



IMPACT FEE SERVICE AREA NUMBER 1

CAPITAL IMPROVEMENTS PLAN UPDATED FEE SCHEDULE, 2013

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March 15, 2013

CAPITAL IMPROVEMENTS PLAN

for the

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UPDATED FEE SCHEDULE, 2013

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CAPITAL IMPROVEMENTS PLAN

for the

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UPDATED FEE SCHEDULE, 2013

Executive Summary

This Capital Improvements Plan for Impact Fee Service Area Number 1 incorporates updated information relating to land uses, development that has occurred, updated projects identification, and updated project construction costs. Beginning with the initial infrastructure fees in 1994, the fees were updated by the City Council in 1997. In 2002, the Infrastructure Fee Program was converted to an Impact Fee system, conforming to the requirements of Nevada Revised Statutes chapter 278B. This Capital Improvements Plan presents the most recent update of the fees since the last update in 2005.

The following table summarizes the impact fees for Service Area Number 1, incorporating updated projections of land uses and capital costs.

Preliminary 2013 Impact Fees (March 15, 2013)						Current fees
Land Use Types	Infrastructure Type				Total Fees	
	Sanitary Sewer	Flood Control	Parks & Rec.	Fire Station Projects		
Single Family Res. (\$/Dwelling Unit)	\$239	\$564	\$619	\$286	\$1,708	\$2,108
Multifamily Res. (\$/Dwelling Unit)	\$239	\$198	\$619	\$286	\$1,342	\$1,510
Business Park (\$/1,000 SF of Building)	\$75	\$325	n/a	\$286	\$686	\$721
General Commercial (\$/1,000 SF of Building)	\$225	\$324	n/a	\$286	\$835	\$873
Public Facilities (\$/1,000 SF of Building)	\$74	\$324	n/a	\$286	\$684	\$740
Tourist Commercial (\$/1,000 SF of Building)	\$225	\$324	n/a	\$286	\$835	\$779
Lodging (\$/room)	\$126	n/a	n/a	\$286	\$412	\$308

CAPITAL IMPROVEMENTS PLAN

for the

IMPACT FEE SERVICE AREA #1

Introduction

Background and Purpose.

The Sparks City Council adopted the Northern Sparks Sphere of Influence (NSSOI) Infrastructure Financing Concept Plan on March 28, 1994. With adoption of the Infrastructure Financing Concept Plan, the City Council established a program that funds the development of infrastructure in the NSSOI. The program incorporates infrastructure costs for the NSSOI and the distribution of those costs among the various development types. Distribution of the costs among the development types yields fees that developers pay when they obtain building permits. This program of assessing and collecting infrastructure fees finances the planning, design and construction of regional infrastructure elements in support of the NSSOI.

A basic assumption of the Infrastructure Financing Concept Plan is recognition that regional master plans and private development plans change; infrastructure project scopes and costs change and are updated; and, regional infrastructure needs are revised. To react to these variables, the infrastructure fees are updated periodically. The infrastructure fees created under the Infrastructure Financing Concept Plan were first updated by the City Council in 1997 and subsequently in 2002 and 2005.

In July of 2001, an update to the 1997 NSSOI Infrastructure Fees was presented to the Sparks Planning Commission for its recommendation to the City Council. At that time, the City Attorney's Office suggested an alternative direction regarding infrastructure fees. Specifically, fees that are established under NRS Chapter 278B – "Impact Fees for New Development" provided a more appropriate structure for fees in the NSSOI and the name change to Impact Fee Service Area Number 1 (IFSA1).

The scope of this Capital Improvements Plan is based on the continuation of the earlier Infrastructure Financing Concept Plan, consistent with the requirements of NRS 278B, specifically NRS 278B.170 Contents of capital improvements plan.

Land use categories and Service Units.

Impact fees are based on (1) land use category, (2) the service unit within each infrastructure type, and (3) the development unit within each land use category. As defined in NRS 278B, a service unit is "a standardized measure of consumption, use, generation or discharge which is attributable to an individual unit of development calculated for a particular category of capital improvements or facility expansions." Development units for dwellings (single family residential units, multifamily residential units, and

hotel/motel rooms) will be each dwelling. Development units for all other types of land use will be each 1,000 square feet of building space. The following table explains and defines the categories, the development units within each category and the methodology to be used in estimating the number of development units based on the land use assumptions used to estimate the capital improvement needs and costs for the Service Area. If there is a question about which category a particular development activity fits into, the Administrator shall select the category that includes the most comparable uses based on expected demands for facilities being financed with the impact fees.

Category	Definition and Examples	Development Unit
Residential:		
Single Family	Detached dwelling units on individual lots; two detached dwelling units located on one lot; not more than two attached dwelling units with separate entrances, connected only by a vertical common wall, and each dwelling unit is situated on a separate lot.	Each dwelling unit
Multi Family	Three or more attached dwelling units, such as condominiums, townhouses, apartments and boarding houses.	Each dwelling unit
Nonresidential		
Business Park	Uses that are found in a campus like setting including general offices, medical offices, research and development facilities, laboratories, corporate and regional facilities for national and regional businesses. This category includes support uses, but does not include warehousing and distribution facilities as principal uses.	Each 1,000 square feet of building space. ¹
General Commercial	A grouping of uses that provide services and supplies for the community including retail, personnel services, offices, and restaurants. This category does not include warehousing, distribution facilities or manufacturing.	Each 1,000 square feet of building space. ¹
Public facilities	Facilities owned by a government entity, or which are dedicated for public use such as golf courses, common areas, parks, fire stations, police stations, public administration buildings.	Each 1,000 square feet of building space. ¹
Tourist Commercial	A grouping of uses that caters to the visitor including gaming, lodging (motel or hotel) meeting rooms and support uses.	Each 1,000 square feet of building space (excluding rooms). ¹
Rooms	Hotel, motel, or other rooms intended for rental less than 30 days per stay.	Each room.

Establishment of Service Area

The Capital Improvements Plan is based on land use assumptions for the service area in which the impact fees will be imposed. The service area is defined in NRS 278B as “the area within the boundaries of the local government which is served and benefited by the capital improvement or facilities expansion as set forth in the capital improvements plan.” (NRS 278B.100) The service area for the Sparks Impact Fee Service Area 1 is based on an amalgamation of unique service areas for each of the infrastructure type.

The service area defines the area served and benefited by the infrastructure financed through the impact fees. It is important to note that adoption of the service area and its underlying land use assumptions does

¹ Land use assumptions in these categories are quantified by number of acres. While actual fees for each development unit are based on actual number of square feet in the buildings for which permits are sought, for purposes of estimating the number of development units in this CIP, buildings are assumed to occupy 25% of the land in a development site. Accordingly, it is estimated that there will be 10.89 development units per acre. (43,560 square feet in an acre x 25% = 10,890 square feet of building space per acre, divided into 1,000 square feet service units = 10.89 development units per acre).

not establish the master plan for the area. The service area merely establishes the boundaries of an area within which property owners receive benefits.

