	N/A	
	Fire Total	$ 313,823				

SCHOOLS FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
All Phases						
1	Dedicate two elementary school sites	N/A	Phase I and II	Subdivision exaction	N/A	
	Schools Total	N/A				

LIBRARIES FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
All Phases						
1	Pay library allocation of PFDIF	$1,224,254	Pay at building permit issuance	PFDIF	N/A	
	Libraries Total	$1,224,254				

PARKS RECREATION FACILITY NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
All Phases						
1	Dedicate 7.0 acre neighborhood park site	N/A	Phase I	Subdivision exaction	N/A	
2	Dedicate 22 acre community park site	N/A	Phase II	Subdivision exaction	N/A	
3	Payment of PAD fees	11,043,385	Prior to final subdivision map or parcel map	PAD fees	N/A	City may give credit against fees for land dedication/improvements
	Fire Total	$1,043,385				

CIVIC CENTER NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
All Phases						
1	Pay Civic Center allocation of PFDIF	$1,476,346	Pay at building permit issuance	PFDIF	N/A	
	Civic Center Total	$1,476,346				

CORP. YARD NO.	DESCRIPTION	COST ESTIMATE	TIMING	FUNDING SOURCE	FINANCE MECHANISM	NOTES
All Phases						
1	Pay Corporation Yard allocation of PFDIF	$1,336,139	Pay at building permit issuance	PFDIF	N/A	
	Civic Center Total	$1,336,139				