

# 2012 – 2022 WATER & WASTEWATER IMPACT FEE UPDATE

*Submitted To*



*Submitted By*

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**CITY OF MCKINNEY**  
**2012 WATER & WASTEWATER IMPACT FEE UPDATE**

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**CITY OF MCKINNEY**  
**2012 – 2022 WATER & WASTEWATER IMPACT FEE UPDATE**

**SECTION I – INTRODUCTION**

**A. GENERAL**

In accordance with the requirements of Chapter 395.052 of the Local Government Code, this report establishes the City of McKinney's Capital Improvement Plan for water and wastewater impact fees and calculates the maximum allowable fee for each. Land use assumptions for impact fees were generated under a separate document by the City of McKinney's Planning Department.

Chapter 395, of the Local Government Code is an act that provides guidelines for financing capital improvements required by new development in municipalities, counties, and certain other local governments. The basis for determination of an impact fee requires the preparation and adoption of a land use plan and growth assumption, and the preparation of a 10-year capital improvement plan. The capital improvement plan requires an analysis of total capacity, the level of current usage and commitments of capacity of existing capital improvements. From these two phases, a maximum impact fee is calculated.

The Act allows the maximum impact fee to be charged if revenues from future ad valorem taxes, and water and sewer bills are included as a credit in the analysis. If not, the Act allows the maximum fee to be set at 50% of the calculated maximum fee. The following items were included in the impact fee calculation:

1. The portion of the cost of the new infrastructure that is to be paid by the City, including engineering, property acquisition and construction cost.
2. Existing excess capacity in lines and facilities that will serve future growth and which were paid for in whole or part by the City.
3. Engineering and quality control fees for construction projects.
4. Interest and other finance charges on bonds issued by the City to cover its portion of the cost.

The engineering analysis portion of the Water and Wastewater Fee determines utilized capacity cost of the major water distribution and wastewater collection facilities between the year 2012 and the year 2022. Facilities in this analysis include, water pump stations, water storage tanks, water transmission lines and wastewater collection lines. The North Texas Municipal Water District (NTMWD) water treatment, wastewater treatment and distribution components were excluded from this analysis. The study period is a ten-year period with 2012 as the base year. The impact fee calculations for the water and wastewater systems are based on land use assumptions provided by the City of McKinney. Prior to this impact fee update, the City's Water Distribution and Wastewater Collection hydraulic models were updated for 2012, 2022 and buildout conditions. The hydraulic model results are available for review from the City of McKinney. The equivalency factors utilized in this analysis conform to the latest American Water Works Association Standards (C700 - C703).

## **B. WATER & WASTEWATER IMPACT FEE GLOSSARY**

1. Advisory Committee means the capital improvements advisory committee established by the City for purposes of reviewing and making recommendations to the City Council on adoption of the City's impact fee program.
2. Area-Related Facility means a capital improvement or facility expansion which is designated in the impact fee capital improvements plan and which is not a site-related facility. Area-Related Facility may include capital improvements that are located off-site, or within or on the perimeter of the development site.
3. Assessment means the determination of the amount of the maximum impact fee per service unit that can be imposed on new development.
4. Capital Improvement means either a water facility or a wastewater facility with a life expectancy of three or more years, to be owned and operated by or on behalf of the City.
5. City means the City of McKinney, Texas.
6. Credit means the amount of the reduction of an impact fee due, determined under this ordinance or pursuant to administrative guidelines that is equal to the value of area-related

facilities provided by a property owner pursuant to the City's subdivision or zoning regulations or requirements, for the same type of facility.

7. Debt Service means the 20-year financing costs of projects applied to all eligible existing and proposed water and wastewater facilities.
8. Facility Expansion means either a water facility expansion or a sewer facility expansion.
9. Impact Fee means either a fee for water facilities or a fee for wastewater facilities, imposed on new development by the City pursuant to Chapter 395 of the Texas Local Government Code in order to generate revenue to fund or recoup the costs of capital improvements or facility expansion necessitated by and attributable to such new development. Impact fees do not include the dedication of rights-of-way or easements for such facilities, or the construction of such improvements, imposed pursuant to the City's zoning or subdivision regulations.
10. Impact Fee Capital Improvements Plan means either a water capital improvements plan or a wastewater capital improvement plan adopted or revised pursuant to the impact fee regulations.
11. Land Use Assumptions means the projections of population and growth, and associated changes in land uses, densities and intensities over at least a ten-year period, as adopted by the City and as may be amended from time to time, upon which the capital improvements plans are based.
12. Land Use Equivalency Table means a table converting the demands for capital improvements generated by various land uses to numbers of service units, as may be amended from time to time.
13. New Development means the subdivision of land; the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure; or any use or extension of the use of land; any of which increases the number of service units.

14. Recoupment means the imposition of an impact fee to reimburse the City for capital improvements that the City had previously oversized to serve new development.
15. Service Area means either a water service area or wastewater service area which impact fees for capital improvements or facility expansion will be collected for new development occurring within such area, and within which fees so collected will be expended for those types of improvements or expansions identified in the type of capital improvements plan applicable to the service area.
16. Service Unit means the applicable standard units of measure shown on the land use equivalency table in the Impact Fees Capital Improvements Plan that can be converted to water meter equivalents, for water or for wastewater facilities, which serves as the standardized measure of consumption, use or generation attributable to the new unit of development.
17. Site-Related Facility means an improvement or facility which is for the primary use or benefit of a new development, and/or which is for the primary purpose of safe and adequate provision of water or wastewater facilities to serve the new development, and which is not included in the impact fees capital improvements plan and for which the property owner is solely responsible under subdivision or other applicable development regulations.
18. Utility Connection means installation of a water meter for connecting a new development to the City's water system, or connection to the City's wastewater system.
19. Wastewater Facility means a wastewater interceptor or main, lift station or other facility included within and comprising an integral component of the City's collection system for wastewater. Wastewater facility includes land, easements or structure associated with such facilities. Wastewater facility excludes site-related facilities.

20. Wastewater Facility Expansion means the expansion of the capacity of any existing wastewater improvement for the purpose of serving new development, but does not include the repair, maintenance, modernization, or expansion of an existing sewer facility to serve existing development.
21. Wastewater Capital Improvements Plan means the adopted plan, as may be amended from time to time, which identifies the wastewater facilities or wastewater expansions and their associated costs which are necessitated by and which are attributable to new development, for a period not to exceed 10 years.
22. Water Facility means a water main, pump station, storage tank or other facility included within and comprising an integral component of the City's water storage or distribution system. Water facility includes land, easements or structures associated with such facilities. Water facility excludes site-related facilities.
23. Water Facility Expansion means the expansion of the capacity of any existing water facility for the purpose of serving new development, but does not include the repair, maintenance, modernization, or expansion of an existing water improvement to serve existing development.
24. Water Capital Improvements Plan means the adopted plan, as may be amended from time to time, which identifies the water facilities or water expansions and their associated costs which are necessitated by and which are attributable to new development, for a period not to exceed 10 years.
25. Water Meter means a device for measuring the flow of water to a development, whether for domestic or for irrigation purposes.

**C. LAND USE ASSUMPTIONS (Provided By: City of McKinney Planning Department)**

The impact fee land use assumptions utilized in this update were prepared by the City of McKinney's Planning Department and are presented in a separate document. The land use assumptions projected an ultimate residential population of approximately 357,967 in the City of McKinney's ultimate planning boundary. This is a lower ultimate population than projected in the City's 2007 Water and Wastewater Impact Fee Update, which estimated a residential population of 387,964, a decrease of 29,997 people.



The residential and non-residential growth provided by the City for the year 2012 through 2022 is summarized in Table No. 1.

**TABLE NO. 1**  
**Residential and Non-Residential Growth from 2012 to 2022**

Year	Residential Population*	Non-Residential Uses**	
		Type	Developed Area (SF)
2012	136,813	Basic	11,453,254
		Service	9,804,571
		Retail	9,900,940
		<b>Total:</b>	<b>31,158,274</b>
2022	199,003	Basic	12,780,084
		Service	14,260,185
		Retail	14,401,196
		<b>Total:</b>	<b>41,441,465</b>
<b>Res. Growth Rate</b>	<b>1.45</b>	<b>Non-Res. Growth Rate</b>	<b>1.3</b>

\* Residential Population – Represent Estate, Low Density, Medium Density and High Density Residential Categories

\*\* Basic – Industrial Land Uses

\*\* Service – Office & Institutional Land Uses

\*\* Retail – Commercial Land Uses

As shown in Table No. 1, increases in the residential population and non-residential uses will occur during the 10-year capital recovery period. The water demand and wastewater flows from the residential and non-residential uses dictate the ultimate size of facilities, while the rate of growth is important to determine the timing of system improvements to meet the City's growing needs. The eligible water impact fee facilities are shown on **Exhibit 1**. The eligible wastewater facilities are shown on **Exhibit 2** in this report.

## **SECTION II**

### **WATER & WASTEWATER C.I.P. AND IMPACT FEE ANALYSIS**

#### **A. DEFINITION OF A SERVICE UNIT – WATER AND WASTEWATER**

Chapter 395 of the Local Government Code requires that impact fees be based on a defined service unit. A “service unit” means a standardized measure of consumption, use generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards. This impact fee defines a water and wastewater service unit to be a  $\frac{3}{4}$ -inch water meter and has referred to this service unit as a Single Family Living Unit Equivalent (SFLUE). The SFLUE is based on the continuous duty capacity of a  $\frac{3}{4}$ -inch water meter. This is the typical meter used for a single family detached dwelling, and therefore is considered to be equivalent to one “living unit”. Other meter sizes can be compared to the  $\frac{3}{4}$ -inch meter through a ratio of water flows as published by the American Water Works Association as shown in **Table No. 2** below. This same ratio is then used to determine the proportional water and wastewater impact fee amount for each water meter size.

**TABLE NO. 2**

#### **Living Unit Equivalencies For Various Types and Sizes of Water Meters**

<b>Meter Type</b>	<b>Meter Size</b>	<b>Continuous Duty Maximum Rate (gpm) <sup>(a)</sup></b>	<b>Ratio to 3/4” Meter</b>
Simple	$\frac{3}{4}$ ”	15	1.0
Simple	1”	25	1.7
Simple	1-1/2”	50	3.3
Simple	2”	80	5.3
Compound	2”	80	5.3
Turbine (Irrigation)	2”	160	10.7
Compound	3”	160	10.7
Turbine (Irrigation)	3”	350	23.3
Compound	4”	250	16.7
Turbine (Irrigation)	4”	650	43.3
Compound	6”	500	33.3
Turbine (Irrigation)	6”	1,400	93.3
Compound	8”	800	53.3
Turbine (Irrigation)	8”	2,400	160.0
Turbine	10”	3,500	233.3
Turbine	12”	4,400	293.3

<sup>(a)</sup> Source: AWWA Standard C700 - C703

## B. CALCULATION OF WATER & WASTEWATER - LIVING UNIT EQUIVALENTS

The City of McKinney provided the existing water meter count by size category as of December 2012. In total, there are 47,277 domestic water and irrigation meters serving an existing population of 136,813 residents and business. **Table No. 3** shows the number of existing meters, the living unit equivalent factor and the total number of living unit equivalents for each sized water meter.

The number of wastewater accounts was determined by subtracting the number of irrigation meters from the number of domestic water meters. This equates to 45,481 wastewater accounts. **Table No. 4** illustrates the existing wastewater accounts and the SFLUE's.

The residential growth rate of 1.45 in **Table 1** was applied to ¾-inch through 2-inch meters. The non-residential growth rate of 1.3 in **Table 1** was applied to 3-inch through 8-inch meters. Utilizing these growth rates in a straight-line extrapolation of the existing water and wastewater accounts, the numbers of new accounts was calculated for the year 2022. City records indicate the historical growth of ¾-inch and 1-inch meters is approximately 45% ¾-inch meters and 55% 1-inch meters for the base meter sizes. These percentages were applied to the total growth of ¾-inch and 1-inch meters. Living unit equivalents were then applied to the water meters and wastewater accounts for 2012 and 2022, resulting in a total number of living units. The difference in the total number of 2012 and 2022 living units results in the new living unit equivalents during the impact fee period. The calculation of living unit equivalents is summarized in **Table 3** and **Table 4**.

**TABLE NO. 3**  
**Water Living Unit Equivalents 2012 - 2022**

Meter Size	2012			2022			New Living Unit Equivalents During Impact Fee Period
	Number of Water Meters	Living Unit Equivalent Ratio for ¾" Used	Total Number of Living Units	Number of Water Meters	Living Unit Equivalent Ratio for ¾" Used	Total Number of Living Units	
¾"	29,629	1.0	29,629.0	38,676	1.0	38,676	9,047
1"	15,050	1.7	25,083.3	26,108	1.7	43,513	18,430
1-1/2"	462	3.3	1,540.0	670	3.3	2,233	693
2"	1,844	5.3	9,834.7	2,674	5.3	14,260	4,426
3"	178	10.7	1,898.7	237	10.7	2,525	627
4"	44	16.7	733.3	59	16.7	975	242
6"	16	33.3	533.3	21	33.3	709	176
8"	4	53.3	213.3	5	53.3	284	70
<b>Totals</b>	<b>47,227</b>		<b>69,465.7</b>	<b>68,450</b>		<b>103,176.9</b>	<b>33,711</b>

**TABLE NO. 4**  
**Wastewater Living Unit Equivalents 2012 – 2022**

Meter Size	2012			2022			New Living Unit Equivalents During Impact Fee Period
	Number of Water Meters	Living Unit Equivalent Ratio for 3/4"	Total Number of Living Units	Number of Water Meters	Living Unit Equivalent Ratio for 3/4"	Total Number of Living Units	
3/4"	26,830	1.0	26,830.0	35,212	1.0	35,212	8,382
1"	14,564	1.7	24,273.3	24,809	1.7	41,348	17,075
1-1/2"	264	3.3	880.0	383	3.3	1,276	396
2"	969	5.3	5,168.0	1,405	5.3	7,494	2,326
3"	172	10.7	1,834.7	229	10.7	2,440	605
4"	43	16.7	716.7	57	16.7	953	237
6"	15	33.3	500.0	20	33.3	665	165
8"	4	53.3	213.3	5	53.3	284	70
<b>Totals</b>	<b>42,861</b>		<b>60,416.0</b>	<b>62,120</b>		<b>89,672.4</b>	<b>29,256</b>

### **C. COST OF FACILITIES**

Unit cost for proposed water and wastewater lines larger than 12 inches in diameter that are anticipated to be constructed by private development, include the City's oversize cost participation only. These water and wastewater lines are highlighted green on **Exhibits 1 through 2**. Oversize cost participation from City is when funds become available. For City participation, the developer must bid the 12-inch as a base and the oversize as an additive alternate. City initiated water and waste water lines include the full cost of the proposed facility. These water and wastewater lines are highlighted red on **Exhibits 1 through 2**. Developer initiated water and wastewater line projects which are 12 inches or less in diameter are not included in this Impact Fee analysis, as the cost for these size lines are the responsibility of the developer. These water and wastewater lines are highlighted blue on **Exhibits 1 through 2**.

Actual construction costs of the various elements of the water and wastewater systems were utilized where the information was known. The existing cost of facilities was determined from Contractor's final pay requests, City purchase orders, bid tabulation forms and developer's agreements.

Most of the cost data for existing water and wastewater lines included in the impact fee analysis have been located. A 5% debt service, over a period of 20-years, has been added to all projects. Actual costs were used for those existing projects where records were available.

#### **D. WATER DISTRIBUTION SYSTEM**

Computer models for the years 2012, 2022 and Buildout were prepared and analyzed by Birkhoff, Hendricks & Carter. The models were developed and water demand distributed from residential population and non-residential land use projections provided by the City of McKinney's Planning Department. The projected developed land areas from the City's Land Use Assumptions follow closely to the construction of major facilities in the system. These facilities include pump stations, storage tanks, and major distribution lines. All computer models were run for the Maximum Hourly Demands in a three-day extended period simulation to insure proper sizing of the facilities to meet peak demands.

##### **1. Existing Pump Stations, Ground Storage Reservoirs & Elevated Storage Tanks**

The existing water distribution system included in the impact fee analysis (As of December 2012) includes the facilities summarized in **Table No. 5** and **Table No. 6**.

**TABLE NO. 5**

##### **Water Distribution System -- Existing Pump Stations & Ground Storage**

<b>Pump Station</b>	<b>Number of Pumps</b>	<b>Rated Capacity (MGD)</b>	<b>Number of Ground Storage Tanks</b>	<b>Total Ground Storage Available (Gallons)</b>
McKinney Ranch	11	49.7	2	16,000,000
University	6	50.0	2	16,000,000
<b>Total:</b>	<b>17</b>	<b>99.7</b>	<b>4</b>	<b>32,000,000</b>

**TABLE NO. 6**  
**Existing Elevated Storage Tanks**

<b>Elevated Storage Tanks</b>	<b>Capacity in Million Gallons</b>
Industrial Elevated Storage Tank	2.0
U.S. 380 Elevated Storage Tank	1.5
Wilmeth Elevated Storage Tank	2.0
Virginia Elevated Storage Tank	1.5
Independence Elevated Storage Tank	3.0
Community Elevated Storage Tank	3.0
<b>Total</b>	<b>13.0</b>

The existing McKinney Ranch Low Side pumps and the Chestnut Elevated Storage Tank are no longer utilized and were not included in the impact fee calculation. The existing Gerrish Pump Station is near capacity and is not included in the impact fee calculation.

The pump stations and ground storage facilities were analyzed with the maximum daily demand, while elevated storage acts dynamically and therefore was analyzed utilizing the difference between the Maximum Hourly Demand and the Maximum Daily Demand.

## **2. Distribution Lines**

The distribution lines consist of all lines within the Service Area planning boundary supplying water to customers in the City of McKinney. Existing and proposed distribution lines vary in size from 3/4-inch services to 72-inch transmission lines. The cost of water lines includes construction cost, appurtenances (water valves, fire hydrants, taps and the like), utility relocations, purchase of easements and engineering costs. Financing cost over a 20-year term is included for each project.

Unit cost for proposed capital improvement water lines 12-inches and larger in diameter classified as City initiated, or City participation in oversize water lines, include the City's full cost of the proposed facility. Developer's initiated water line projects, 12 inches or less in diameter were not included in this Impact Fee analysis, as the cost for these size lines are the responsibility of the developer.

### 3. **Water Supply**

The City of McKinney currently receives all of its water supply from the North Texas Municipal Water District (NTMWD). McKinney's allocation of the capital cost of services as a Member of the NTMWD was specifically excluded from the impact fee analysis.

If included, McKinney's share of the NTMWD capital cost could include the original construction cost, expansion cost and financing cost of the following components:

- a) Water Rights Cost in Lake Lavon and other Sources
- b) Raw Water Intake Structures
- c) Raw Water Pump Stations
- d) Treatment Plant and Expansion
- e) High Service Pump Stations
- f) Transmission Lines
- g) NTMWD Owned Ground Storage Facilities

### 4. **Water Distribution System Capital Improvement Projects for Impact Fees**

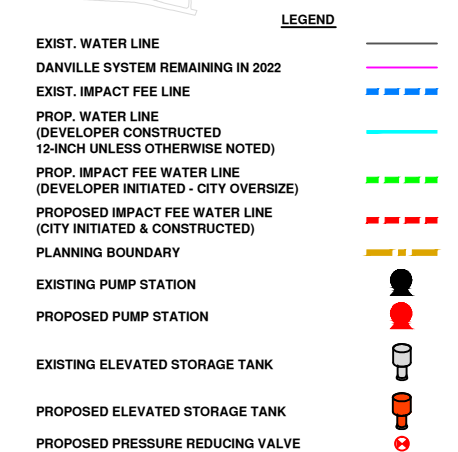
In order to meet the demands of the anticipated growth over the next 10-years, as provided in the Land Use Assumptions prepared by the City of McKinney, certain water distribution system improvements are required. **Exhibit 1** shows the recommended water system improvements and **Table No. 7** itemizes each project and the project cost in 2012 dollars. These recommended improvements form the basis for the water system impact fee calculation.

*The capital improvement plan for impact fees provides for system improvements within the defined Service Area Planning Boundary.*





NOT TO SCALE



## EXHIBIT 1



Table No. 7

## 10-Year Water System Capital Improvement Plan for Impact Fees

### PROPOSED WATER LINES

PROPOSED WATER LINES						
	1=City Participation in Cost Oversize 2=City Initiated and Funded					
Year		Project	Size	Opinion of Construction Cost (A)	Debt Service (B)	Total Project Cost
2014	2	INDUSTRIAL BLVD. 12" WATER LINE (PIPE BURST 8" to 12")	12"	\$ 610,868	\$ 320,707	\$ 931,575
2014	2	COUCH DRIVE 12" WATER LINE LOOP	12"	\$ 700,000	\$ 367,500	\$ 1,067,500
2015	2	US 380 / INDEPENDENCE LOOP	12", 16", 20", 24"	\$ 2,173,617	\$ 1,141,149	\$ 3,314,766
2014	1	US 380 / COIT SUBDIVISION OFFSITE	16", 20", 24"	\$ 235,861	\$ 123,827	\$ 359,688
2015	1	BLUESTEM 16" WATER LINE	16"	\$ 42,750	\$ 22,444	\$ 65,194
2015	1	WESTRIDGE 16" WATER LINE	16"	\$ 29,349	\$ 15,408	\$ 44,757
2015	1	S.H. 5 36" WATER LINE & WILLOW WOOD 36" & 24" WATER LINE	24", 36"	\$ 2,307,387	\$ 1,211,378	\$ 3,518,765
2016	1	HARDIN SOUTH 16" WATER LINE	16"	\$ 27,264	\$ 14,314	\$ 41,578
2017	1	STONEBRIDGE 48" WATER LINE	48"	\$ 6,096,215	\$ 3,200,512	\$ 9,296,727
2017	1	HARDIN 30" WATER LINE - (TRINITY FALLS WEST FEED)	30"	\$ 2,188,580	\$ 1,149,004	\$ 3,337,584
2017	1	F.M. 543 24" & 16" WATER LINE	16", 24"	\$ 402,059	\$ 211,081	\$ 613,140
2017	1	F.M. 1461 (FUTURE E/W THOROUGHFARE) 24" & 18" WATER LINE	18", 24"	\$ 861,612	\$ 452,346	\$ 1,313,958
2018	1	HARDIN 24" & 16" (TRINITY FALLS WEST FEED NORTH)	16", 24"	\$ 425,132	\$ 223,194	\$ 648,326
2018	1	COUNTY ROAD 227 16" WATER LINE	16"	\$ 94,617	\$ 49,674	\$ 144,291
2018	2	AIRPORT WATER LINE NORTH LOOP	20", 36"	\$ 3,569,134	\$ 1,873,795	\$ 5,442,929
2018	2	CUSTER 18" NORTH WATER LINE	18"	\$ 2,301,937	\$ 1,208,517	\$ 3,510,454
2019	1	RIDGE 20" & 24" WATER LINES	20", 24"	\$ 498,838	\$ 261,890	\$ 760,728
2019	1	RIDGE 16" WATER LINES (LOOP TO OLD DANVILLE SYSTEM)	16"	\$ 92,909	\$ 48,777	\$ 141,686
2019	1	LAKE FOREST 30" WATER LINE	30"	\$ 910,261	\$ 477,887	\$ 1,388,148
2019	1	BLOOMDALE 16" WATER LINE - 850 PHASE 1	16"	\$ 61,438	\$ 32,255	\$ 93,693
2019	1	BLOOMDALE 16" WATER LINE - 850 PHASE 2	16"	\$ 95,152	\$ 49,955	\$ 145,107
2020	2	BLOOMDALE 794 PUMP STATION 54" DISCHARGE LINE	54"	\$ 3,890,601	\$ 2,042,566	\$ 5,933,167
2020	2	AIRPORT 24" WATER LINE SOUTH LOOP	24"	\$ 1,356,344	\$ 712,082	\$ 2,068,426
2020	2	OLD MILL ROAD 24" WATER LINE (FUTURE THOROUGHFARE)	24"	\$ 2,008,863	\$ 1,054,653	\$ 3,063,516
2020	1	BLOOMDALE 850 PUMP STATION 42 & 54" DISCHARGE LINE	42", 54"	\$ 4,029,477	\$ 2,115,476	\$ 6,144,953
2021	1	FUTURE 850 EAST / WEST THOROUGHFARE 20" & 24" WATER LINE	20", 24"	\$ 1,541,297	\$ 809,182	\$ 2,350,479
2021	1	BLOOMDALE PUMP STATION 850 DISCHARGE LINE (TRINITY FALLS EAST FEED)	24", 30", 48"	\$ 4,127,908	\$ 2,167,151	\$ 6,295,059
2022	1	F.M. 2933 30" WATER LINE	30"	\$ 1,625,879	\$ 853,587	\$ 2,479,466
2022	1	MCINTYRE / WOODLAWN 36" WATER LINE	36"	\$ 1,540,425	\$ 808,723	\$ 2,349,148
2022	1	U.S. 380 EAST WATER LINE	12", 24"	\$ 1,859,159	\$ 976,058	\$ 2,835,217
2022	1	FUTURE NORTH / SOUTH THOROUGHFARE 16" WATER LINE	16"	\$ 162,415	\$ 85,268	\$ 247,683
		Subtotal: Proposed Water Lines		\$ 45,867,348	\$ 24,080,360	\$ 69,947,708

- (A) Opinion of Cost includes:
- a) Engineer's Opinion of Construction Cost
  - b) Professional Services Fees (Survey, Engineering, Testing, Legal)
  - c) Cost of Easement or Land Acquisitions
- (B) Debt Service based on 20-year simple interest bonds at 5%

**Table No. 7 Cont.**

**PUMPING AND STORAGE FACILITIES**

Year	Project	Capacity	Opinion of Construction Cost (A)	Debt Service (B)	Total Project Cost
2013	Hardin Elevated Storage Tank	2 MG	\$ 5,202,788	\$ 2,731,464	\$ 7,934,252
2014	University 10-MG Ground Storage Reservoir No. 3	10 MG	\$ 4,950,000	\$ 2,598,750	\$ 7,548,750
2014	794/850 PRV		\$ 183,920	\$ 96,558	\$ 280,478
2015	Gerrish 2-MG Ground Storage Reservoir No. 2	2 MG	\$ 2,200,000	\$ 1,155,000	\$ 3,355,000
2015	Gerrish Pump Station Expansion - Replace Pump 4 + Electrical	4.8 MGD	\$ 1,100,000	\$ 577,500	\$ 1,677,500
2016	Stacy Elevated Storage Tank	3 MG	\$ 6,700,000	\$ 3,517,500	\$ 10,217,500
2017	Trinity Falls Elevated Storage Tank	3 MG	\$ 6,700,000	\$ 3,517,500	\$ 10,217,500
2018	Bloomdale Pump Station - Phase I (850)	20 MGD	\$ 4,730,149	\$ 2,483,328	\$ 7,213,477
2018	Bloomdale 6-MG Ground Storage Reservoir No. 1	6 MG	\$ 2,640,000	\$ 1,386,000	\$ 4,026,000
2018	Bloomdale Pump Station - Emergency Generator No. 1	1000 kW	\$ 660,000	\$ 346,500	\$ 1,006,500
2018	Bloomdale Pump Station - Phase I (794)	20 MGD	\$ 4,730,149	\$ 2,483,328	\$ 7,213,477
2022	University Pump Station Phase III Improvements - Add Pump	15 MGD	\$ 550,000	\$ 288,750	\$ 838,750
	<b>Subtotal: Pumping and Storage Facilities</b>		<b>\$ 40,347,006</b>	<b>\$ 21,182,178</b>	<b>\$ 61,529,184</b>

**PLANNING EXPENSES**

Year	Project	Capacity	Opinion of Cost (1)	Debt Service (2)	Total Project Cost
2007	Water & Wastewater System Master Plan & Impact Fee Analysis		\$ 204,417	\$ -	\$ 204,417
	<b>Subtotal: Planning Expenses</b>		<b>\$ 204,417</b>	<b>\$ -</b>	<b>\$ 204,417</b>
	<b>GRAND TOTAL: Water Distribution System CIP</b>		<b>\$ 86,418,771</b>	<b>\$ 45,262,538</b>	<b>\$ 131,681,309</b>

## 5. Utilized Capacity

Utilized capacity for the water distribution system was calculated based on the water line size required for each model year (2012, 2022 and build out). Analysis of the water distribution system is based on the maximum daily demand, maximum hourly demand, and the minimum hourly demand. Pump station capacity is generally based on the maximum daily system demand while transmission and distribution facilities are sized based on either the maximum hourly demand or the minimum hourly demand, whichever demand is greater for a particular water line. Often times, the capacity of a water line is determined by the flows generated by the minimum hourly demand. The minimum hourly flows are usually higher in those lines that are used to refill elevated storage. For each line segment in the water distribution model, the buildout flow rate in the line was compared to the flow rate in the same line segment for the 2012 and the 2022 models.