For sanitary sewers and flood control, topography and geology serve as the principal variables that establish the service area. The projected populations and associated distribution of the populations within the area influence the service area boundaries for the sanitary sewer infrastructure element. Regarding flood control, the drainage basins provided the initial boundary and subsequently adjusted to remove those areas falling within the County's jurisdiction.

For fire station projects and parks & recreation projects, population and geography link the respective service areas. In the case of fire station projects, projected response times play a key role in estimating the service area boundary defining that area benefiting from the fire stations. Parks & Recreation facilities serve an area identified in the "Park, Open Space and Recreation Services Plan" prepared by JC Drago & Associates in August 1997. The Drago Plan addresses recreational needs throughout the entire City. For the purposes of this report, only selected elements of the Plan specific to the service area are incorporated herein.

The boundary for Service Area Number 1 is a reconciliation of the service areas for each of the infrastructure types. In 1994 the Service Area was predominantly undeveloped. By 2002, development that had occurred in the area effectively established a loosely defined boundary. Therefore, in reconciling all of the infrastructure service areas into one, the resultant Service Area Number 1 yields an optimal relationship with each of the individual service areas. As the character or land uses change in the service area, boundaries may require modification. Service Area Number 1 boundary is shown at Appendix A.

Development Land Use for Service Area

Analysis of Master Plan Land Use

Projected land uses within the Sparks Impact Fee Service Area 1 conform to the City of Sparks Master Plan adopted by the City council in November 1991 with updates through December 2012. When Service Area Number 1 is fully developed, the expected types of land uses are summarized in the following table.

Master Plan Land Uses for Full Build Out		
Land Use Type	Acres	Development Units
Single Family Residential		13,919
Multifamily Residential		5,296
Total Residential Units, (dwelling units)	4,594	19,215
Business Park, (1,000 sf of building)	285	3,107
General Commercial, (1,000 sf of building)	407	4,386
Public Facilities, (1,000 sf of building)	38	414
Tourist Commercial, (1,000 sf of building)	18	195
Lodging, (room)		200
Open Space	3,205	
Schools and Parks	145	
Total Non-Residential Units	4,098	8,302
TOTAL	8,692	27,517

Analysis of Developed Land Uses

The developed land uses within the Service Area depict the amount of the full build out that has occurred within the Service Area, as of a defined date. For purposes of this Capital Improvements Plan, that date is December 31, 2012. The quantity of development in the service area is derived from an updated and more accurate Geographic Information System (GIS) utilized by the Community Services Department. The amount of development that has taken place is summarized in the following table.

Developed Land Uses through December 31, 2012	
Land Use Type	Development Units
Single Family Residential	7,258
Multifamily Residential	1,368
Total Residential Units	8,626
Business Park, (1,000 sf of building)	379
General Commercial, (1,000 sf of building)	1,476
Public Facilities, (1,000 sf of building)	41
Tourist Commercial, (1,000 sf of building)	
Lodging, (room)	
Open Space	
Schools and Parks	
Total Non-Residential Units	1,896.00
TOTAL	10,522.00

Analysis of Undeveloped Land Uses

Undeveloped land uses are defined as that development which remains to be accomplished during the build out period. Numerically, undeveloped land uses are derived by subtracting the quantity of developed land uses from the quantity of full build out land uses, shown in the following table.

Remaining Land Uses Within Service Area Subsequent to December 31, 2004				
Land Use Type	Full Build Out		Developed	Remaining
	Acres	Development Units	Development Units	Development Units
Single Family Residential		13,919	7,258	6,661
Multifamily Residential		5,296	1,368	3,928
Total Residential Units		19,215	8,626	10,589
Business Park	285	3,107	379	2,728
General Commercial	407	4,386	1,476	2,910
Public Facilities	38	414	41	373
Tourist Commercial	18	195	-0-	195
Lodging		200	-0-	200
Open Space	3,205			
Schools and Parks	145			
Total Non-Residential Units	4,098	8,302	1,896	6,406
TOTAL		27,517	10,522	16,995

Impact Fee Infrastructure Analysis

Sanitary Sewer

Description of Existing Facilities

The Master Plan for the Northern Sparks Sphere of Influence, prepared in 1991, was developed to improve planning in an area that had not seen any type of residential or commercial development. Existing land use at the time was agricultural. Because of absence of development, need for infrastructure did not exist. With adoption of the NSSOI Master Plan and implementation of voluntary infrastructure fees, several infrastructure projects were planned. For each of the infrastructure types for which fees are being developed, the facilities are described in the following sections.

The sanitary sewer facilities existing in 1994, at the time of the adoption of the first fee program, consisted of a single collector line at the southern boundary of the currently identified service area that terminated near the south boundary, barely entering Service Area Number 1. Interceptors connecting Service Area Number 1 to the Truckee Meadows Water Reclamation Facility (TMWRF) contained insufficient capacity to pass future flows coming from Service Area Number 1. The principal interceptor that existed in 1994 was the interceptor within the Sparks Boulevard right-of-way between Baring Boulevard and Interstate 80. Following implementation of facilities initially identified in the improvements plan, several sanitary sewer improvements now exist in the service area. Because the recent projects are relatively new, no need exists to expand or replace such facilities. The following table summarizes the existing sanitary sewer facilities.

Existing Sanitary Sewer Facilities	
Through 2012	
Facility	Cost
Northeast Interceptor & Main Trunk	
Baring Blvd to Drop Manhole	\$1,976,884
Drop Manhole to Los Altos	\$767,498
Los Altos to La Posada	\$3,097,544
Northwest Interceptor	
Main Trunk to 2,600 feet north	\$330,000
2,600 feet north of Main Trunk to 1,800 feet south of Spanish Springs Dam	\$453,816
Northwest Interceptor from 1,800 feet south of Spanish Springs Dam	\$1,820,591
Reliever Line, from Baring Blvd. To I-80. Total Cost \$12.493M, Area #1 contribution to total cost =	\$3,872,919
TOTAL	\$12,319,252

Assessment of Project Capacity Needs Attributable to New Development

Sanitary sewer capacity required to serve the Impact Fee Service Area is based on the flow generated. Using average unit flow rates for each type of land use, the total sewerage flow and the sewerage flow from the remaining (un-built) development are summarized in the following table:

Total Sewerage Flow from Impact Fee Service Area - Full Build Out -			
Land Use Type	Total Sewerage Flow, (gpd)	Remaining Sewerage Flow, (gpd)	
		(gpd)	%
Single Family Residential (650 gpd/devel. unit)	9,047,350	4,329,650	45.68%
Multifamily Residential (650 gpd/devel. unit)	3,442,400	2,553,200	26.94%
Business Park (2,200 gpd/acre; 202 gpd/devel. unit)	627,614	551,056	5.81%
General Commercial (6,666 gpd/acre; 612 gpd/devel. unit)	2,684,232	1,780,920	18.79%
Public Facilities (2,200 gpd/acre; 202 gpd/devel. unit)	83,628	75,346	0.79%
Tourist Commercial (6,666 gpd/acre; 612 gpd/devel. unit)	119,340	119,340	1.26%
Lodging (340 gpd/devel. unit)	68,000	68,000	0.72%
TOTAL	16,072,564	9,477,512	99.99%

gpd = gallons per day

The land use category of “Business Park” consists of a limited range of land uses focusing on office parks. “General Commercial” incorporates a broad range of specific land uses, including restaurant, bars, laundry, deli, office, and retail sales.

