

SERVICE PLAN
FOR
SUNSET METROPOLITAN DISTRICT
August 1985

Prepared for:

Pikes Peak Water Company
4463 Whispering Circle
Colorado Springs, CO 80917

Consulting Engineers and Planners:

Sheaffer & Roland, Inc.
1660 So. Albion St. Suite 513
Denver, CO 80222

Sheaffer & Roland, Inc.
130 No. Franklin
Chicago, IL 60606

Financial Advisor:

Lankford & Company
333 Fairfax Street
Denver, CO 80220

TABLE OF CONTENTS (continued)

SECTION		PAGE
VIII	FINANCIAL ANALYSIS	VIII - 1
	Primary Debt	VIII - 1
	Subordinated Debt	VIII - 1
	Phasing of Debt Issues	VIII - 2
	Bond Issue Amounts	VIII - 2
	Reserves and Maximum Rates	VIII - 3
	Sources of District Income	VIII - 3
	District Financing Plan	VIII - 4
IX	CONCLUSION	IX - 1

LIST OF TABLES

TABLE		PAGE
I - 1	General Land Use	I - 5
I - 2	Estimated Residential Population	I - 6
I - 3	Estimated Commercial/Industrial Employment	I - 7
II - 1	Estimated Costs of Major Water System Facilities	II - 5
III - 1	Wastewater Flow Generation	III - 4
III - 2	Estimated Costs of Major Wastewater System Facilities	III - 6
IV - 1	Street Improvement Plan	IV - 3
IV - 2	Estimated Costs of Major Street Improvements	IV - 4
VI - 1	Estimated Costs of Major Park & Recreation Facilities	VI - 2
VII - 1	Estimated Costs of Mosquito Control Equipment	VII - 2
VIII - 1	Infrastructure Capital Expenditures Estimates	VIII - 6
VIII - 2	Debt Service	VIII - 7
VIII - 3	Operation & Maintenance Cost Estimates	VIII - 8
VIII - 4	Subordinated Issues Debt Service	VIII - 9
VIII - 5	Assumptions Used in Cash Flow Analysis	VIII - 10
VIII - 6	Cash Flow Analysis Sheet 1 of 4	VIII - 11
VIII - 7	Cash Flow Analysis Sheet 2 of 4	VIII - 12
VIII - 8	Cash Flow Analysis Sheet 3 of 4	VIII - 13
VIII - 9	Cash Flow Analysis Sheet 4 of 4	VIII - 14

APPENDICES AND EXHIBITS

Appendix A	Legal Description of District Boundaries
Appendix B	Colorado Ground Water Commission Findings of Fact
Exhibit A	District Boundaries & Land Use Map
Exhibit B	Water Distribution System
Exhibit C	Wastewater Management System

SECTION I

INTRODUCTION

The proposed Sunset Metropolitan District (District) will be organized in accordance with the "Special District Act," Article 1, Title 32, Colorado Revised Statutes, as amended. This Service Plan for the proposed District was developed from a preliminary engineering analysis for determining costs and phasing, and a financial analysis for determining economic feasibility.

Service Area

The area to be included within and primarily served by the proposed District is located in eastern El Paso County, approximately eight miles southeast of the Falcon Air Force Station, currently under construction. The District contains approximately 1,063 acres in Sections 11, 12 and 13, Township 15 S, Range 63 W of the 6th P.M. The legal description and a map of the District boundaries are contained in Appendix A and Exhibit A, respectively, herein.

Purpose of District

The Sunset Metropolitan District is proposed to be formed primarily in order to provide certain services and facilities for Sunset Village (Village), a proposed new mixed-use development. The following services and facilities are proposed to be provided by the District: water acquisition, treatment, storage and distribution; wastewater collection, treatment, storage and distribution; parks and recreation; street improvement; flood and surface drainage management and mosquito control.

Facilities to be built by the District will be advertised for competitive construction bids, as required by law. The District will also pursue the possibility of joint facility bidding with other entities to enhance economies of scale.

