

CITY OF EL PASO, TEXAS
AGENDA ITEM DEPARTMENT HEAD'S SUMMARY FORM

DEPARTMENT: **Development Services**

AGENDA DATE: **May 12, 2009 (6:00 PM or later)**

CONTACT PERSON/PHONE: **John Neal, (915) 541-4285**

DISTRICT(S) AFFECTED: **All**

SUBJECT:

An Ordinance adopting impact fees for water and wastewater facilities.

BACKGROUND / DISCUSSION:

See attached ordinance. This Ordinance was adopted on Introduction May 5, 2009.

On March 24, 2009 the City Council adopted the land use assumptions and capital improvements plan necessary for impact fees. A public hearing as required in the Texas Local Government Code Chapter 395 precedes this item. Also attached is the Water and Wastewater Impact Fee Report- Addendum dated March 26, 2009.

PRIOR COUNCIL ACTION:

See above.

AMOUNT AND SOURCE OF FUNDING:

N/A

BOARD / COMMISSION ACTION:

Capital Improvements Advisory Committee comments have been made and are attached.

*******REQUIRED AUTHORIZATION*******

LEGAL: (if required) _____ **FINANCE:** (if required) N/A _____

DEPARTMENT HEAD: _____

APPROVED FOR AGENDA: _____

CITY MANAGER: Patricia D. Adauto, Deputy City Manager **DATE:** May 5, 2009 _____

ORDINANCE NO. _____

AN ORDINANCE ADOPTING IMPACT FEES FOR WATER AND WASTEWATER FACILITIES, ESTABLISHING IMPACT FEE SERVICE AREAS, PROVIDING FOR ASSESSMENT AND COLLECTION OF IMPACT FEES; PROVIDING FOR ACCOUNTS FOR IMPACT FEES AND USE OF FUNDS IN THESE ACCOUNTS; PROVIDING FOR APPEALS; AND PROVIDING FOR OTHER PROVISIONS REQUIRED UNDER STATE LAW; INCLUDING PROCEDURAL PROVISIONS; AND AMENDING TITLE 15 (PUBLIC SERVICES) OF THE EL PASO CITY CODE TO ADD A CHAPTER ON IMPACT FEES WHICH SHALL CODIFY THIS ORDINANCE.

WHEREAS, Chapter 395 (Impact Fee Statute) of the Texas Local Government Code provides for the establishment and collection of impact fees by Texas municipalities and mandates the specific process Texas municipalities must take in order to adopt impact fees; and,

WHEREAS, the City of El Paso desires to adopt impact fees in accordance with the provisions of Chapter 395 (Impact Fee Statute) of the Texas Local Governments; and,

WHEREAS, the Impact Fee Statute requires the City of El Paso to provide for a capital improvements plan to be developed by qualified professionals using generally accepted engineering and planning practices in accordance with the Impact Fee Statute; and,

WHEREAS, the Impact Fee Statute required the City Council to appoint a Capital Improvements Advisory Committee prior to holding the public hearing and such Committee was appointed on October 28, 2008; and,

WHEREAS, the City completed the process required for the preparation of the Land Use Assumption Report, Capital Improvements Plan, and Impact Fee pursuant to the requirements of Local Government Code, Chapter 395 and provided the capital improvements plan and land use assumptions to the City; and,

WHEREAS, the capital improvements plan and land use assumptions were provided to the Capital Improvements Advisory Committee and the Committee reviewed the documents and provided comments to the documents before the fifth business day before the public hearing on whether to adopt the capital improvements plan and land use assumptions; and,

WHEREAS, a public hearing was held on March 24, 2009 and members of the public were allowed to appear at the hearing and present evidence for or against the land use assumptions and capital improvements plan in accordance with the provisions of the Impact Fee Statute and after conducting the hearing the City Council adopted the land use assumptions, capital improvements plan and service areas; and,

WHEREAS, as a part of the process of adopting an impact fee under the Texas Local Government Code, Chapter 395 (Impact Fee Statute), the City Council must hold a public hearing to consider the adoption of an impact fee; and,