New Facilities needed to Support New Development

Based on the projected master plan land uses in the Impact Fee Service Area, there are no additional facilities required that warrant inclusion in the Impact Fee Structure at this time.

Basis for Cost Allocation among Development Unit Types (Sanitary Sewer)

The basis for allocating sanitary sewer infrastructure costs to service units combines two primary elements: (1) the net cost required to reimburse previously completed projects, and (2) allocating the net cost among remaining (un-built) development units. The following table summarizes service units for each land use type.

Summary of Sanitary Sewer Service Units	
Land Use Type	Service Unit
Single Family Residential	650 gpd/devel. unit
Multifamily Residential	650 gpd/devel. unit
Business Park	202 gpd/devel. unit
General Commercial	612 gpd/devel. unit
Public Facilities	202 gpd/devel. unit
Tourist Commercial	612 gpd/devel. unit
Lodging	340 gpd/devel. unit

Net costs incorporate construction costs, other revenue sources and previously paid fees. The following table describes the derivation of net costs for the sanitary sewer infrastructure element.

Net Sanitary Sewer Costs to be Funded	
Gross Cost	
Constructed facilities	\$12,319,252
Other Revenue Sources	
Sanitary sewer connection fees	(\$3,719,568)
Washoe County lease	(\$2,215,005)
Previously paid fees & credits given	(\$2,907,572)
TOTAL NET COST	\$3,477,107

Single Family Residential. The cost allocation of sanitary sewer costs for single family residential dwelling units is simply the single family residential share of total flow (45.68%) times the total cost to be funded (\$3,477,107), allocated to all remaining single family units (6,661 du's). The calculation is as follows:

$$\frac{45.68\% \times \$3,477,107}{6,661 \text{ du's}} = \$239 \text{ per single family dwelling unit}$$

Multifamily Residential. The cost allocation of sanitary sewer costs for multifamily residential dwelling units is the multifamily residential share of total flow (26.94%) times the total cost to be funded (\$3,477,107), allocated to the remaining multifamily dwelling units (3,928du's). The calculation is as follows:

$$\frac{26.94\% \times \$3,477,107}{3,928 \text{ du's}} = \$239 \text{ per multifamily dwelling unit}$$

Business Park. The cost allocation of sanitary sewer costs for business parks is the business park share of total flow (5.81%) times the total cost to be funded (\$3,477,107), allocated to the remaining business park development units (2,728 development units of 1,000 square feet of building). The calculation is as follows:

$$\frac{5.81\% \times \$3,477,107}{2,728 \text{ dev. units}} = \$75 \text{ per 1,000 square feet of building}$$

General Commercial. The cost allocation of sanitary sewer costs for general commercial land use is the general commercial share of total flow (18.79%) times the total cost to be funded (\$3,477,107), allocated to the remaining general commercial development units (2,910 development units of 1,000 square feet of building). The calculation is as follows:

$$\frac{18.79\% \times \$3,477,107}{2,910 \text{ dev. units}} = \$225 \text{ per 1,000 square feet of building}$$

Public Facilities. For public facilities, the cost allocation of sanitary sewer costs is the public facilities share of total flow (0.79%) times the total cost to be funded (\$3,477,107), allocated to the remaining public facilities development units (373 development units of 1,000 square feet of building). The calculation is as follows:

$$\frac{0.79\% \times \$3,477,107}{373 \text{ dev. units}} = \$74 \text{ per 1,000 square feet of building}$$

Tourist Commercial. The cost allocation of sanitary sewer costs for tourist commercial use is the tourist commercial share of total flow (1.26%) times the total cost to be funded (\$3,477,107), allocated to the remaining tourist commercial development units (195 development units of 1,000 square feet of building). The calculation is as follows:

$$\frac{1.26\% \times \$3,477,107}{195 \text{ dev. units}} = \$225 \text{ per 1,000 square feet of building}$$

Lodging. The cost allocation of sanitary sewer costs for lodging is the resort room share of total flow (0.72%) times the total cost to be funded to be funded (\$3,477,107), allocated to the remaining resort room development units (200 rooms). The calculation is as follows:

$$\frac{0.72\% \times \$3,477,107}{200 \text{ rooms}} = \$126 \text{ per room}$$

Flood Control

Description of Existing Facilities

Flood control facilities in Service Area Number 1 were limited in 1994. The single facility that existed in 1994 was the Sparks Detention Dam, constructed to detain drainage that ultimately traveled to the city limits. By 2012, several additional regional flood control facilities were constructed by developers in Service Area Number 1. Because the recent projects are relatively new, no need exists to expand or replace such facilities. The facilities, original and updated, are listed in the following table.

Existing Flood Control Facilities	
Through 2004	
Facility	Cost
La Posada Roadside Ditch Ph#1	\$597,789
Cimarron Unit Bypass Channel	\$400,000
Reach 5	\$770,697
Reach 7 – Wingfield Springs	\$1,350,805
Reach 8	\$376,800
Reach 11	\$1,353,825
La Posada Roadside Ditch Ph#2	\$526,716
Reach 10	\$367,504
Reach 12	\$21,550
Reach 4 - Partial	\$1,873,105
Reach 6 Foothills	\$270,248
Reach 6 GERP	\$539,584
Tucker Detention Basin	\$425,773
West Side Diversion	\$162,145
Wetlands Detention Basin	\$222,500
Boneyard Flat Improvements	\$2,719,903
TOTAL	\$11,978,944

Assessment of Project Capacity Needs Attributable to New Development

The flood control requirements to serve the Impact Fee Service Area are based on the amount of storm water runoff emanating from the Impact Fee Service Area. Most importantly, the flow exiting the service area must be reduced sufficiently to pass through the drainage facility at Shadow Lane, at the south boundary of the service area, with a flow rate of less than 856 cubic feet per second (cfs). Influencing the drainage rate passing through the service area is the Boneyard Flat drainage facility proposed by Washoe County. Although the Boneyard Flat facility is north and west of the Impact Fee Service Area, the facility would greatly reduce the scope and cost of drainage facilities proposed for the Impact Fee Service Area.