This Service Plan is in substantial compliance with the Sketch Plan report for Sunset Village submitted to El Paso County on or about June 20, 1985. That Sketch Plan, when approved by the County, will constitute an amendment to the County master plan pursuant to adopted El Paso County Land Use Regulations.

Sunset Village

Sunset Village is located in the corridor between State Highway 94 and Drennan Road, east of Colorado Springs. This corridor is experiencing significant growth caused by the Federal government's \$1.4 billion investment in the Falcon Air Force

Station (FAFS), which includes the Consolidated Space Operations Center (CSOC) to be completed and occupied in the fall of 1985. The FAFS is located 16 miles east of downtown Colorado Springs, and 8 miles from the Village site.

Colorado Springs now is the home of the Air Force Space Command. The CSOC at FAFS was built to control all military space shuttle flight and orbiting satellite operations. The FAFS also will house the 2nd Space Wing in the fall of 1985. The CSOC will also house the Satellite Operations Complex (SOC), to be occupied in 1987.

It is estimated that by 1986 the CSOC will employ 2,000 workers directly and generate at least 2,000 more spin-off jobs. Eventually, 5,000 new jobs are predicted for all FAFS functions, with about 6,000 spin-off jobs. This will create housing needs for 11,000 people. (Note: these estimates may be subject to adjustment as funding, mission and staffing plans for the FAFS and the CSOC are modified from time-to-time). Plans are being made for large industrial research and technology parks in the vicinity of the FAFS.

A new major employment center is being created in the sparsely developed High Plains region of El Paso County. The proposed Village responds to the housing demand being created by the impact of the FAFS. Planning for the Village incorporates the important elements of water conservation, open space preservation, centralized water and sewer systems, paved roads and other elements necessary to accommodate population growth.

The proposed Sunset Village will be developed as a planned, affordable community. A diversity of housing types will be provided to meet housing needs. An innovative on-site wastewater management plan will be incorporated into the development, providing the basis for recreational open spaces and lushly landscaped environs, as well as achieving goals of recycling, conservation, and efficiency.

The Village will provide shopping and small professional office spaces in a Village Center located in the southeast one-quarter (SE 1/4) of Section 12. Three small Village Squares are planned, two in Section 11 and one in Section 13. These will provide convenience shopping and parks for the residents. A 40-acre light industrial park is planned for Section 11 to round-out the development. A tabular description of the Village land uses is provided in Table I-1.

The development of Sunset Village will require that facilities and services be provided by the Sunset Metropolitan District which are not now available and are not currently anticipated to be available from a municipal or quasi-municipal corporation within a reasonable time and on a comparable basis.

Regional Resources Management

The proponents of the Sunset Metropolitan District recognize that the Board of Commissioners for El Paso County, through the recently-created Resources Management Board, are considering alternative roles which the County could have with respect to water and wastewater services for certain unincorporated areas of the County, including the Sunset service area. The proponents are willing to cooperate fully with the El Paso County officials to determine the best method of providing these services to the Village and elsewhere. This Service Plan outlines methods and costs for water and wastewater services which would be appropriate for the proposed Village.

Sources of District Revenues

A mill levy and appropriate rates and charges are proposed as sources of revenue for the District to finance the acquisition, construction, operation and maintenance of the various required services and facilities of the District.

Extraterritorial Services and Future Inclusions

The District will consider applications for water and wastewater services from extraterritorial customers in those cases where the extraterritorial service extensions can be logically integrated into the District's facilities. In such cases, the District would be an acquirer and provider of water for those extraterritorial customers. Additionally, the District will entertain requests for inclusion into the District so long as the proposed inclusion can be determined by the District to be of net benefit to or in parity with the District residents. Connection charges and user fees will be determined for extraterritorial customers and for newly-included customers so as to cause no financial hardship to the District as a result of the connection of the new customers.