WHEREAS, prior to conducting the public hearing to consider the adoption of impact fees, the Capital Improvements Advisory Committee reviewed the documents and provided

comments before the fifth business day before the public hearing on whether to adopt impact fees; and,

WHEREAS, a public hearing was held on May 12, 2009 and members of the public were allowed to appear at the hearing and present evidence for or against the adoption of impact fees and after conducting the hearing the City Council desired to adopt impact fees for water and wastewater;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

Section 1. That the findings and recitations set out in the preambles to this Ordinance are found to be true and correct, and they are hereby adopted by the City Council of the City of El Paso and made a part of this Ordinance for all purposes.

Section 2. That the City Council hereby adopts the water and wastewater impact fees as set forth in this Ordinance. This ordinance shall be known, and may be cited, as the Impact Fee Ordinance.

Section 3. That Title 15 (Public Services), of the El Paso City Code shall be amended to add the following Chapter:

15.20 Water and Wastewater Impact Fees

15.20.010 Short Title. This ordinance and its subsequent codification shall be known and may be cited as the City of El Paso Impact Fee Ordinance.

15.20.020 Purpose. The purpose of this Chapter is to assure the provision of adequate water and wastewater to serve new development in the City by requiring each new development to contribute payments towards its share of the costs of the facilities necessitated by and attributable to the new development.

15.20.030 Authority. This ordinance is adopted pursuant to Texas Local Government Code Chapter 395. The provisions of this ordinance shall not be construed to limit the power of the City to utilize other methods authorized under State law or pursuant to other City powers to accomplish the purposes set forth herein, either in substitution or in conjunction with this ordinance.

15.20.040 Definitions.

The following definitions apply to this Chapter:

A. Advisory committee. The capital improvements advisory committee on water and wastewater impact fees designated and appointed by the City Council in accordance with Local Government Code Chapter 395.

B. Capital improvement. A water supply, treatment and distribution facilities or a wastewater collection and treatment facilities, with a life expectancy of three or more years, to be owned and operated by or on behalf of the City whether or not located in the service area.

C. Capital improvements plan. The plan adopted by the City, as may be amended from time to time, that identifies water and wastewater capital improvements or facility expansions and

their associated costs which are necessitated by and attributable to new development and will be financed in whole or in part through water and wastewater impact fees imposed under this ordinance.

D. Facility expansion. The expansion of the capacity of an existing facility that serves the same function as an otherwise necessary new capital improvement, in order that the existing facility may serve new development. The term does not include the repair, maintenance, modernization, or expansion of an existing facility to better serve existing development.

E. Impact fee. A charge or assessment imposed by the City against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development. The term includes amortized charges, lump-sum charges, capital recovery fees, contributions in aid of construction, and any other fee that functions as described by this definition to fund capital improvements in the capital improvements plan. The term does not include:

1. dedication of land for public parks or payment in lieu of the dedication to serve park needs;
2. dedication of rights-of-way or easements or construction or dedication of on-site or off-site water distribution, wastewater collection or drainage facilities, or streets, sidewalks, or curbs if the dedication or construction is required by a valid ordinance and is necessitated by and attributable to the new development;
3. lot or acreage fees to be placed in trust funds for the purpose of reimbursing developers for oversizing or constructing water or sewer mains or lines; or
4. other pro rata fees for reimbursement of water or wastewater mains or lines extended by the City.

However, an item included in the capital improvements plan may not be required to be constructed except in accordance with Section 395.019(2) of the Texas Local Government Code, and an owner may not be required to construct or dedicate facilities and to pay impact fees for those facilities.

F. Land use assumptions. A description of the service area and projections of changes in land uses, densities, intensities, and population in the service area over at least a 10-year period as may be amended.

G New development. 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 and is located within a service area.

H. Service area. The area within the corporate boundaries or extraterritorial jurisdiction, as determined under Chapter 42, Texas Local Government Code, of the City to be served by the capital improvements or facilities expansions specified in the capital improvements plan. The service area does include all or part of the land within the City and its extraterritorial jurisdiction.