The percent utilized capacity was then calculated for each year based on the buildout capacity. The utilized capacity during the Impact Fee period is the difference between the year 2022 capacity and the year 2012 capacity. **Table No. 8** below summarizes the project cost and utilized cost over the impact fee period of 2012 - 2022 for each element of the Water Distribution System. The utilized capacity for each water distribution facility, both existing and proposed, is presented in detail in Impact Fee Capacity Calculation **Table Nos. 9, 10, 11, 12 and 13.**

**Table No. 8**

**Summary of Eligible Water Distribution Project Cost and Utilized Capacity Cost**

<b>Water System Facility</b>	<b>20-Year Project Cost</b>	<b>Utilized Capacity (\$) in the CRP Period</b>
Existing Pump Stations & Storage	\$74,737,483	\$19,576,395
Existing Transmission/Distribution Lines	\$66,836,124	\$11,022,749
Proposed Pump Stations & Storage	\$61,529,184	\$43,027,372
Proposed Transmission/Distribution Lines	\$69,947,708	\$21,785,316
Planning Expenses	\$204,417	\$204,417
<b>Total:</b>	<b>\$273,254,916</b>	<b>\$95,616,249</b>

**TABLE NO. 9**  
**Water Pump Station Facilities**

Pump Station Improvements	Year Const.	Projected Capacity (MGD)	Pump Station Cost (\$)				Capacity Utilized (%)			Capacity Utilized (\$)				
			Const.	Engineering & Testing	20 Year Debt Service @ 5% Simple Interest	Total 20 Yr. Project Cost \$	2012	2022	In The CRF Period	2012	2022	In The CRF Period		
McKinney Ranch Pump Station														
Original Construction (794)	[3]	**	1986	10.8	\$ 164,200	\$ 16,420	\$ 94,826	\$ 275,446	100.0%	100.0%	0.0%	\$ 275,446	\$ 275,446	\$ -
Original Construction (920)	[3]	**	1987	14.3	\$ 189,700	\$ 18,970	\$ 109,552	\$ 318,222	100.0%	100.0%	0.0%	\$ 318,222	\$ 318,222	\$ -
Phase I Improvements (920)	[4]		1999	20.1	\$ 1,020,172	\$ 103,000	\$ 589,665	\$ 1,712,837	20.0%	60.0%	40.0%	\$ 342,567	\$ 1,027,702	\$ 685,135
Phase II Improvements (920)	[1]		2002	5.0	\$ 157,929	\$ 40,000	\$ 103,913	\$ 301,842	20.0%	60.0%	40.0%	\$ 60,368	\$ 181,105	\$ 120,737
850 Service Area Pumps (850)	[3]		2007	15.0	\$ 4,184,997	\$ 303,285	\$ 2,356,348	\$ 6,844,630	20.0%	40.0%	20.0%	\$ 1,368,926	\$ 2,737,852	\$ 1,368,926
Emergency Generator (2 Sets)			2008		\$ 1,875,964	\$ 222,263	\$ 1,101,569	\$ 3,199,795	40.0%	60.0%	20.0%	\$ 1,279,918	\$ 1,919,877	\$ 639,959
University Pump Station														
Phase IA Improvements (920)	[2]	*	2004	20.0	\$2,380,738	\$166,880	\$ 1,337,499	\$ 3,885,117	50.0%	100.0%	50.0%	\$ 1,942,558	\$ 3,885,117	\$ 1,942,558
Phase II Improvements (850)	[2]		2007	30.0	\$2,949,246	\$189,113	\$ 1,647,638	\$ 4,785,996	77.0%	83.0%	6.0%	\$ 3,685,217	\$ 3,972,377	\$ 287,160
Phase II Improvements (920)	[2]		2007	30.0	\$2,949,246	\$189,113	\$ 1,647,638	\$ 4,785,996	50.0%	100.0%	50.0%	\$ 2,392,998	\$ 4,785,996	\$ 2,392,998
Emergency Generator - Set 1			2008		\$2,024,937	\$148,017	\$ 1,140,801	\$ 3,313,755	50.0%	100.0%	50.0%	\$ 1,656,877	\$ 3,313,755	\$ 1,656,877
(1) Phase III Improvements (920)	[1]		2022	15.0	\$500,000	\$50,000	\$ 288,750	\$ 838,750	0.0%	47.0%	47.0%	\$ -	\$ 394,213	\$ 394,213
Gerrish Pump Station														
(1) Replace Pump 4 + Electrical	[3]	*	2015	4.8	\$ 1,000,000	\$ 100,000	\$ 577,500	\$ 1,677,500	0.0%	100.0%	100.0%	\$ -	\$ 1,677,500	\$ 1,677,500
Bloomdale Pump Station														
(1) Phase I Improvements (850)	[2]	*	2018	20.0	\$ 4,300,135	\$ 430,014	\$ 2,483,328	\$ 7,213,477	0.0%	60.0%	60.0%	\$ -	\$ 4,328,086	\$ 4,328,086
(1) Phase I Improvements (794)	[2]	*	2018	20.0	\$ 4,300,135	\$ 430,014	\$ 2,483,328	\$ 7,213,477	0.0%	50.0%	50.0%	\$ -	\$ 3,606,738	\$ 3,606,738
(1) Emergency Generator - Set 1			2018		\$ 600,000	\$ 60,000	\$ 346,500	\$ 1,006,500	0.0%	60.0%	60.0%	\$ -	\$ 603,900	\$ 603,900
794 / 850 Pressure Reducing Valve (Bloomdale Road and Community Blvd.)														
(1) 794/850 PRV Station			2014		\$ 151,800	\$ 32,120	\$ 96,558	\$ 280,478	0.0%	100.0%	100.0%	\$ -	\$ 280,478	\$ 280,478
Total			205.0		\$ 28,749,198	\$ 2,499,206	\$ 16,405,413	\$ 47,653,817				\$ 13,323,098	\$ 33,308,364	\$ 19,985,265

\* Includes Property Acquisition

\*\* 10% of Construction Assumed for Engineering and Testing

(1) Estimated Cost in 2012 Dollars

[4] Number of Pumps

**TABLE NO. 10**  
**Ground Storage Reservoirs**

Pump Station	Year Const.	Capacity (MG)	Capital Cost (\$)				Capacity Utilized (%)			Capacity Utilized (\$)			
			Const.	Eng. & Testing	20 Year Debt Service @ 5% Simple Interest	Total 20 Yr. Project Cost \$	2007	2017	In the CRF Period	2012	2022	In the CRF Period	
EXISTING GROUND STORAGE RESERVOIRS													
McKinney Ranch No. 1 (FM-720)	*	1987	6.0	\$ 2,910,000	\$ 291,000	\$ 1,680,525	\$ 4,881,525	38.0%	61.0%	23.0%	\$ 1,854,980	\$ 2,977,730	\$ 1,122,751
McKinney Ranch No. 2 (FM-720)	1	2007	10.0	\$ 3,748,480	\$ 335,500	\$ 2,144,090	\$ 6,228,070	38.0%	61.0%	23.0%	\$ 2,366,667	\$ 3,799,123	\$ 1,432,456
University No. 1	1	2003	6.0	\$ 2,008,499	\$ 150,544	\$ 1,133,498	\$ 3,292,541	51.0%	86.0%	35.0%	\$ 1,679,196	\$ 2,831,585	\$ 1,152,389
University No. 2	1	2007	10.0	\$ 5,921,753	\$ 257,689	\$ 3,244,207	\$ 9,423,649	51.0%	86.0%	35.0%	\$ 4,806,061	\$ 8,104,338	\$ 3,298,277
PROPOSED GROUND STORAGE RESERVOIRS													
University No. 3	2*	2014	10.0	\$ 4,500,000	\$ 450,000	\$ 2,598,750	\$ 7,548,750	0.0%	48%	48%	\$ -	\$ 3,623,400	\$ 3,623,400
Gerrish No. 2 (Buried)	2*	2015	2.0	\$ 2,000,000	\$ 200,000	\$ 1,155,000	\$ 3,355,000	0.0%	100.0%	100.0%	\$ -	\$ 3,355,000	\$ 3,355,000
Bloomdale No. 1	2*	2018	6.0	\$ 2,400,000	\$ 240,000	\$ 1,386,000	\$ 4,026,000	0.0%	42.0%	42.0%	\$ -	\$ 1,690,920	\$ 1,690,920
Total			50.0	\$ 23,488,732	\$ 1,924,733	\$ 13,342,070	\$ 38,755,535				\$ 10,706,903	\$ 26,382,096	\$ 15,675,193

\* 10% of Construction Assumed for Engineering and Testing

(1) Actual Cost

(2) Estimated Cost in 2012 Dollars

**TABLE NO. 11**  
**Elevated Storage Tanks**

Elevated Storage	Pressure Divide	Year Const.	Storage Capacity (MGD)	Capital Cost (\$)				Capacity Utilized (%)			Capacity Utilized (\$)			
				Const.	Eng. & Testing	20 Year Debt Service @ 5% Simple Interest	Total 20 Yr. Project Cost \$	2012	2022	In the CRF Period	2012	2022	In the CRF Period	
EXISTING ELEVATED STORAGE TANKS														
U.S. 380	2*	794	Unknown	1.5	\$ 550,000	\$ 55,000	\$ -	\$ 605,000	89.0%	93.0%	4.0%	\$ 538,450	\$ 562,650	\$ 24,200
Virginia	1*	920	1993	1.5	\$ 1,234,301	\$ 123,430	\$ 712,809	\$ 2,070,540	100.0%	100.0%	0.0%	\$ 2,070,540	\$ 2,070,540	\$ -
Community	1	920	2002	3.0	\$ 3,313,500	\$ 105,000	\$ 1,794,713	\$ 5,213,213	100.0%	100.0%	0.0%	\$ 5,213,213	\$ 5,213,213	\$ -
Industrial	1	794	2002	2.0	\$ 1,787,500	\$ 70,000	\$ 975,188	\$ 2,832,688	71.0%	87.0%	16.0%	\$ 2,011,208	\$ 2,464,439	\$ 453,230
Wilmeth	1	850	2006	2.0	\$ 2,400,000	\$ 280,137	\$ 1,407,072	\$ 4,087,209	60.0%	68.0%	8.0%	\$ 2,452,325	\$ 2,779,302	\$ 326,977
Independence	1	920	2008	3.0	\$ 4,218,250	\$ 161,693	\$ 2,299,470	\$ 6,679,413	56.0%	96.0%	40.0%	\$ 3,740,471	\$ 6,412,236	\$ 2,671,765
PROPOSED ELEVATED STORAGE TANKS														
Hardin	2*	850	2013	2.0	\$ 4,828,953	\$ 373,835	\$ 2,731,464	\$ 7,934,252	0.0%	82.0%	82.0%	\$ -	\$ 6,506,087	\$ 6,506,087
Stacy	2*	920	2016	3.0	\$ 6,300,000	\$ 400,000	\$ 3,517,500	\$ 10,217,500	0.0%	100.0%	100.0%	\$ -	\$ 10,217,500	\$ 10,217,500
Trinity Falls	2*	850	2017	3.0	\$ 6,300,000	\$ 400,000	\$ 3,517,500	\$ 10,217,500	0.0%	66.0%	66.0%	\$ -	\$ 6,743,550	\$ 6,743,550
Total			21.0		\$ 30,932,504	\$ 1,969,095	\$ 16,955,716	\$ 49,857,315				\$ 16,026,208	\$ 42,969,517	\$ 26,943,309

\* 10% of Construction Assumed for Engineering and Testing

(1) Actual Cost

(2) Estimated Cost in 2012 Dollars

**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(% Utilized Capacity			(\$ Utilized Capacity		
												During Fee Period			During Fee Period
										2012	2022		2012	2022	
F.M. 720 PUMP STATION 30" WATER LINE															
Pump Station Name Change to McKinney Ranch - Project from McKinney Ranch Pump Station to Hardin Rd.															
1	P5573	920	2,282	30		\$61.63	\$140,651	\$73,842	\$214,493	77%	90%	13%	\$165,160	\$193,044	\$27,884
1	P5574	920	287	30		\$61.63	\$17,689	\$9,287	\$26,976	69%	90%	21%	\$18,613	\$24,278	\$5,665
Subtotal:		2,569		1990		\$158,340	5%	\$83,129	\$241,469				\$183,773	\$217,322	\$33,549
VIRGINIA PARKWAY 24" WATER LINE															
From Stonebridge Dr. West to the Virigna Eleavated Storage Tank															
1	P5023	920	443	24		\$5.80	\$2,567	\$1,348	\$3,915	0%	0%	0%	\$0	\$0	\$0
1	P5024	920	228	24		\$5.80	\$1,324	\$695	\$2,019	0%	100%	100%	\$0	\$2,019	\$2,019
1	P5069	920	976	24		\$5.80	\$5,659	\$2,971	\$8,630	100%	100%	0%	\$8,630	\$8,630	\$0
1	P5070	920	299	24		\$5.80	\$1,735	\$911	\$2,646	95%	100%	5%	\$2,514	\$2,646	\$132
1	P5071	920	582	24		\$5.80	\$3,374	\$1,771	\$5,145	96%	100%	4%	\$4,939	\$5,145	\$206
1	P5072	920	1,109	24		\$5.80	\$6,429	\$3,375	\$9,804	99%	100%	1%	\$9,706	\$9,804	\$98
1	P5073	920	298	24		\$5.80	\$1,729	\$908	\$2,637	100%	100%	0%	\$2,637	\$2,637	\$0
1	P5074	920	919	24		\$5.80	\$5,324	\$2,795	\$8,119	100%	100%	0%	\$8,119	\$8,119	\$0
1	P5075	920	636	24		\$5.80	\$3,686	\$1,935	\$5,621	100%	100%	0%	\$5,621	\$5,621	\$0
1	P5076	920	1,148	24		\$5.80	\$6,653	\$3,493	\$10,146	100%	100%	0%	\$10,146	\$10,146	\$0
1	P5077	920	552	24		\$5.80	\$3,199	\$1,679	\$4,878	100%	100%	0%	\$4,878	\$4,878	\$0
1	P5078	920	469	24		\$5.80	\$2,716	\$1,426	\$4,142	100%	100%	0%	\$4,142	\$4,142	\$0
1	P5079	920	376	24		\$5.80	\$2,182	\$1,146	\$3,328	94%	100%	6%	\$3,128	\$3,328	\$200
1	P5761	920	184	24		\$5.80	\$1,066	\$560	\$1,626	0%	0%	0%	\$0	\$0	\$0
1	P6198	920	387	24		\$5.80	\$2,244	\$1,178	\$3,422	0%	0%	0%	\$0	\$0	\$0
Subtotal:		8,607		1992		\$49,884	5%	\$26,191	\$76,078				\$64,460	\$67,115	\$2,655
CUSTER 16" WATER LINE															
From Stacy Rd. to Stonebridge Dr.															
1	P5399	920	461	16		\$44.97	\$20,734	\$10,885	\$31,619	81%	100%	19%	\$25,611	\$31,619	\$6,008
1	P5400	920	1,281	16		\$44.97	\$57,617	\$30,249	\$87,866	80%	100%	20%	\$70,293	\$87,866	\$17,573
1	P5401	920	1,311	16		\$44.97	\$58,950	\$30,949	\$89,899	77%	100%	23%	\$69,222	\$89,899	\$20,677
1	P5402	920	3,005	16		\$44.97	\$135,140	\$70,949	\$206,089	80%	100%	20%	\$164,871	\$206,089	\$41,218
Subtotal:		6,059		1996		\$272,440	5%	\$143,032	\$415,473				\$329,997	\$415,473	\$85,476
F.M. 720 PARALLEL 42" WATER LINE															
F.M. 720 Now Called McKinney Ranch Pkwy.- Project Begins at McKinney Ranch Pump Station and Ends at Lake Forest Dr.															
2	P5544	920	59	20		\$170.38	\$10,092	\$5,298	\$15,390	84%	90%	6%	\$12,928	\$13,851	\$923
2	P5545	920	42	42		\$170.38	\$7,158	\$3,758	\$10,916	84%	90%	6%	\$9,169	\$9,824	\$655
2	P5578	920	8,018	42		\$170.38	\$1,366,121	\$717,213	\$2,083,334	81%	89%	8%	\$1,687,501	\$1,854,167	\$166,667
2	P7573	920	131	42		\$170.38	\$22,321	\$11,719	\$34,040	79%	88%	9%	\$26,892	\$29,955	\$3,064
Subtotal:		8,250		1999		\$1,405,692	5%	\$737,988	\$2,143,680				\$1,736,490	\$1,907,797	\$171,309

**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$) Utilized Capacity			
										2012	2022	During Fee Period	2012	2022	During Fee Period	
CUSTER 16" WATER LINE																
From Stonebridge Dr. to Cotton Rridge Rd. (Pipes 5135, 5295, 5296 &5297 Were Adandoned in 2009 with Custer Utility Relocations)																
2	P5135	920	2,330	16		\$104.00	\$242,328		\$127,223	\$369,551	0%	0%	0%	\$0	\$0	\$0
2	P5295	920	1,700	16		\$104.00	\$176,849		\$92,846	\$269,695	0%	0%	0%	\$0	\$0	\$0
2	P5296	920	2,666	16		\$104.00	\$277,273		\$145,569	\$422,842	0%	0%	0%	\$0	\$0	\$0
2	P5297	920	1,372	16		\$104.00	\$142,637		\$74,885	\$217,522	0%	0%	0%	\$0	\$0	\$0
2	P5298	920	2,042	16		\$104.00	\$212,350		\$111,484	\$323,834	0%	0%	0%	\$0	\$0	\$0
Subtotal:		10,110		1999			\$1,051,437	5%	\$552,007	\$1,603,444				\$0	\$0	\$0
INDUSTRIAL 2-MG ELEVATED STORAGE TANK WATER LINE																
From Industrial Elevated Storage Tank to McDonald St.																
2	P1304	794	561	24		\$229.94	\$128,893		\$67,669	\$196,562	81%	87%	6%	\$159,215	\$171,009	\$11,794
Subtotal:		561		2002			\$128,893	5%	\$67,669	\$196,562				\$159,215	\$171,009	\$11,794
ALMA ROAD 24-INCH WATER LINE																
From Eldorado Pkwy. South to Community 3-MG Elevated Storage Tank																
1	P5403	920	1,146	24		\$157.47	\$180,391		\$94,705	\$275,096	100%	100%	0%	\$275,096	\$275,096	\$0
1	P5404	920	897	24		\$157.47	\$141,275		\$74,169	\$215,444	100%	100%	0%	\$215,444	\$215,444	\$0
1	P5405	920	674	24		\$157.47	\$106,120		\$55,713	\$161,833	100%	100%	0%	\$161,833	\$161,833	\$0
1	P5406	920	140	24		\$157.47	\$22,011		\$11,556	\$33,567	100%	100%	0%	\$33,567	\$33,567	\$0
Subtotal:		2,856		2005			\$449,797	5%	\$236,143	\$685,940				\$685,940	\$685,940	\$0
ELDORADO 20-INCH WATER LINE																
From Alma Rd. to Custer Rd.																
1	P5301	920	1,375	20		\$14.31	\$19,676		\$10,330	\$30,006	63%	100%	37%	\$18,904	\$30,006	\$11,102
1	P5370	920	2,023	20		\$14.31	\$28,945		\$15,196	\$44,141	68%	100%	32%	\$30,016	\$44,141	\$14,125
1	P5371	920	116	20		\$14.31	\$1,661		\$872	\$2,533	100%	100%	0%	\$2,533	\$2,533	\$0
1	P6154	920	1,986	20		\$14.31	\$28,420		\$14,921	\$43,341	67%	100%	33%	\$29,038	\$43,341	\$14,303
Subtotal:		5,500		2005			\$78,702	5%	\$41,319	\$120,021				\$80,491	\$120,021	\$39,530
GERRISH PUMP STATION / AIRPORT BLVD. 36-INCH WATER LINES																
From Gerrish Pump Station East to Airport Blvd. and Airport Blvd. from U.S. 380 to Industrial Blvd.																
2	P1059	794	532	36		\$115.51	\$61,501		\$32,288	\$93,789	100%	100%	0%	\$93,789	\$93,789	\$0
2	P1192	794	1,366	36		\$115.51	\$157,828		\$82,860	\$240,688	73%	79%	6%	\$175,702	\$190,144	\$14,441
2	P1193	794	952	36		\$115.51	\$109,911		\$57,703	\$167,614	73%	79%	6%	\$122,358	\$132,415	\$10,057
2	P1194	794	2,918	36		\$115.51	\$337,101		\$176,978	\$514,079	76%	79%	3%	\$390,700	\$406,122	\$15,422
2	P1195	794	2,574	36		\$115.51	\$297,294		\$156,079	\$453,373	16%	60%	44%	\$72,540	\$272,024	\$199,484
2	P1360	794	2,110	36		\$115.51	\$243,761		\$127,975	\$371,736	47%	70%	23%	\$174,716	\$260,215	\$85,499
2	P1395	794	1,300	36		\$115.51	\$150,176		\$78,842	\$229,018	20%	61%	41%	\$45,804	\$139,701	\$93,897
2	P1408	794	831	36		\$115.51	\$95,966		\$50,382	\$146,348	73%	79%	6%	\$106,834	\$115,615	\$8,781
Subtotal:		12,584		2003			\$1,453,539	5%	\$763,107	\$2,216,645				\$1,182,443	\$1,610,025	\$427,581



**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
												During Fee Period			During Fee Period
										2012	2022		2012	2022	
UNIVERSITY 36-INCH WATER LINE - DISCHARGE LINE 1															
From Univeristy Pump Station to U.S. 380; East Along U.S. 380 to Stonebridge Dr.															
2	P5000	920	1,916	36		\$224.18	\$429,617	\$225,549	\$655,166	96%	100%	4%	\$628,959	\$655,166	\$26,207
2	P5004	920	35	36		\$224.18	\$7,936	\$4,166	\$12,102	96%	100%	4%	\$11,618	\$12,102	\$484
2	P7079	920	49	36		\$224.18	\$10,924	\$5,735	\$16,659	96%	100%	4%	\$15,993	\$16,659	\$666
2	P7080	920	707	36		\$224.18	\$158,404	\$83,162	\$241,566	96%	100%	4%	\$231,903	\$241,566	\$9,663
Subtotal:		2,707		2003		\$606,881	5%	\$318,612	\$925,493				\$888,473	\$925,493	\$37,020
HARDIN BLVD. 36-INCH WATER LINE - (VIRGINIA TO US 380)															
From Virgina Pkwy. to U.S. 380															
2	P3090	850	2,433	36		\$159.83	\$388,895	\$204,170	\$593,065	100%	100%	0%	\$593,065	\$593,065	\$0
2	P3091	850	4,383	36		\$159.83	\$700,589	\$367,809	\$1,068,398	100%	100%	0%	\$1,068,398	\$1,068,398	\$0
2	P3092	850	1,267	36		\$159.83	\$202,516	\$106,321	\$308,837	100%	100%	0%	\$308,837	\$308,837	\$0
Subtotal:		8,083		2003		\$1,292,000	5%	\$678,300	\$1,970,300				\$1,970,300	\$1,970,300	\$0
HARDIN NORTH WATER LINE - (US 380 TO BUCHANAN)															
From U.S. 380 North to Buchanan St. (Constructed with President's Point)															
1	P3036	850	1,109	36		\$272.00	\$301,778	\$158,433	\$460,211	100%	100%	0%	\$460,211	\$460,211	\$0
1	P3037	850	1,264	36		\$272.00	\$343,764	\$180,476	\$524,240	100%	100%	0%	\$524,240	\$524,240	\$0
Subtotal:		2,373		2002		\$347,000	5%	\$338,909	\$984,451				\$984,451	\$984,451	\$0
850 WILMETH WATER MAIN - PHASE 1															
Along Hardin Blvd from Buchanan St. to Wilmeth Rd.															
2	P3038	850	3,414	36		\$144.15	\$492,196	\$258,403	\$750,599	100%	100%	0%	\$750,599	\$750,599	\$0
2	P3039	850	777	36		\$144.15	\$112,076	\$58,840	\$170,916	100%	100%	0%	\$170,916	\$170,916	\$0
2	P3040	850	82	36		\$144.15	\$11,792	\$6,191	\$17,983	100%	100%	0%	\$17,983	\$17,983	\$0
2	P3041	850	707	20		\$144.15	\$101,879	\$53,486	\$155,365	100%	100%	0%	\$155,365	\$155,365	\$0
Subtotal:		4,981		2005		\$717,943	5%	\$376,920	\$1,094,863				\$1,094,863	\$1,094,863	\$0
850 WILMETH WATER MAIN - PHASE 2															
Along Wilmeth Rd. from Hardin Blvd. to C.R. 943; North Along C.R. 943 2,880-ft; West to Lake Forest Dr.; South Along Lake Forest Dr. to Wilmeth Rd.															
2	P3010	850	1,445	36		\$144.15	\$208,253	\$109,333	\$317,586	70%	100%	30%	\$222,310	\$317,586	\$95,276
2	P3011	850	1,075	36		\$144.15	\$154,922	\$81,334	\$236,256	75%	100%	25%	\$177,192	\$236,256	\$59,064
2	P3026	850	2,897	24		\$144.15	\$417,539	\$219,208	\$636,747	100%	100%	0%	\$636,747	\$636,747	\$0
2	P3027	850	2,285	24		\$144.15	\$329,373	\$172,921	\$502,294	100%	100%	0%	\$502,294	\$502,294	\$0
2	P3028	850	1,857	24		\$144.15	\$267,645	\$140,514	\$408,159	100%	100%	0%	\$408,159	\$408,159	\$0
2	P3030	850	902	24		\$144.15	\$129,978	\$68,238	\$198,216	100%	100%	0%	\$198,216	\$198,216	\$0
2	P3031	850	3,664	24		\$144.15	\$528,127	\$277,267	\$805,394	70%	100%	30%	\$563,776	\$805,394	\$241,618
2	P3369	850	293	36		\$144.15	\$42,180	\$22,145	\$64,325	0%	0%	0%	\$0	\$0	\$0
Subtotal:		14,416		2005		\$2,078,018	5%	\$1,090,960	\$3,168,977				\$2,708,694	\$3,104,652	\$395,958

**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$) Utilized Capacity			
												During Fee Period			During Fee Period	
										2012	2022		2012	2022		
850 LOOPED SYSTEM NORTH																
From University Pump Station East to Future Ridge Rd.; Along Future Ridge Rd. North to Wilmeth Rd.; East Along Wilmeth Rd. to Lake Forest Dr.																
2	P3000	850	1,830	36		\$144.15	\$263,798		\$138,494	\$402,292	34%	63%	29%	\$136,779	\$253,444	\$116,665
2	P3002	850	1,373	36		\$144.15	\$197,943		\$103,920	\$301,863	36%	67%	31%	\$108,671	\$202,248	\$93,578
2	P3003	850	663	36		\$144.15	\$95,594		\$50,187	\$145,781	37%	69%	32%	\$53,939	\$100,589	\$46,650
2	P3004	850	4,270	36		\$144.15	\$615,583		\$323,181	\$938,764	28%	54%	26%	\$262,854	\$506,933	\$244,079
2	P3005	850	1,537	36		\$144.15	\$221,554		\$116,316	\$337,870	29%	73%	44%	\$97,982	\$246,645	\$148,663
2	P3006	850	2,402	36		\$144.15	\$346,241		\$181,777	\$528,018	52%	100%	48%	\$274,569	\$528,018	\$253,449
2	P3007	850	752	36		\$144.15	\$108,468		\$56,946	\$165,414	61%	100%	39%	\$100,903	\$165,414	\$64,511
2	P3008	850	801	36		\$144.15	\$115,441		\$60,607	\$176,048	62%	100%	38%	\$109,150	\$176,048	\$66,898
2	P3009	850	1,161	36		\$144.15	\$167,411		\$87,891	\$255,302	35%	100%	65%	\$89,356	\$255,302	\$165,946
2	P3461	850	1,049	36		\$144.15	\$151,198		\$79,379	\$230,577	0%	0%	0%	\$0	\$0	\$0
2	P3462	850	625	36		\$144.15	\$90,161		\$47,335	\$137,496	0%	0%	0%	\$0	\$0	\$0
Subtotal:					2005		\$2,373,392	5%	\$1,246,033	\$3,619,425				\$1,234,203	\$2,434,641	\$1,200,439
STONEBRIDGE 48-INCH WATERMAIN																
U.S. 380 to Lacima Dr.																
2	P5686	920	116	48		\$395.31	\$46,022		\$24,162	\$70,184	100%	100%	0%	\$70,184	\$70,184	\$0
2	P5687	920	1,001	48		\$395.31	\$395,826		\$207,809	\$603,635	100%	100%	0%	\$603,635	\$603,635	\$0
2	P5688	920	1,014	48		\$395.31	\$401,008		\$210,529	\$611,537	100%	100%	0%	\$611,537	\$611,537	\$0
2	P5690	920	954	48		\$395.31	\$377,009		\$197,930	\$574,939	100%	100%	0%	\$574,939	\$574,939	\$0
Subtotal:					2006		\$1,219,865	5%	\$640,430	\$1,860,295				\$1,860,295	\$1,860,295	\$0
36-INCH & 48INCH WATERLINE FROM VIRGINIA TO STONEBRIDGE																
Along Lacima Dr. from Stonebridge Dr. to Bristol Dr.; Along Bristol Dr. from Lacima Dr. to St. Gabriel Dr.; Along St. Gabriel Dr. from Bristol Dr. to Virginia Pkwy.																
2	P5034	920	49	48		\$395.31	\$19,181		\$10,070	\$29,251	100%	100%	0%	\$29,251	\$29,251	\$0
2	P5691	920	740	48		\$395.31	\$292,559		\$153,593	\$446,152	100%	100%	0%	\$446,152	\$446,152	\$0
2	P5692	920	212	48		\$395.31	\$83,652		\$43,917	\$127,569	100%	100%	0%	\$127,569	\$127,569	\$0
2	P5693	920	2,726	36		\$395.31	\$1,077,659		\$565,771	\$1,643,430	100%	100%	0%	\$1,643,430	\$1,643,430	\$0
2	P5694	920	390	36		\$395.31	\$154,158		\$80,933	\$235,091	100%	100%	0%	\$235,091	\$235,091	\$0
Subtotal:					2006		\$1,627,208	5%	\$854,284	\$2,481,493				\$2,481,493	\$2,481,493	\$0
ALMA ROAD 24-INCH WATER LINE (CRAIG RANCH NORTH)																
From Community 3-MG Elevated Storage Tank South to C.R. 152																
1	P5407	920	293	24		\$596.91	\$174,973		\$0	\$174,973	100%	100%	0%	\$174,973	\$174,973	\$0
1	P5408	920	632	24		\$596.91	\$377,419		\$0	\$377,419	100%	100%	0%	\$377,419	\$377,419	\$0
1	P5409	920	831	24		\$596.91	\$495,759		\$0	\$495,759	100%	100%	0%	\$495,759	\$495,759	\$0
1	P5410	920	265	24		\$596.91	\$158,210		\$0	\$158,210	100%	100%	0%	\$158,210	\$158,210	\$0
1	P5411	920	704	24		\$596.91	\$419,978		\$0	\$419,978	100%	100%	0%	\$419,978	\$419,978	\$0
1	P5412	920	77	24		\$596.91	\$45,890		\$0	\$45,890	100%	100%	0%	\$45,890	\$45,890	\$0
Subtotal:					2002		\$1,672,230	0%	\$0	\$1,672,229				\$1,672,229	\$1,672,229	\$0