New Facilities needed to Support New Development

Flood control projects are required to accommodate increased runoff created by new development within Service Area Number 1. The basis for projecting infrastructure requirements for flood control is “Drainage Master Plan for the Spanish Springs Valley, Washoe County, Nevada,” November 1991, and updated in April 1996, prepared by Stantec, formerly SEA Engineers and Planners, and incorporated in the Sparks Master Plan. A copy of the 1991 and 1996 plan documents are on file with the Community Development Department. A listing of the remaining proposed facilities is contained in the following table:

New Flood Control Facilities	
Facility	Cost (based on year 2012 costs)
Reach 4, Remaining	\$541,328
Reach 12, Remaining	\$1,107,270
Reach 9	\$2,277,611
Total	\$3,926,209

Basis for Cost Allocation among Development Unit Types (Flood Control)

Allocation of flood control costs is a function of the amount of runoff from each land use type. The flood control master plan was based on a mathematical model designed by the U.S. Army Corps of Engineers. The model analyzes numerous variables affecting storm water runoff. These variables include precipitation rate, interception/infiltration, soil type, vegetative cover type, impervious surface, ground slope (topography), and presence and/or operational characteristics of existing storm water facilities. The most significant variable, or factor, that influences the amount of storm water runoff is the amount of impervious surface. The service unit for calculating the impact fee for flood control infrastructure is impervious area for each land use category.

As with the allocation of sanitary sewer costs, total net flood control costs are first distributed to each principal land use type based on the land use type's average impervious surface, and then the respective share of the cost is divided among all of the remaining development units. The following table describes the derivation of net costs for the flood control infrastructure element.

Net Flood Control Costs to be Funded	
Gross Cost	
Constructed facilities	\$11,978,944
Future facilities	\$3,926,209
Other Revenue Sources	
Storm drainage portion of sanitary sewer connection fees	(\$598,083)
Previously paid fees & credits given	(\$8,139,425)
TOTAL NET COST	\$7,167,645

To account for land area and for degree of impervious surface, which causes storm water runoff, the amount of remaining acreage for each land use type was adjusted in a consistent manner among all land use types. Estimates of impervious area are based on factors commonly used in projecting runoff quantities (Rational Formula, as used in hydrology) are as follows:

Single Family Residential	50% impervious surface
Multifamily Residential	65% impervious surface
Business Park, General	85% impervious surface
Commercial, Fire Stations, and Tourist Commercial	

The following information summarizes the adjusted acreages for each land use type and the percentage of area that the respective land use type occupies.

Allocation of Costs among Land Use Types (based on flow contribution; A, acres x C = ac*)

Single Family Residential:

$$\frac{6,661 \text{ remaining du's}}{13,919 \text{ total du's}} \times 3,779.7 \text{ acres} \times 0.50 = 904.40 \text{ ac* (52.37\% of total)}$$

Multi-Family Residential:

$$\frac{3,928 \text{ remaining du's}}{5,296 \text{ total du's}} \times 387.6 \text{ acres} \times 0.65 = 186.86 \text{ ac* (10.82\% of total)}$$

Business Park: 285.4 acres x 0.85 = 242.59 ac* (14.05% of total)

General Commercial: 406.8 acres x 0.85 = 345.78 ac* (20.02% of total)

Public Facilities: 37.6 acres x 0.85 = 31.96 ac* (1.85% of total)

Tourist Commercial: 17.9 acres x 0.85 = 15.22 ac* (0.88% of total)

Resort Rooms: not used in this allocation

Total Areas Adjusted for Impervious Surface 2,207.95 acres (100%)

Flood Control Fee Calculations

Single Family Residential. The cost allocation of flood control costs for single family residential dwelling units is calculated by multiplying the flow generated by single family residential land use (52.37%) times the total cost to be funded (\$7,167,645), allocated to all remaining single family (6,661 du's). The calculation is as follows:

$$\frac{\$7,167,645 \times 52.37\%}{6,661 \text{ du's}} = \$564 \text{ per single family du}$$

Multifamily Residential. The cost allocation of flood control costs for multifamily residential dwelling units is calculated by multiplying the runoff generated from multifamily residential land use (10.82%) times the total cost to be funded (\$7,167,645), allocated to all remaining multifamily dwelling units (3,928 du's). The calculation is as follows:

$$\frac{\$12,677,957}{3,928 \text{ du's}} \times 10.82\% = \$198 \text{ per multi-family dwelling unit}$$

Business Park. The cost allocation of flood control costs for business parks is calculated by multiplying the runoff generated from business parks (14.05%) times the total cost to be funded (\$7,167,645),

allocated to all remaining business park development units (3,108 development units of 1,000 square feet of building). The calculation is as follows:

$$\frac{14.05\% \times \$7,167,645}{3,108 \text{ devel. units}} = \$325 \text{ per 1,000 square feet of building}$$

General Commercial. The cost allocation of flood control costs for general commercial land use is calculated by multiplying the runoff generated from general commercial land use (20.02%) times the total cost to be funded (\$7,167,645), allocated to all remaining general commercial development units (4,430 development units of 1,000 square feet of building). The calculation is as follows:

$$\frac{20.02\% \times \$7,167,645}{4,430 \text{ devel. units}} = \$324 \text{ per 1,000 square feet of building}$$

Public Facilities. The cost allocation of flood control costs for public facilities is calculated by multiplying the runoff generated from public facilities (1.85%) times the total cost to be funded (\$7,167,645), allocated to all remaining public facilities development units (410 development units of 1,000 square feet of building). The calculation is as follows:

$$\frac{1.85\% \times \$7,167,645}{410 \text{ devel. units}} = \$324 \text{ per 1,000 square feet of building}$$

Tourist Commercial. The cost allocation of flood control costs for tourist commercial land use is calculated by multiplying the runoff generated from tourist commercial land use (0.88%) times the total cost to be funded (\$7,167,645), allocated to all remaining tourist commercial development units (195 development units of 1,000 square feet of building). The calculation is as follows:

$$\frac{.88\% \times \$7,167,645}{195 \text{ devel. units}} = \$324 \text{ per 1,000 square feet of building}$$

Lodging. Because lodging is incorporated in tourist commercial land uses, commonly on floors above the first, no flood flow is contributed by lodging. Therefore, no flood control fees are assessed against lodging.