I. Service unit. 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 and based on historical data and trends applicable to the City subdivision in which the individual unit of development is located during the previous 10 years. For purposes of compliance with the impact fee statute and this ordinance, a service unit represents the water and wastewater flows in gallons per day (gpd) for a single family residential or equivalent unit with a water meter smaller than 1-inch

15.20.050 Administration and Accounting

A. The El Paso Water Utilities shall administer the provisions of this Chapter. The El Paso Water Utilities shall establish adequate financial and accounting controls to ensure that impact fees disbursed from an account established under this section are utilized solely for the purpose authorized under Chapter 395, Texas Local Government Code.

B. Accounts and funds. All funds collected shall be deposited in interest-bearing accounts clearly identifying the category of capital improvements or facility expansions within the service area for which the impact fee was adopted. Interest earned on impact fee accounts are considered funds of the account on which it is earned. Impact fee funds, to include interest generated from impact fee accounts, may be spent only for the purposes for which the impact fee was imposed as shown by the capital improvements plan and as otherwise authorized by Chapter 395, Texas Local Government Code. The records of the accounts into which impact fees are deposited shall be open for public inspection and copying during ordinary business hours.

C. The El Paso Water Utilities shall maintain and keep adequate financial records for each account to show the source and disbursement of all revenues, which shall account for all monies received and ensure that the disbursement of funds from each account shall be used solely and exclusive for the purposes for which the impact fee was imposed as shown by the capital improvements plan and as otherwise authorized by Chapter 395, Texas Local Government Code.

D. The El Paso Water Utilities shall ensure that any fee collected under the Impact Fee Ordinance is expended within a reasonable period of time but not to exceed ten (10) years from the date the fee is deposited into the impact fee account.

15.20.060 Land Use Assumptions and Service Area

The land use assumptions (LUA) and service areas are those adopted by the El Paso City Council on March 24, 2009.

15.20.070 Capital Improvements Plan

The capital improvements plan (CIP) is the plan adopted by the El Paso City Council on March 24, 2009.

15.20.080. Impact Fee Service Areas.

The Impact Fee Service Areas are those adopted by the El Paso City Council on March 24, 2009 as reflected in Appendix A. Three separate service areas have been established within the City of El Paso and its extraterritorial jurisdiction to be served by the capital improvements or facilities expansions specified in the capital improvements plan. Those service areas are the Westside Service Area, the Eastside Service Area, and the Northeast Service Area.

15.20.090 Impact Fee Schedules.

Appendix B contains the City of El Paso Impact Fee Assessment Schedule. For purposes of compliance with the Impact Fee statute, the City of El Paso has determined that a service unit represents the water and wastewater flows in gallons per day (gpd) for a single family residential or equivalent unit with a water meter smaller than 1-inch.

15.20.100 Maximum fee and actual fee to be assessed.

The maximum allowable impact fee per service unit was calculated in accordance with Section 395.015 of the Texas Local Government Code. In accordance with Section 395.014(7) of the Texas Local Government Code, the City has awarded a credit based on the portion of the utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan. Ad valorem taxes will not be used for the payment of improvements contained in the capital improvements plan.

The impact fee to be assessed is the impact fee adopted by the City Council.

WATER IMPACT FEE PER SERVICE UNIT

<u>Service Area</u>	<u>Impact Fee</u> (Before credit)	<u>Maximum Allowable</u> <u>Impact Fee</u>	<u>Impact Fee to be</u> <u>Assessed</u>
Northeast	\$1,865.00	\$1,570.00	
Westside	\$1,044.00	\$879.00	
Eastside	\$1,103.00	\$929.00	

WASTEWATER IMPACT FEE PER SERVICE UNIT

<u>Service Area</u>	<u>Impact Fee</u> (Before Credit)	<u>Maximum Allowable</u> <u>Impact Fee</u>	<u>Impact Fee to be</u> <u>Assessed</u>
Northeast	\$538.00	\$388.00	
Westside	\$1,711.00	\$1,236.00	
Eastside	\$1,698.00	\$1,227.00	