**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity			
												During Fee Period			During Fee Period	
										2012	2022		2012	2022		
LAKE FOREST DRIVE 30-INCH WATER LINE (WAL-MART)																
From McKinney Ranch Pkwy. South 1,400-ft																
1	P5582	920	1,373	30		\$148.06	\$203,232		\$106,697	\$309,929	61%	97%	36%	\$189,057	\$300,631	\$111,574
Subtotal:			1,373	2004			\$203,232	5%	\$106,697	\$309,929				\$189,057	\$300,631	\$111,574
VILLAGE PARK - PHASE 1 - 20", 30" & 36" WATER LINE (LAKE FOREST DR., COLLIN MCKINNEY PKWY. & RIDGE RD.)																
20" - Ridge Road from Stacy Rd. to McKinney Ranch Pkwy.; 30" -Lake Forest Dr. from 1,400-ft South of McKinney Ranch Pkwy. to Collin McKinney Pkwy.;																
36"- Collin McKinney Pkwy. from Lake Forest Dr. to 1,900-ft West																
1	P5583	920	1,087	30		\$50.51	\$54,892		\$28,818	\$83,710	61%	97%	36%	\$51,063	\$81,199	\$30,136
1	P5584	920	711	30		\$50.51	\$35,927		\$18,862	\$54,789	60%	97%	37%	\$32,873	\$53,145	\$20,272
1	P5606	920	666	36		\$50.51	\$33,644		\$17,663	\$51,307	41%	100%	59%	\$21,036	\$51,307	\$30,271
1	P5586	920	1,054	20		\$50.51	\$53,225		\$27,943	\$81,168	46%	100%	54%	\$37,337	\$81,168	\$43,831
1	P5587	920	434	20		\$50.51	\$21,911		\$11,503	\$33,414	70%	100%	30%	\$23,390	\$33,414	\$10,024
1	P5588	920	1,331	20		\$50.51	\$67,221		\$35,291	\$102,512	55%	97%	42%	\$56,382	\$99,437	\$43,055
1	P5607A	920	1,900	36		\$50.51	\$95,963		\$50,381	\$146,344	55%	97%	42%	\$80,489	\$141,954	\$61,464
1	P6017	920	624	20		\$50.51	\$31,523		\$16,550	\$48,073	57%	100%	43%	\$27,402	\$48,073	\$20,671
Subtotal:			7,807	2004			\$394,306	5%	\$207,011	\$601,317				\$329,972	\$589,697	\$259,724
COLLIN MCKINNEY 30" & 36" WATER LINE (CRAIG RANCH INFRASTRUCTURE) (VCIM 1)																
From 1,900-ft West of Lake Forest Dr. to Alma Dr.																
1	P5607B	920	1,584	36		\$81.13	\$128,513		\$0	\$128,513	29%	97%	68%	\$37,269	\$124,658	\$87,389
1	P5608	920	2,844	30		\$81.13	\$230,735		\$0	\$230,735	53%	95%	42%	\$122,290	\$219,198	\$96,909
1	P5609	920	603	30		\$81.13	\$48,930		\$0	\$48,930	54%	95%	41%	\$26,422	\$46,484	\$20,061
1	P5682	920	358	30		\$81.13	\$29,057		\$0	\$29,057	100%	100%	0%	\$29,057	\$29,057	\$0
1	P5696	920	895	30		\$81.13	\$72,616		\$0	\$72,616	0%	0%	0%	\$0	\$0	\$0
Subtotal:			6,284	2004			\$509,851	0%	\$0	\$509,851				\$215,038	\$419,397	\$204,359

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Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
										(%)			(%)		
										2012	2022	During Fee Period	2012	2022	During Fee Period
<b>COLLIN MCKINNEY 20" &amp; 24" WATER LINE (CRAIG RANCH INFRASTRUCTURE) (VCIM 1)</b>															
From Alma Dr. to TPC Dr.															
1	P5610	920	299	20	\$81.13	\$24,284		\$0	\$24,284	54%	94%	40%	\$13,113	\$22,827	\$9,714
1	P5618	920	495	24	\$81.13	\$40,175		\$0	\$40,175	51%	77%	26%	\$20,489	\$30,935	\$10,446
1	P5619	920	307	24	\$81.13	\$24,904		\$0	\$24,904	54%	76%	22%	\$13,448	\$18,927	\$5,479
1	P5620	920	294	24	\$81.13	\$23,826		\$0	\$23,826	59%	82%	23%	\$14,057	\$19,537	\$5,480
1	P5621	920	238	24	\$81.13	\$19,298		\$0	\$19,298	60%	83%	23%	\$11,579	\$16,017	\$4,439
1	P5622	920	290	24	\$81.13	\$23,564		\$0	\$23,564	60%	83%	23%	\$14,138	\$19,558	\$5,420
1	P5623	920	298	24	\$81.13	\$24,145		\$0	\$24,145	60%	83%	23%	\$14,487	\$20,040	\$5,553
1	P5624	920	290	24	\$81.13	\$23,550		\$0	\$23,550	61%	83%	22%	\$14,366	\$19,547	\$5,181
1	P5625	920	296	24	\$81.13	\$24,001		\$0	\$24,001	60%	84%	24%	\$14,401	\$20,161	\$5,760
1	P5626	920	220	24	\$81.13	\$17,839		\$0	\$17,839	51%	73%	22%	\$9,098	\$13,022	\$3,925
1	P5627	920	586	24	\$81.13	\$47,510		\$0	\$47,510	54%	73%	19%	\$25,655	\$34,682	\$9,027
1	P5628	920	597	24	\$81.13	\$48,446		\$0	\$48,446	38%	73%	35%	\$18,409	\$35,366	\$16,956
1	P5629	920	922	24	\$81.13	\$74,838		\$0	\$74,838	41%	71%	30%	\$30,684	\$53,135	\$22,451
<b>Subtotal:</b>		<b>5,132</b>		<b>2004</b>		<b>\$416,381</b>	<b>0%</b>	<b>\$0</b>	<b>\$416,380</b>				<b>\$213,924</b>	<b>\$323,754</b>	<b>\$109,831</b>
<b>ALMA ROAD 20-INCH WATER LINE (CRAIG RANCH INFRASTRUCTURE) (VCIM 1)</b>															
From Collin McKinney Parkway to S.H. 121															
1	P5611	920	879	20	\$81.13	\$71,305		\$0	\$71,305	52%	93%	41%	\$37,079	\$66,314	\$29,235
1	P5612	920	349	20	\$81.13	\$28,346		\$0	\$28,346	46%	93%	47%	\$13,039	\$26,362	\$13,323
1	P5613	920	347	20	\$81.13	\$28,136		\$0	\$28,136	40%	93%	53%	\$11,254	\$26,166	\$14,912
1	P5616	920	624	20	\$81.13	\$50,664		\$0	\$50,664	62%	100%	38%	\$31,412	\$50,664	\$19,252
1	P5617	920	583	20	\$81.13	\$47,264		\$0	\$47,264	61%	100%	39%	\$28,831	\$47,264	\$18,433
<b>Subtotal:</b>		<b>2,782</b>		<b>2004</b>		<b>\$225,715</b>	<b>0%</b>	<b>\$0</b>	<b>\$225,715</b>				<b>\$121,615</b>	<b>\$216,770</b>	<b>\$95,155</b>
<b>WESTRIDGE WATER LINE</b>															
From Custer Rd. to the Independence Elevated Storage Tank															
1	P5148	920	1,100	20	\$47.85	\$52,634		\$27,633	\$80,267	100%	100%	0%	\$80,267	\$80,267	\$0
1	P5149	920	578	20	\$47.85	\$27,648		\$14,515	\$42,163	100%	100%	0%	\$42,163	\$42,163	\$0
1	P5150	920	1,106	18	\$47.85	\$52,906		\$27,776	\$80,682	100%	100%	0%	\$80,682	\$80,682	\$0
1	P5151	920	2,689	18	\$47.85	\$128,656		\$67,544	\$196,200	100%	100%	0%	\$196,200	\$196,200	\$0
<b>Subtotal:</b>		<b>5,472</b>		<b>2002</b>		<b>\$261,844</b>	<b>5%</b>	<b>\$137,468</b>	<b>\$399,312</b>				<b>\$399,312</b>	<b>\$399,312</b>	<b>\$0</b>
<b>INDEPENDENCE 20-INCH WATER LINE</b>															
From Westridge Blvd. to 650-ft South of Virginia Pkwy.															
1	P5136	920	1,245	20	\$46.75	\$58,194		\$30,552	\$88,746	37%	100%	63%	\$32,836	\$88,746	\$55,910
1	P5137	920	1,005	20	\$46.75	\$46,980		\$24,665	\$71,645	45%	100%	55%	\$32,240	\$71,645	\$39,405
1	P5138	920	259	20	\$46.75	\$12,128		\$6,367	\$18,495	45%	100%	55%	\$8,323	\$18,495	\$10,172
1	P5567	920	1,205	20	\$46.75	\$56,342		\$29,580	\$85,922	33%	100%	67%	\$28,354	\$85,922	\$57,568
1	P5695	920	920	20	\$46.75	\$43,029		\$22,590	\$65,619	33%	100%	67%	\$21,654	\$65,619	\$43,965
<b>Subtotal:</b>		<b>4,635</b>		<b>2002</b>		<b>\$216,672</b>	<b>5%</b>	<b>\$113,754</b>	<b>\$330,427</b>				<b>\$123,407</b>	<b>\$330,427</b>	<b>\$207,020</b>

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										2012	2022	During Fee Period	2012	2022	During Fee Period	
STACY ROAD WATER LINE																
From S.H. 121 to Old FM 720																
1	P6013	920	445	20		\$55.40		\$12,943	\$37,596	52%	100%	48%	\$19,550	\$37,596	\$18,046	
1	P6014	920	1,486	20		\$55.40		\$43,225	\$125,558	66%	100%	34%	\$82,868	\$125,558	\$42,690	
1	P6016	920	2,148	20		\$54.65		\$61,614	\$178,975	55%	98%	43%	\$98,436	\$175,396	\$76,959	
1	P6018	920	1,357	24		\$82.11		\$58,512	\$169,964	35%	100%	65%	\$59,487	\$169,964	\$110,477	
1	P6019	920	1,395	24		\$82.11		\$60,140	\$174,692	36%	100%	64%	\$62,889	\$174,692	\$111,803	
Subtotal:		6,831		2007		\$450,351	5%	\$236,434	\$686,785				\$323,230	\$683,206	\$359,975	
MCKINNEY RANCH 16-INCH WATER LINE																
From Ridge Rd. to Stacy Rd.																
1	P6024	920	1,666	16		\$34.40		\$30,089	\$87,402	24%	98%	74%	\$20,976	\$85,654	\$64,677	
1	P6026	920	2,331	16		\$34.40		\$42,094	\$122,273	45%	100%	55%	\$55,023	\$122,273	\$67,250	
Subtotal:		3,997		2007		\$137,492	5%	\$72,183	\$209,675				\$75,999	\$207,927	\$131,927	
COLLIN MCKINNEY 20-INCH WATER LINE - (CRAIG RANCH INFRASTRUCTURE) (VCIM 2)																
From Boston Rd. to Custer Rd.																
1	P5678	920	1,057	20		\$130.86		\$0	\$138,278	28%	67%	39%	\$38,718	\$92,646	\$53,928	
1	P5679	920	1,335	20		\$130.86		\$0	\$174,742	26%	66%	40%	\$45,433	\$115,330	\$69,897	
Subtotal:		2,392		2007		\$313,020	0%	\$0	\$138,278				\$38,718	\$92,646	\$53,928	
ALMA ROAD 24-INCH WATER LINE - (CRAIG RANCH INFRASTRUCTURE) (VCIM 2)																
From Stacy Road to Collin McKinney Pkwy.																
1	P6027	920	147	24		\$130.86		\$10,132	\$29,431	100%	100%	0%	\$29,431	\$29,431	\$0	
1	P6028	920	684	24		\$130.86		\$46,998	\$136,518	57%	96%	39%	\$77,815	\$131,057	\$53,242	
1	P6029	920	626	24		\$130.86		\$43,033	\$125,000	56%	96%	40%	\$70,000	\$120,000	\$50,000	
1	P6030	920	727	24		\$130.86		\$49,941	\$145,067	56%	96%	40%	\$81,238	\$139,264	\$58,027	
1	P6031	920	472	24		\$130.86		\$32,409	\$94,140	56%	96%	40%	\$52,718	\$90,374	\$37,656	
1	P6171	920	1,014	24		\$130.86		\$69,632	\$202,264	56%	98%	42%	\$113,268	\$198,219	\$84,951	
Subtotal:		3,670		2007		\$480,275	5%	\$252,145	\$732,420				\$424,470	\$708,345	\$283,876	
CUSTER ROAD 16-INCH WATER LINE - (CRAIG RANCH INFRASTRUCTURE) (VCIM 2)																
From Stacy Rd. to Town Crossing (2,720-ft South of Boston Rd.)																
1	P5665	920	1,561	16		\$130.86		\$107,245	\$311,522	83%	86%	3%	\$258,563	\$267,909	\$9,346	
1	P5666	920	1,113	16		\$130.86		\$76,482	\$222,162	83%	86%	3%	\$184,394	\$191,059	\$6,665	
1	P5667	920	917	16		\$130.86		\$63,008	\$183,024	48%	72%	24%	\$87,852	\$131,777	\$43,926	
1	P6037	920	1,290	16		\$130.86		\$88,643	\$257,486	90%	100%	10%	\$231,737	\$257,486	\$25,749	
1	P6038	920	1,430	16		\$130.86		\$98,252	\$285,398	80%	88%	8%	\$228,318	\$251,150	\$22,832	
Subtotal:		6,312		2007		\$825,962	5%	\$433,630	\$1,259,592				\$990,864	\$1,099,381	\$108,518	

**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$) Utilized Capacity		
												During Fee Period			During Fee Period
COLLIN MCKINNEY 20-INCH WATER LINE - ROWLETT CREEK BRIDGE															
From TPC Dr. to Boston Rd.															
2	P6041	920	1,324	20		\$18.35	\$24,289	\$12,752	\$37,041	39%	68%	29%	\$14,446	\$25,188	\$10,742
Subtotal:			1,324	2006			\$24,289	5%	\$12,752	\$37,041			\$14,446	\$25,188	\$10,742
BRISTOL / CUSTER 42-INCH WATER LINE															
Bristol Dr. from Lacima Dr. to Custer Rd. & Custer Rd. from Bristol Dr. to Virginia Pkwy.															
2	P6150	920	4,864	42		\$ 507.59	\$2,468,962	\$1,296,205	\$3,765,167	100%	100%	0%	\$3,765,167	\$3,765,167	\$0
2	P6151	920	610	42		\$ 507.59	\$309,743	\$162,615	\$472,358	100%	100%	0%	\$472,358	\$472,358	\$0
2	P6152	920	871	42		\$ 507.59	\$441,921	\$232,009	\$673,930	100%	100%	0%	\$673,930	\$673,930	\$0
2	P6222	920	900	42		\$ 507.59	\$456,834	\$239,838	\$696,672	100%	100%	0%	\$696,672	\$696,672	\$0
Subtotal:			7,245	2008			\$3,677,460	5%	\$1,930,667	\$5,608,127			\$5,608,127	\$5,608,127	\$0
CUSTER ROAD UTILITY RELOCATION															
From Virginia Pkwy. to Eldorado Pkwy.															
2	P5130	920	275	36		\$ 432.46	\$118,725	\$62,331	\$181,056	100%	100%	0%	\$181,056	\$181,056	\$0
2	P5132	920	260	36		\$ 432.46	\$112,437	\$59,029	\$171,466	100%	100%	0%	\$171,466	\$171,466	\$0
2	P5754	920	487	30		\$ 432.46	\$210,584	\$110,557	\$321,141	100%	100%	0%	\$321,141	\$321,141	\$0
2	P6153	920	841	36		\$ 432.46	\$363,495	\$190,835	\$554,330	100%	100%	0%	\$554,330	\$554,330	\$0
2	P6155	920	1,717	36		\$ 432.46	\$742,406	\$389,763	\$1,132,169	100%	100%	0%	\$1,132,169	\$1,132,169	\$0
2	P6156	920	2,392	36		\$ 432.46	\$1,034,493	\$543,109	\$1,577,602	100%	100%	0%	\$1,577,602	\$1,577,602	\$0
2	P6168	920	1,347	30		\$ 432.46	\$582,648	\$305,890	\$888,538	100%	100%	0%	\$888,538	\$888,538	\$0
2	P6169	920	2,744	30		\$ 432.46	\$1,186,493	\$622,909	\$1,809,402	100%	100%	0%	\$1,809,402	\$1,809,402	\$0
2	P6170	920	1,007	30		\$ 432.46	\$435,495	\$228,635	\$664,130	100%	100%	0%	\$664,130	\$664,130	\$0
Subtotal:			11,069	2010			\$4,786,776	5%	\$2,513,058	\$7,299,834			\$7,299,834	\$7,299,834	\$0
ELDORADO PKWY. / STONEBRIDGE DRIVE INTERSECTION 20-INCH WATER LINE															
Intersection of Eldorado Pkwy. and Stonebridge Dr. - Replace Existing 12" Water Line with 20" Water Line by Bore															
2	P6183	920	210	20		\$1,041.85	\$218,789	\$5,250	\$224,039	68%	100%	32%	\$152,347	\$224,039	\$71,692
Subtotal:			210	2012			\$218,789	5%	\$218,789	\$218,789					

**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$) Utilized Capacity			
												During Fee Period			During Fee Period	
										2012	2022		2012	2022		
U.S. 380 36-INCH WATER LINE																
From Univeristy Pump Station to Hardin Rd.																
2	P3423	850	36		\$361.55	\$10,765		\$5,652	\$16,417	71%	100%	29%	\$11,656	\$16,417	\$4,761	
2	P4084	850	5,597		\$361.55	\$2,023,591		\$1,062,385	\$3,085,976	40%	100%	60%	\$1,234,390	\$3,085,976	\$1,851,586	
2	P4085	850	3,633		\$361.55	\$1,313,651		\$689,667	\$2,003,318	71%	100%	29%	\$1,422,356	\$2,003,318	\$580,962	
2	P4086	850	1,082		\$361.55	\$391,083		\$205,319	\$596,402	79%	100%	21%	\$471,158	\$596,402	\$125,244	
2	P4087	850	320		\$361.55	\$115,531		\$60,654	\$176,185	83%	100%	17%	\$146,234	\$176,185	\$29,951	
2	P4088	850	129		\$361.55	\$46,731		\$24,534	\$71,265	83%	100%	17%	\$59,150	\$71,265	\$12,115	
2	P4089	850	1,451		\$361.55	\$524,737		\$275,487	\$800,224	91%	100%	9%	\$728,204	\$800,224	\$72,020	
2	P4090	850	926		\$361.55	\$334,611		\$175,671	\$510,282	94%	100%	6%	\$479,665	\$510,282	\$30,617	
2	P4183	850	441		\$361.55	\$159,447		\$83,710	\$243,157	81%	100%	19%	\$196,957	\$243,157	\$46,200	
2	P4184	850	3,229		\$361.55	\$1,167,383		\$612,876	\$1,780,259	92%	100%	8%	\$1,637,838	\$1,780,259	\$142,421	
2	P4196	850	366		\$361.55	\$132,334		\$69,475	\$201,809	81%	100%	19%	\$163,465	\$201,809	\$38,344	
Subtotal:			17,204	2012		\$6,219,865	5%	\$3,265,430	\$9,485,294				\$6,551,073	\$9,485,294	\$2,934,221	
UNIVERSITY PUMP STATION DISCHARGE LINE NO. 2																
From University Pump Station West to Future Stonebridge Dr.; South Along Future Stonebridge Dr. to U.S. 380; U.S. 380 to Custer Rd.																
2	P6090	920	184	48		\$677.22	\$124,891		\$65,568	\$190,459	100%	100%	0%	\$190,459	\$190,459	\$0
2	P6091	920	112	48		\$677.22	\$75,772		\$39,780	\$115,552	12%	27%	15%	\$13,866	\$31,199	\$17,333
2	P6148	920	2,145	66		\$677.22	\$1,452,373		\$762,496	\$2,214,869	55%	60%	5%	\$1,218,178	\$1,328,921	\$110,743
2	P6149	920	2,784	30		\$677.22	\$1,885,175		\$989,717	\$2,874,892	47%	82%	35%	\$1,351,199	\$2,357,411	\$1,006,212
2	P6235	920	623	30		\$677.22	\$422,236		\$221,674	\$643,910	41%	77%	36%	\$264,003	\$495,811	\$231,808
2	P7061	920	106	48		\$677.22	\$71,490		\$37,532	\$109,022	66%	72%	6%	\$71,955	\$78,496	\$6,541
Subtotal:			5,954	2009		\$4,031,938	5%	\$2,116,767	\$6,148,704				\$3,109,660	\$4,482,297	\$1,372,637	
STACY ROAD 24-INCH WATER LINE																
From Alma Rd. East 2,756-ft																
1	P6020	920	687	24		193.1462403	\$132,707		\$69,671	\$202,378	60%	100%	40%	\$121,427	\$202,378	\$80,951
1	P5744	920	1,950	24		193.1462403	\$376,677		\$197,755	\$574,432	60%	100%	40%	\$344,659	\$574,432	\$229,773
Subtotal:			2,637	2009		\$509,384	5%	\$267,426	\$776,810				\$466,086	\$776,810	\$310,724	
HARDIN 36-INCH WATER LINE (TIMBER CREEK ACCESS IMPROVEMENTS)																
From Wilmeth Rd. to Holly Ridge Way																
1	P4015	850	1,200	36		\$249.81	\$299,890		\$157,442	\$457,332	10%	46%	36%	\$45,733	\$210,373	\$164,640
1	P4016	850	1,606	36		\$249.81	\$401,100		\$210,578	\$611,678	0%	40%	40%	\$0	\$244,671	\$244,671
Subtotal:			2,806	2010		\$700,990	5%	\$368,020	\$1,069,010				\$45,733	\$455,044	\$409,311	
LAKE FOREST 20-INCH WATER LINE																
From Collin McKinney Pkwy. to S.H. 121																
1	P6012	920	1,879	20		\$302.70	\$568,772		\$298,605	\$867,377	100%	100%	0%	\$867,377	\$867,377	\$0
Subtotal:			1,879	2010		\$568,772	5%	\$298,605	\$867,377				\$867,377	\$867,377	\$0	

**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity			
										2012	2022	During Fee Period	2012	2022	During Fee Period	
VALOR POINTE AT WESTRIDGE, PHASE 10 - 16-INCH WATER LINES																
Along Virgina Parkway West 1,250-ft to Future Westridge Subdivision; South & Southwest in Future Westridge Subdivision																
1	P6069	920	1,224	16		\$18.45	\$22,579		\$11,854	\$34,433	23%	100%	77%	\$7,920	\$34,433	\$26,513
1	P6079	920	647	16		\$18.45	\$11,927		\$6,262	\$18,189	21%	100%	79%	\$3,820	\$18,189	\$14,369
Subtotal:			1,870	2012			\$34,506	5%	\$18,116	\$52,622				\$11,740	\$52,622	\$40,882
920 VIRGINIA PKWY. 12-INCH PARALLEL LINE																
From Adriatic Pkwy. to Ridge Rd.																
2	P5232	920	949	12		\$67.51	\$64,038		\$33,620	\$97,658	100%	100%	0%	\$97,658	\$97,658	\$0
2	P5702	920	620	12		\$67.51	\$41,874		\$21,984	\$63,858	100%	100%	0%	\$63,858	\$63,858	\$0
2	P5736	920	949	12		\$67.51	\$64,102		\$33,654	\$97,756	96%	100%	4%	\$93,846	\$97,756	\$3,910
2	P5737	920	389	12		\$67.51	\$26,232		\$13,772	\$40,004	97%	100%	3%	\$38,804	\$40,004	\$1,200
2	P6172	920	1,095	12		\$67.51	\$73,920		\$38,808	\$112,728	97%	100%	3%	\$109,346	\$112,728	\$3,382
Subtotal:			4,002	2011			\$270,166	5%	\$141,838	\$412,004				\$403,512	\$412,004	\$8,492
WESTRIDGE 24-INCH WATER LINE																
Westridge Blvd. Phase 4A & 4B (Custer West Partners) From Independence Elevated Storage Tank to Willard Dr.																
1	P5158	920	1,163	24		\$50.74	\$58,996		\$30,973	\$89,969	36%	81%	45%	\$32,389	\$72,875	\$40,486
1	P5159	920	632	24		\$50.74	\$32,041		\$16,822	\$48,863	39%	82%	43%	\$19,057	\$40,068	\$21,011
1	P5160	920	867	24		\$50.74	\$43,971		\$23,085	\$67,056	79%	97%	18%	\$52,974	\$65,044	\$12,070
1	P5683	920	287	24		\$50.74	\$14,561		\$7,645	\$22,206	41%	83%	42%	\$9,104	\$18,431	\$9,327
1	P6062	920	1,289	24		\$50.74	\$65,385		\$34,327	\$99,712	4%	80%	76%	\$3,988	\$79,770	\$75,781
Subtotal:			4,237	2007			\$214,953	5%	\$112,852	\$327,806				\$117,512	\$276,188	\$158,675



**TABLE NO. 12**  
**Existing Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
										(%)			(%)		
										2012	2022	During Fee Period	2012	2022	During Fee Period
<b>LAKE FOREST 36-INCH WATER LINE</b>															
From Willmeth Phase 2 Water Line to Bloomdale Rd.															
1	P4013	850	1,650	36		\$421.10		\$364,742	\$1,059,488	0%	15%	15%	\$0	\$158,923	\$158,923
1	P4189	850	892	36		\$421.10		\$197,175	\$572,746	5%	17%	12%	\$28,637	\$97,367	\$68,730
<b>Subtotal:</b>						<b>\$1,070,317</b>	<b>5%</b>	<b>\$561,917</b>	<b>\$1,632,234</b>				<b>\$28,637</b>	<b>\$256,290</b>	<b>\$227,653</b>
<b>HARDIN ELEVATED STORAGE TANK WATER LINES</b>															
From Mallard Lakes 12" WL. to Hardin Blvd.															
2	P3359	850	464	24		\$407.34		\$99,172	\$288,071	0%	82%	82%	\$0	\$236,218	\$236,218
2	P3371	850	369	12		\$169.32		\$32,759	\$95,158	0%	82%	82%	\$0	\$78,030	\$78,030
2	P4116	850	1,072	24		\$300.92		\$169,331	\$491,867	0%	75%	75%	\$0	\$368,900	\$368,900
<b>Subtotal:</b>						<b>\$573,834</b>	<b>5%</b>	<b>\$301,262</b>	<b>\$875,096</b>				<b>\$0</b>	<b>\$683,148</b>	<b>\$683,148</b>
<b>US 75 UTILITY RELOCATIONS</b>															
From Market Place Dr. South to Existing 16" Water Line															
2	P2116	794	1,848	16		\$376.42		\$365,200	\$1,060,819	68%	81%	13%	\$721,357	\$859,263	\$137,906
<b>Subtotal:</b>						<b>\$695,619</b>	<b>5%</b>	<b>\$365,200</b>					<b>\$721,357</b>	<b>\$859,263</b>	<b>\$137,906</b>
<b>US 75 UTILITY RELOCATIONS - PHASE III</b>															
Along NB US 75 From Bloomdale Rd. North; US 75 Crossing; From US 75 Crossing Along SB US 75															
2	P3175	794	1,186	16		\$218.41		\$136,026	\$395,123	13%	66%	53%	\$51,366	\$260,781	\$209,415
2	P3176	794	458	16		\$218.41		\$52,545	\$152,631	13%	66%	53%	\$19,842	\$100,736	\$80,894
2	P3177	794	544	16		\$218.41		\$62,347	\$181,103	6%	65%	59%	\$10,866	\$117,717	\$106,851
<b>Subtotal:</b>						<b>\$477,940</b>	<b>5%</b>	<b>\$250,918</b>	<b>\$728,857</b>				<b>\$82,074</b>	<b>\$479,234</b>	<b>\$397,160</b>
<b>EXISTING TOTAL:</b>															
		<b>241,729</b>				<b>\$45,493,957</b>		<b>\$22,497,972</b>	<b>\$66,836,124</b>				<b>\$48,090,584</b>	<b>\$59,113,332</b>	<b>\$11,022,749</b>

**TABLE NO. 13**  
**Proposed Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

\*Average Unit Costs are Based in 2012 Dollars Unless Otherwise Indicated and Includes 20% for Engineering and Easements.

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
										(%)		During Fee Period	(%)		During Fee Period
2012	2022		2012	2022											
<b>INDUSTRIAL BLVD. 12" WATER LINE (PIPE BURST 8" to 12")</b>															
From Industrial Elevated Tank East 1,540-ft & from Union Pacific RR to Lavon Dr.															
2	P1399 *	794	160	12	\$261.90	\$41,782		\$21,936	\$63,718	0%	82%	82%	\$0	\$52,249	\$52,249
2	P1402 *	794	630	12	\$261.90	\$164,959		\$86,604	\$251,563	0%	85%	85%	\$0	\$213,829	\$213,829
2	P1403 *	794	1,543	12	\$261.90	\$404,127		\$212,167	\$616,294	0%	84%	84%	\$0	\$517,687	\$517,687
<b>Subtotal:</b>		<b>2,332</b>		<b>2014</b>		<b>\$610,868</b>	<b>5%</b>	<b>\$320,707</b>	<b>\$931,575</b>				<b>\$0</b>	<b>\$783,765</b>	<b>\$783,765</b>
<b>COUCH DRIVE 12" WATER LINE LOOP</b>															
From Airport Rd. to Couch Dr.															
2	P1406 *	794	4,120	12	\$169.90	\$700,000		\$367,500	\$1,067,500	0%	83%	83%	\$0	\$886,025	\$886,025
				<b>2014</b>		<b>\$700,000</b>	<b>5%</b>	<b>\$367,500</b>	<b>\$1,067,500</b>				<b>\$0</b>	<b>\$886,025</b>	<b>\$886,025</b>
<b>US 380 / INDEPENDENCE LOOP</b>															
From Custer Rd. to Independence Pkwy. & Independence Pkwy. from US 380 to Virginia Pkwy. (Pipe 5757 is a Bore Across Custer)															
2	P5757 *	920	146	16	\$550.00	\$80,475		\$42,249	\$122,724	0%	70%	70%	\$0	\$85,907	\$85,907
2	P5758 *	920	449	12	\$114.00	\$51,222		\$26,892	\$78,114	0%	83%	83%	\$0	\$64,835	\$64,835
2	P5763 *	920	329	8	\$85.00	\$27,946		\$14,672	\$42,618	0%	100%	100%	\$0	\$42,618	\$42,618
2	P5767 *	920	307	16	\$132.00	\$40,477		\$21,250	\$61,727	0%	89%	89%	\$0	\$54,937	\$54,937
2	P6083 *	920	1,021	24	\$225.00	\$229,786		\$120,638	\$350,424	0%	88%	88%	\$0	\$308,373	\$308,373
2	P6084 *	920	2,797	24	\$225.00	\$629,218		\$330,339	\$959,557	0%	88%	88%	\$0	\$844,410	\$844,410
2	P6086 *	920	1,686	12	\$114.00	\$192,204		\$100,907	\$293,111	0%	89%	89%	\$0	\$260,869	\$260,869
2	P6087 *	920	4,099	24	\$225.00	\$922,289		\$484,202	\$1,406,491	0%	90%	90%	\$0	\$1,265,842	\$1,265,842
		<b>10,834</b>		<b>2015</b>		<b>\$2,173,617</b>	<b>5%</b>	<b>\$1,141,149</b>	<b>\$3,314,766</b>				<b>\$0</b>	<b>\$2,927,791</b>	<b>\$2,927,791</b>
<b>US 380 / COIT SUBDIVISION OFFSITE</b>															
20" Along Independence Pkwy. from 600-ft South of Virginia Pkwy.; 24" Along Independence Pkwy. from Virginia Pkwy. to 1,628-ft north of Virginia Pkwy.; 16" Along Virginia Pkwy. from Bluestem Dr. to Independence Pkwy.															
1	P6074 *	920	1,078	16	\$18.00	\$19,401		\$10,186	\$29,587	0%	81%	81%	\$0	\$23,965	\$23,965
1	P6089 *	920	596	20	\$60.00	\$35,743		\$18,765	\$54,508	0%	100%	100%	\$0	\$54,508	\$54,508
1	P6239 *	920	1,628	24	\$111.00	\$180,717		\$94,876	\$275,593	0%	89%	89%	\$0	\$245,278	\$245,278
<b>Subtotal:</b>		<b>3,302</b>		<b>2014</b>		<b>\$235,861</b>	<b>5%</b>	<b>\$123,827</b>	<b>\$359,688</b>				<b>\$0</b>	<b>\$323,751</b>	<b>\$323,751</b>
<b>BLUESTEM 16" WATER LINE</b>															
16" Along Bluestem Dr. from Hidden Haven Dr. to Future Eden Dr.															
1	P6067 *	920	2,375	16	\$18.00	\$42,750		\$22,444	\$65,194	0%	100%	100%	\$0	\$65,194	\$65,194
<b>Subtotal:</b>		<b>2,375</b>		<b>2015</b>		<b>\$42,750</b>	<b>5%</b>	<b>\$22,444</b>	<b>\$65,194</b>				<b>\$0</b>	<b>\$65,194</b>	<b>\$65,194</b>

**TABLE NO. 13**  
**Proposed Impact Fee Water Lines**

1 - City Participation in Cost Oversize

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\*Average Unit Costs are Based in 2012 Dollars Unless Otherwise Indicated and Includes 20% for Engineering and Easements.