Relation to Other Districts or Municipalities

Presently, there are no water, sanitation, park and recreation, drainage, street improvement, mosquito control or metropolitan districts serving the area included within the proposed District boundaries. The Ellicott Fire Protection District presently serves the proposed District.

The development of Sunset Village will require the provision of services and facilities on a scale that exceeds that level which is presently available in the rural area in which the proposed District is located. There are no known existing or proposed municipal or quasi-municipal corporations within a three-mile radius from the proposed District which could provide the required services and facilities within a reasonable time or on a

comparable basis.

The proponents of the Sunset Metropolitan District intend to cooperate fully with the Eastern El Paso County Association - an association of existing and proposed special districts, developers and water companies who are active in the general vicinity of the Falcon Air Force Station - in matters relating to regional water, wastewater and transportation management issues.

The proponents of the Sunset Metropolitan District recognizes that there could be certain efficiencies associated with inter-governmental agreements to provide services or facilities in common with other districts which may be formed in the area. Therefore, future agreements would be considered in order to provide the District with the savings due to economies of scale resulting from such intergovernmental agreements.

Population Projections

Upon full development, an estimated ultimate permanent population of 15,160 persons will reside within the District. As shown in Table I-2, there will be 5,280 total dwelling units with an estimated average of 2.9 persons per unit. The units are planned to be a mixture of single family, townhome and condominium/apartment units at an overall average density of 5.0 units per acre.

The Pikes Peak Area Council of Governments, in the preface to its recently published population projections for the portion of El Paso County in which the Sunset Metropolitan District is located, recognizes the growth impact of the Falcon Air Force Station as well as the need to make significant adjustments to county population projections: "... the population cap established for Teller and El Paso Counties will be renegotiated with the State demographer on the basis of the previously unanticipated location of the Consolidated Space Operations Center (CSOC) in El Paso County and the resulting growth which this will cause." (Addendum One to The 1984 Update to Project Aquarius Areawide Water Quality Management Plan for the Pikes Peak Region (El Paso and Teller Counties), Pikes Peak Area Council of Governments, April 16, 1985, page 7).

The Village ultimately will provide an estimated 930 commercial jobs and 1,170 industrial jobs for a total of 2,100 jobs, as shown in Table I-3. Employment estimates were determined by assuming 200 sq.ft./worker in all retail and commercial uses, and 500 sq.ft./worker in light industrial uses.

Table I-1: Sunset Metropolitan District
General Land Use

USE	Acreage			Total	% of Total Site
	Phase 1 (Sec. 12)	Phase 2 (Sec. 13)	Phase 3 (Sec. 11)		
Residential (a)					
Single Family Home	222	220	151	593	55.8%
Townhomes	31	35	16	82	7.7%
Apartments and Condominiums	15	10	16	41	3.9%
Subtotal	268	265	183	716	67.4%
Commercial/Office/Civic					
Village Center	6	0	0	6	.6%
Village Squares	0	3	6	9	.8%
Subtotal	6	3	6	15	1.4%
Light Industrial (b)	0	0	40	40	3.8%
Parks and Open Space					
Irrig. Golf Course	116	0	0	116	10.9%
Vil. Center Park	6	0	0	6	.6%
Vil. Square Parks	0	6	8	14	1.3%
Forest Nursery	10	5	4	19	1.8%
Subtotal	132	11	12	155	14.6%
Wastewater Facility	25	0	0	25	2.4%
School Site (c)	10	30	0	40	3.8%
Collector Streets	42	11	19	72	6.8%
Grand Total	483	320	260	1,063	100.0%
Percent of Total	45.4%	30.1%	24.5%	100.0%	

(a) - Residential acreage includes local streets and open space drainageways

(b) - Industrial acreage includes collector streets, parking and Drennan Road R.O.W.