Parks and Recreation

Description of Existing Facilities

No regional or sub-regional parks & recreation facilities existed in the service area in 1994. While a comprehensive parks & recreational facilities Master Plan has been developed and is in different stages of planning and construction, smaller parks, such as neighborhood parks, have been constructed in the service area, but are not a part of this fee program. Park & recreation facilities required to serve the residents of the Impact Fee Service Area were initially established by “rule-of-thumb” estimates based on population. Subsequently, the Sparks Parks & Recreation Department, through staff and consultants, developed more detailed master planning documents. In August 1997, the “Park, Open Space and Recreation Services Plan,” was completed, which was ultimately incorporated into the City’s Master Plan. This report provides the basis for future park facilities in the Impact Fee Service Area. With certain unique facilities, a facility may serve more than just the Impact Fee Service Area. In such situations, the cost is distributed to Impact Fee Service Area and non-Impact Fee Service Area land uses.

To meet the parks & recreational needs of Service Area Number 1, a combination of facilities has been identified. The following table details the existing constructed facilities through December 2012.

Existing Parks & Recreation Facilities	
Facility	Cost
Section 18 Regional Sports Complex	\$5,269,000
Linear Park - Orr Ditch Partial	\$525,648
Linear Park – Spanish Springs Trail Partial	\$1,477,842
Total	\$7,272,490

New Facilities needed to Support New Development

The bases for identification of required projects are founded on the amount of population and the distribution of that population in the Service Area. The projects are identified in the Sparks Master Plan, and specifically the Parks & Recreation element. In addition to Impact Fee Service Area users, those living outside of the Impact Fee Service Area, also, would likely utilize the regional park. While the exact distribution of the two types of users is difficult to identify, an estimated allocation of costs between the Impact Fee Service Area and the non-Impact Fee Service Area users of 60% and 40%, respectively, is assigned to the estimated project costs. The table below represents the approved future projects at the time of this study update. The cost estimates are for 2013 but reflect what is expected for the construction when accomplished.

New Parks & Recreation Facilities	
Facility	Cost (based on year 2013 costs)
Section 18 Community Park (12 acres)	\$2,790,804
Linear Park - Orr Ditch Remaining	\$1,082,900
Linear Park – Spanish Springs Trail Remaining	\$1,414,400
Wedekind Park Trailhead	\$300,000
Total	\$5,588,104

Total Costs for all facilities = \$12,860,594.

Basis for Cost Allocation among Development Unit Types (Parks and Recreation)

Costs for the development of parks & recreation are distributed among the principal users of such facilities—residential land uses. The standards used for service units are based on those contained in the City’s Master Plan. The service units are summarized in the following table.

Summary of Parks & Recreation Service Units	
Park & Recreation Facility Type	Service Unit Standard
Community Park	0.77 acre per 1,000 population
Regional Park	5.5 acres per 1,000 population
Pathways/Trails	0.27 mile per 1,000 population
Note: Service unit standards used for Community Park and Regional Park may incorporate standards for other types of facilities, such as soccer fields, baseball and softball fields, and football fields, based on the inclusion of these elements in the Community Park or Regional Park.	

Costs for the parks & recreation facilities are spread among the residential development units. Total net costs are shown in the following table:

Net Parks & Recreation Costs to be Funded	
Gross Cost	
Constructed facilities	\$7,272,490
Future facilities	\$5,588,104
Other Revenue Sources	
Previously paid fees & credits given	(\$6,313,779)
TOTAL NET COST	\$6,546,815

Single Family Residential and Multifamily Residential. Similar to other infrastructure types, the cost allocation for all parks & recreation costs (\$6,546,815) is allocated to all remaining residential dwelling units—single family and multifamily. (6,661 + 3,928 = 10,589 du’s). The calculation is as follows:

$$\frac{\$6,546,815}{10,589 \text{ du's}} = \$619 \text{ per dwelling unit (single or multi - family)}$$

Fire Station

Description of Existing Facilities

Fire station projects are developed to support Service Area Number 1 based on distance/response time and priority for construction and manning is based on density of response calls for service areas. Fire Station #4 was the first to be developed at the intersection of Vista Boulevard and Disc Drive. In 2002, a site for the proposed Fire Station #5 was purchased for \$500,000. The site was changed in 2005 and Fire Station #5 was constructed through a property exchange and construction agreement with Loeb Enterprises.

Existing Fire Station Projects	
Through June 2012	
Facility	Cost
Fire Station #5 construction + Land Acquired	\$1,748,116 \$500,000
TOTAL	\$2,248,116

New Facilities needed to Support New Development

Given the magnitude and distribution of population, and the proposed roadway network envisioned for Service Area Number 1, senior administration at the Sparks Fire Department assessed the required minimum response times. Response times provided the basis for identification of fire stations required for the full-build out master plan for the Impact Fee Service Area.

Basis for Cost Allocation among Development Unit Types (Fire Station)

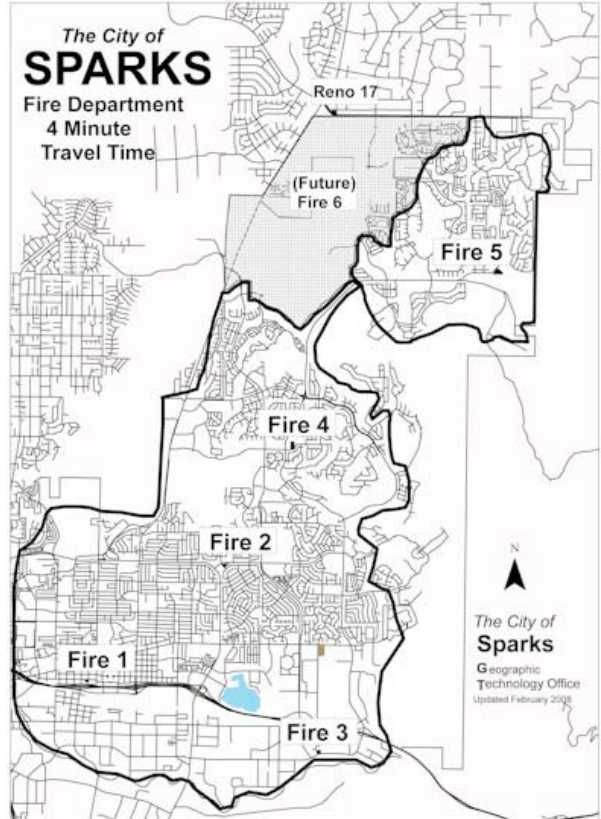
The basis for establishing fire station projects in the Service Area is the response required to serve the population—residential and non-residential—in the Service Area. The basis for identification of required fire stations are founded on the amount of population and the distribution of that population in the Service Area. To meet minimum response times, a new fire station and a station expansion are required. A fire station in the northern and northwestern portion of the Impact Fee Service Area is required to reduce what would otherwise be unacceptably high response times in the northern boundary area. This fire station has been identified as Fire Station #6. Based on several coordination meetings with the Senior Fire Staff and Community Development officials, the future density of the southern portion of the IFSA led to increase capacity requirement of existing Fire Station #4. An additional Bay to Fire Station #4 must be accomplished to serve the needs of this additional development in that area. The following table presents the additional facilities required for fire protection as of 31 December, 2012.