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$) Utilized Capacity		
										2012	2022	During Fee Period	2012	2022	During Fee Period
WESTRIDGE 16" WATER LINE															
From Willard Drive to Coit Rd.															
1	P6061 *	920	1,630	16	\$18.00	\$29,349		\$15,408	\$44,757	0%	79%	79%	\$0	\$35,358	\$35,358
Subtotal:						\$29,349	5%	\$15,408	\$44,757				\$0	\$35,358	\$35,358
S.H. 5 36" WATER LINE & WILLOWWOOD 36" & 24" WATER LINE															
From Bloomdale Road to Future Willowwood Subdivision															
1	P2000 *	794	6,677	36	\$276.00	\$1,842,852		\$967,497	\$2,810,349	0%	7%	7%	\$0	\$196,724	\$196,724
1	P2008 *	764	4,185	24	\$111.00	\$464,535		\$243,881	\$708,416	0%	11%	11%	\$0	\$77,926	\$77,926
Subtotal:						\$2,307,387	5%	\$1,211,378	\$3,518,765				\$0	\$274,650	\$274,650
HARDIN SOUTH 16" WATER LINE															
From McKinney Ranch Pkwy. to Collin McKinney Pkwy.															
1	P6010 *	920	1,515	16	\$18.00	\$27,264		\$14,314	\$41,578	0%	97%	97%	\$0	\$40,331	\$40,331
Subtotal:						\$27,264	5%	\$14,314	\$41,578				\$0	\$40,331	\$40,331
STONEBRIDGE 48" WATER LINE															
From U.S. 380 to F.M. 1461 (Future East-West Thoroughfare)															
1	P6092 *	920	6,911	48	\$378.00	\$2,612,307		\$1,371,461	\$3,983,768	0%	7%	7%	\$0	\$278,864	\$278,864
1	P6100 *	920	1,500	48	\$378.00	\$566,928		\$297,637	\$864,565	0%	4%	4%	\$0	\$34,583	\$34,583
1	P6101 *	920	2,301	48	\$378.00	\$869,604		\$456,542	\$1,326,146	0%	5%	5%	\$0	\$66,307	\$66,307
1	P6111 *	920	3,289	48	\$378.00	\$1,243,172		\$652,665	\$1,895,837	0%	3%	3%	\$0	\$56,875	\$56,875
1	P6112 *	920	2,128	48	\$378.00	\$804,204		\$422,207	\$1,226,411	0%	3%	3%	\$0	\$36,792	\$36,792
Subtotal:						\$6,096,215	5%	\$3,200,512	\$9,296,727				\$0	\$473,421	\$473,421
HARDIN 30" WATER LINE - (TRINITY FALLS WEST FEED)															
From Holly Ridge Way to FM 543															
1	P4017 *	850	2,448	30	\$162.00	\$396,643		\$208,238	\$604,881	0%	48%	48%	\$0	\$290,343	\$290,343
1	P4034 *	850	2,422	30	\$162.00	\$392,296		\$205,955	\$598,251	0%	20%	20%	\$0	\$119,650	\$119,650
1	P4035 *	850	4,530	30	\$162.00	\$733,808		\$385,249	\$1,119,057	0%	19%	19%	\$0	\$212,621	\$212,621
1	P4036 *	850	2,474	30	\$162.00	\$400,835		\$210,438	\$611,273	0%	38%	38%	\$0	\$232,284	\$232,284
1	P4044 *	850	1,636	30	\$162.00	\$264,998		\$139,124	\$404,122	0%	39%	39%	\$0	\$157,608	\$157,608
Subtotal:						\$2,188,580	5%	\$1,149,004	\$3,337,584				\$0	\$1,012,506	\$1,012,506
F.M. 543 24" & 16" WATER LINE															
From Hardin Blvd. to East Limits of Trinity Falls															
1	P4051 *	850	3,200	24	\$111.00	\$355,232		\$186,497	\$541,729	0%	76%	76%	\$0	\$411,714	\$411,714
1	P4052 *	850	2,602	16	\$18.00	\$46,827		\$24,584	\$71,411	0%	51%	51%	\$0	\$36,420	\$36,420
Subtotal:						\$402,059	5%	\$211,081	\$613,140				\$0	\$448,134	\$448,134

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Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
										(%)		During Fee Period	(%)		During Fee Period
2012	2022		2012	2022											
<b>F.M. 1461 (FUTURE E/W THOROUGHFARE) 24" &amp; 18" WATER LINE</b>															
From Future Stonebridge Dr. to Future Lake Forest Dr.															
1	P4164 *	920	1,348	24	\$111.00	\$149,610		\$78,545	\$228,155	0%	4%	4%	\$0	\$9,126	\$9,126
1	P6132 *	920	3,041	24	\$111.00	\$337,515		\$177,195	\$514,710	0%	3%	3%	\$0	\$15,441	\$15,441
1	P6133 *	920	1,142	24	\$111.00	\$126,750		\$66,544	\$193,294	0%	4%	4%	\$0	\$7,732	\$7,732
1	P6140 *	920	3,657	18	\$30.00	\$109,710		\$57,598	\$167,308	0%	2%	2%	\$0	\$3,346	\$3,346
1	P6141 *	920	940	24	\$111.00	\$104,301		\$54,758	\$159,059	0%	1%	1%	\$0	\$1,591	\$1,591
1	P6176 *	920	452	18	\$30.00	\$13,546		\$7,112	\$20,658	0%	4%	4%	\$0	\$826	\$826
1	P6178 *	920	182	24	\$111.00	\$20,180		\$10,594	\$30,774	0%	2%	2%	\$0	\$615	\$615
<b>Subtotal:</b>			<b>10,760</b>	<b>2017</b>		<b>\$861,612</b>	<b>5%</b>	<b>\$452,346</b>	<b>\$1,313,958</b>				<b>\$0</b>	<b>\$38,677</b>	<b>\$38,677</b>
<b>HARDIN 24" &amp; 16" (TRINITY FALLS WEST FEED NORTH)</b>															
"Trinity Falls West Feed" From F.M. 546 to Trinity Falls North Loop															
1	P4069 *	850	2,925	24	\$111.00	\$324,686		\$170,460	\$495,146	0%	33%	33%	\$0	\$163,398	\$163,398
1	P4070 *	850	5,580	16	\$18.00	\$100,446		\$52,734	\$153,180	0%	38%	38%	\$0	\$58,208	\$58,208
<b>Subtotal:</b>			<b>8,505</b>	<b>2018</b>		<b>\$425,132</b>	<b>5%</b>	<b>\$223,194</b>	<b>\$648,326</b>				<b>\$0</b>	<b>\$221,606</b>	<b>\$221,606</b>
<b>COUNTY ROAD 227 16" WATER LINE</b>															
From Future Hardin Rd. East to Trinity Falls															
1	P4072 *	850	5,256	16	\$18.00	\$94,617		\$49,674	\$144,291	0%	51%	51%	\$0	\$73,588	\$73,588
<b>Subtotal:</b>			<b>5,256</b>	<b>2018</b>		<b>\$94,617</b>	<b>5%</b>	<b>\$49,674</b>	<b>\$144,291</b>				<b>\$0</b>	<b>\$73,588</b>	<b>\$73,588</b>
<b>AIRPORT WATER LINE NORTH LOOP</b>															
Along Future Airport Blvd. From Bloomdale Rd. to U.S. 380															
2	P2017 *	794	4,995	36	\$390.00	\$1,947,997		\$1,022,698	\$2,970,695	0%	19%	19%	\$0	\$564,432	\$564,432
2	P2018 *	794	421	36	\$390.00	\$164,202		\$86,206	\$250,408	0%	19%	19%	\$0	\$47,578	\$47,578
2	P2043 *	794	4,928	20	\$174.00	\$857,552		\$450,215	\$1,307,767	0%	68%	68%	\$0	\$889,282	\$889,282
2	P2044 *	794	3,445	20	\$174.00	\$599,383		\$314,676	\$914,059	0%	87%	87%	\$0	\$795,231	\$795,231
<b>Subtotal:</b>			<b>13,789</b>	<b>2018</b>		<b>\$3,569,134</b>	<b>5%</b>	<b>\$1,873,795</b>	<b>\$5,442,929</b>				<b>\$0</b>	<b>\$2,296,523</b>	<b>\$2,296,523</b>
<b>CUSTER 18" NORTH WATER LINE</b>															
From U.S. 380 North to FM 1461 (Future E / W Thoroughfare)															
2	P6052 *	920	1,426	18	\$144.00	\$205,353		\$107,810	\$313,163	0%	43%	43%	\$0	\$134,660	\$134,660
2	P6093 *	920	2,174	18	\$144.00	\$312,996		\$164,323	\$477,319	0%	32%	32%	\$0	\$152,742	\$152,742
2	P6096 *	920	2,617	18	\$144.00	\$376,916		\$197,881	\$574,797	0%	28%	28%	\$0	\$160,943	\$160,943
2	P6097 *	920	1,392	18	\$144.00	\$200,431		\$105,226	\$305,657	0%	30%	30%	\$0	\$91,697	\$91,697
2	P6102 *	920	3,095	18	\$144.00	\$445,733		\$234,010	\$679,743	0%	14%	14%	\$0	\$95,164	\$95,164
2	P6103 *	920	2,348	18	\$144.00	\$338,065		\$177,484	\$515,549	0%	15%	15%	\$0	\$77,332	\$77,332
2	P6210 *	920	1,925	18	\$144.00	\$277,167		\$145,513	\$422,680	0%	34%	34%	\$0	\$143,711	\$143,711
2	P6211 *	920	1,009	18	\$144.00	\$145,276		\$76,270	\$221,546	0%	32%	32%	\$0	\$70,895	\$70,895
<b>Subtotal:</b>			<b>15,986</b>	<b>2018</b>		<b>\$2,301,937</b>	<b>5%</b>	<b>\$1,208,517</b>	<b>\$3,510,454</b>				<b>\$0</b>	<b>\$927,144</b>	<b>\$927,144</b>

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Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
										2012	2022	During Fee Period	2012	2022	During Fee Period
RIDGE 20" & 24" WATER LINES															
From Wilmeth Rd. to Future Bloomdale Rd.															
1	P4007 *	850	3,003	24	\$111.00	\$333,364		\$175,016	\$508,380	0%	7%	7%	\$0	\$35,587	\$35,587
1	P4008 *	850	1,732	20	\$60.00	\$103,901		\$54,548	\$158,449	0%	13%	13%	\$0	\$20,598	\$20,598
1	P4109 *	850	555	24	\$111.00	\$61,573		\$32,326	\$93,899	0%	7%	7%	\$0	\$6,573	\$6,573
Subtotal:			5,290	2019		\$498,838	5%	\$261,890	\$760,728				\$0	\$62,758	\$62,758
RIDGE 16" WATER LINES (LOOP TO OLD DANVILLE SYSTEM)															
From FM 1461 to C.R. 168 (Future E / W Thoroughfare)															
1	P6134 *	920	2,078	16	\$18.00	\$37,401		\$19,635	\$57,036	0%	3%	3%	\$0	\$1,711	\$1,711
1	P6135 *	920	3,084	16	\$18.00	\$55,508		\$29,142	\$84,650	0%	2%	2%	\$0	\$1,693	\$1,693
Subtotal:			5,162	2019		\$92,909	5%	\$48,777	\$141,686				\$0	\$3,404	\$3,404
LAKE FOREST 30" WATER LINE															
From Bloomdale Rd. to Future E/W Thoroughfare at C.R. 166 and F.M. 1461															
1	P4025 *	850	2,317	30	\$162.00	\$375,349		\$197,058	\$572,407	0%	15%	15%	\$0	\$85,861	\$85,861
1	P4026 *	850	1,780	30	\$162.00	\$288,354		\$151,386	\$439,740	0%	15%	15%	\$0	\$65,961	\$65,961
1	P4027 *	850	1,522	30	\$162.00	\$246,558		\$129,443	\$376,001	0%	15%	15%	\$0	\$56,400	\$56,400
Subtotal:			5,619	2019		\$910,261	5%	\$477,887	\$1,388,148				\$0	\$208,222	\$208,222
BLOOMDALE 16" WATER LINE - 850 PHASE 1															
From Future Ridge Rd. to Future Stonebridge Dr.															
1	P4018 *	850	1,534	16	\$18.00	\$27,619		\$14,500	\$42,119	0%	12%	12%	\$0	\$5,054	\$5,054
1	P4019 *	850	1,879	16	\$18.00	\$33,819		\$17,755	\$51,574	0%	9%	9%	\$0	\$4,642	\$4,642
Subtotal:			3,413	2019		\$61,438	5%	\$32,255	\$93,693				\$0	\$9,696	\$9,696
BLOOMDALE 16" WATER LINE - 850 PHASE 2															
From Future Ridge Rd. to Lake Forest Dr.															
1	P4020 *	850	3,050	16	\$18.00	\$54,904		\$28,825	\$83,729	0%	41%	41%	\$0	\$34,329	\$34,329
1	P4021 *	850	2,236	16	\$18.00	\$40,248		\$21,130	\$61,378	0%	56%	56%	\$0	\$34,372	\$34,372
Subtotal:			5,286	2019		\$95,152	5%	\$49,955	\$145,107				\$0	\$68,701	\$68,701
BLOOMDALE 794 PUMP STATION 54" DISCHARGE LINE															
From Future Bloomdale Pump Station to Bloomdale Rd. & East to S.H. 5															
2	P2112 *	794	1,446	54	\$564.00	\$815,578		\$428,179	\$1,243,757	0%	20%	20%	\$0	\$248,751	\$248,751
2	P2114 *	794	5,452	54	\$564.00	\$3,075,023		\$1,614,387	\$4,689,410	0%	18%	18%	\$0	\$844,094	\$844,094
Subtotal:			6,898	2020		\$3,890,601	5%	\$2,042,566	\$5,933,167				\$0	\$1,092,845	\$1,092,845

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Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
										2012	2022	During Fee Period	2012	2022	During Fee Period
AIRPORT 24" WATER LINE SOUTH LOOP															
Along Future Airport Blvd. From Industrial Blvd. South to Future SE Thoroughfare															
2	P2086 *	794	1,214	24		\$225.00		\$143,370	\$416,455	0%	77%	77%	\$0	\$320,670	\$320,670
2	P2087 *	794	1,418	24		\$225.00		\$167,490	\$486,518	0%	53%	53%	\$0	\$257,855	\$257,855
2	P2120 *	794	2,296	24		\$225.00		\$271,258	\$787,939	0%	55%	55%	\$0	\$433,366	\$433,366
2	P2121 *	794	1,100	24		\$225.00		\$129,964	\$377,514	0%	53%	53%	\$0	\$200,082	\$200,082
Subtotal:		6,028		2020		\$1,356,344	5%	\$712,082	\$2,068,426				\$0	\$1,211,973	\$1,211,973
OLD MILL ROAD 24" WATER LINE (FUTURE THOROUGHFARE)															
From McDonald St. to Future Airport Blvd.															
2	P2082 *	794	2,473	24		\$225.00		\$292,129	\$848,566	0%	92%	92%	\$0	\$780,681	\$780,681
2	P2083 *	794	1,551	24		\$225.00		\$183,210	\$532,181	0%	91%	91%	\$0	\$484,285	\$484,285
2	P2085 *	794	4,904	24		\$225.00		\$579,314	\$1,682,769	0%	96%	96%	\$0	\$1,615,458	\$1,615,458
Subtotal:		8,928		2020		\$2,008,863	5%	\$1,054,653	\$3,063,516				\$0	\$2,880,424	\$2,880,424
BLOOMDALE 850 PUMP STATION 42 & 54" DISCHARGE LINE															
From Future Bloomdale Pump Station to Future Hardin Rd.															
2	P4024 *	850	2,971	42		\$450.00		\$701,938	\$2,038,963	0%	19%	19%	\$0	\$387,403	\$387,403
2	P4075 *	850	2,549	54		\$564.00		\$754,898	\$2,192,799	0%	22%	22%	\$0	\$482,416	\$482,416
2	P4077 *	850	1,977	42		\$450.00		\$467,034	\$1,356,622	0%	23%	23%	\$0	\$312,023	\$312,023
2	P4118 *	850	811	42		\$450.00		\$191,606	\$556,569	0%	24%	24%	\$0	\$133,577	\$133,577
Subtotal:		8,309		2020		\$4,029,477	5%	\$2,115,476	\$6,144,953				\$0	\$1,315,419	\$1,315,419
FUTURE 850 EAST / WEST THOROUGHFARE 20" & 24" WATER LINE															
From U.S. 75 to Future Lake Forest Dr.															
1	P4037 *	850	2,631	24		\$111.00		\$153,337	\$445,407	0%	23%	23%	\$0	\$102,444	\$102,444
1	P4038 *	850	2,806	20		\$60.00		\$88,393	\$256,760	0%	30%	30%	\$0	\$77,028	\$77,028
1	P4039 *	850	4,540	20		\$60.00		\$143,011	\$415,412	0%	28%	28%	\$0	\$116,315	\$116,315
1	P4047 *	850	3,945	24		\$111.00		\$229,909	\$667,830	0%	24%	24%	\$0	\$160,279	\$160,279
1	P4048 *	850	3,338	24		\$111.00		\$194,532	\$565,070	0%	23%	23%	\$0	\$129,966	\$129,966
Subtotal:		17,261		2021		\$1,541,297	5%	\$809,182	\$2,350,479				\$0	\$586,032	\$586,032
BLOOMDALE PUMP STATION 850 DISCHARGE LINE (TRINITY FALLS EAST FEED)															
From Bloomdale Rd. North Along U.S. 75 to F.M. 543; North Along F.M. 543 to Trinity Falls															
1	P4049 *	850	4,519	30		\$162.00		\$384,349	\$1,116,443	0%	39%	39%	\$0	\$435,413	\$435,413
1	P4050 *	850	2,217	30		\$162.00		\$188,577	\$547,772	0%	40%	40%	\$0	\$219,109	\$219,109
1	P4076 *	850	7,002	48		\$378.00		\$1,389,637	\$4,036,564	0%	33%	33%	\$0	\$1,332,066	\$1,332,066
1	P4091 *	850	2,278	24		\$111.00		\$132,768	\$385,660	0%	30%	30%	\$0	\$115,698	\$115,698
1	P4092 *	850	1,232	24		\$111.00		\$71,820	\$208,620	0%	35%	35%	\$0	\$73,017	\$73,017
Subtotal:		17,250		2021		\$4,127,908	5%	\$2,167,151	\$6,295,059				\$0	\$2,175,303	\$2,175,303

**TABLE NO. 13**  
**Proposed Impact Fee Water Lines**

1 - City Participation in Cost Oversize

2 - City Initiated and Funded

\*Average Unit Costs are Based in 2012 Dollars Unless Otherwise Indicated and Includes 20% for Engineering and Easements.

Pipe Number	Pressure Plane	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
										(%)		During Fee Period	(%)		During Fee Period
2012	2022		2012	2022											
<b>F.M. 2933 30" WATER LINE</b>															
From Woodlawn Rd. to U.S. 380 along a Future Thoroughfare															
1 P2047 *	794	2,618	30		\$162.00	\$424,165		\$222,687	\$646,852	0%	15%	15%	\$0	\$97,028	\$97,028
1 P2048 *	794	1,077	30		\$162.00	\$174,466		\$91,595	\$266,061	0%	15%	15%	\$0	\$39,909	\$39,909
1 P2049 *	794	4,740	30		\$162.00	\$767,875		\$403,134	\$1,171,009	0%	17%	17%	\$0	\$199,072	\$199,072
1 P2050 *	794	1,601	30		\$162.00	\$259,373		\$136,171	\$395,544	0%	19%	19%	\$0	\$75,153	\$75,153
<b>Subtotal:</b>		<b>10,036</b>		<b>2022</b>		<b>\$1,625,879</b>	<b>5%</b>	<b>\$853,587</b>	<b>\$2,479,466</b>				<b>\$0</b>	<b>\$411,162</b>	<b>\$411,162</b>
<b>MCINTYRE / WOODLAWN 36" WATER LINE</b>															
From Southern Pacific Railroad to F.M. 2933															
1 P2020 *	794	4,045	36		\$276.00	\$1,116,362		\$586,090	\$1,702,452	0%	7%	7%	\$0	\$119,172	\$119,172
1 P2021 *	794	1,536	36		\$276.00	\$424,063		\$222,633	\$646,696	0%	7%	7%	\$0	\$45,269	\$45,269
<b>Subtotal:</b>		<b>5,581</b>		<b>2022</b>		<b>\$1,540,425</b>	<b>5%</b>	<b>\$808,723</b>	<b>\$2,349,148</b>				<b>\$0</b>	<b>\$164,441</b>	<b>\$164,441</b>
<b>U.S. 380 EAST WATER LINE</b>															
From Airport Blvd. to C.R. 407															
1 P2075 *	794	6,215	12		\$114.00	\$708,486		\$371,955	\$1,080,441	0%	53%	53%	\$0	\$572,634	\$572,634
1 P2076 *	794	7,013	24		\$111.00	\$778,411		\$408,666	\$1,187,077	0%	8%	8%	\$0	\$94,966	\$94,966
1 P2077 *	794	3,354	24		\$111.00	\$372,262		\$195,437	\$567,699	0%	9%	9%	\$0	\$51,093	\$51,093
<b>Subtotal:</b>		<b>16,581</b>		<b>2022</b>		<b>\$1,859,159</b>	<b>5%</b>	<b>\$976,058</b>	<b>\$2,835,217</b>				<b>\$0</b>	<b>\$718,693</b>	<b>\$718,693</b>
<b>FUTURE NORTH / SOUTH THOROUGHFARE 16" WATER LINE</b>															
From U.S. 380 (East of Intersection of U.S. 380 and Airport Blvd.) South to Enloe Rd.															
1 P2079 *	794	6,404	16		\$18.00	\$115,268		\$60,516	\$175,784	0%	19%	19%	\$0	\$33,399	\$33,399
1 P2080 *	794	2,619	16		\$18.00	\$47,147		\$24,752	\$71,899	0%	20%	20%	\$0	\$14,380	\$14,380
<b>Subtotal:</b>		<b>9,023</b>		<b>2022</b>		<b>\$162,415</b>	<b>5%</b>	<b>\$85,268</b>	<b>\$247,683</b>				<b>\$0</b>	<b>\$47,779</b>	<b>\$47,779</b>
<b>PROPOSED TOTAL:</b>															
		<b>253,251</b>				<b>\$45,867,348</b>		<b>\$24,080,360</b>	<b>\$69,947,708</b>				<b>\$0</b>	<b>\$21,785,316</b>	<b>\$21,785,316</b>

## **E. WASTEWATER COLLECTION SYSTEM**

Computer models for the years 2012, 2022 and Buildout were prepared by Birkhoff, Hendricks & Carter. The models were developed and peak flows calculated from the residential population and non-residential land use projections provided by the City of McKinney's Planning Department. Computer models were run to determine peak wet weather flow to insure proper sizing of the collection system.

### **1. Collection Lines**

The natural creeks, whose basins will collect wastewater through the installed system of collection lines that flow into the geographic area serviced by the NTMWD.

The wastewater collection system analysis covered all of the drainage basins within the Service Area planning boundary. Each collection system was analyzed for line sizes 12-inches in diameter and larger. Eliminating line sizes smaller than 12-inches in diameter from the study leaves only the interceptor and trunk lines included in the study. The wastewater project cost includes necessary appurtenances (manholes, lift stations, aerial crossings and the like), purchase of easements, utility relocation, pavement removal and replacement, and engineering costs. For existing Impact Fee projects, actual costs were utilized where known. Future project cost estimates were based on 2012 average unit cost per linear foot and includes engineering, easements, and construction cost.

All eligible wastewater collection line projects in the Service Area planning boundary were included in the impact fee analysis. Eligible existing and proposed wastewater facilities are shown on **Exhibit 2**.

### **2. Treatment**

The North Texas Municipal Water District (NTMWD) provides the City of McKinney with a significant portion of its wastewater collection, and transportation. NTMWD also owns and operates the Wilson Creek Treatment Plant and provides all of McKinney's wastewater treatment. McKinney pays NTMWD for the cost of this service according to the City's present contribution of wastewater flows in each of the regional facilities in any given year.



This Impact Fee study excludes the cost of NTMWD regional collection and transportation and facilities located within the City’s Service Area planning boundary that were paid for by NTMWD. Existing treatment plant and future treatment plant expansion costs of NTMWD were specifically excluded from this Impact Fee analysis.

**3. Wastewater System Capital Improvement Projects for Impact Fees**

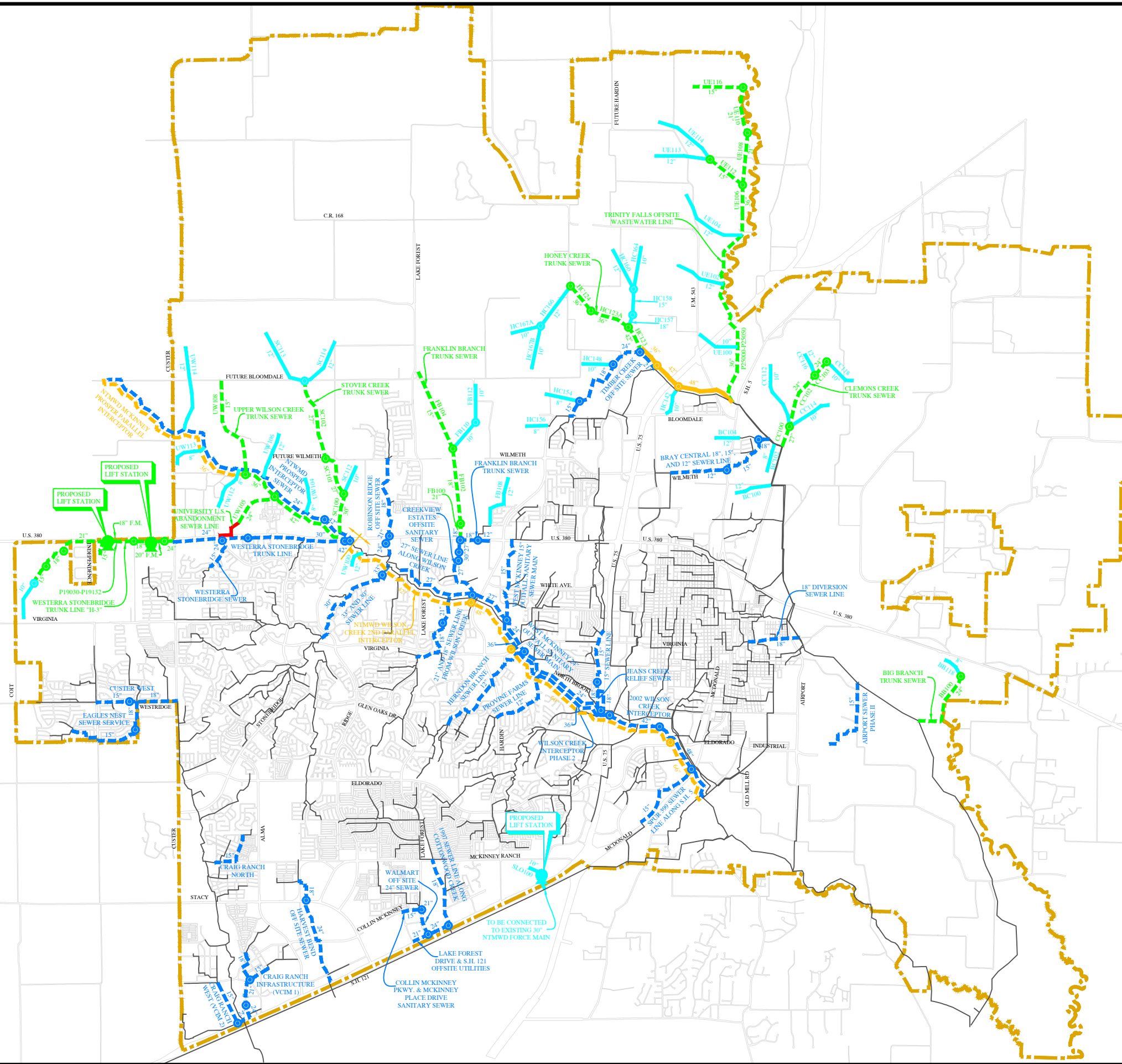
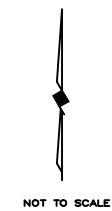
The 10-year Wastewater System Capital Improvement Plan for Impact Fees was developed by Birkhoff, Hendricks & Carter, LLP. **Exhibit 2** shows the recommended system improvements and **Table No. 14** itemizes each project and the project cost. These recommended improvements form the basis for the Wastewater System Impact Fee Calculation.