(c) - Includes 20 acres of irrigated landscaping around schools

Table I-2: Sunset Metropolitan District
Estimated Residential Population

Phase/Type	Dwelling Units	Density (pop. /DU)	Population
Phase 1 Residential			
Single Family	1,332	3.1	4,130
Townhomes	372	2.4	890
Apartments & Condominiums	270	2.4	650
Subtotal	1,974		5,670
Phase 2 Residential			
Single Family	1,320	3.1	4,090
Townhomes	420	2.4	1,010
Apartments & Condominiums	180	2.4	430
Subtotal	1,920		5,530
Phase 3 Residential			
Single Family	906	3.1	2,810
Townhomes	192	2.4	460
Apartments & Condominiums	288	2.4	690
Subtotal	1,386		3,960
Entire Village			
Single Family	3,558	3.1	11,030
Townhomes	984	2.4	2,360
Apartments & Condominiums	738	2.4	1,770
Residential Total	5,280		15,160

Housing Type	Dwelling Density (DU/Acre)	Population Density (Pop. /DU)
Single Family	6	3.1
Townhomes	12	2.4
Apartments & Condominiums	18	2.4
Overall	5.0	2.9

Table I-3: Sunset Metropolitan District
Estimated Commercial/Industrial Employment

<u>Employment</u>	<u>Sq. Ft.</u>	<u>Sq. Ft. per Employee</u>	<u>Employment</u>
Phase 1			
Commercial/Office	75,000	200.0	375
Light Industrial	0	500.0	0
Subtotal	75,000		375
Phase 2			
Commercial/Office	37,000	200.0	185
Light Industrial	0	500.0	0
Subtotal	37,000		185
Phase 3			
Commercial/Office	74,000	200.0	370
Light Industrial	585,000	500.0	1,170
Subtotal	659,000		1,540
Entire Village			
Commercial/Office	186,000	200.0	930
Light Industrial	585,000	500.0	1,170
	771,000		2,100

SECTION II

WATER SUPPLY SYSTEM

A description of the water supply system for the Sunset Metropolitan District is presented in this section. The water supply sources are intended to be the Pikes Peak Water Company (via their existing on-site alluvial wells in the Piney Creek alluvium of the Upper Black Squirrel Designated Ground Water Basin) and supplemental in-basin and/or out-of-basin suppliers (under consideration are Rocky Mountain Water Works' alluvial wells near Rush, Colorado and surface water rights from the Arkansas River). A preliminary layout for the main water distribution system is shown in Exhibit B.

Water Resources

The Sunset Metropolitan District water supply is planned to come from multiple sources. The Pikes Peak Water Company source of supply will be up to 840 acre-feet of water available via a phased supply plan from existing on-site alluvial wells. The supplemental sources of supply will be 560 acre-feet of water (or more, depending on the amount of water supplied by Pikes Peak) from in-basin and/or out-of-basin alluvial wells and/or the Arkansas River. Rocky Mountain Water Works' existing well field near Rush, Colorado is being considered as one of the out-of-basin alluvial well supplemental sources. If used, the Rocky Mountain Water Works system would be connected to the District via a new water transmission system proposed to be financed and constructed by Rocky Mountain Water Works, Inc. The water supply connections to the District facilities will be designed for an ultimate capacity of 7.5 mgd, the rate required to fill all of the District water storage tanks during an 8-hour period.

Pikes Peak Water Company

On January 21, 1977, the Pikes Peak Water Company was granted, by the Colorado Ground Water Commission, the right to export and/or fully consume up to 840 acre-feet of water per year from its existing on-site alluvial wells. The 840 acre-feet consumptive use value was determined by the Commission following considerable expert testimony regarding the historic consumptively used water drawn from those wells when they were used for agricultural irrigation purposes. Hence, the intent of the Commission was to match future consumptive withdrawals from the alluvium by the on-site wells with that amount which was historically withdrawn from the alluvium. A copy of the "Findings of Fact, Conclusions and Recommendations of the Hearing Officer" for the Colorado Ground Water Commission in this matter is enclosed as Appendix B.