New Fire Station Projects	
Facility	Cost (based on year projected to be built)
Construct New Fire Station (northern portion of Impact Fee Service Area - Fire Station #6) (year scheduled 2023)	\$3,483,526
Station Expansion at Fire Station #4 to accommodate additional Fire Apparatus and dorm area for 4 additional personnel (year scheduled 2017)	\$1,047,030
Total	\$4,530,556

Fire Station Projects.

Fire station projects are targeted for funding from all land use types. The basis for this allocation was determined because the level of fire response for all citizens and residents are the same. The response time standard for determining fire station projects is a six-minute travel time to the coverage area. Response times for the City, and specifically the Service Area, are shown in the map to the right.

Based on the six-minute service unit, the Fire Department’s senior staff identified fire station locations in the Impact Fee Service Area. Based on the number and location of stations, and the types of calls expected to be received from land uses in the Service Area, equipment inventories for each station was identified. The demand for an additional station would most likely come when 1,000 residential units or commercial units or any combination of both are built within the area identified as future Fire 6 (northern area of Impact Service Area #1). A “call for service” volume of 210 is also an indicator for an additional station. The fire stations and equipment so identified provided the basis for Fire Station Projects.



Priority of construction projects for the Service Area is determined by a combination of the density of the response calls in each of the service areas, the expected population growth in each area, and the funding stream to meet the responses. Based on projections for future calls and estimates from the City of Sparks Staff the Expansion at Station #4 should be built in 2017 and the new Fire Station #6 should be built in 2023.

Therefore, the total net cost of developing fire station projects in the Impact Fee Service Area is distributed to development units in all land use classifications. The projected net cost is derived as shown in the following table:

Net Fire Station Project Costs to be Funded	
Gross Cost	
Fire Station #4 Improvements	\$1,047,030
Fire Station #5 Construction (completed) + Land Acquisition of \$500K	\$2,248,116
Fire Station #6 Construction	\$3,483,526
Other Revenue Sources	
Previously paid fees & credits given	(\$1,926,368)
TOTAL NET COST	\$4,852,304

The calculation incorporating the remaining development units and the net costs for fire station projects is as follows:

$$\frac{\$4,852,304}{16,996 \text{ du's}} = \$286 \text{ per dwelling unit or service unit}$$

Summary of Allocation of Costs (Impact Fees)

A summary of the impact fees is presented in the following table:

Preliminary 2013 Impact Fees (March 15, 2013)					
Land Use Types	Infrastructure Type				Total Fees
	Sanitary Sewer	Flood Control	Parks & Rec.	Fire Station Projects	
Single Family Res. (\$/ Dwelling Unit)	\$239	\$564	\$619	\$286	\$1,708
Multifamily Res. (\$/ Dwelling Unit)	\$239	\$198	\$619	\$286	\$1,342
Business Park (\$/1,000 SF of Building)	\$75	\$325	n/a	\$286	\$686
General Commercial (\$/1,000 SF of Building)	\$225	\$324	n/a	\$286	\$835
Public Facilities (\$/1,000 SF of Building)	\$74	\$324	n/a	\$286	\$684
Tourist Commercial (\$/1,000 SF of Building)	\$225	\$324	n/a	\$286	\$835
Lodging (\$/room)	\$126	n/a	n/a	\$286	\$412

Collection, Credits, and Administration of Impact Fees

Impact Fees

Collection of Fees

Impact fees shall be collected at the time building permits are issued for improvements in the Service Area.

Credits against Fees

General.

Any person initiating a land development activity may apply for credits against impact fees as provided in this section. The following provisions apply to requests for credits.

(1) Credits shall be requested, granted, documented, and applied against impact fees as provided in the Administrative Manual.

(2) Credits may be transferred to any developer, as provided in the Administrative Manual, but may be applied only to developments in the Service Area.

Credits for dedication of land or construction of CIP Projects.

If an owner or developer is required to dedicate land pursuant to NRS 278.4983, or otherwise dedicate or improve land, or both, for use as a park identified herein ("CIP Park Project"), or construct or dedicate a portion of the off-site facilities for a CIP Project, the owner is entitled under NRS 278B. 240(3) to receive credit against the impact fee imposed for the park project for the fair market value of the land dedicated, the cost of any improvements to the dedicated land, or the cost of the off-site facilities dedicated or constructed, as applicable. To receive these credits, the owner or developer must first, before commencing construction of any improvements, obtain approval from the Administrator for the plans and specifications and estimated costs of the improvements, and, after construction commences, must obtain approval from the Administrator for all cost overruns and change orders, as provided in the Administrative Manual.

Credits for payment of residential construction tax.

Neighborhood parks for which a Residential Construction Tax may be imposed under NRS 278.4983 have been excluded from this CIP, and therefore, credits under NRS 278B.240(3)(a) are not contemplated. However, should a residential construction tax be imposed for a park which is included in this CIP, the owner or developer is entitled to a credit against the impact fees for that park for the amount of the residential construction tax actually paid by the owner or developer.

Conditions on collecting impact fees.

CIP Projects only.

As required by NRS 278B.250, impact fees may be collected only for projects, which are described in this CIP.

Reservation of capacity or agreement to reimburse.

As required by NRS 278B.250(2), before collecting the impact fees set forth herein, the Administrator shall enter into a written agreement with the owner or developer where under the City agrees to either:

- (1) Reserve to the developer or owner (or assigns) a portion of the new capacity of the improvements being built and paid for by the impact fees to be collected in an amount agreed upon; or
- (2) Permit the owner or developer to construct or finance the improvements and if the owner or developer does so, the City will provide credits to impact fees as provided above, or will (at City's option) reimburse the owner or developer for those costs from the impact fees paid from other developers who will use those improvements.

Review every three years

Calculation of actual costs upon completion of projects; Refunds of fees collected.

Upon the completion of a capital improvement or facility expansion identified in the capital improvements plan, the City shall determine the actual cost of the improvement and shall combine that amount with estimated costs of other projects in the same category to be completed. If the actual costs plus projected costs are less than the amounts actually collected from the developer or owner, the City shall refund the surplus impact fees collected.

If the City fails to commence projects or complete the expenditure of impact fees collected with the time frames set forth in NRS 278B.260 it shall refund the fees as provided therein.