*The capital improvement plan for impact fees provides for system improvements within the defined Service Area Planning Boundary.*



2012 - 2022 SANITARY SEWER IMPACT FEE  
10-YEAR CAPITAL IMPROVEMENT PLAN

BIRKHOFF, HENDRICKS & CARTER, L.L.P.  
PROFESSIONAL ENGINEERS  
Dallas, Texas  
AUGUST 2013



- LEGEND**
- EXIST. SANITARY SEWER LINE
  - EXIST. IMPACT FEE LINE
  - PROP. IMPACT FEE SANITARY SEWER LINE  
(DEVELOPER INITIATED - CITY OVERSIZE)
  - PROP. SANITARY SEWER LINE  
(DEVELOPER CONSTRUCTED)
  - PROP. SANITARY SEWER LINE  
(CITY CONSTRUCTED)
  - FUTURE MASTER PLAN PIPE  
(NOT IN THIS 10-YEAR C.I.P.)
  - FUTURE NTMWD SANITARY SEWER LINE  
(IN THIS 10-YEAR C.I.P.)
  - PLANNING BOUNDARY

EXHIBIT 2

Table No. 14

## 10-Year Wastewater System Capital Improvement Plan for Impact Fees

## PROPOSED WASTEWATER LINES

Year	1=City Participation in Cost Oversize 2=City Initiated and Funded		Size	Opinion of Construction Cost (1)	Debt Service (2)	Total Project Cost
	Project					
2013	1	Westerra Stonebridge - Sanitary Sewer Trunk Line Line "H-3"	15-24"	\$ 628,692	\$ 330,063	\$ 958,755
2013	1	Trinity Falls Off-site Wastewater Line	36"	\$ 2,503,778	\$ 1,314,482	\$ 3,818,260
2014	1	Clemons Creek Trunk Sewer	21"-27"	\$ 834,039	\$ 437,871	\$ 1,271,910
2016	1	Honey Creek Trunk Sewer	15"-36"	\$ 1,367,493	\$ 717,933	\$ 2,085,426
2017	1	NTMWD Prosper / McKinney Parallel Interceptor	42" - 48"	\$ 1,799,107	\$ 944,532	\$ 2,743,639
2018	1	Big Branch Trunk Sewer	21"-27"	\$ 468,264	\$ 245,839	\$ 714,103
2018	1	Upper East Fork Trunk Sewer	15"-30"	\$ 855,365	\$ 449,066	\$ 1,304,431
2020	1	Franklin Branch Trunk Sewer	15"-18"	\$ 417,301	\$ 219,083	\$ 636,384
2022	2	Stonebridge Lift Station No. 1 Abandonment Sanitary Sewer	24"	\$ 1,022,400	\$ 536,760	\$ 1,559,160
2022	1	Stover Creek Trunk Sewer	24"-27"	\$ 1,377,601	\$ 723,241	\$ 2,100,842
2022	1	Upper Wilson Creek Trunk Sewer	15"	\$ 157,933	\$ 82,915	\$ 240,848
		Subtotal: Proposed WastewaterLines		\$ 11,431,973	\$ 6,001,785	\$ 17,433,758

## PROPOSED WASTEWATER FACILITIES

Year	1=City Participation in Cost Oversize 2=City Initiated and Funded		Capacity (MGD)	Opinion of Construction Cost (1)	Debt Service (2)	Total Project Cost
	Project					
2013	1	Westerra Stonebridge - Lift Station No. 2 & Forcemain	4.9	\$ 345,674	\$ 181,479	\$ 527,153
2013	1	Westerra Stonebridge - Lift Station No. 3 & Forcemain	4.4	\$ 380,098	\$ 199,551	\$ 579,649
		Subtotal: Proposed WastewaterLines		\$ 725,772	\$ 381,030	\$ 1,106,802

\* Construction Cost Reduced by 50% On Lift Station No. 3 and 60% On Lift Station 2 for Excess Capacity Available to City for Future Development

## PLANNING EXPENSES

Year	Project	Opinion of Cost (1)(b)	Debt Service (2)	Total Project Cost
2013	Water System Master Plan & Impact Fee Analysis	\$ 345,935	\$ -	\$ 345,935
	<b>Subtotal: Planning Expenses</b>	<b>\$ 345,935</b>	<b>\$ -</b>	<b>\$ 345,935</b>
	<b>GRAND TOTAL: Wastewater Collection System CIP</b>	<b>\$ 12,503,680</b>	<b>\$ 6,382,815</b>	<b>\$ 18,886,495</b>

#### 4. Utilized Capacity

Utilized capacity for the wastewater collection system was calculated based on land use assumptions provided by the City of McKinney. The population and non-residential growth in each wastewater drainage basin was determined utilizing the City's growth projections. These growth rates were utilized to calculate 2012, 2022 and buildout peak design flows.

The percent-utilized capacity was calculated for the design flow of each study year based on the buildout capacity. The utilized capacity during the Impact Fee period is the difference between the year 2012 capacity and the year 2022 capacity. **Table No. 15** below summarizes the project cost and utilized cost over the impact fee period of 2012 – 2022. The utilized capacity for each eligible existing and proposed wastewater collection line is presented in detail in the Impact Fee Capacity Calculation **Table Nos. 16 and 17**. **Table No. 18** summarizes the utilized capacity of lift stations eligible for impact fee recovery.

**TABLE NO. 15**

**Summary of Eligible Capital Cost and Utilized Capacity Cost**

<b>Wastewater System Facility</b>	<b>20-Year Project Cost</b>	<b>Utilized Capacity (\$) in the CRP Period</b>
Existing Wastewater Collection Line	\$20,302,674	\$2,133,385
Proposed Wastewater Collection Line	\$17,433,758	\$7,097,312
Proposed Wastewater Facilities	\$1,106,802	\$606,116
Planning Expenses	\$345,935	\$345,935
<b>Total:</b>	<b>\$39,189,169</b>	<b>\$10,182,748</b>

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
									2012	2022	During Fee Period	2012	2022	During Fee Period
27" Sewer Line Along Wilson Creek														
North of Virginia Parkway (Wilson Creek Main Interceptor)														
10227	614	27		\$51.14	\$31,402	5%	\$16,486	\$47,888	100%	100%	0%	\$47,888	\$47,888	\$0
10228	344	27		\$51.14	\$17,614		\$9,247	\$26,861	100%	100%	0%	\$26,861	\$26,861	\$0
10229	290	27		\$51.14	\$14,837		\$7,789	\$22,626	100%	100%	0%	\$22,626	\$22,626	\$0
10230	126	27		\$51.14	\$6,434		\$3,378	\$9,812	100%	100%	0%	\$9,812	\$9,812	\$0
10231	144	27		\$51.14	\$7,370		\$3,869	\$11,239	100%	100%	0%	\$11,239	\$11,239	\$0
10232	496	27		\$51.14	\$25,367		\$13,318	\$38,685	100%	100%	0%	\$38,685	\$38,685	\$0
10233	500	27		\$51.14	\$25,572		\$13,425	\$38,997	100%	100%	0%	\$38,997	\$38,997	\$0
10234	411	27		\$51.14	\$21,030		\$11,041	\$32,071	100%	100%	0%	\$32,071	\$32,071	\$0
10235	182	27		\$51.14	\$9,298		\$4,881	\$14,179	100%	100%	0%	\$14,179	\$14,179	\$0
10236	454	27		\$51.14	\$23,235		\$12,198	\$35,433	100%	100%	0%	\$35,433	\$35,433	\$0
10237	501	27		\$51.14	\$25,628		\$13,455	\$39,083	100%	100%	0%	\$39,083	\$39,083	\$0
10238	499	27		\$51.14	\$25,516		\$13,396	\$38,912	100%	100%	0%	\$38,912	\$38,912	\$0
10239	411	27		\$51.14	\$21,000		\$11,025	\$32,025	100%	100%	0%	\$32,025	\$32,025	\$0
10240	506	27		\$51.14	\$25,853		\$13,573	\$39,426	100%	100%	0%	\$39,426	\$39,426	\$0
10241	300	27		\$51.14	\$15,328		\$8,047	\$23,375	100%	100%	0%	\$23,375	\$23,375	\$0
10242	273	27		\$51.14	\$13,978		\$7,338	\$21,316	100%	100%	0%	\$21,316	\$21,316	\$0
10243	655	27		\$51.14	\$33,484		\$17,579	\$51,063	100%	100%	0%	\$51,063	\$51,063	\$0
10244	69.3	27		\$51.14	\$3,544		\$1,861	\$5,405	100%	100%	0%	\$5,405	\$5,405	\$0
10245	465	27		\$51.14	\$23,802		\$12,496	\$36,298	100%	100%	0%	\$36,298	\$36,298	\$0
10246	147	27		\$51.14	\$7,498		\$3,936	\$11,434	100%	100%	0%	\$11,434	\$11,434	\$0
10247	281	27	\$51.14	\$14,377	\$7,548	\$21,925	100%	100%	0%	\$21,925	\$21,925	\$0		
10248	357	27	\$51.14	\$18,243	\$9,578	\$27,821	100%	100%	0%	\$27,821	\$27,821	\$0		
10249	278	27	\$51.14	\$14,223	\$7,467	\$21,690	100%	100%	0%	\$21,690	\$21,690	\$0		
10250	432	27	\$51.14	\$22,069	\$11,586	\$33,655	100%	100%	0%	\$33,655	\$33,655	\$0		
Subtotal:	8,734		1987		\$446,700		\$234,517	\$681,219				\$681,219	\$681,219	\$0

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)		During Fee Period			During Fee Period
									2012	2022		2012	2022	
<b>21" and 18" Sewer Line from Wilson Creek</b>														
Main Interceptor Crossing Virginia Parkway (Wilson Creek Lateral #22)														
15136	455	21		\$64.87	\$29,491		\$15,483	\$44,974	80%	81%	1%	\$36,191	\$36,652	\$461
15137	376	21		\$64.87	\$24,359		\$12,788	\$37,147	80%	81%	1%	\$29,903	\$30,273	\$370
15138	318	21		\$64.87	\$20,649		\$10,841	\$31,490	80%	82%	1%	\$25,342	\$25,665	\$323
15139	382	21		\$64.87	\$24,749		\$12,993	\$37,742	81%	82%	1%	\$30,384	\$30,760	\$376
15140	329	21		\$64.87	\$21,310		\$11,188	\$32,498	81%	82%	1%	\$26,162	\$26,486	\$324
15141	379	18		\$64.87	\$24,606		\$12,918	\$37,524	80%	82%	1%	\$30,200	\$30,584	\$384
15142	354	18		\$64.87	\$22,965		\$12,057	\$35,022	80%	81%	1%	\$28,188	\$28,537	\$349
15143	162	18		\$64.87	\$10,535		\$5,531	\$16,066	81%	82%	1%	\$13,075	\$13,209	\$134
15144	164	18		\$64.87	\$10,658		\$5,595	\$16,253	81%	82%	1%	\$13,224	\$13,359	\$135
15145	61	18		\$64.87	\$3,970		\$2,084	\$6,054	81%	82%	1%	\$4,926	\$4,978	\$52
15146	166	18		\$64.87	\$10,775		\$5,657	\$16,432	82%	83%	1%	\$13,528	\$13,641	\$113
15147	141	18		\$64.87	\$9,114		\$4,785	\$13,899	82%	83%	1%	\$11,440	\$11,536	\$95
15148	63	18		\$64.87	\$4,113		\$2,159	\$6,272	82%	83%	1%	\$5,173	\$5,213	\$41
15149	119	18		\$64.87	\$7,700		\$4,043	\$11,743	82%	83%	1%	\$9,669	\$9,746	\$77
15150	362	18		\$64.87	\$23,458		\$12,315	\$35,773	82%	83%	1%	\$29,494	\$29,725	\$231
15151	111	18		\$64.87	\$7,168		\$3,763	\$10,931	82%	83%	1%	\$9,013	\$9,084	\$71
15152	224	18		\$64.87	\$14,538		\$7,632	\$22,170	82%	83%	1%	\$18,275	\$18,418	\$143
15153	132.8	18		\$64.87	\$8,615		\$4,523	\$13,138	82%	83%	1%	\$10,835	\$10,919	\$85
15154	228	18		\$64.87	\$14,765		\$7,752	\$22,517	83%	83%	1%	\$18,595	\$18,738	\$143
15155	388	18		\$64.87	\$25,190		\$13,225	\$38,415	83%	84%	1%	\$32,073	\$32,292	\$220
15156	457	18		\$64.87	\$29,653		\$15,568	\$45,221	83%	84%	1%	\$37,732	\$37,991	\$258
15157	341	18		\$64.87	\$22,128		\$11,617	\$33,745	83%	84%	1%	\$28,168	\$28,349	\$181
15159	225	18		\$64.87	\$14,596		\$7,663	\$22,259	83%	84%	1%	\$18,575	\$18,705	\$130
15160	125	18		\$64.87	\$8,096		\$4,250	\$12,346	85%	86%	1%	\$10,534	\$10,616	\$83
<b>Subtotal:</b>	<b>6,061</b>		<b>1987</b>		<b>\$393,200</b>	<b>5%</b>	<b>\$206,430</b>	<b>\$599,631</b>				<b>\$490,699</b>	<b>\$495,476</b>	<b>\$4,779</b>

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)		During Fee Period			During Fee Period
									2012	2022		2012	2022	
<b>33" and 30" Sewer Line</b>														
Along Gray Branch (Wilson Creek Lateral #25)														
17017	157	33		\$37.97	\$5,961		\$3,130	\$9,091	82%	84%	2%	\$7,420	\$7,634	\$214
17018	232	33		\$37.97	\$8,824		\$4,633	\$13,457	82%	84%	2%	\$10,983	\$11,300	\$317
17019	198	33		\$37.97	\$7,514		\$3,945	\$11,459	82%	84%	2%	\$9,352	\$9,622	\$270
17020	315	33		\$37.97	\$11,976		\$6,287	\$18,263	82%	84%	2%	\$14,905	\$15,338	\$433
17021	208	30		\$37.97	\$7,879		\$4,136	\$12,015	82%	84%	2%	\$9,806	\$10,091	\$285
17022	198	30		\$37.97	\$7,510		\$3,943	\$11,453	82%	84%	2%	\$9,347	\$9,619	\$271
17023	393	30		\$37.97	\$14,915		\$7,830	\$22,745	82%	84%	2%	\$18,561	\$19,099	\$539
17024	217	30		\$37.97	\$8,251		\$4,332	\$12,583	82%	84%	2%	\$10,268	\$10,566	\$298
17025	319	30		\$37.97	\$12,120		\$6,363	\$18,483	82%	84%	2%	\$15,144	\$15,515	\$370
17026	495	30		\$37.97	\$18,799		\$9,869	\$28,668	83%	84%	2%	\$23,698	\$24,153	\$455
17027	368	30		\$37.97	\$13,984		\$7,342	\$21,326	83%	84%	2%	\$17,629	\$17,967	\$338
17028	283	30		\$37.97	\$10,730		\$5,633	\$16,363	83%	84%	2%	\$13,526	\$13,786	\$260
17029	591	30		\$37.97	\$22,436		\$11,779	\$34,215	83%	84%	1%	\$28,414	\$28,821	\$407
17030	282	30		\$37.97	\$10,704		\$5,620	\$16,324	83%	84%	1%	\$13,556	\$13,751	\$194
17031	297	30		\$37.97	\$11,285		\$5,925	\$17,210	84%	84%	0%	\$14,375	\$14,457	\$82
17032	259	30		\$37.97	\$9,838		\$5,165	\$15,003	84%	100%	16%	\$12,640	\$15,003	\$2,363
17033	267	30		\$37.97	\$10,153		\$5,330	\$15,483	84%	100%	16%	\$13,044	\$15,483	\$2,439
17034	217	30		\$37.97	\$8,247		\$4,330	\$12,577	84%	84%	0%	\$10,505	\$10,565	\$60
17035	366	30		\$37.97	\$13,905		\$7,300	\$21,205	84%	100%	16%	\$17,865	\$21,205	\$3,340
17036	236	30		\$37.97	\$8,976		\$4,712	\$13,688	84%	100%	16%	\$11,530	\$13,688	\$2,158
17037	123	30		\$37.97	\$4,655		\$2,444	\$7,099	84%	100%	16%	\$5,980	\$7,099	\$1,119
17038	217	30		\$37.97	\$8,220		\$4,316	\$12,536	84%	100%	16%	\$10,562	\$12,536	\$1,974
17039	151	30		\$37.97	\$5,733		\$3,010	\$8,743	84%	100%	16%	\$7,366	\$8,743	\$1,377
17040	154	30		\$37.97	\$5,832		\$3,062	\$8,894	85%	100%	15%	\$7,562	\$8,894	\$1,332
17041	79	30		\$37.97	\$3,011		\$1,581	\$4,592	85%	100%	15%	\$3,904	\$4,592	\$688
17042	280	30		\$37.97	\$10,632		\$5,582	\$16,214	85%	100%	15%	\$13,785	\$16,214	\$2,429
17043	254	30		\$37.97	\$9,652		\$5,067	\$14,719	86%	100%	14%	\$12,634	\$14,719	\$2,085
17044	235	30		\$37.97	\$8,934		\$4,690	\$13,624	86%	100%	14%	\$11,657	\$13,624	\$1,967
17045	170	30		\$37.97	\$6,436		\$3,379	\$9,815	85%	100%	15%	\$8,370	\$9,815	\$1,445
17046	232	30		\$37.97	\$8,794		\$4,617	\$13,411	85%	100%	15%	\$11,438	\$13,411	\$1,973
17047	88	30		\$37.97	\$3,330		\$1,748	\$5,078	85%	100%	15%	\$4,331	\$5,078	\$747
17048	147	30		\$37.97	\$5,563		\$2,921	\$8,484	85%	100%	15%	\$7,236	\$8,484	\$1,248
<b>Subtotal:</b>	<b>8,027</b>		<b>1987</b>		<b>\$304,800</b>	<b>5%</b>	<b>\$160,021</b>	<b>\$464,820</b>				<b>\$387,393</b>	<b>\$420,872</b>	<b>\$33,477</b>



**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
									2012	2022	During Fee Period	2012	2022	During Fee Period
Bray Central 18", 15", and 12" Sewer Line														
Trinity River Lateral #6														
24000	381	18	1985	\$7.02	\$2,675	5%	\$1,404	\$4,079	72%	78%	6%	\$2,941	\$3,167	\$225
24001	329	18		\$7.02	\$2,308		\$1,212	\$3,520	72%	78%	6%	\$2,538	\$2,733	\$194
24002	473	15		\$7.02	\$3,318		\$1,742	\$5,060	90%	100%	10%	\$4,547	\$5,060	\$513
24003	498	15		\$7.02	\$3,495		\$1,835	\$5,330	90%	100%	10%	\$4,789	\$5,330	\$541
24004	195	15		\$7.02	\$1,372		\$720	\$2,092	89%	100%	11%	\$1,868	\$2,092	\$224
24005	430	15		\$7.02	\$3,020		\$1,586	\$4,606	89%	100%	11%	\$4,114	\$4,606	\$492
24006	235	15		\$7.02	\$1,652		\$867	\$2,519	89%	100%	11%	\$2,250	\$2,519	\$269
24007	191	15		\$7.02	\$1,344		\$706	\$2,050	89%	100%	11%	\$1,832	\$2,050	\$218
24008	187	15		\$7.02	\$1,311		\$688	\$1,999	89%	100%	11%	\$1,786	\$1,999	\$213
24010	148	15		\$7.02	\$1,036		\$544	\$1,580	89%	100%	11%	\$1,412	\$1,580	\$168
24011	167	15		\$7.02	\$1,173		\$616	\$1,789	89%	100%	11%	\$1,599	\$1,789	\$190
24012	204	15		\$7.02	\$1,434		\$753	\$2,187	89%	100%	11%	\$1,954	\$2,187	\$233
24013	340	15		\$7.02	\$2,383		\$1,251	\$3,634	89%	100%	11%	\$3,247	\$3,634	\$387
24014	119	15		\$7.02	\$835		\$438	\$1,273	89%	100%	11%	\$1,137	\$1,273	\$136
24015	113	12		\$7.02	\$792		\$416	\$1,208	90%	100%	10%	\$1,088	\$1,208	\$120
24016	301	15		\$7.02	\$2,115		\$1,110	\$3,225	89%	100%	11%	\$2,883	\$3,225	\$342
24017	366	12		\$7.02	\$2,572		\$1,350	\$3,922	90%	100%	10%	\$3,534	\$3,922	\$388
24018	424	12		\$7.02	\$2,976		\$1,562	\$4,538	90%	100%	10%	\$4,087	\$4,538	\$451
24019	182	12		\$7.02	\$1,274		\$669	\$1,943	91%	100%	9%	\$1,769	\$1,943	\$174
24020	480	12		\$7.02	\$3,369		\$1,769	\$5,138	90%	100%	10%	\$4,631	\$5,138	\$507
24021	40	12		\$7.02	\$279		\$146	\$425	91%	100%	9%	\$387	\$425	\$38
24022	210	12		\$7.02	\$1,471		\$772	\$2,243	92%	100%	8%	\$2,066	\$2,243	\$177
24023	478	12		\$7.02	\$3,356		\$1,762	\$5,118	92%	100%	8%	\$4,713	\$5,118	\$405
24024	1,017	12		\$7.02	\$7,140		\$3,749	\$10,889	92%	100%	8%	\$10,028	\$10,889	\$861
Subtotal:	7,507				\$52,700		\$27,667	\$80,367				\$71,200	\$78,668	\$7,466



**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
									2012	2022	During Fee Period	2012	2022	During Fee Period
West McKinney 24" Outfall Sanitary Sewer Main														
Along Wilson Creek to Wastewater Treatment Plant (Wilson Creek Main Interceptor)														
10065	528	24		\$49.86	\$26,339		\$13,828	\$40,167	100%	100%	0%	\$40,167	\$40,167	\$0
10066	713	24		\$49.86	\$35,532		\$18,654	\$54,186	100%	100%	0%	\$54,186	\$54,186	\$0
10067	671	24		\$49.86	\$33,458		\$17,565	\$51,023	100%	100%	0%	\$51,023	\$51,023	\$0
10068	744	24		\$49.86	\$37,113		\$19,484	\$56,597	100%	100%	0%	\$56,597	\$56,597	\$0
10069	631	24		\$49.86	\$31,434		\$16,503	\$47,937	100%	100%	0%	\$47,937	\$47,937	\$0
10070	727	24		\$49.86	\$36,220		\$19,016	\$55,236	100%	100%	0%	\$55,236	\$55,236	\$0
10071	688	24		\$49.86	\$34,311		\$18,013	\$52,324	100%	100%	0%	\$52,324	\$52,324	\$0
10072	510	24		\$49.86	\$25,431		\$13,351	\$38,782	100%	100%	0%	\$38,782	\$38,782	\$0
10073	537	24		\$49.86	\$26,768		\$14,053	\$40,821	100%	100%	0%	\$40,821	\$40,821	\$0
10074	98	24		\$49.86	\$4,886		\$2,565	\$7,451	100%	100%	0%	\$7,451	\$7,451	\$0
10075	113	24		\$49.86	\$5,624		\$2,953	\$8,577	100%	100%	0%	\$8,577	\$8,577	\$0
10076	163	24		\$49.86	\$8,107		\$4,256	\$12,363	100%	100%	0%	\$12,363	\$12,363	\$0
10077	445	24		\$49.86	\$22,186		\$11,648	\$33,834	100%	100%	0%	\$33,834	\$33,834	\$0
10078	275	24		\$49.86	\$13,705		\$7,195	\$20,900	100%	100%	0%	\$20,900	\$20,900	\$0
10079	463	24		\$49.86	\$23,068		\$12,111	\$35,179	100%	100%	0%	\$35,179	\$35,179	\$0
10080	155	24	\$49.86	\$7,713	\$4,049	\$11,762	100%	100%	0%	\$11,762	\$11,762	\$0		
10081	657	24	\$49.86	\$32,745	\$17,191	\$49,936	83%	100%	17%	\$41,544	\$49,936	\$8,392		
10082	596	24	\$49.86	\$29,689	\$15,587	\$45,276	83%	100%	17%	\$37,669	\$45,276	\$7,607		
10083	435	24	\$49.86	\$21,672	\$11,378	\$33,050	47%	69%	22%	\$15,468	\$22,744	\$7,276		
Subtotal:	9,146		1982		\$456,000	5%	\$239,400	\$695,401				\$661,820	\$685,095	\$23,275

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)			(%)		
									2012	2022	During Fee Period	2012	2022	During Fee Period
<b>West McKinney 15" Outfall Sanitary Sewer Main</b>														
From Wilson Creek to Wastewater Treatment Plant (Wilson Creek Lateral #20)														
14267	741	15		\$24.56	\$18,209		\$9,560	\$27,769	85%	88%	3%	\$23,602	\$24,383	\$780
14268	561	15		\$24.56	\$13,785		\$7,237	\$21,022	85%	88%	3%	\$17,868	\$18,458	\$591
14269	233	15		\$24.56	\$5,716		\$3,001	\$8,717	83%	86%	3%	\$7,251	\$7,539	\$289
14270	139	15		\$24.56	\$3,417		\$1,794	\$5,211	83%	86%	3%	\$4,334	\$4,507	\$173
14271	228	15		\$24.56	\$5,601		\$2,941	\$8,542	83%	86%	3%	\$7,105	\$7,388	\$283
14272	58	15		\$24.56	\$1,435		\$753	\$2,188	83%	86%	3%	\$1,820	\$1,892	\$72
14273	226	15		\$24.56	\$5,549		\$2,913	\$8,462	83%	86%	3%	\$7,039	\$7,319	\$280
14274	127	15		\$24.56	\$3,110		\$1,633	\$4,743	83%	86%	3%	\$3,945	\$4,102	\$157
14275	346	15		\$24.56	\$8,506		\$4,466	\$12,972	83%	86%	3%	\$10,790	\$11,219	\$430
14276	423	15		\$24.56	\$10,386		\$5,453	\$15,839	84%	87%	2%	\$13,336	\$13,727	\$391
14277	604	15		\$24.56	\$14,839		\$7,791	\$22,630	84%	87%	2%	\$19,054	\$19,613	\$559
14278	508	15		\$24.56	\$12,469		\$6,546	\$19,015	84%	87%	2%	\$15,999	\$16,453	\$453
14279	509	15		\$24.56	\$12,505		\$6,565	\$19,070	84%	86%	2%	\$16,019	\$16,473	\$454
14280	488	15		\$24.56	\$11,985		\$6,292	\$18,277	84%	86%	2%	\$15,341	\$15,790	\$449
14281	499	15		\$24.56	\$12,267		\$6,440	\$18,707	84%	86%	3%	\$15,676	\$16,150	\$475
14282	355	15		\$24.56	\$8,723		\$4,580	\$13,303	86%	87%	1%	\$11,482	\$11,621	\$139
<b>Subtotal:</b>	<b>6,046</b>		<b>1980</b>		<b>\$148,500</b>	<b>5%</b>	<b>\$77,965</b>	<b>\$226,467</b>				<b>\$190,661</b>	<b>\$196,634</b>	<b>\$5,975</b>

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
									2012	2022	During Fee Period	2012	2022	During Fee Period
15" Sewer Line														
Along Jeans Creek (Wilson Creek Lateral #15)														
14024	264	15		\$30.14	\$7,966	5%	\$4,182	\$12,148	72%	73%	2%	\$8,709	\$8,896	\$187
14023	144	15		\$30.14	\$4,325		\$2,271	\$6,596	72%	74%	2%	\$4,740	\$4,855	\$116
14022	395	15		\$30.14	\$11,896		\$6,245	\$18,141	72%	74%	2%	\$13,028	\$13,353	\$325
14021	58	15		\$30.14	\$1,760		\$924	\$2,684	72%	74%	2%	\$1,928	\$1,976	\$48
14020	241	15		\$30.14	\$7,269		\$3,816	\$11,085	72%	74%	2%	\$7,963	\$8,160	\$196
14019	168	15		\$30.14	\$5,063		\$2,658	\$7,721	72%	74%	2%	\$5,547	\$5,683	\$137
14018	152	15		\$30.14	\$4,575		\$2,402	\$6,977	72%	74%	2%	\$5,012	\$5,136	\$123
14017	177	15		\$30.14	\$5,322		\$2,794	\$8,116	72%	74%	2%	\$5,827	\$5,971	\$144
14016	116	15		\$30.14	\$3,493		\$1,834	\$5,327	72%	74%	2%	\$3,826	\$3,921	\$94
14015	361	15		\$30.14	\$10,865		\$5,704	\$16,569	72%	74%	2%	\$11,901	\$12,195	\$293
14014	317	15		\$30.14	\$9,566		\$5,022	\$14,588	72%	74%	2%	\$10,478	\$10,737	\$258
14013	27	15		\$30.14	\$826		\$434	\$1,260	73%	74%	2%	\$917	\$937	\$21
14012	243	15		\$30.14	\$7,318		\$3,842	\$11,160	73%	74%	2%	\$8,121	\$8,303	\$183
14011	246	15		\$30.14	\$7,426		\$3,899	\$11,325	73%	74%	2%	\$8,241	\$8,426	\$186
14010	136	15		\$30.14	\$4,096		\$2,150	\$6,246	73%	74%	2%	\$4,545	\$4,647	\$102
14009	113	15		\$30.14	\$3,394		\$1,782	\$5,176	73%	74%	2%	\$3,765	\$3,849	\$85
14008	579	15		\$30.14	\$17,441		\$9,157	\$26,598	73%	74%	2%	\$19,345	\$19,781	\$436
14007	578	15		\$30.14	\$17,426		\$9,149	\$26,575	73%	74%	2%	\$19,328	\$19,763	\$435
14006	70	15		\$30.14	\$2,110		\$1,108	\$3,218	73%	74%	2%	\$2,340	\$2,393	\$53
14005	126	15		\$30.14	\$3,791		\$1,990	\$5,781	73%	75%	2%	\$4,224	\$4,322	\$98
14004	242	15		\$30.14	\$7,299		\$3,832	\$11,131	73%	75%	2%	\$8,132	\$8,321	\$189
14003	71	15		\$30.14	\$2,140		\$1,124	\$3,264	73%	75%	2%	\$2,397	\$2,456	\$58
14002	156	15		\$30.14	\$4,686		\$2,460	\$7,146	73%	75%	2%	\$5,246	\$5,376	\$130
14001	784	15		\$30.14	\$23,613		\$12,397	\$36,010	73%	75%	2%	\$26,436	\$27,077	\$641
14000	396	15	\$30.14	\$11,935	\$6,266	\$18,201	73%	75%	2%	\$13,367	\$13,691	\$324		
Subtotal:	6,158		1965		\$185,600		\$97,442	\$283,043				\$205,363	\$210,225	\$4,862