Between 1974 and 1984, the Pikes Peak Water Company delivered municipal water, via an existing water transmission pipeline owned by them, to Security and Widefield. These two entities contracted for up to 725 acre-feet per year of Pikes Peak's water. In the period of 1980 - 1982, the deliveries ranged from 688 to 752 acre-feet per year. Stratmoor Hills has also received municipal water deliveries from Pikes Peak, via an interconnect between Security and Stratmoor Hills.

At the present time, Pikes Peak Water Company is holding discussions with potential water users in the Eastern El Paso County region regarding the sale of Pikes Peak water. There are no existing water sales contracts at this time. Pikes Peak intends to continue to pursue water sales.

Arkansas River Water

The proponents of the District are diligently pursuing the acquisition of surface water rights as a supplemental water supply for the District. To this end the proponents are assisting in the change of type and place of use of certain 1871 Arkansas River rights. This effort commenced in mid-1982 and is an on-going effort because the proponents of the District believe that surface water rights are important to meet the future water resources needs of El Paso County.

Rocky Mountain Water Works

The Rocky Mountain Water Works wells consist of six alluvial wells situated in the shallow aquifers associated with Little Horse Creek and Steele's Fork Creek in Lincoln County. Decrees for these wells have been issued in the District Court in and for Water Division No. 2, State of Colorado, granting a conditional right for out-of-basin exportation of up to 1,925 acre-feet per year. Engineering information provided by the proponents of the District indicates that the existing wells are capable of pumping at a rate at least as high as, and probably higher than, 1,925 acre-feet per year.

Design Criteria

The water system facilities for the District will be designed and constructed in accordance with standards and criteria for such facilities as are duly adopted and published by the Colorado Department of Health and the Ellicott Fire Protection District. El Paso County has not promulgated its own standards and criteria for water system facilities and there are no existing water or metropolitan districts within a three-mile radius of the proposed Sunset Metropolitan District.

The general criteria for design of the District's water system are as follows:

1. Average Daily Demands

A.	Residential inside use: 15,160 persons @ 70 gpcd	=	1,061,200 gpd
B.	Residential irrigation use: 15,160 persons @ 10 gpcd	=	151,600 gpd
C.	Retail/Commercial: 930 employees @ 17 gpcd	=	15,810 gpd
D.	Light Industrial 1,170 employees @ 17 gpcd	=	<u>19,890 gpd</u>
	TOTAL	=	1,248,500 gpd
	TOTAL	=	1,400 AF/Yr

2. Maximum day demand factor is 1.5 times average daily use, and maximum hour demand is 3.0 times average daily demand.
3. Fire flow requirements for the non-residential areas are 2,000 gpm for a flow duration of 2 hours.
4. Water storage facilities are sized based on industry criteria providing for emergency, equalization and fire flow requirements.
5. Emergency storage requirements are assumed to be one day of maximum day demand.
6. Equalizing storage is assumed to be 25 percent of maximum day demand.
7. Fire flow storage is based on providing 2,000 gpm fire flow for a 2-hour duration per standard criteria.

It is anticipated that the water supply system will be divided into two (2) pressure zones during normal operations.

Water Treatment

No additional treatment, other than disinfection as required, is anticipated to be provided for the District water supply.

Water Distribution System

The preliminary design of the main water distribution system is presented in Exhibit B. This system will be supplemented with local distribution mains to serve the individual project areas. It is anticipated that the entire system will be metered, with the meter costs being paid by each customer.

Water System Capital Costs

As actual development requires, the acquisition of water resources and the water system construction will be accomplished on a phased basis. The estimated costs for the elements of the water supply system are given in the enclosed tables as follows: major on-site water system facilities are shown in Table II - 1; minor on-site water system facilities are included in the minor on-site infrastructure costs shown in Table VIII - 1 and water acquisition costs are shown in Table VIII - 4.