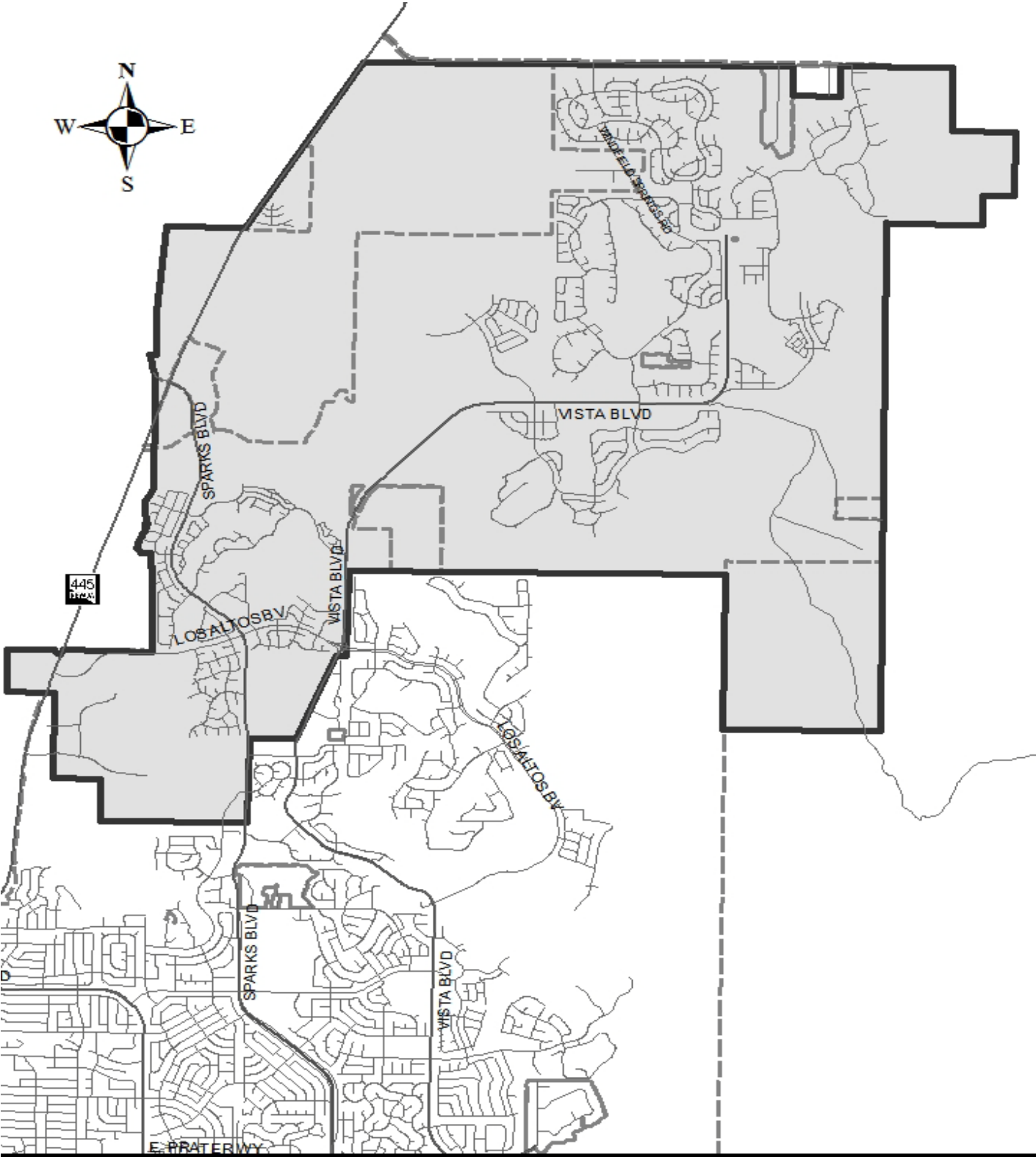
APPENDICES

Appendix A.....	Impact Fee Service Area Number 1
Appendix B.....	Miscellaneous Calculations
Appendix B-1.....	Sanitary Sewer Calculations
Appendix B-2.....	Flood Control Calculations
Appendix B-3.....	Parks & Recreation Calculations
Appendix B-4.....	Fire Station Projects Calculations

Appendix A

Impact Fee Service Area Number 1

Impact Fee Service Area Number 1



Appendix B-1

Sanitary Sewer Calculations

Revenue from Sanitary Sewer Connection Fees

Sanitary sewer connection fees paid in Service Area Number 1 include a part that is devoted to development of interceptors. This allocation is assigned to interceptor development, which decreases the funding requirement for interceptors in Service Area Number 1. The amount of the fee devoted to interceptor development is \$151 per equivalent dwelling unit (\$151/edu).

$\frac{\$151/\text{edu}}{650\text{gpd}/\text{edu}} = \$0.2323/\text{gpd}$

	<u>Master Plan, Full Build Out</u>	<u>Flow rate per Development Unit</u>	<u>Projected Revenue</u>
Single Family Residential	13,919	\$151/du	\$2,101,769
Multifamily Residential	5,296	\$151/du	\$799,696
General Commercial	403	\$0.2323/gpd x 6,666gpd/acre	\$623,671
Business Park	286	\$0.2323/gpd x 2,200gpd/acre	\$146,163
Public Facility	9	\$0.2323/gpd x 2,200gpd/acre	\$4,600
Tourist Commercial	18	\$0.2323/gpd x 6,666gpd/acre	\$27,873
Resort Room	200	\$0.2323/gpd x 340gpd/room	\$15,796
		Total	\$3,719,568

Washoe County Lease Payments

Washoe County leases part of the interceptor capacity in several portions of the completed main trunk and the northeast interceptor.

La Posada to Los Altos:	\$70,658 x 20 years = \$1,413,160
Los Altos to SW corner of Section 22 (Drop Manhole):	\$194,985
SW corner of Section 22 (Drop Manhole) to Baring Blvd.:	\$30,343 x 20 years = \$606,860
Total	\$2,215,005

Previously Paid Fees & Credits Given

1995 All Sources except 1000 series collections	\$ 24,486
1996 All Sources except 1000 series collections	\$ 72,155
1997 All Sources except 1000 series collections	\$ 114,279
1998 All Sources except 1000 series collections	\$ 169,780
1999 All Sources except 1000 series collections	\$ 149,580
2000 All Sources except 1000 series collections	\$ 118,561
2001 All Sources except 1000 series collections	\$ 113,108
2002 All Sources except 1000 series collections	\$ 128,736
2003 All Sources except 1000 series collections	\$ 164,084
2004 All Sources except 1000 series collections	\$ 215,793
subtotal	\$1,270,561
1997-2004 Kiley 1000 series collection	\$ 376,381
1997-2004 Bailey-McG 1004 series collection	\$ 279
1997-2004 Lewis Homes 1007 series collection	\$ 341
1997-2004 Barker Cole 1022 series collection	\$ 90
1997-2004 Sewer-Reno Dev. 1027 series collection	\$ 39,741
1997-2004 Sewer R&K Homes 1029 series collection	\$ 4,554