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)			(%)		
									2012	2022	During Fee Period	2012	2022	During Fee Period
<b>2002 Wilson Creek Interceptor</b>														
From Rail Road to West Side of S.H. 75														
10034	212	48		\$204.93	\$43,527		\$22,852	\$66,379	100%	100%	0%	\$66,379	\$66,379	\$0
10035	273	48		\$204.93	\$55,905		\$29,350	\$85,255	100%	100%	0%	\$85,255	\$85,255	\$0
10036	302	48		\$204.93	\$61,971		\$32,535	\$94,506	100%	100%	0%	\$94,506	\$94,506	\$0
10037	359	48		\$204.93	\$73,549		\$38,613	\$112,162	100%	100%	0%	\$112,162	\$112,162	\$0
10038	435	48		\$204.93	\$89,124		\$46,790	\$135,914	100%	100%	0%	\$135,914	\$135,914	\$0
10039	376	48		\$204.93	\$77,136		\$40,496	\$117,632	100%	100%	0%	\$117,632	\$117,632	\$0
10040	169	48		\$204.93	\$34,531		\$18,129	\$52,660	100%	100%	0%	\$52,660	\$52,660	\$0
10041	235	48		\$204.93	\$48,240		\$25,326	\$73,566	100%	100%	0%	\$73,566	\$73,566	\$0
10042	736	48		\$204.93	\$150,828		\$79,185	\$230,013	100%	100%	0%	\$230,013	\$230,013	\$0
10043	219	48		\$204.93	\$44,921		\$23,584	\$68,505	100%	100%	0%	\$68,505	\$68,505	\$0
10044	231	48		\$204.93	\$47,257		\$24,810	\$72,067	100%	100%	0%	\$72,067	\$72,067	\$0
10045	745	48		\$204.93	\$152,570		\$80,099	\$232,669	100%	100%	0%	\$232,669	\$232,669	\$0
10046	560	48		\$204.93	\$114,781		\$60,260	\$175,041	100%	100%	0%	\$175,041	\$175,041	\$0
10047	293	48		\$204.93	\$60,003		\$31,502	\$91,505	100%	100%	0%	\$91,505	\$91,505	\$0
10048	364	48		\$204.93	\$74,594		\$39,162	\$113,756	100%	100%	0%	\$113,756	\$113,756	\$0
10049	263	48		\$204.93	\$53,856		\$28,274	\$82,130	100%	100%	0%	\$82,130	\$82,130	\$0
10050	370	42		\$204.93	\$75,824		\$39,808	\$115,632	100%	100%	0%	\$115,632	\$115,632	\$0
10051	548	42		\$204.93	\$112,261		\$58,937	\$171,198	100%	100%	0%	\$171,198	\$171,198	\$0
10052	866	42		\$204.93	\$177,367		\$93,118	\$270,485	100%	100%	0%	\$270,485	\$270,485	\$0
10053	95	42		\$204.93	\$19,407		\$10,189	\$29,596	100%	100%	0%	\$29,596	\$29,596	\$0
10054	411	42		\$204.93	\$84,267		\$44,240	\$128,507	100%	100%	0%	\$128,507	\$128,507	\$0
10055	145	42		\$204.93	\$29,694		\$15,589	\$45,283	100%	100%	0%	\$45,283	\$45,283	\$0
10056	588	42		\$204.93	\$120,458		\$63,240	\$183,698	100%	100%	0%	\$183,698	\$183,698	\$0
10057	172	42		\$204.93	\$35,248		\$18,505	\$53,753	100%	100%	0%	\$53,753	\$53,753	\$0
10058	524	42		\$204.93	\$107,301		\$56,333	\$163,634	100%	100%	0%	\$163,634	\$163,634	\$0
10059	59	42		\$204.93	\$12,173		\$6,391	\$18,564	100%	100%	0%	\$18,564	\$18,564	\$0
10060	72	42		\$204.93	\$14,734		\$7,735	\$22,469	100%	100%	0%	\$22,469	\$22,469	\$0
10061	145	36		\$204.93	\$29,735		\$15,611	\$45,346	100%	100%	0%	\$45,346	\$45,346	\$0
10062	248	36		\$204.93	\$50,823		\$26,682	\$77,505	100%	100%	0%	\$77,505	\$77,505	\$0
10063	506	36		\$204.93	\$103,715		\$54,450	\$158,165	100%	100%	0%	\$158,165	\$158,165	\$0
<b>Subtotal:</b>	<b>10,520</b>		<b>2000</b>		<b>\$2,155,800</b>	<b>5%</b>	<b>\$1,131,795</b>	<b>\$3,287,595</b>				<b>\$3,287,595</b>	<b>\$3,287,595</b>	<b>\$0</b>

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)		During Fee Period			During Fee Period
									2012	2022		2012	2022	
<b>18" Diversion Sewer Line</b>														
From Throckmorton to 27" NTMWD Sewer Line														
22014	777	18		\$64.41	\$50,067		\$26,285	\$76,352	86%	94%	8%	\$65,701	\$71,511	\$5,810
22015	346	18		\$64.41	\$22,312		\$11,714	\$34,026	85%	93%	8%	\$28,929	\$31,786	\$2,857
22016	496	18		\$64.41	\$31,961		\$16,780	\$48,741	85%	93%	9%	\$41,262	\$45,500	\$4,238
22017	336	18		\$64.41	\$21,649		\$11,366	\$33,015	84%	93%	9%	\$27,789	\$30,784	\$2,996
22018	770	18		\$64.41	\$49,603		\$26,042	\$75,645	84%	93%	9%	\$63,540	\$70,490	\$6,950
22019	433	18		\$64.41	\$27,897		\$14,646	\$42,543	81%	93%	11%	\$34,625	\$39,510	\$4,885
22020	261	18		\$64.41	\$16,811		\$8,826	\$25,637	81%	93%	11%	\$20,865	\$23,809	\$2,944
<b>Subtotal:</b>	<b>3,420</b>		<b>1995</b>		<b>\$220,300</b>	<b>5%</b>	<b>\$115,659</b>	<b>\$335,959</b>				<b>\$282,711</b>	<b>\$313,390</b>	<b>\$30,680</b>
<b>Provine Farms Sewer Line</b>														
From Hardin Boulevard to Wilson Creek Interceptor														
15000	430	15		\$48.87	\$21,012		\$11,031	\$32,043	77%	82%	5%	\$24,807	\$26,337	\$1,530
15001	86	15		\$48.87	\$4,213		\$2,212	\$6,425	77%	82%	5%	\$4,974	\$5,281	\$307
15002	521	12		\$48.87	\$25,474		\$13,374	\$38,848	77%	82%	5%	\$30,076	\$31,931	\$1,855
15003	329	12		\$48.87	\$16,077		\$8,440	\$24,517	77%	82%	5%	\$18,981	\$20,151	\$1,170
15004	499	12		\$48.87	\$24,376		\$12,797	\$37,173	77%	82%	5%	\$28,779	\$30,554	\$1,775
15005	149	12		\$48.87	\$7,301		\$3,833	\$11,134	79%	83%	4%	\$8,740	\$9,197	\$457
15006	480	12		\$48.87	\$23,460		\$12,317	\$35,777	79%	83%	4%	\$28,085	\$29,553	\$1,468
15007	150	12		\$48.87	\$7,325		\$3,846	\$11,171	79%	83%	4%	\$8,769	\$9,228	\$458
15008	486	12		\$48.87	\$23,770		\$12,479	\$36,249	79%	83%	4%	\$28,456	\$29,943	\$1,487
15009	174	12		\$48.87	\$8,484		\$4,454	\$12,938	79%	83%	4%	\$10,156	\$10,687	\$531
15010	185	12		\$48.87	\$9,029		\$4,740	\$13,769	79%	83%	4%	\$10,809	\$11,374	\$565
15011	306	12		\$48.87	\$14,940		\$7,844	\$22,784	79%	83%	4%	\$17,886	\$18,820	\$935
15012	295	12		\$48.87	\$14,434		\$7,578	\$22,012	80%	83%	3%	\$17,596	\$18,355	\$759
15013	295	12		\$48.87	\$14,419		\$7,570	\$21,989	82%	84%	2%	\$17,938	\$18,478	\$540
15014	297	12		\$48.87	\$14,492		\$7,608	\$22,100	82%	84%	2%	\$18,029	\$18,572	\$543
15015	329	12		\$48.87	\$16,096		\$8,450	\$24,546	84%	85%	1%	\$20,536	\$20,830	\$293
<b>Subtotal:</b>	<b>5,011</b>		<b>1996</b>		<b>\$244,900</b>	<b>5%</b>	<b>\$128,573</b>	<b>\$373,475</b>				<b>\$294,617</b>	<b>\$309,291</b>	<b>\$14,673</b>

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
											During Fee			During
									2012	2022	Period	2012	2022	Fee Period
1997 Sewer Line Along Cottonwood Creek														
From S.H. 121 to South of Eldorado Parkway														
50040	110	18		\$69.47	\$7,649		\$4,016	\$11,665	72%	85%	13%	\$8,451	\$9,960	\$1,509
50041	735	18		\$69.47	\$51,068		\$26,811	\$77,879	82%	86%	4%	\$63,920	\$67,030	\$3,110
50042	506	18		\$69.47	\$35,153		\$18,455	\$53,608	82%	86%	4%	\$44,002	\$46,126	\$2,124
50043	399	18		\$69.47	\$27,684		\$14,534	\$42,218	82%	86%	4%	\$34,653	\$36,326	\$1,673
50044	716	18		\$69.47	\$49,742		\$26,115	\$75,857	82%	86%	4%	\$62,492	\$65,548	\$3,056
50045	506	18		\$69.47	\$35,139		\$18,448	\$53,587	82%	86%	4%	\$44,010	\$46,288	\$2,278
50046	742	18		\$69.47	\$51,562		\$27,070	\$78,632	82%	86%	4%	\$64,579	\$67,921	\$3,342
50047	789	18		\$69.47	\$54,841		\$28,792	\$83,633	82%	86%	4%	\$68,687	\$72,241	\$3,555
50048	118	18		\$69.47	\$8,163		\$4,286	\$12,449	83%	87%	4%	\$10,380	\$10,861	\$481
Subtotal:	4,621		1997		\$321,000	5%	\$168,527	\$489,528				\$401,174	\$422,301	\$21,128
Wilson Creek Interceptor Phase 2														
From west of S.H. 75 to 1,600 feet north of Virginia Parkway														
10208	528	36		\$122.14	\$64,529		\$33,878	\$98,407	100%	100%	0%	\$98,407	\$98,407	\$0
10209	713	36		\$122.14	\$87,052		\$45,702	\$132,754	100%	100%	0%	\$132,754	\$132,754	\$0
10210	671	36		\$122.14	\$81,971		\$43,035	\$125,006	100%	100%	0%	\$125,006	\$125,006	\$0
10211	744	36		\$122.14	\$90,924		\$47,735	\$138,659	100%	100%	0%	\$138,659	\$138,659	\$0
10212	631	36		\$122.14	\$77,012		\$40,431	\$117,443	100%	100%	0%	\$117,443	\$117,443	\$0
10213	727	36		\$122.14	\$88,738		\$46,587	\$135,325	100%	100%	0%	\$135,325	\$135,325	\$0
10214	688	36		\$122.14	\$84,060		\$44,131	\$128,191	100%	100%	0%	\$128,191	\$128,191	\$0
10215	510	36		\$122.14	\$62,306		\$32,711	\$95,017	100%	100%	0%	\$95,017	\$95,017	\$0
10216	537	36		\$122.14	\$65,579		\$34,429	\$100,008	100%	100%	0%	\$100,008	\$100,008	\$0
10217	98	36		\$122.14	\$11,970		\$6,284	\$18,254	100%	100%	0%	\$18,254	\$18,254	\$0
10218	113	36		\$122.14	\$13,778		\$7,233	\$21,011	100%	100%	0%	\$21,011	\$21,011	\$0
10219	163	36		\$122.14	\$19,861		\$10,427	\$30,288	100%	100%	0%	\$30,288	\$30,288	\$0
10220	445	36		\$122.14	\$54,354		\$28,536	\$82,890	100%	100%	0%	\$82,890	\$82,890	\$0
10221	275	36		\$122.14	\$33,577		\$17,628	\$51,205	100%	100%	0%	\$51,205	\$51,205	\$0
10222	463	36		\$122.14	\$56,516		\$29,671	\$86,187	73%	100%	27%	\$62,909	\$86,187	\$23,278
10223	155	36		\$122.14	\$18,896		\$9,920	\$28,816	75%	100%	25%	\$21,472	\$28,816	\$7,344
10224	657	36		\$122.14	\$80,224		\$42,118	\$122,342	47%	100%	53%	\$57,694	\$122,342	\$64,648
10225	596	36		\$122.14	\$72,737		\$38,187	\$110,924	100%	100%	0%	\$110,924	\$110,924	\$0
10226	402	36		\$122.14	\$49,090		\$25,772	\$74,862	100%	100%	0%	\$74,862	\$74,862	\$0
Subtotal:	9,114		2000		\$1,113,172	5%	\$584,415	\$1,697,589				\$1,602,319	\$1,697,589	\$95,270

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(S) Utilized Capacity		
									2012	2022	During Fee Period	2012	2022	During Fee Period
Spur 399 Sewer Line Along S.H. 5														
From Wilson Creek Interceptor to S.H. 75														
13022	503	15		\$51.14	\$25,746		\$13,517	\$39,263	81%	100%	19%	\$31,930	\$39,263	\$7,333
13023	21	15		\$51.14	\$1,048		\$550	\$1,598	81%	100%	19%	\$1,300	\$1,598	\$298
13024	257	15		\$51.14	\$13,134		\$6,895	\$20,029	81%	100%	19%	\$16,288	\$20,029	\$3,741
13025	310	15		\$51.14	\$15,865		\$8,329	\$24,194	81%	100%	19%	\$19,675	\$24,194	\$4,519
13026	338	15		\$51.14	\$17,261		\$9,062	\$26,323	81%	100%	19%	\$21,407	\$26,323	\$4,916
13027	375	15		\$51.14	\$19,179		\$10,069	\$29,248	81%	100%	19%	\$23,785	\$29,248	\$5,463
13028	377	15		\$51.14	\$19,297		\$10,131	\$29,428	81%	100%	19%	\$23,932	\$29,428	\$5,496
13029	65	15		\$51.14	\$3,299		\$1,732	\$5,031	81%	100%	19%	\$4,091	\$5,031	\$940
13030	620	15		\$51.14	\$31,700		\$16,642	\$48,342	81%	100%	19%	\$39,313	\$48,342	\$9,029
13031	450	15		\$51.14	\$23,031		\$12,091	\$35,122	81%	100%	19%	\$28,562	\$35,122	\$6,560
13032	241	15		\$51.14	\$12,311		\$6,463	\$18,774	81%	100%	19%	\$15,267	\$18,774	\$3,507
13033	279	15		\$51.14	\$14,269		\$7,491	\$21,760	79%	100%	21%	\$17,294	\$21,760	\$4,466
13034	345	15		\$51.14	\$17,650		\$9,266	\$26,916	79%	100%	21%	\$21,392	\$26,916	\$5,524
13035	376	15		\$51.14	\$19,241		\$10,102	\$29,343	79%	100%	21%	\$23,321	\$29,343	\$6,022
13036	337	15		\$51.14	\$17,236		\$9,049	\$26,285	79%	100%	21%	\$20,891	\$26,285	\$5,394
13037	575	15		\$51.14	\$29,383		\$15,426	\$44,809	77%	100%	23%	\$34,538	\$44,809	\$10,271
Subtotal:	5,468		1997		\$279,650	5%	\$146,815	\$426,465				\$342,986	\$426,465	\$83,479

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)		During Fee Period			During Fee Period
									2012	2022		2012	2022	
<b>Herndon Branch Sewer Line</b>														
From Hills Creek Drive to Wilson Creek Interceptor														
15049	382	12		\$61.61	\$23,537		\$12,357	\$35,894	65%	72%	7%	\$23,293	\$25,672	\$2,380
15050	551	12		\$61.61	\$33,968		\$17,833	\$51,801	65%	72%	7%	\$33,615	\$37,049	\$3,434
15051	343	12		\$61.61	\$21,134		\$11,095	\$32,229	65%	72%	7%	\$20,914	\$23,051	\$2,137
15052	162	12		\$61.61	\$9,975		\$5,237	\$15,212	65%	72%	7%	\$9,871	\$10,880	\$1,008
15053	326	12		\$61.61	\$20,062		\$10,533	\$30,595	65%	72%	7%	\$19,854	\$21,882	\$2,028
15054	95	12		\$61.61	\$5,872		\$3,083	\$8,955	65%	72%	7%	\$5,811	\$6,405	\$594
15055	324	12		\$61.61	\$19,969		\$10,484	\$30,453	68%	74%	5%	\$20,823	\$22,479	\$1,656
15056	371	12		\$61.61	\$22,828		\$11,985	\$34,813	68%	74%	5%	\$23,805	\$25,698	\$1,893
15057	407	12		\$61.61	\$25,071		\$13,162	\$38,233	68%	74%	5%	\$26,143	\$28,222	\$2,079
15058	621	12		\$61.61	\$38,262		\$20,088	\$58,350	68%	74%	5%	\$39,899	\$43,072	\$3,173
15059	60	12		\$61.61	\$3,709		\$1,947	\$5,656	68%	74%	5%	\$3,867	\$4,175	\$308
15060	165	12		\$61.61	\$10,148		\$5,328	\$15,476	68%	74%	5%	\$10,582	\$11,424	\$842
15061	574	12		\$61.61	\$35,373		\$18,571	\$53,944	68%	74%	5%	\$36,849	\$39,780	\$2,931
15062	620	12		\$61.61	\$38,201		\$20,056	\$58,257	72%	76%	4%	\$41,981	\$44,371	\$2,390
15063	309	12		\$61.61	\$19,020		\$9,986	\$29,006	72%	76%	4%	\$20,952	\$22,156	\$1,203
15064	239	12		\$61.61	\$14,738		\$7,737	\$22,475	72%	76%	4%	\$16,235	\$17,167	\$932
15065	249	12		\$61.61	\$15,367		\$8,068	\$23,435	71%	75%	3%	\$16,705	\$17,464	\$759
15066	223	12		\$61.61	\$13,752		\$7,220	\$20,972	71%	75%	3%	\$14,949	\$15,629	\$680
15067	64	12		\$61.61	\$3,925		\$2,061	\$5,986	72%	75%	3%	\$4,285	\$4,471	\$186
15068	234	12		\$61.61	\$14,393		\$7,556	\$21,949	73%	77%	4%	\$15,915	\$16,837	\$922
15069	479	12		\$61.61	\$29,513		\$15,494	\$45,007	72%	76%	4%	\$32,511	\$34,377	\$1,867
15070	267	12		\$61.61	\$16,457		\$8,640	\$25,097	72%	75%	3%	\$18,165	\$18,917	\$752
15071	408	12		\$61.61	\$25,114		\$13,185	\$38,299	72%	75%	3%	\$27,721	\$28,868	\$1,147
15072	188	12		\$61.61	\$11,559		\$6,068	\$17,627	72%	75%	3%	\$12,758	\$13,257	\$499
15073	530	12		\$61.61	\$32,655		\$17,144	\$49,799	72%	75%	3%	\$36,044	\$37,453	\$1,409
<b>Subtotal:</b>	<b>8,190</b>		<b>1998</b>		<b>\$504,600</b>	<b>5%</b>	<b>\$264,918</b>	<b>\$769,520</b>				<b>\$533,547</b>	<b>\$570,756</b>	<b>\$37,209</b>
<b>Jeans Creek Relief Sewer</b>														
Along S.H 75 to Wilson Creek Interceptor														
14186A	371	18		\$63.80	\$23,643		\$12,413	\$36,056	74%	75%	1%	\$26,688	\$27,160	\$472
14187	98	18		\$63.80	\$6,227		\$3,269	\$9,496	73%	75%	2%	\$6,932	\$7,084	\$152
14189	564	18		\$63.80	\$35,975		\$18,887	\$54,862	73%	75%	2%	\$40,048	\$40,927	\$879
14191	371	18		\$63.80	\$23,656		\$12,420	\$36,076	73%	75%	2%	\$26,335	\$26,913	\$578
<b>Subtotal:</b>	<b>1,403</b>		<b>1999</b>		<b>\$89,500</b>	<b>5%</b>	<b>\$46,989</b>	<b>\$136,490</b>				<b>\$100,003</b>	<b>\$102,084</b>	<b>\$2,081</b>



**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity			
									2012	2022	During Fee Period	2012	2022	During Fee Period	
Eagles Nest Sewer Service															
2003 - Phase 2															
1	30310	1,134	18		\$5.25	\$5,954		\$3,126	\$9,080	89%	92%	3%	\$8,075	\$8,392	\$317
1	30311	122	18		\$5.25	\$641		\$337	\$978	89%	92%	3%	\$869	\$903	\$34
1	30312	196	18		\$5.25	\$1,030		\$541	\$1,571	89%	92%	4%	\$1,396	\$1,452	\$56
1	30313	30	18		\$5.25	\$158		\$83	\$241	89%	92%	4%	\$214	\$222	\$8
1	30314	258	18		\$5.25	\$1,356		\$712	\$2,068	89%	92%	3%	\$1,842	\$1,905	\$63
1	30315	280	18		\$5.25	\$1,470		\$772	\$2,242	88%	92%	3%	\$1,980	\$2,054	\$74
1	30316	280	15		\$3.00	\$840		\$441	\$1,281	87%	91%	4%	\$1,120	\$1,166	\$46
1	30317	401	15		\$3.00	\$1,202		\$631	\$1,833	87%	91%	4%	\$1,603	\$1,669	\$66
1	30318	337	15		\$3.00	\$1,012		\$531	\$1,543	87%	91%	4%	\$1,349	\$1,405	\$55
1	30319	359	15		\$3.00	\$1,077		\$565	\$1,642	86%	90%	4%	\$1,418	\$1,483	\$65
1	30320	343	15		\$3.00	\$1,028		\$540	\$1,568	86%	90%	4%	\$1,354	\$1,416	\$62
1	30321	487	15		\$3.00	\$1,460		\$767	\$2,227	86%	90%	4%	\$1,923	\$2,012	\$88
1	30322	476	15		\$3.00	\$1,429		\$750	\$2,179	86%	90%	4%	\$1,882	\$1,968	\$86
1	30323	183	15		\$3.00	\$549		\$288	\$837	86%	90%	4%	\$723	\$756	\$33
1	30324	190	15		\$3.00	\$569		\$299	\$868	86%	90%	4%	\$750	\$784	\$34
1	30325	116	15		\$3.00	\$348		\$183	\$531	85%	90%	4%	\$453	\$476	\$23
1	30326	27	15		\$3.00	\$82		\$43	\$125	85%	90%	4%	\$107	\$112	\$5
1	30327	143	15		\$3.00	\$428		\$225	\$653	85%	90%	4%	\$557	\$585	\$28
1	30328	276	15		\$3.00	\$828		\$435	\$1,263	85%	90%	4%	\$1,077	\$1,131	\$55
1	30329	275	15		\$3.00	\$826		\$434	\$1,260	85%	90%	4%	\$1,074	\$1,129	\$55
1	30330	340	15		\$3.00	\$1,021		\$536	\$1,557	85%	90%	4%	\$1,327	\$1,395	\$68
1	30331	500	15		\$3.00	\$1,500		\$788	\$2,288	83%	89%	6%	\$1,903	\$2,032	\$129
1	30332	450	15		\$3.00	\$1,350		\$709	\$2,059	83%	89%	6%	\$1,713	\$1,829	\$116
Subtotal:		7,203		2003		\$26,158	5%	\$13,736	\$39,894				\$34,709	\$36,276	\$1,566

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)		During Fee Period			During Fee Period
									2012	2022		2012	2022	
<b>Custer West</b>														
1 30068	114	18		\$3.40	\$386		\$203	\$589	85%	91%	7%	\$498	\$538	\$40
1 30069	265	18		\$3.40	\$902		\$474	\$1,376	85%	91%	7%	\$1,164	\$1,257	\$93
1 30070	265	18		\$3.40	\$902		\$474	\$1,376	84%	91%	7%	\$1,161	\$1,255	\$95
1 30071	500	18		\$3.40	\$1,699		\$892	\$2,591	83%	91%	8%	\$2,141	\$2,354	\$214
1 30072	408	18		\$3.40	\$1,387		\$728	\$2,115	82%	91%	8%	\$1,736	\$1,915	\$180
1 30073	311	18		\$3.40	\$1,057		\$555	\$1,612	82%	91%	8%	\$1,323	\$1,460	\$137
1 30074	310	18		\$3.40	\$1,053		\$553	\$1,606	82%	91%	8%	\$1,318	\$1,454	\$136
1 30075	531	18		\$3.40	\$1,805		\$948	\$2,753	82%	91%	8%	\$2,259	\$2,493	\$234
1 30076	475	18		\$3.40	\$1,615		\$848	\$2,463	62%	83%	21%	\$1,534	\$2,047	\$513
1 30077	490	15		\$1.70	\$833		\$437	\$1,270	62%	83%	21%	\$791	\$1,055	\$264
1 30078	499	15		\$1.70	\$848		\$445	\$1,293	62%	83%	21%	\$805	\$1,074	\$269
1 30079	159	15		\$1.70	\$269		\$141	\$410	62%	83%	21%	\$255	\$341	\$85
1 30080	316	15		\$1.70	\$538		\$282	\$820	58%	81%	23%	\$479	\$667	\$188
1 30081	360	15		\$1.70	\$612		\$321	\$933	58%	81%	23%	\$545	\$759	\$214
1 30082	409	15		\$1.70	\$695		\$365	\$1,060	58%	81%	23%	\$620	\$862	\$243
<b>Subtotal:</b>	<b>5,411</b>				<b>\$14,601</b>	<b>5%</b>	<b>\$7,666</b>	<b>\$22,267</b>				<b>\$16,629</b>	<b>\$19,531</b>	<b>\$2,905</b>
<b>Craig Ranch North</b>														
Phase 6														
1 30209	635	15		\$208.00	\$131,976		\$69,287	\$201,263	87%	96%	9%	\$174,802	\$192,235	\$17,433
1 30210	114	15		\$208.00	\$23,733		\$12,460	\$36,193	87%	96%	9%	\$31,434	\$34,569	\$3,135
1 30210	265	15		\$208.00	\$55,120		\$28,938	\$84,058	87%	96%	9%	\$73,006	\$80,287	\$7,281
1 30211	60	15		\$208.00	\$12,480		\$6,552	\$19,032	87%	96%	9%	\$16,530	\$18,178	\$1,649
1 30212	161	15		\$208.00	\$33,426		\$17,549	\$50,975	84%	95%	11%	\$42,907	\$48,356	\$5,449
1 30213	474	15		\$208.00	\$98,530		\$51,728	\$150,258	82%	94%	12%	\$123,090	\$141,571	\$18,482
1 30214	422	15		\$208.00	\$87,714		\$46,050	\$133,764	82%	94%	12%	\$109,578	\$126,031	\$16,453
1 30215	264	15		\$208.00	\$54,912		\$28,829	\$83,741	80%	94%	14%	\$67,306	\$78,784	\$11,479
1 30216	372	15		\$208.00	\$77,418		\$40,644	\$118,062	80%	94%	14%	\$94,891	\$111,074	\$16,183
1 30217	265	15		\$208.00	\$55,120		\$28,938	\$84,058	80%	94%	14%	\$67,561	\$79,083	\$11,522
1 30218	265	15		\$208.00	\$55,120		\$28,938	\$84,058	80%	94%	14%	\$67,561	\$79,083	\$11,522
1 30219	664	15		\$208.00	\$138,133		\$72,520	\$210,653	78%	94%	16%	\$164,139	\$197,236	\$33,096
<b>Subtotal:</b>	<b>3,960</b>		<b>2004</b>		<b>\$823,680</b>	<b>5%</b>	<b>\$432,433</b>	<b>\$1,256,115</b>				<b>\$1,032,805</b>	<b>\$1,186,487</b>	<b>\$153,684</b>