Table II-1: Sunset Metropolitan District
 Estimated Costs of Major Water System Facilities

Year	Description	Cost	Subtotal
1986	1 MG Storage Facility	300,000	
	Pumping Station	360,000	
	Subtotal		\$660,000
1989	Pipeline for supplemental supply connection	333,000	
	Subtotal		\$333,000
1992	1.5 MG Storage Facility	450,000	
	Pumping Station	540,000	
	Subtotal		\$990,000
Total of Direct Construction.....			\$1,983,000

SECTION III

WASTEWATER (SANITARY SEWAGE) MANAGEMENT SYSTEM

The Sunset Metropolitan District proposes to develop a comprehensive wastewater management system. Elements of the system will include wastewater collection, pretreatment, filtration, disinfection (as required), storage and distribution. This reclaimed effluent will be used to irrigate and fertilize the public landscaping of the District. The wastewater management system is shown in Exhibit C.

Regional Wastewater Planning

The Project Aquarius Areawide Water Quality Management Plan for the Pikes Peak Region (El Paso and Teller Counties) - 1984 Update - published and adopted by the Pikes Peak Area Council of Governments (PPACG) - is the official regional Water Quality Management Plan (WQMP) for El Paso County. However, this WQMP does not address (does not prescribe or preclude) new wastewater treatment facilities in the area of El Paso County in which the District is to be located.

The proponents of the District will cooperate fully with the PPACG and request that the wastewater treatment facilities proposed for the District be included in the 1985 update to the WQMP. Site approval application(s) for the District wastewater treatment facilities will be prepared by the proponents of the District and submitted to the PPACG and the Colorado Department of Health for approval.

In accordance with published regulations, a site approval application for the District wastewater treatment facilities cannot be submitted to the Colorado Department of Health until after formation of the District. Site approval application preparation is underway as of August 1985 so that an application can be submitted to the PPACG for their approval by December 1985. This timetable should accommodate formation of the proposed District and submittal of the site approval application to the Colorado Department of Health in early 1986.

Design Criteria

The wastewater management system facilities for the District will be designed and constructed in accordance with standards and criteria for such facilities as are adopted and published by the Colorado Department of Health. El Paso County has not promulgated its own standards and there are no existing sanitation or metropolitan districts within a three-mile radius of the proposed Sunset Metropolitan District.

The general design criteria for the wastewater management system are presented below:

Total wastewater flow is estimated to be 1,042,206 gpd or 1,167 acre-feet/year. Wastewater generation rates have been calculated as indicated below and as shown in Table III-1:

- Commercial/Industrial -- 15 gallons per employee per working day
- Residential areas -- 5.0 dwelling units per acre, 2.9 people per dwelling unit and 67 gpcd
- A peaking factor for wastewater flow rates of 3.5 times the average daily flow rate has been used.
- The minimum size of pipelines used in the wastewater collection system is 8 inches for gravity collectors and 4 inches for force main sewers. All sewer types shall be designed to achieve a minimum of 2 feet per second flow velocity.
- The central wastewater treatment facility for the project will be located in the southeast one-quarter (SE 1/4) of Section 12, Township 15 S, Range 63 W.

Wastewater Collection System

All collection lines, appurtenances, pumping stations and force main sewers within the service area will be owned and operated by the Sunset Metropolitan District. Due to the topography of the project site, the collection system shall consist of both gravity collection and pressure transmission lines to convey the collected wastewaters to the central treatment facility. All building sites will be served by gravity wastewater collection lines.

Wastewater Treatment System

All wastewater generated within the District service area shall be conveyed to and treated at the central wastewater treatment facility to be located in Section 12. The District will own and operate the treatment facility which will be constructed in phases as the project development demands. The first-phase of the treatment facility will have a treatment capacity of 0.39 mgd, the second phase of the facility will have a capacity of 0.37 mgd, and the third phase 0.28 mgd, for an ultimate total of 1.04 mgd treatment capacity.

Each phase of the central treatment facility shall be an aerated lagoon design consisting of three cells in series. Treatment in the lagoon will be followed by storage (during the non-irrigation season), filtration, and disinfection (as required)

prior to distribution to the landscape irrigation system. Storage capacity shall, at a minimum, meet the U.S. EPA design guidelines and provision for 120 days of storage shall be incorporated into the design.