	TOTAL THRU 2004	\$1,691,948
2005 Fees Collected		\$452,084
2006 Fees Collected		\$406,959
2007 Fees Collected		\$120,632
2008 Fees Collected		\$158,900
2009 Fees Collected		\$ 17,341
2010 Fees Collected		\$ 20,753
2011 Fees Collected		\$ 16,005
2012 Fees Collected		<u>\$ 22,950</u>
	TOTAL 2005 THRU 2012	\$1,215,624

TOTAL **\$2,907,572**

Appendix B-2

Flood Control Calculations

Flood Control Portion of Connection Fees. A portion of the sanitary sewer connection fees paid in the NSSOI includes a part that is devoted to storm drainage. This allocation decreases the funding requirement for NSSOI flood control. The amount of the fee devoted to flood control is \$36 per equivalent dwelling unit, however only 75% of the storm drainage element (\$27/edu) is used to offset the flood control infrastructure cost, per City policy. [Neil Krutz email 3/22/00, verbal direction 6/5/00].

a. Residential Contribution:

$$\begin{aligned} \text{SF: } & 13,919 \text{ du's} \times \$27/\text{du} = \$375,813 \\ \text{MF: } & 5,296 \text{ du's} \times \$27/\text{du} = \$142,992 \\ & \text{Total Residential} - \$518,805 \end{aligned}$$

b. Relate residential fee to non-residential fee based on runoff coefficient used in the rational formula

$$\begin{aligned} \text{SF: } & 3,779.7 \text{ acres; } 13,919 \text{ du's; } C=0.50 \\ \text{MF: } & 387.6 \text{ acres; } 5,296 \text{ du's; } C=0.65 \\ \text{BP, GC, PF, TC: } & (285.4+406.8+37.6+17.9=) 747.7 \text{ acres; } C=0.85 \end{aligned}$$

c. Adjust residential areas to account for runoff coefficient.

$$\frac{3,779.7 \text{ acres}}{0.50} + \frac{387.6 \text{ acres}}{0.65} = 8,155.7 \text{ adjusted residential acres}$$

d. Develop residential rate per residential acre

$$\frac{\$518,805}{8,155.7 \text{ acres}} = \$63.62/\text{residential acre}$$

e. Weighted residential runoff coefficient, C

$$\frac{3,779.7 \times 0.50 + 387.6 \times 0.65}{3,779.7 + 387.6} = 0.51$$

f. Relate Residential rate per acre to non-residential rate based on runoff coefficients

$$\frac{\$63.62/\text{residential acre}}{0.51} = \frac{\$X/\text{non-residential acre}}{0.85}$$

$$\text{Non-residential rate per acre} = \$106.03 \text{ per acre}$$

g. Non-residential Contribution:

$$\begin{aligned} \text{BP, GC, PF, TC: } & (285.4+406.8+37.6+17.9=) 747.7 \text{ acres} \times \$106.03/\text{acre} = \$79,278 \\ & \text{Total Non-residential} - \$79,278 \end{aligned}$$

h. Sum of residential and non-residential contributions from connection fees

$$\$518,805 + \$79,278 = \$598,083$$

Flood Control Portion of Connection Fees

< \$598,083 >

Previously Paid NSSOI Fees. Revenues from NSSOI fees from approved final maps and from issued permits for non-residential development under original (1994) and updated (1997, 1999, and 2004) NSSOI fees.

Committed or Paid NSSOI Flood Control Fees < **\$3,252,059** >

2005 fees = \$2,179,486

2006 fees = \$1,386,271

2007 fees = \$ 500,974

2008 fees = \$ 424,499

2009 fees = \$ 125,753

2010 fees = \$ 103,702

2011 fees = \$ 65,497

2012 fees = \$ 101,184

TOTAL THRU 31 DEC 2012 = <\$8,139,425>

Remaining Unfunded Flood Control Costs \$7,167,645

Appendix B-3

Parks & Recreation Calculations

Previously Paid Fees & Credits Given

1995 All Sources except the 1000 series	\$ 59,432
1996 All Sources except the 1000 series	\$ 166,566
1997 All Sources except the 1000 series	\$ 244,412
1998 All Sources except the 1000 series	\$ 461,358
1999 All Sources except the 1000 series	\$ 428,662
2000 All Sources except the 1000 series	\$ 324,810
2001 All Sources except the 1000 series	\$ 330,726
2002 All Sources except the 1000 series	\$ 372,744
2003 All Sources except the 1000 series	\$ 490,811
2004 All Sources except the 1000 series	\$ 626,135
Subtotal	\$3,505,656

1997-2004 Kiley 1001 series collection	\$ 27,426
1997-2004 Bailey-McG 1005 series collection	\$ 5,260
1997-2004 Sparks Dev. 1019 series collection	\$ 543
1997-2004 Area 1 R&K Homes 1030 series collection	\$ 41,059
TOTAL THRU 2004	\$3,579,944

Residential Fees Collected from 1 January 2005 thru 31 December 2012

2005	\$1,152,806
2006	\$ 714,533
2007	\$ 247,622
2008	\$ 399,668
2009	\$ 49,166
2010	\$ 54,643
2011	\$ 44,915
2012	\$ 70,482
Subtotal of Residential 2005 thru 31 December 20	\$2,733,835

TOTAL THRU 31 DECEMBER 2012 **\$6,313,779**

Appendix B-4

Fire Station Projects Calculations

Previously Paid Fees & Credits Given

1995 All Sources	\$ 8,701
1996 All Sources	\$ 24,069
1997 All Sources	\$ 39,915
1998 All Sources	\$ 81,861
1999 All Sources	\$ 81,109
2000 All Sources	\$ 61,717
2001 All Sources	\$ 61,308
2002 All Sources	\$ 67,213
2003 All Sources	\$ 115,323
2004 All Sources	\$ 198,008
TOTAL	\$ 739,224

Additional Fees Collected through December 2012

2005 NSSOI Public Facility	\$ 446,775
2006 NSSOI Public Facility	\$ 400,182
2007 NSSOI Public Facility	\$ 115,802
2008 NSSOI Public Facility	\$ 152,292
2009 NSSOI Public Facility	\$ 18,643
2010 NSSOI Public Facility	\$ 20,148
2011 NSSOI Public Facility	\$ 14,302
2012 NSSOI Public Facility	\$ 19,000
TOTAL	\$1,187,144

GRAND TOTAL = \$1,926,368

CAPITAL COSTS FOR FUTURE PROJECTS as of 1 March 2013

Fire Station #6 (northern and northwestern support area)

- Estimated build date of 2023
- 2007 estimated cost = \$2,491,000
- **Estimated costs in 2023 = \$3,483,526**

Fire Station #4 (southern support area) Station Expansion to accommodate additional Fire Apparatus and dorm area for 4 additional personnel

- Estimated build date of 2017
- 2007 estimated cost = \$894,000
- **Estimated costs in 2017 = \$1,047,030**