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)		During Fee Period			During Fee Period
									2012	2022		2012	2022	
<b>Craig Ranch West (VCIM 2)</b>														
Phase 1														
1 30118	2,998	15		\$235.14	\$704,884		\$370,064	\$1,074,948	80%	86%	7%	\$855,019	\$925,584	\$70,566
1 30095	381	24		\$235.14	\$89,660		\$47,072	\$136,732	81%	90%	8%	\$111,178	\$122,535	\$11,357
<b>Subtotal:</b>	<b>3,379</b>		<b>2005</b>		<b>\$794,544</b>	<b>5%</b>	<b>\$417,136</b>	<b>\$1,211,680</b>				<b>\$966,197</b>	<b>\$1,048,119</b>	<b>\$81,923</b>
<b>Craig Ranch Infrastructure (VCIM 1)</b>														
Phase 1 15" to 24"														
1 30140	471	24		\$57.47	\$27,082		\$14,218	\$41,300	72%	85%	13%	\$29,778	\$35,187	\$5,409
1 30141	335	24		\$57.47	\$19,254		\$10,108	\$29,362	76%	89%	13%	\$22,402	\$26,142	\$3,740
1 30142	210	24		\$57.47	\$12,087		\$6,346	\$18,433	72%	85%	13%	\$13,291	\$15,705	\$2,414
1 30143	289	24		\$57.47	\$16,587		\$8,708	\$25,295	76%	89%	13%	\$19,299	\$22,521	\$3,222
1 30144	298	21		\$57.47	\$17,116		\$8,986	\$26,102	76%	89%	13%	\$19,915	\$23,239	\$3,324
1 30145	291	21		\$57.47	\$16,702		\$8,769	\$25,471	76%	89%	13%	\$19,434	\$22,678	\$3,244
1 30146	528	21		\$57.47	\$30,335		\$15,926	\$46,261	76%	90%	14%	\$35,084	\$41,569	\$6,485
1 30147	456	21		\$57.47	\$26,180		\$13,745	\$39,925	75%	91%	16%	\$30,086	\$36,275	\$6,188
1 30148	238	21		\$57.47	\$13,656		\$7,169	\$20,825	75%	91%	16%	\$15,693	\$18,921	\$3,228
1 30149	555	18		\$57.47	\$31,875		\$16,734	\$48,609	80%	90%	10%	\$38,945	\$43,690	\$4,745
1 30150	425	18		\$57.47	\$24,450		\$12,836	\$37,286	80%	90%	10%	\$29,873	\$33,513	\$3,640
1 30151	594	18		\$57.47	\$34,163		\$17,936	\$52,099	80%	90%	10%	\$41,741	\$46,827	\$5,086
1 30152	177	18		\$57.47	\$10,156		\$5,332	\$15,488	80%	90%	10%	\$12,409	\$13,921	\$1,512
1 30153	194	18		\$57.47	\$11,127		\$5,842	\$16,969	80%	90%	10%	\$13,595	\$15,252	\$1,656
1 30154	351	18		\$57.47	\$20,185		\$10,597	\$30,782	80%	90%	10%	\$24,662	\$27,667	\$3,005
1 30166	299	15		\$57.47	\$17,162		\$9,010	\$26,172	68%	92%	24%	\$17,853	\$24,116	\$6,263
1 30167	295	15		\$57.47	\$16,955		\$8,901	\$25,856	68%	92%	24%	\$17,637	\$23,824	\$6,187
1 30168	294	15		\$57.47	\$16,903		\$8,874	\$25,777	68%	92%	24%	\$17,584	\$23,752	\$6,168
1 30169	300	15		\$57.47	\$17,265		\$9,064	\$26,329	68%	92%	24%	\$17,960	\$24,260	\$6,300
1 30170	300	15		\$57.47	\$17,219		\$9,040	\$26,259	68%	92%	24%	\$17,952	\$24,217	\$6,266
<b>Subtotal:</b>	<b>6,898</b>		<b>2004</b>		<b>\$396,459</b>	<b>5%</b>	<b>\$208,141</b>	<b>\$604,600</b>				<b>\$455,193</b>	<b>\$543,276</b>	<b>\$88,082</b>

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number		Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
										2012	2022	During Fee Period	2012	2022	During Fee Period
Harvest Bend Offsite Sewer															
1	40001	125	24		\$25.65	\$3,212		\$1,686	\$4,898	68%	98%	31%	\$3,320	\$4,825	\$1,504
1	40002	432	24		\$25.65	\$11,079		\$5,817	\$16,896	68%	98%	31%	\$11,454	\$16,643	\$5,188
1	40003	330	24		\$25.65	\$8,473		\$4,448	\$12,921	69%	82%	13%	\$8,927	\$10,625	\$1,698
1	40004	133	24		\$25.65	\$3,402		\$1,786	\$5,188	69%	82%	13%	\$3,587	\$4,266	\$679
1	40005	272	24		\$25.65	\$6,972		\$3,660	\$10,632	68%	82%	14%	\$7,198	\$8,704	\$1,506
1	40006	446	24		\$25.65	\$11,441		\$6,007	\$17,448	68%	82%	14%	\$11,813	\$14,284	\$2,471
1	40007	595	24		\$25.65	\$15,271		\$8,017	\$23,288	68%	82%	14%	\$15,767	\$19,065	\$3,298
1	40008	595	24		\$25.65	\$15,271		\$8,017	\$23,288	66%	81%	15%	\$15,360	\$18,952	\$3,592
1	40009	249	24		\$25.65	\$6,385		\$3,352	\$9,737	66%	81%	15%	\$6,422	\$7,924	\$1,502
1	40010	480	24		\$25.65	\$12,318		\$6,467	\$18,785	66%	81%	15%	\$12,390	\$15,288	\$2,898
1	40011	585	24		\$25.65	\$15,007		\$7,879	\$22,886	66%	81%	15%	\$15,095	\$18,625	\$3,530
1	40012	500	24		\$25.65	\$12,826		\$6,734	\$19,560	68%	85%	17%	\$13,298	\$16,593	\$3,295
1	40013	236	24		\$25.65	\$6,051		\$3,177	\$9,228	68%	85%	17%	\$6,274	\$7,828	\$1,554
1	40014	396	24		\$25.65	\$10,148		\$5,328	\$15,476	68%	85%	17%	\$10,522	\$13,129	\$2,607
1	40015	261	24		\$25.65	\$6,698		\$3,516	\$10,214	68%	85%	17%	\$6,944	\$8,665	\$1,720
1	40016	374	24		\$25.65	\$9,584		\$5,032	\$14,616	71%	89%	19%	\$10,336	\$13,063	\$2,727
1	40017	487	18		\$25.65	\$12,498		\$6,561	\$19,059	70%	90%	20%	\$13,322	\$17,095	\$3,773
1	40018	487	18		\$25.65	\$12,498		\$6,561	\$19,059	70%	90%	20%	\$13,322	\$17,095	\$3,773
1	40019	343	18		\$25.65	\$8,799		\$4,619	\$13,418	70%	90%	20%	\$9,379	\$12,035	\$2,656
1	40020	295	18		\$25.65	\$7,573		\$3,976	\$11,549	69%	90%	21%	\$7,933	\$10,394	\$2,461
1	40021	204	18		\$25.65	\$5,233		\$2,747	\$7,980	69%	90%	21%	\$5,482	\$7,182	\$1,701
Subtotal:		7,825		2004		\$200,740	5%	\$105,387	\$306,126				\$208,145	\$262,280	\$54,133

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	Utilized Capacity			Utilized Capacity		
									(%)		During Fee Period			During Fee Period
									2012	2022		2012	2022	
<b>Wal-Mart Offsite 24" Sewer</b>														
1 50001	269	24		\$34.30	\$9,220		\$4,841	\$14,061	59%	71%	12%	\$8,307	\$9,967	\$1,660
1 50002	468	24		\$34.30	\$16,066		\$8,435	\$24,501	59%	71%	12%	\$14,474	\$17,366	\$2,892
1 50003	274	24		\$34.30	\$9,402		\$4,936	\$14,338	59%	71%	12%	\$8,470	\$10,163	\$1,693
1 50004	291	24		\$34.30	\$9,964		\$5,231	\$15,195	59%	71%	12%	\$8,976	\$10,770	\$1,794
1 50005	230	24		\$34.30	\$7,889		\$4,142	\$12,031	59%	71%	12%	\$7,107	\$8,528	\$1,420
1 50006	694	24		\$34.30	\$23,787		\$12,488	\$36,275	60%	73%	12%	\$21,894	\$26,358	\$4,464
1 50007	265	24		\$34.30	\$9,076		\$4,765	\$13,841	60%	73%	13%	\$8,305	\$10,068	\$1,763
1 50008	232	24		\$34.30	\$7,958		\$4,178	\$12,136	60%	73%	13%	\$7,282	\$8,827	\$1,546
1 50009	566	24		\$34.30	\$19,400		\$10,185	\$29,585	60%	73%	13%	\$17,751	\$21,519	\$3,768
1 50010	153	21		\$34.30	\$5,238		\$2,750	\$7,988	60%	73%	13%	\$4,768	\$5,824	\$1,056
<b>Subtotal:</b>	<b>3,440</b>		<b>2003</b>		<b>\$118,000</b>	<b>5%</b>	<b>\$61,951</b>	<b>\$179,951</b>				<b>\$107,334</b>	<b>\$129,390</b>	<b>\$22,056</b>
<b>Creekview Estates Offsite Sanitary Sewer</b>														
Franklin Branch - from Wilson Creek to Franklin Branch Trunk Sewer														
1 16000	350	27		\$57.71	\$20,210		\$10,610	\$30,820	15%	48%	33%	\$4,526	\$14,676	\$10,150
1 16001	209	16		\$57.71	\$12,038		\$6,320	\$18,358	15%	48%	33%	\$2,695	\$8,740	\$6,045
1 16002	443	27		\$57.71	\$25,571		\$13,425	\$38,996	15%	48%	33%	\$5,725	\$18,566	\$12,840
1 16003	359	27		\$57.71	\$20,735		\$10,886	\$31,621	9%	46%	37%	\$2,903	\$14,446	\$11,542
1 16004	231	27		\$57.71	\$13,314		\$6,990	\$20,304	9%	46%	37%	\$1,864	\$9,276	\$7,411
1 16005	484	27		\$57.71	\$27,909		\$14,652	\$42,561	9%	46%	37%	\$3,908	\$19,443	\$15,535
1 16006	375	27		\$57.71	\$21,618		\$11,349	\$32,967	4%	44%	39%	\$1,338	\$14,358	\$13,020
1 16007	383	27		\$57.71	\$22,074		\$11,589	\$33,663	4%	44%	39%	\$1,366	\$14,661	\$13,295
1 16008	136	27		\$57.71	\$7,860		\$4,127	\$11,987	4%	44%	39%	\$486	\$5,221	\$4,734
1 16009	209	27		\$57.71	\$12,038		\$6,320	\$18,358	4%	44%	39%	\$745	\$7,995	\$7,250
<b>Subtotal:</b>	<b>3,177</b>		<b>2005</b>		<b>\$183,369</b>	<b>5%</b>	<b>\$96,268</b>	<b>\$279,635</b>				<b>\$25,556</b>	<b>\$127,382</b>	<b>\$101,822</b>

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity			
									2012	2022	During Fee Period	2012	2022	During Fee Period	
Timber Creek Offsite Sewer															
Phase 1															
1	26009	789	21		\$44.34	\$34,982		\$18,366	\$53,348	34%	65%	31%	\$18,089	\$34,821	\$16,733
1	26010	725	21		\$44.34	\$32,153		\$16,880	\$49,033	39%	65%	26%	\$18,936	\$31,800	\$12,864
1	26011	211	21		\$44.34	\$9,374		\$4,921	\$14,295	25%	62%	37%	\$3,540	\$8,803	\$5,263
1	26012	716	24		\$44.34	\$31,731		\$16,659	\$48,390	24%	59%	35%	\$11,796	\$28,718	\$16,922
1	26013	204	21		\$44.34	\$9,059		\$4,756	\$13,815	24%	59%	35%	\$3,368	\$8,199	\$4,831
1	26014	137	21		\$44.34	\$6,088		\$3,196	\$9,284	24%	59%	35%	\$2,263	\$5,510	\$3,247
1	26015	225	21		\$44.34	\$9,977		\$5,238	\$15,215	24%	59%	35%	\$3,709	\$9,030	\$5,321
1	26016	718	21		\$44.34	\$31,824		\$16,708	\$48,532	24%	59%	35%	\$11,831	\$28,803	\$16,972
1	26017	569	18		\$44.34	\$25,226		\$13,244	\$38,470	33%	54%	20%	\$12,744	\$20,610	\$7,866
1	26018	360	18		\$44.34	\$15,963		\$8,381	\$24,344	33%	54%	20%	\$8,064	\$13,042	\$4,978
1	26019	408	18		\$44.34	\$18,069		\$9,486	\$27,555	33%	54%	20%	\$9,128	\$14,763	\$5,634
1	26020	361	18		\$44.34	\$15,985		\$8,392	\$24,377	33%	54%	20%	\$8,075	\$13,060	\$4,985
1	26021	392	18		\$44.34	\$17,387		\$9,128	\$26,515	33%	54%	20%	\$8,784	\$14,205	\$5,422
1	26022	480	18		\$44.34	\$21,267		\$11,165	\$32,432	35%	54%	19%	\$11,367	\$17,385	\$6,019
1	26023	479	18		\$44.34	\$21,244		\$11,153	\$32,397	33%	54%	20%	\$10,732	\$17,357	\$6,625
1	26024	471	18		\$44.34	\$20,881		\$10,963	\$31,844	35%	54%	19%	\$11,161	\$17,070	\$5,910
1	26025	590	18		\$44.34	\$26,175		\$13,742	\$39,917	37%	57%	20%	\$14,960	\$22,793	\$7,833
1	26026	614	15		\$44.34	\$27,213		\$14,287	\$41,500	43%	70%	27%	\$17,822	\$29,131	\$11,308
1	26027	305	15		\$44.34	\$13,516		\$7,096	\$20,612	43%	70%	27%	\$8,852	\$14,468	\$5,616
1	26028	468	15		\$44.34	\$20,761		\$10,900	\$31,661	43%	70%	27%	\$13,597	\$22,224	\$8,627
Subtotal:		9,221	2004		\$408,876	5%	\$214,661	\$623,536					\$208,818	\$371,792	\$162,976

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number		Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
										2012	2022	During Fee Period	2012	2022	During Fee Period
Robinson Ridge Offsite Sewer															
1	16040	179	24		\$37.30	\$6,685		\$3,510	\$10,195	37%	42%	5%	\$3,777	\$4,275	\$498
1	16041	285	24		\$37.30	\$10,628		\$5,580	\$16,208	37%	42%	5%	\$6,005	\$6,796	\$792
1	16042	434	24		\$37.30	\$16,189		\$8,499	\$24,688	37%	42%	5%	\$9,146	\$10,352	\$1,206
1	16043	319	21		\$37.30	\$11,895		\$6,245	\$18,140	37%	42%	5%	\$6,720	\$7,606	\$886
1	16044	134	21		\$37.30	\$4,990		\$2,620	\$7,610	37%	42%	5%	\$2,819	\$3,191	\$372
1	16045	202	21		\$37.30	\$7,536		\$3,956	\$11,492	37%	42%	5%	\$4,257	\$4,819	\$561
1	16046	498	18		\$37.30	\$18,575		\$9,752	\$28,327	37%	42%	5%	\$10,494	\$11,878	\$1,384
1	16047	190	18		\$37.30	\$7,077		\$3,715	\$10,792	37%	42%	5%	\$3,996	\$4,523	\$527
1	16048	443	18		\$37.30	\$16,509		\$8,667	\$25,176	37%	42%	5%	\$9,322	\$10,551	\$1,229
1	16049	383	18		\$37.30	\$14,299		\$7,507	\$21,806	36%	41%	5%	\$7,790	\$8,912	\$1,122
1	16050	76	18		\$37.30	\$2,826		\$1,484	\$4,310	36%	41%	5%	\$1,540	\$1,762	\$222
1	16051	401	18		\$37.30	\$14,950		\$7,849	\$22,799	36%	41%	5%	\$8,144	\$9,318	\$1,173
1	16052	282	18		\$37.30	\$10,503		\$5,514	\$16,017	36%	41%	5%	\$5,722	\$6,546	\$824
1	16053	442	18		\$37.30	\$16,502		\$8,664	\$25,166	34%	39%	5%	\$8,656	\$9,799	\$1,142
1	16054	379	18		\$37.30	\$14,149		\$7,428	\$21,577	34%	39%	5%	\$7,422	\$8,401	\$979
1	16055	300	18		\$37.30	\$11,208		\$5,884	\$17,092	34%	39%	5%	\$5,879	\$6,655	\$776
1	16056	253	18		\$37.30	\$9,435		\$4,953	\$14,388	34%	39%	5%	\$4,949	\$5,602	\$653
1	16057	407	18		\$37.30	\$15,164		\$7,961	\$23,125	34%	39%	5%	\$7,954	\$9,004	\$1,050
1	16058	454	18		\$37.30	\$16,926		\$8,886	\$25,812	34%	39%	5%	\$8,879	\$10,050	\$1,172
1	16059	505	18		\$37.30	\$18,830		\$9,886	\$28,716	34%	39%	5%	\$9,877	\$11,181	\$1,303
1	16060	393	18		\$37.30	\$14,646		\$7,689	\$22,335	34%	39%	5%	\$7,683	\$8,696	\$1,014
1	16061	31	18		\$37.30	\$1,145		\$601	\$1,746	34%	39%	5%	\$601	\$680	\$79
1	16062	110	18		\$37.30	\$4,096		\$2,150	\$6,246	32%	36%	4%	\$2,029	\$2,266	\$237
Subtotal:		7,098		2002		\$264,761	5%	\$139,000	\$403,763				\$143,661	\$162,863	\$19,201

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number		Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
										2012	2022	During Fee Period	2012	2022	During Fee Period
NTMWD Prosper Interceptor Sewer															
1	10126	247	42		\$20.25	\$5,004		\$2,627	\$7,631	23%	52%	29%	\$1,778	\$3,989	\$2,211
1	10127	341	42		\$20.25	\$6,906		\$3,626	\$10,532	23%	52%	29%	\$2,454	\$5,512	\$3,057
1	10128	404	42		\$20.25	\$8,189		\$4,299	\$12,488	23%	52%	29%	\$2,910	\$6,544	\$3,634
1	10129	267	42		\$20.25	\$5,405		\$2,838	\$8,243	26%	59%	33%	\$2,141	\$4,823	\$2,682
1	10130	417	42		\$20.25	\$8,444		\$4,433	\$12,877	26%	59%	33%	\$3,344	\$7,543	\$4,198
1	10131	693	42		\$20.25	\$14,041		\$7,372	\$21,413	26%	59%	33%	\$5,560	\$12,558	\$6,998
1	10132	788	24		\$20.25	\$15,969		\$8,384	\$24,353	100%	100%	0%	\$24,353	\$24,353	\$0
1	10133	589	24		\$20.25	\$11,934		\$6,265	\$18,199	100%	100%	0%	\$18,199	\$18,199	\$0
1	10134	252	24		\$20.25	\$5,105		\$2,680	\$7,785	100%	100%	0%	\$7,785	\$7,785	\$0
1	10135	352	24		\$20.25	\$7,130		\$3,743	\$10,873	100%	100%	0%	\$10,873	\$10,873	\$0
1	10136	650	24		\$20.25	\$13,170		\$6,914	\$20,084	100%	100%	0%	\$20,084	\$20,084	\$0
1	10137	617	24		\$20.25	\$12,504		\$6,565	\$19,069	100%	100%	0%	\$19,069	\$19,069	\$0
1	10138	520	24		\$20.25	\$10,539		\$5,533	\$16,072	100%	100%	0%	\$16,072	\$16,072	\$0
1	10139	775	24		\$20.25	\$15,702		\$8,244	\$23,946	100%	100%	0%	\$23,946	\$23,946	\$0
1	10140	343	24		\$20.25	\$6,951		\$3,649	\$10,600	100%	100%	0%	\$10,600	\$10,600	\$0
1	10141	368	24		\$20.25	\$7,451		\$3,912	\$11,363	100%	100%	0%	\$11,363	\$11,363	\$0
1	10142	586	24		\$20.25	\$11,868		\$6,231	\$18,099	100%	100%	0%	\$18,099	\$18,099	\$0
1	10143	298	24		\$20.25	\$6,042		\$3,172	\$9,214	100%	100%	0%	\$9,214	\$9,214	\$0
1	10144	450	24		\$20.25	\$9,109		\$4,782	\$13,891	100%	100%	0%	\$13,891	\$13,891	\$0
1	10145	452	24		\$20.25	\$9,147		\$4,802	\$13,949	90%	100%	10%	\$12,535	\$13,949	\$1,414
1	10146	318	24		\$20.25	\$6,447		\$3,385	\$9,832	95%	100%	5%	\$9,340	\$9,832	\$492
1	10147	167	24		\$20.25	\$3,377		\$1,773	\$5,150	95%	100%	5%	\$4,892	\$5,150	\$258
1	10148	478	24		\$20.25	\$9,678		\$5,081	\$14,759	95%	100%	5%	\$14,020	\$14,759	\$739
1	10149	500	24		\$20.25	\$10,125		\$5,316	\$15,441	95%	100%	5%	\$14,664	\$15,441	\$777
1	10150	614	24		\$20.25	\$12,439		\$6,530	\$18,969	95%	100%	5%	\$18,015	\$18,969	\$954
1	10151	271	24		\$20.25	\$5,490		\$2,882	\$8,372	95%	100%	5%	\$7,946	\$8,372	\$426
1	10152	773	24		\$20.25	\$15,657		\$8,220	\$23,877	98%	100%	2%	\$23,375	\$23,877	\$502
1	10153	693	24		\$20.25	\$14,028		\$7,365	\$21,393	98%	100%	2%	\$20,943	\$21,393	\$450
1	10154	197	24		\$20.25	\$4,000		\$2,100	\$6,100	98%	100%	2%	\$5,972	\$6,100	\$128
1	10155	134	24		\$20.25	\$2,721		\$1,429	\$4,150	98%	100%	2%	\$4,063	\$4,150	\$87
1	10156	735	24		\$20.25	\$14,885		\$7,815	\$22,700	98%	100%	2%	\$22,223	\$22,700	\$477
1	10157	505	24		\$20.25	\$10,234		\$5,373	\$15,607	98%	100%	2%	\$15,275	\$15,607	\$332
1	10158	481	24	\$20.25	\$9,739		\$5,113	\$14,852	100%	100%	0%	\$14,852	\$14,852	\$0	
1	10159	332	24	\$20.25	\$6,730		\$3,533	\$10,263	100%	100%	0%	\$10,263	\$10,263	\$0	
Subtotal:		15,610		2007		\$316,159	5%	\$165,986	\$482,146				\$239,582	\$246,618	\$7,036



**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity			
									2012	2022	During Fee Period	2012	2022	During Fee Period	
Westerra Stonebridge Sewer															
1	19009	13	24		\$18.00	\$225		\$118	\$343	10%	90%	80%	\$34	\$308	\$274
1	19010	72	24		\$18.00	\$1,296		\$680	\$1,976	83%	89%	6%	\$1,634	\$1,753	\$120
1	19011	144	15		\$4.80	\$689		\$362	\$1,051	83%	89%	6%	\$869	\$933	\$64
1	19012	329	15		\$4.80	\$1,578		\$828	\$2,406	83%	89%	6%	\$1,989	\$2,135	\$146
1	19013	339	15		\$4.80	\$1,628		\$855	\$2,483	83%	89%	6%	\$2,053	\$2,203	\$150
1	19014	129	15		\$4.80	\$621		\$326	\$947	83%	89%	6%	\$783	\$840	\$57
1	19015	131	15		\$4.80	\$630		\$331	\$961	83%	89%	7%	\$796	\$860	\$64
1	19016	334	15		\$4.80	\$1,602		\$841	\$2,443	83%	89%	7%	\$2,022	\$2,186	\$163
1	19017	345	15		\$4.80	\$1,654		\$868	\$2,522	83%	89%	7%	\$2,088	\$2,256	\$168
1	19018	307	15		\$4.80	\$1,476		\$775	\$2,251	83%	90%	7%	\$1,867	\$2,032	\$165
1	19019	50	15		\$4.80	\$239		\$125	\$364	83%	90%	7%	\$303	\$328	\$26
1	19020	64	15		\$4.80	\$306		\$161	\$467	83%	90%	7%	\$388	\$421	\$33
1	19021	77	15		\$4.80	\$369		\$194	\$563	83%	90%	7%	\$469	\$508	\$39
Subtotal:		2,333	2003			\$12,313	5%	\$6,464	\$18,777				\$15,295	\$16,763	\$1,469

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity			
											During Fee Period			During Fee Period	
									2012	2022		2012	2022		
Westerra Stonebridge Trunk Line															
Line H & H-2															
1	17397	344	42		\$54.00	\$18,569		\$9,749	\$28,318	100%	100%	0%	\$28,318	\$28,318	\$0
1	17398	490	30		\$54.00	\$26,462		\$13,893	\$40,355	100%	100%	0%	\$40,355	\$40,355	\$0
1	17399	451	30		\$54.00	\$24,353		\$12,785	\$37,138	100%	100%	0%	\$37,138	\$37,138	\$0
1	17400	500	30		\$54.00	\$27,000		\$14,175	\$41,175	100%	100%	0%	\$41,175	\$41,175	\$0
1	17401	10	30		\$54.00	\$540		\$284	\$824	91%	91%	0%	\$751	\$751	\$0
1	17402	480	30		\$54.00	\$25,914		\$13,605	\$39,519	100%	100%	0%	\$39,519	\$39,519	\$0
1	17403	349	30		\$54.00	\$18,857		\$9,900	\$28,757	100%	100%	0%	\$28,757	\$28,757	\$0
1	17404	260	30		\$54.00	\$14,014		\$7,357	\$21,371	100%	100%	0%	\$21,371	\$21,371	\$0
1	17405	32	30		\$54.00	\$1,751		\$919	\$2,670	100%	100%	0%	\$2,670	\$2,670	\$0
1	17406	70	30		\$54.00	\$3,803		\$1,997	\$5,800	100%	100%	0%	\$5,800	\$5,800	\$0
1	17407	157	30		\$54.00	\$8,486		\$4,455	\$12,941	100%	100%	0%	\$12,941	\$12,941	\$0
1	17408	83	30		\$30.50	\$2,533		\$1,330	\$3,863	100%	100%	0%	\$3,863	\$3,863	\$0
1	17409	37	30		\$30.50	\$1,127		\$592	\$1,719	100%	100%	0%	\$1,719	\$1,719	\$0
1	17410	229	30		\$30.50	\$6,996		\$3,673	\$10,669	100%	100%	0%	\$10,669	\$10,669	\$0
1	17411	490	30		\$30.50	\$14,945		\$7,846	\$22,791	100%	100%	0%	\$22,791	\$22,791	\$0
1	17412	210	30		\$30.50	\$6,414		\$3,367	\$9,781	100%	100%	0%	\$9,781	\$9,781	\$0
1	17413	280	30		\$30.50	\$8,528		\$4,477	\$13,005	100%	100%	0%	\$13,005	\$13,005	\$0
1	17414	245	30		\$30.50	\$7,471		\$3,922	\$11,393	100%	100%	0%	\$11,393	\$11,393	\$0
1	17415	235	30		\$30.50	\$7,168		\$3,763	\$10,931	100%	100%	0%	\$10,931	\$10,931	\$0
1	17416	474	30		\$54.00	\$25,583		\$13,431	\$39,014	100%	100%	0%	\$39,014	\$39,014	\$0
1	17417	517	30		\$54.00	\$27,936		\$14,666	\$42,602	100%	100%	0%	\$42,602	\$42,602	\$0
1	17418	490	30		\$54.00	\$26,460		\$13,892	\$40,352	100%	100%	0%	\$40,352	\$40,352	\$0
1	17420	293	30		\$54.00	\$15,796		\$8,293	\$24,089	100%	100%	0%	\$24,089	\$24,089	\$0
1	17421	179	30		\$54.00	\$9,673		\$5,078	\$14,751	100%	100%	0%	\$14,751	\$14,751	\$0
1	19000	144	24		\$54.00	\$7,789		\$4,089	\$11,878	85%	91%	6%	\$10,087	\$10,841	\$754
1	19001	377	24		\$54.00	\$20,361		\$10,690	\$31,051	12%	90%	78%	\$3,601	\$27,879	\$24,278
1	19002	129	24		\$54.00	\$6,956		\$3,652	\$10,608	12%	90%	78%	\$1,229	\$9,541	\$8,312
1	19003	490	24		\$93.00	\$45,610		\$23,945	\$69,555	12%	90%	78%	\$8,058	\$62,574	\$54,516
1	19004	490	24		\$54.00	\$26,457		\$13,890	\$40,347	12%	90%	78%	\$4,673	\$36,307	\$31,634
1	19005	490	24		\$54.00	\$26,466		\$13,895	\$40,361	12%	90%	78%	\$4,674	\$36,329	\$31,655
1	19006	490	24		\$54.00	\$26,465		\$13,894	\$40,359	10%	90%	80%	\$4,030	\$36,260	\$32,230
1	19007	430	24		\$54.00	\$23,210		\$12,185	\$35,395	10%	90%	80%	\$3,525	\$31,809	\$28,284
1	19008	237	24		\$54.00	\$12,785		\$6,712	\$19,497	10%	90%	80%	\$1,933	\$17,480	\$15,547
Subtotal:	10,183		2003		\$526,478	5%	\$276,401	\$802,879				\$545,565	\$772,775	\$227,210	

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity			
											During Fee Period			During Fee Period	
									2012	2022		2012	2022	During Fee Period	
Franklin Branch Trunk Sewer															
From North Side of Parker Creek Estates North Along Franklin Branch to U.S. 380 and East to Bois D' Arc Road															
2	16010	102	30		\$205.18	\$20,929		\$10,988	\$31,917	4%	44%	39%	\$1,295	\$13,900	\$12,605
2	16011	38	30		\$205.18	\$7,797		\$4,093	\$11,890	4%	44%	39%	\$482	\$5,178	\$4,696
2	16012	60	30		\$205.18	\$12,311		\$6,463	\$18,774	4%	44%	39%	\$762	\$8,176	\$7,415
2	16013	381	27		\$205.18	\$78,175		\$41,042	\$119,217	4%	44%	39%	\$4,838	\$51,921	\$47,083
2	16014	800	27		\$205.18	\$164,147		\$86,177	\$250,324	4%	44%	39%	\$10,158	\$109,020	\$98,862
2	16015	60	27		\$205.18	\$12,311		\$6,463	\$18,774	4%	44%	39%	\$762	\$8,175	\$7,413
2	16016	229	18		\$205.18	\$46,987		\$24,668	\$71,655	11%	57%	46%	\$8,196	\$40,818	\$32,622
2	16017	300	18		\$205.18	\$61,555		\$32,316	\$93,871	11%	57%	46%	\$10,737	\$53,474	\$42,736
2	16018	192	18		\$205.18	\$39,395		\$20,682	\$60,077	11%	57%	46%	\$6,872	\$34,223	\$27,351
2	16019	308	18		\$205.18	\$63,196		\$33,178	\$96,374	11%	57%	46%	\$11,024	\$54,899	\$43,876
2	16020	140	18		\$205.18	\$28,726		\$15,081	\$43,807	11%	57%	46%	\$5,011	\$24,955	\$19,944
2	16021	775	12		\$205.18	\$159,017		\$83,484	\$242,501	56%	66%	10%	\$135,592	\$159,060	\$23,468
2	16022	216	18		\$205.18	\$44,320		\$23,268	\$67,588	1%	40%	39%	\$861	\$27,177	\$26,316
Subtotal:		3,601	2005			\$738,865	5%	\$387,903	\$1,126,769				\$196,590	\$590,976	\$394,387
Airport Sewer Phase II															
From northeast of termination of Industrial Blvd to North McKinney Interceptor															
2	20300	25	15		\$149.89	\$3,816		\$2,003	\$5,819	79%	100%	21%	\$4,576	\$5,819	\$1,243
2	20302	43	15		\$149.89	\$6,454		\$3,388	\$9,842	79%	100%	21%	\$7,740	\$9,842	\$2,102
2	20304	438	15		\$149.89	\$65,671		\$34,477	\$100,148	79%	100%	21%	\$78,763	\$100,148	\$21,385
2	20306	500	15		\$149.89	\$74,974		\$39,361	\$114,335	79%	100%	21%	\$89,921	\$114,335	\$24,414
2	20308	500	15		\$149.89	\$74,882		\$39,313	\$114,195	79%	100%	21%	\$89,811	\$114,195	\$24,384
2	20310	500	15		\$149.89	\$75,012		\$39,381	\$114,393	79%	100%	21%	\$89,966	\$114,393	\$24,427
2	20312	183	15		\$149.89	\$27,499		\$14,437	\$41,936	79%	100%	21%	\$32,981	\$41,936	\$8,955
2	20314	498	15		\$149.89	\$74,701		\$39,218	\$113,919	79%	100%	21%	\$89,593	\$113,919	\$24,326
2	20316	499	15		\$149.89	\$74,768		\$39,253	\$114,021	79%	100%	21%	\$89,674	\$114,021	\$24,347
2	20318	523	15		\$149.89	\$78,400		\$41,160	\$119,560	79%	100%	21%	\$94,030	\$119,560	\$25,530
2	20320	296	15		\$149.89	\$44,350		\$23,284	\$67,634	79%	100%	21%	\$53,192	\$67,634	\$14,442
2	20322	532	15		\$149.89	\$79,816		\$41,903	\$121,719	79%	100%	21%	\$95,728	\$121,719	\$25,991
2	20324	357	15		\$149.89	\$53,464		\$28,069	\$81,533	79%	100%	21%	\$64,123	\$81,533	\$17,410
2	20326	282	15		\$149.89	\$42,255		\$22,184	\$64,439	79%	100%	21%	\$50,739	\$64,439	\$13,700
2	20328	445	15		\$149.89	\$66,709		\$35,022	\$101,731	79%	100%	21%	\$80,368	\$101,731	\$21,363
2	20330	24	15		\$149.89	\$3,667		\$1,925	\$5,592	79%	100%	21%	\$4,398	\$5,592	\$1,194
Subtotal:		5,647	2005			\$846,438	5%	\$444,378	\$1,290,816				\$1,015,603	\$1,290,816	\$275,213