The annual wastewater volume entering the treatment facilities at full development is equivalent to 1,167 acre-feet of water. This amount of available treated wastewater effluent (adjusted for storage losses due to evaporation) will be carefully considered in finalizing the irrigated landscaping acreage and plant listing. The design intent for the public landscaping will be to balance the irrigation water demand and nitrogen uptake of that landscaping with those amounts which will be available from the treated wastewater effluent.

Wastewater Management System Capital Costs

Estimated costs of the three phases of the central treatment facility are shown in Table III-2. The estimated costs for minor on-site wastewater facilities (lift stations, force mains, gravity sewers, manholes and appurtenances) are included in the minor on-site infrastructure costs listed in Table VIII-1.

Table III-1: Sunset Metropolitan District
Wastewater Flow Generation

Phase 1

Residential				
Population	5,670	persons		
Average Daily flow	67	gpcd		
		=		379,890 gpd
Commercial/Office				
Employment	375	persons		
Average Daily flow	15	gpcd		
		=		5,625 gpd
Light Industrial				
Employment	0	persons		
Average Daily flow	15	gpcd		
		=		0 gpd
Total Average Flows				
Weekday Flows		=		385,515 gpd
Weekend Flows		=		385,515 gpd
Annual Average Daily Flows		=		385,515 gpd
Design Peak Flow				
Annual Average Daily Flow X 3.5		=		1.3493 mgd

Phase 2

Residential				
Population	5,530	persons		
Average Daily flow	67	gpcd		
		=		370,510 gpd
Commercial/Office				
Employment	185	persons		
Average Daily flow	15	gpcd		
		=		2,775 gpd
Light Industrial				
Employment	0	persons		
Average Daily flow	15	gpcd		
		=		0 gpd
Total Average Flows				
Weekday Flows		=		373,285 gpd
Weekend Flows		=		373,285 gpd
Annual Average Daily Flows		=		373,285 gpd
Design Peak Flow				
Annual Average Daily Flow X 3.5		=		1.3065 mgd

Table III-1: Sunset Metropolitan District
Wastewater Flow Generation (continued)

Phase 3

Residential				
Population	3,960	persons		
Average Daily flow	67	gpcd	=	265,320 gpd
Commercial/Office				
Employment	370	persons		
Average Daily flow	15	gpcd	=	5,550 gpd
Light Industrial				
Employment	1,170	persons		
Average Daily flow	15	gpcd	=	17,550 gpd
Total Average Flows				
Weekday Flows			=	288,420 gpd
Weekend Flows			=	270,870 gpd
Annual Average Daily Flows			=	283,406 gpd
Design Peak Flow				
Annual Average Daily Flow X 3.5			=	.9919 mgd

Entire Village

Residential				
Population	15,160	persons		
Average Daily flow	67	gpcd	=	1,015,720 gpd
Commercial/Office				
Employment	930	persons		
Average Daily flow	15	gpcd	=	13,950 gpd
Light Industrial				
Employment	1,170	persons		
Average Daily flow	15	gpcd	=	17,550 gpd
Total Average Flows				
Weekday Flows			=	1,047,220 gpd
Weekend Flows			=	1,029,670 gpd
Annual Average Daily Flows			=	1,042,206 gpd
Design Peak Flow				
Annual Average Daily Flow X 3.5			=	3.6477 mgd

Table III-2: Sunset Metropolitan District
 Est'd Costs of Major Wastewater System Facilities

Year	Description	Cost	Subtotal
1986	Treatment Facility Phase I	1,505,000	
	Subtotal		\$1,505,000
1990	Treatment Facility Phase II	1,457,000	
	Subtotal		\$1,457,000
1995	Treatment Facility Phase III	1,106,000	
	Subtotal		\$1,106,000
Total of Direct Construction.....			\$4,068,000