**TABLE NO. 16**  
**Existing Impact Fee Wastewater Lines**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	Debt Service Utilizing Simple	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity			
									2012	2022	During Fee Period	2012	2022	During Fee Period	
Collin McKinney Pkwy. & McKinney Place Drive Sanitary Sewer															
Along Collin McKinney Pkwy. From McKinney Place Drive to Lake Forest Drive															
1 50170	402	15		\$114.35	\$45,976		\$24,137	\$70,113	63%	100%	37%	\$44,507	\$70,113	\$25,606	
1 50172	398	15		\$114.35	\$45,504		\$23,890	\$69,394	63%	100%	37%	\$44,050	\$69,394	\$25,344	
1 50174	385	15		\$114.35	\$44,055		\$23,129	\$67,184	66%	100%	34%	\$44,400	\$67,184	\$22,784	
Subtotal:	1,185		2008		\$135,535	5%	\$71,156	\$206,691				\$132,957	\$206,691	\$73,734	
Lake Forest Drive & SH 121 Offsite Utilities															
Along SH 121 North ROW from McKinney Place Drive to Lake Forest Drive															
1 50160	226	21		\$538.52	\$121,973		\$64,036	\$186,009	41%	53%	11%	\$76,716	\$97,734	\$21,018	
1 50162	226	21		\$538.52	\$121,536		\$63,806	\$185,342	41%	53%	11%	\$76,440	\$97,383	\$20,943	
1 50164	223	21		\$538.52	\$120,278		\$63,146	\$183,424	41%	53%	11%	\$75,649	\$96,375	\$20,726	
1 50166	420	21		\$538.52	\$226,023		\$118,662	\$344,685	41%	53%	11%	\$142,158	\$181,106	\$38,947	
Subtotal:	1,095		2008		\$589,810	5%	\$309,650	\$899,460				\$370,963	\$472,598	\$101,634	
Existing Sewer Line CIP Total															
	196,693				\$13,313,208		\$6,989,450	\$20,302,674				\$15,248,909	\$17,382,293	\$2,133,385	

Notes:

1 - City Participate in Cost Oversize

2 - City Initiated and Funded

**TABLE NO. 17**  
**Proposed Impact Fee Wastewater Lines**

*Birkhoff, Hendricks Carter, L.L.P.*

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.) *	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(% ) Utilized Capacity			(\$ ) Utilized Capacity		
									2012	2022	During Fee Period	2012	2022	During Fee Period
Westerra Stonebridge - Sanitary Sewer Trunk Line - Line "H-3"														
1 19059 *	74	24		\$96.00	\$7,087		\$3,721	\$10,808	0%	88%	88%	\$0	\$9,541	\$9,541
1 19060 *	531	24		\$96.00	\$50,958		\$26,753	\$77,711	0%	89%	89%	\$0	\$68,863	\$68,863
1 19063 *	34	21		\$72.00	\$2,462		\$1,292	\$3,754	0%	90%	90%	\$0	\$3,369	\$3,369
1 19064 *	341	21		\$72.00	\$24,558		\$12,893	\$37,451	0%	88%	88%	\$0	\$33,009	\$33,009
1 19066 *	498	18		\$48.00	\$23,908		\$12,551	\$36,459	0%	95%	95%	\$0	\$34,699	\$34,699
1 19068 *	411	18		\$48.00	\$19,743		\$10,365	\$30,108	0%	98%	98%	\$0	\$29,579	\$29,579
1 19070 *	508	18		\$48.00	\$24,375		\$12,797	\$37,172	0%	99%	99%	\$0	\$36,868	\$36,868
1 19071 *	63	21		\$72.00	\$4,570		\$2,399	\$6,969	0%	63%	63%	\$0	\$4,375	\$4,375
1 19072 *	219	21		\$72.00	\$15,742		\$8,265	\$24,007	0%	53%	53%	\$0	\$12,810	\$12,810
1 19074 *	159	21		\$72.00	\$11,477		\$6,025	\$17,502	0%	53%	53%	\$0	\$9,339	\$9,339
1 19076 *	490	21		\$72.00	\$35,250		\$18,506	\$53,756	0%	53%	53%	\$0	\$28,684	\$28,684
1 19078 *	453	21		\$72.00	\$32,605		\$17,118	\$49,723	0%	53%	53%	\$0	\$26,533	\$26,533
1 19080 *	441	21		\$72.00	\$31,769		\$16,679	\$48,448	0%	53%	53%	\$0	\$25,852	\$25,852
1 19082 *	481	21		\$72.00	\$34,650		\$18,191	\$52,841	0%	53%	53%	\$0	\$28,196	\$28,196
1 19084 *	182	21		\$72.00	\$13,087		\$6,871	\$19,958	0%	53%	53%	\$0	\$10,650	\$10,650
1 19086 *	204	21		\$72.00	\$14,689		\$7,712	\$22,401	0%	53%	53%	\$0	\$11,953	\$11,953
1 19088 *	157	21		\$72.00	\$11,276		\$5,920	\$17,196	0%	53%	53%	\$0	\$9,176	\$9,176
1 19090 *	347	21		\$72.00	\$24,950		\$13,099	\$38,049	0%	53%	53%	\$0	\$20,303	\$20,303
1 19092 *	383	18		\$48.00	\$18,374		\$9,647	\$28,021	0%	53%	53%	\$0	\$14,952	\$14,952
1 19094 *	138	18		\$48.00	\$6,615		\$3,473	\$10,088	0%	53%	53%	\$0	\$5,383	\$5,383
1 19096 *	113	18		\$48.00	\$5,417		\$2,844	\$8,261	0%	53%	53%	\$0	\$4,408	\$4,408
1 19098 *	326	18		\$48.00	\$15,652		\$8,218	\$23,870	0%	53%	53%	\$0	\$12,737	\$12,737
1 19102 *	389	18		\$48.00	\$18,682		\$9,808	\$28,490	0%	40%	40%	\$0	\$11,290	\$11,290
1 19104 *	230	18		\$48.00	\$11,051		\$5,802	\$16,853	0%	40%	40%	\$0	\$6,679	\$6,679
1 19106 *	179	18		\$48.00	\$8,598		\$4,514	\$13,112	0%	40%	40%	\$0	\$5,196	\$5,196
1 19108 *	421	15		\$24.00	\$10,099		\$5,302	\$15,401	0%	40%	40%	\$0	\$6,103	\$6,103
1 19110 *	229	15		\$24.00	\$5,495		\$2,885	\$8,380	0%	40%	40%	\$0	\$3,321	\$3,321
1 19112 *	195	15		\$24.00	\$4,679		\$2,456	\$7,135	0%	40%	40%	\$0	\$2,827	\$2,827
1 19114 *	234	15		\$24.00	\$5,619		\$2,950	\$8,569	0%	40%	40%	\$0	\$3,396	\$3,396
1 19116 *	111	15		\$24.00	\$2,667		\$1,400	\$4,067	0%	40%	40%	\$0	\$1,612	\$1,612
1 19118 *	236	15		\$24.00	\$5,654		\$2,968	\$8,622	0%	0%	0%	\$0	\$0	\$0
1 19120 *	156	15		\$24.00	\$3,742		\$1,965	\$5,707	0%	87%	87%	\$0	\$4,961	\$4,961
1 19122 *	194	15		\$24.00	\$4,656		\$2,444	\$7,100	0%	87%	87%	\$0	\$6,172	\$6,172
1 19124 *	116	15		\$24.00	\$2,789		\$1,464	\$4,253	0%	87%	87%	\$0	\$3,697	\$3,697
1 19126 *	59	15		\$24.00	\$1,415		\$743	\$2,158	0%	87%	87%	\$0	\$1,876	\$1,876
1 19128 *	109	15		\$24.00	\$2,610		\$1,370	\$3,980	0%	87%	87%	\$0	\$3,460	\$3,460
1 19130 *	149	15		\$24.00	\$3,586		\$1,882	\$5,468	0%	87%	87%	\$0	\$4,753	\$4,753
1 19132 *	177	15		\$24.00	\$4,256		\$2,235	\$6,491	0%	87%	87%	\$0	\$5,643	\$5,643
1 19134 *	358	12		\$0.00	\$0		\$0	\$0	0%	87%	87%	\$0	\$0	\$0
1 19136 *	61	12		\$0.00	\$0		\$0	\$0	0%	87%	87%	\$0	\$0	\$0
1 19138 *	448	12		\$0.00	\$0		\$0	\$0	0%	87%	87%	\$0	\$0	\$0
1 19140 *	328	12		\$0.00	\$0		\$0	\$0	0%	87%	87%	\$0	\$0	\$0
1 19142 *	248	12		\$0.00	\$0		\$0	\$0	0%	87%	87%	\$0	\$0	\$0
1 FM19008 *	742	20		\$48.00	\$35,636		\$18,709	\$54,345	0%	44%	44%	\$0	\$23,689	\$23,689
1 FM19010 *	1,422	18		\$48.00	\$68,242		\$35,827	\$104,069	0%	44%	44%	\$0	\$45,363	\$45,363
Subtotal:	13,344		2013		\$628,692	5%	\$330,063	\$958,755				\$0	\$581,317	\$581,317

**TABLE NO. 17**  
**Proposed Impact Fee Wastewater Lines**

*Birkhoff, Hendricks Carter, L.L.P.*

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.) *	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(% Utilized Capacity)			(\$ Utilized Capacity)		
									2012	2022	During Fee Period	2012	2022	During Fee Period
Trinity Falls Offsite Wastewater Line														
1 25000 *	19	36		\$180.00	\$3,442		\$1,807	\$5,249	0%	54%	54%	\$0	\$2,817	\$2,817
1 25002 *	597	36		\$180.00	\$107,504		\$56,440	\$163,944	0%	53%	53%	\$0	\$87,229	\$87,229
1 25004 *	87	36		\$180.00	\$15,595		\$8,187	\$23,782	0%	53%	53%	\$0	\$12,651	\$12,651
1 25006 *	79	36		\$180.00	\$14,310		\$7,513	\$21,823	0%	53%	53%	\$0	\$11,575	\$11,575
1 25008 *	265	36		\$180.00	\$47,725		\$25,056	\$72,781	0%	53%	53%	\$0	\$38,598	\$38,598
1 25010 *	609	36		\$180.00	\$109,675		\$57,579	\$167,254	0%	53%	53%	\$0	\$88,699	\$88,699
1 25012 *	573	36		\$180.00	\$103,115		\$54,135	\$157,250	0%	53%	53%	\$0	\$83,403	\$83,403
1 25014 *	577	36		\$180.00	\$103,888		\$54,541	\$158,429	0%	53%	53%	\$0	\$84,019	\$84,019
1 25016 *	570	36		\$180.00	\$102,597		\$53,863	\$156,460	0%	53%	53%	\$0	\$82,946	\$82,946
1 25018 *	531	36		\$180.00	\$95,666		\$50,225	\$145,891	0%	54%	54%	\$0	\$78,912	\$78,912
1 25020 *	798	36		\$180.00	\$143,717		\$75,451	\$219,168	0%	54%	54%	\$0	\$118,988	\$118,988
1 25022 *	278	36		\$180.00	\$50,121		\$26,314	\$76,435	0%	54%	54%	\$0	\$41,486	\$41,486
1 25024 *	317	36		\$180.00	\$57,128		\$29,992	\$87,120	0%	55%	55%	\$0	\$48,331	\$48,331
1 25026 *	521	36		\$180.00	\$93,692		\$49,188	\$142,880	0%	55%	55%	\$0	\$79,253	\$79,253
1 25028 *	410	36		\$180.00	\$73,748		\$38,718	\$112,466	0%	55%	55%	\$0	\$62,366	\$62,366
1 25030 *	674	36		\$180.00	\$121,367		\$63,718	\$185,085	0%	55%	55%	\$0	\$102,620	\$102,620
1 25032 *	856	36		\$180.00	\$154,124		\$80,915	\$235,039	0%	55%	55%	\$0	\$130,280	\$130,280
1 25034 *	789	36		\$180.00	\$141,990		\$74,545	\$216,535	0%	55%	55%	\$0	\$119,989	\$119,989
1 25036 *	717	36		\$180.00	\$129,108		\$67,782	\$196,890	0%	61%	61%	\$0	\$120,114	\$120,114
1 25038 *	279	36		\$180.00	\$50,235		\$26,374	\$76,609	0%	61%	61%	\$0	\$46,736	\$46,736
1 25040 *	607	36		\$180.00	\$109,349		\$57,408	\$166,757	0%	61%	61%	\$0	\$101,731	\$101,731
1 25042 *	638	36		\$180.00	\$114,875		\$60,309	\$175,184	0%	61%	61%	\$0	\$106,903	\$106,903
1 25044 *	812	36		\$180.00	\$146,223		\$76,767	\$222,990	0%	61%	61%	\$0	\$136,076	\$136,076
1 25046 *	840	36		\$180.00	\$151,128		\$79,342	\$230,470	0%	61%	61%	\$0	\$140,640	\$140,640
1 25048 *	586	36		\$180.00	\$105,568		\$55,423	\$160,991	0%	63%	63%	\$0	\$102,163	\$102,163
1 25050 *	877	36		\$180.00	\$157,885		\$82,890	\$240,775	0%	63%	63%	\$0	\$152,794	\$152,794
Subtotal:	13,910		2013		\$2,503,778	5%	\$1,314,482	\$3,818,260				\$0	\$2,181,319	\$2,181,319

**TABLE NO. 17**  
**Proposed Impact Fee Wastewater Lines**

*Birkhoff, Hendricks Carter, L.L.P.*

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.) *	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$) Utilized Capacity				
									2012	2022	During Fee Period	2012	2022	During Fee Period		
Clemons Creek Trunk Sewer																
1	CC100	*	1,423	27		\$120.00	\$170,789		\$89,664	\$260,453	0%	13%	13%	\$0	\$33,526	\$33,526
1	CC102	*	3,869	24		\$96.00	\$371,457		\$195,015	\$566,472	0%	6%	6%	\$0	\$34,950	\$34,950
1	CC103	*	1,196	24		\$96.00	\$114,803		\$60,272	\$175,075	0%	4%	4%	\$0	\$6,548	\$6,548
1	CC104	*	2,458	21		\$72.00	\$176,990		\$92,920	\$269,910	0%	0%	0%	\$0	\$0	\$0
Subtotal:			8,947	2014			\$834,039	5%	\$437,871	\$1,271,910				\$0	\$75,024	\$75,024
Honey Creek Trunk Sewer																
1	HC122A	*	19	36		\$180.00	\$3,330		\$1,748	\$5,078	0%	55%	55%	\$0	\$2,790	\$2,790
1	HC123	*	1,848	42		\$240.00	\$443,402		\$232,786	\$676,188	0%	6%	6%	\$0	\$37,931	\$37,931
1	HC123A	*	2,752	36		\$180.00	\$495,432		\$260,102	\$755,534	0%	2%	2%	\$0	\$16,012	\$16,012
1	HC124	*	2,129	36		\$180.00	\$383,287		\$201,226	\$584,513	0%	2%	2%	\$0	\$12,635	\$12,635
1	HC157	*	876	18		\$48.00	\$42,041		\$22,071	\$64,112	0%	34%	34%	\$0	\$21,513	\$21,513
Subtotal:			19	2015			\$1,367,493	5%	\$717,933	\$2,085,426				\$0	\$90,881	\$90,881
Big Branch Trunk Sewer																
1	BB100	*	4,878	24		\$96.00	\$468,264		\$245,839	\$714,103	0%	2%	2%	\$0	\$17,333	\$17,333
Subtotal:			4,878	2016			\$468,264	5%	\$245,839	\$714,103				\$0	\$17,333	\$17,333
Upper East Fork Trunk Sewer																
1	UE106	*	1,870	30		\$144.00	\$269,222		\$141,342	\$410,564	0%	63%	63%	\$0	\$260,540	\$260,540
1	UE108	*	3,475	21		\$72.00	\$250,178		\$131,343	\$381,521	0%	68%	68%	\$0	\$260,157	\$260,157
1	UE110	*	2,593	21		\$72.00	\$186,673		\$98,003	\$284,676	0%	65%	65%	\$0	\$184,386	\$184,386
1	UE112	*	2,747	15		\$24.00	\$65,920		\$34,608	\$100,528	0%	58%	58%	\$0	\$58,304	\$58,304
1	UE116	*	3,474	15		\$24.00	\$83,371		\$43,770	\$127,141	0%	65%	65%	\$0	\$82,349	\$82,349
Subtotal:			14,157	2018			\$855,365	5%	\$449,066	\$1,304,431				\$0	\$845,736	\$845,736
Franklin Branch Trunk Sewer																
1	FB100	*	883	18		\$48.00	\$42,361		\$22,239	\$64,600	0%	40%	40%	\$0	\$25,678	\$25,678
1	FB102	*	5,010	18		\$48.00	\$240,470		\$126,247	\$366,717	0%	36%	36%	\$0	\$132,061	\$132,061
1	FB104	*	5,603	15		\$24.00	\$134,471		\$70,597	\$205,068	0%	29%	29%	\$0	\$60,403	\$60,403
Subtotal:			883	2018			\$417,301	5%	\$219,083	\$636,384				\$0	\$218,142	\$218,142

**TABLE NO. 17**  
**Proposed Impact Fee Wastewater Lines**

*Birkhoff, Hendricks Carter, L.L.P.*

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.) *	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(% ) Utilized Capacity			(\$ ) Utilized Capacity			
									2012	2022	During Fee Period	2012	2022	During Fee Period	
Stonebridge Lift Station No. 1 Abandonment Sanitary Sewer															
1	UW105B *	3,000	24		\$96.00	\$288,000		\$151,200	\$439,200	0%	90%	90%	\$0	\$393,421	\$393,421
2	UW105A	2,550	24		\$288.00	\$734,400		\$385,560	\$1,119,960	0%	90%	90%	\$0	\$1,003,223	\$1,003,223
Subtotal:		5,550		2020		\$1,022,400	5%	\$536,760	\$1,559,160				\$0	\$1,396,644	\$1,396,644
Stover Creek Trunk Sewer															
1	SC100 *	2,585	30		\$144.00	\$372,181		\$195,395	\$567,576	0%	18%	18%	\$0	\$100,752	\$100,752
1	SC101 *	2,917	27		\$120.00	\$350,083		\$183,793	\$533,876	0%	15%	15%	\$0	\$80,257	\$80,257
1	SC102 *	5,461	27		\$120.00	\$655,338		\$344,053	\$999,391	0%	13%	13%	\$0	\$129,901	\$129,901
Subtotal:		10,963		2022		\$1,377,601	5%	\$723,241	\$2,100,842				\$0	\$310,910	\$310,910
Upper Wilson Creek Trunk Sewer															
1	UW108 *	6,581	15		\$24.00	\$157,933		\$82,915	\$240,848	0%	24%	24%	\$0	\$57,161	\$57,161
Subtotal:		6,581		2022		\$157,933	5%	\$82,915	\$240,848				\$0	\$57,161	\$57,161
NTMWD Prosper/McKinney Parallel Interceptor															
1	WC284 *	269	36		\$180.00	\$48,342		\$25,379	\$73,721	0%	68%	68%	\$0	\$49,885	\$49,885
1	WC286 *	341	36		\$180.00	\$61,357		\$32,212	\$93,569	0%	68%	68%	\$0	\$63,356	\$63,356
1	WC288 *	404	36		\$180.00	\$72,788		\$38,214	\$111,002	0%	68%	68%	\$0	\$75,192	\$75,192
1	WC290 *	267	30		\$144.00	\$38,429		\$20,175	\$58,604	0%	68%	68%	\$0	\$39,742	\$39,742
1	WC292 *	417	30		\$144.00	\$60,036		\$31,519	\$91,555	0%	68%	68%	\$0	\$62,117	\$62,117
1	WC294 *	693	30		\$144.00	\$99,824		\$52,408	\$152,232	0%	68%	68%	\$0	\$103,367	\$103,367
1	WC294A *	14	42		\$240.00	\$3,397		\$1,784	\$5,181	0%	12%	12%	\$0	\$604	\$604
1	WC296 *	788	42		\$240.00	\$189,232		\$99,347	\$288,579	0%	46%	46%	\$0	\$132,204	\$132,204
1	WC298 *	589	42		\$240.00	\$141,417		\$74,244	\$215,661	0%	46%	46%	\$0	\$99,178	\$99,178
1	WC300 *	252	42		\$240.00	\$60,470		\$31,747	\$92,217	0%	46%	46%	\$0	\$42,168	\$42,168
1	WC302 *	352	42		\$240.00	\$84,475		\$44,349	\$128,824	0%	46%	46%	\$0	\$59,034	\$59,034
1	WC304 *	650	42		\$240.00	\$156,075		\$81,939	\$238,014	0%	46%	46%	\$0	\$109,131	\$109,131
1	WC306 *	617	42		\$240.00	\$148,169		\$77,788	\$225,957	0%	46%	46%	\$0	\$103,703	\$103,703
1	WC308 *	520	42		\$240.00	\$124,880		\$65,562	\$190,442	0%	46%	46%	\$0	\$87,547	\$87,547
1	WC310 *	775	36		\$180.00	\$139,541		\$73,259	\$212,800	0%	38%	38%	\$0	\$81,515	\$81,515
1	WC312 *	343	36		\$180.00	\$61,778		\$32,433	\$94,211	0%	38%	38%	\$0	\$36,089	\$36,089
1	WC314 *	368	36		\$180.00	\$66,208		\$34,759	\$100,967	0%	38%	38%	\$0	\$38,676	\$38,676
1	WC316 *	586	36		\$180.00	\$105,467		\$55,370	\$160,837	0%	38%	38%	\$0	\$60,513	\$60,513
1	WC317 *	14	36		\$180.00	\$2,552		\$1,340	\$3,892	0%	43%	43%	\$0	\$1,673	\$1,673
1	WC318 *	298	36		\$180.00	\$53,713		\$28,200	\$81,913	0%	38%	38%	\$0	\$30,772	\$30,772
1	WC320 *	450	36		\$180.00	\$80,959		\$42,504	\$123,463	0%	38%	38%	\$0	\$46,379	\$46,379
Subtotal:		9,009		2017		\$1,799,107	5%	\$944,532	\$2,743,639				\$0	\$1,322,845	\$1,322,845
Sewer Line CIP Total		88,240				\$11,431,973		\$6,001,785	\$17,433,758				\$0	\$7,097,312	\$7,097,312

Notes: 1 - City Participate in Cost Oversize

2 - City Initiated and Funded

\* Average Unit costs are based in 2012 dollars unless otherwise indicated and includes 20% for engineering, surveying & QA testing



**TABLE NO. 18**  
**Proposed Wastewater Lift Station Facilities**

Pump Station Improvements	Year Const.	Projected Capacity (MGD)	Pump Station Cost (\$)				Capacity Utilized (%)			Capacity Utilized (\$)		
			Const.	* Engineering & Testing	20 Year Debt Service @ 5% Simple Interest	Total 20 Yr. Project Cost \$	2012	2022	In The CRF Period	2012	2022	In The CRF Period
Westerra Stonebridge - Lift Stations (On U.S. 380, West of Custer Rd. & East of Independence Pkwy.)												
Stonebridge Lift Station No. 2	2013	4.9	\$ 314,249	\$ 31,425	\$ 181,479	\$ 527,153	0.0%	60.0%	60.0%	\$ -	\$ 316,292	\$ 316,292
Stonebridge Lift Station No. 3	2013	4.4	\$ 345,544	\$ 34,554	\$ 199,551	\$ 579,649	0.0%	50.0%	50.0%	\$ -	\$ 289,824	\$ 289,824
Total			\$ 659,793	\$ 65,979	\$ 381,030	\$ 1,106,802				\$ -	\$ 606,116	\$ 606,116

\* 10% of Construction Assumed for Engineering and Testing

(1) Estimated Cost Based on Actual Bid Price

## F. CALCULATION OF MAXIMUM IMPACT FEES - WATER & WASTEWATER

The **Water System** impact fee for a ¾" meter is calculated as follows:

Maximum Impact Fee =	$\frac{\text{Eligible Existing Facility Cost} + \text{Eligible Proposed Facility Cost}}{\text{Number of New Living Unit Equivalent over the Next 10-Years}}$		
=	$\frac{\$30,599,144}{33,711}$	+	$\frac{\$65,017,105}{33,711}$
		=	$\frac{\$95,616,249}{33,711}$
Calculated Water Maximum Impact Fee =	\$2,836.33 *		
* Maximum Allowable Water Impact Fee is 50% of the Calculated Water Maximum Impact Fee			
<b>Maximum Assessable Water Impact Fee =</b>	<b>\$2,836.33</b>	<b>X 50% =</b>	<b>\$1,418.17</b>

The **Wastewater System** impact fee is calculated as follows:

Maximum Impact Fee =	$\frac{\text{Eligible Existing Facility Cost} + \text{Eligible Proposed Facility Cost}}{\text{Number of New Living Unit Equivalent over the Next 10-Years}}$		
=	$\frac{\$2,133,385}{29,256}$	+	$\frac{\$8,049,363}{29,256}$
		=	$\frac{\$10,182,748}{29,256}$
Calculated Water Maximum Impact Fee =	\$348.05 *		
* Maximum Allowable Water Impact Fee is 50% of the Calculated Water Maximum Impact Fee			
<b>Maximum Assessable Wastewater Impact Fee =</b>	<b>\$348.05</b>	<b>X 50% =</b>	<b>\$174.03</b>

Chapter 395, of the Local Government Code allows the maximum impact fee to be charged if revenues from Future Ad Valorem Taxes, and water and sewer bills are included as a credit in the analysis. If not, the Act allows the maximum assessable fee to be set at 50% of the calculated maximum fee. The maximum impact fees for the water and wastewater systems are calculated separately by dividing the cost of the capital improvements or facility expansions necessitated and attributable to new development in the Service Area within the ten year period by the number of living units anticipated to be added to City within the ten year period. To simplify collection, we recommend the fee remain fixed throughout the 5-year period, unless changed by Council.

**Table No. 19** summarizes the per service unit equivalent maximum assessable impact fee that can be charged based on the calculated 50% credit above.

**TABLE NO. 19****Maximum Assessable Water & Wastewater Impact Fee****Maximum Assessable Water Impact Fee per Living Unit Equivalent: \$1,418.17****Maximum Assessable Wastewater Impact Fee per Living Unit Equivalent: \$174.03**

Typical Land Use	Meter Type	Meter Size	Living Unit Equivalent	Max. Assessable Impact		Total
				Water	Wastewater	
Single Family Residential	Simple	3/4"	1.0	\$ 1,418.17	\$ 174.03	\$ 1,592.19
Single Family Residential	Simple	1"	1.7	\$ 2,363.61	\$ 290.04	\$ 2,653.65
Single Family Residential	Simple	1-1/2"	3.3	\$ 4,727.22	\$ 580.09	\$ 5,307.31
Single Family Residential	Simple	2"	5.3	\$ 7,563.55	\$ 928.14	\$ 8,491.69
Comm./Retail	Compound	2"	5.3	\$ 7,563.55	\$ 928.14	\$ 8,491.69
Comm./Retail/ Irrigation	Turbine	2"	10.7	\$ 15,127.10	\$ 1,856.28	\$ 16,983.38
Comm./Retail/ Multi Family	Compound	3"	10.7	\$ 15,127.10	\$ 1,856.28	\$ 16,983.38
Comm./Retail/ Irrigation/ Multi Family	Turbine	3"	23.3	\$ 33,090.52	\$ 4,060.61	\$ 37,151.14
Comm./Retail/ Multi Family	Compound	4"	16.7	\$ 23,636.09	\$ 2,900.44	\$ 26,536.53
Comm./Retail/ Irrigation/ Multi Family	Turbine	4"	43.3	\$ 61,453.83	\$ 7,541.14	\$ 68,994.97
Industrial	Compound	6"	33.3	\$ 47,272.18	\$ 5,800.88	\$ 53,073.05
Industrial/ Irrigation	Turbine	6"	93.3	\$132,362.10	\$ 16,242.45	\$148,604.55
Industrial	Compound	8"	53.3	\$ 75,635.48	\$ 9,281.40	\$ 84,916.89
Industrial/ Irrigation	Turbine	8"	160.0	\$226,906.45	\$ 27,844.21	\$254,750.66
Industrial/ Irrigation	Turbine	10"	233.3	\$330,905.24	\$ 40,606.13	\$371,511.38
Industrial	Turbine	12"	293.3	\$415,995.16	\$ 51,047.71	\$467,042.87



# **2012 -2022 WATER & WASTEWATER IMPACT FEE UPDATE**

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**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**

**AUGUST 2013**