15.20.110 Time of Assessment

1. An “assessment” means a determination of the amount of the impact fee in effect on the date or occurrence provided in this section and is the maximum amount that can be charged per service unit of such development. No specific act by the City is required.
2. For new development which is platted, or re-platted and there is an increase in the number of service units in the development, after the adoption of an impact fee, impact fees shall be assessed on the incremental increase in service units in the development before or at the time of recordation of a subdivision plat or replat in the official records of the county clerk of the county in which the tract is located.
3. For land on which new development occurs or is proposed to occur without platting, impact fees shall be assessed at the time an application for an individual meter connection to the City’s water or wastewater system is filed.

15.20.120 Re- Assessment

Following the initial assessment of an impact fee, the amount of the impact fee per service unit for that development cannot be increased unless the approved final plat expires or lapses under the applicable ordinance or law, and service units increase or meter size is increased

15.20.130 Time of Collection

A. For new development, which is platted in accordance with the provisions of Title 19 before the adoption of an impact fee, an impact fee may not be collected on any service unit for which a valid building permit is issued within one year after the date of adoption of the impact fee ordinance.

B. For new development which is platted, or re-platted and there is an increase in the number of service units after the adoption of impact fee ordinance and if water and/or wastewater capacity is currently available:

1. For land platted within the corporate boundaries of the City, impact fees shall be collected at the time a building permit is issued.
2. For land platted outside the corporate boundaries of the City, impact fees shall be collected at the time an application for an individual meter connection to the City's water or wastewater system is filed.
3. For land on which new development occurs or is proposed to occur without platting, impact fees shall be collected at the time an application is filed for an individual meter connection to the City's water or wastewater system..
4. If the City fails to collect the fee at the time specified above, the City has the option of collecting the fee at the time of connection to the water or wastewater system.

C. For new development which is platted, or re-platted and there is an increase in the number of service units, after the adoption of an impact fee and if water and wastewater capacity is not currently available:

1. Impact fees shall be collected, except as otherwise provided in this ordinance, only if the collection is made to pay for a capital improvement or facility expansion that has been identified in the capital improvements plan and the City commits to commence construction of the identified capital improvement within two years, under duly awarded and executed contracts or commitments of staff time covering substantially all of the work required to provide service, and to have the service available within a reasonable period of time considering the type of capital improvement or facility expansion to be constructed, but in no event longer than five years; or
2. The City has entered into an agreement that the owner of a new development may construct or finance the capital improvements or facility expansions and agrees that the costs incurred or funds advanced will be credited against the

impact fees otherwise due from the new development impact fees shall be collect.

15.20.140 Impact fee as Condition of Building Permit approval or Meter Connection

New development occurring in any of the defined service areas shall not be connected to the City's water or wastewater system without payment of an impact fee in accordance with the provisions of this Chapter. No building permit shall be issued without payment of an impact fee in accordance with the provisions of this Chapter. If impact fees have not been collected in accordance with the provision of the Impact Fee Ordinance and the development has been connected to the water and/or wastewater system, the El Paso Water Utilities may disconnect the service per their "Rules and Regulations" until such time as the impact fees are paid.

15.20.150 Refund of Fees

A. Refund if service denied or service not available.

1. On the request of an owner of the property on which an impact fee has been paid, the City shall refund the impact fee paid if
 - (a) existing facilities are available and service is denied; or
 - (b) the City has, after collecting the impact fee when service was not available, failed to commence construction within two years; or
 - (c) service is not available within a reasonable period considering the type of capital improvement or facility expansion to be constructed, but in no event later than five years from the date of payment of the impact fee
2. A request for a refund shall be submitted to the El Paso Water Utilities on a form provided for by the El Paso Water Utilities for such purpose.
3. Any refund shall bear interest calculated from the date of collection to the date of refund at the statutory rate as set forth in Section 302.002 of the Finance Code, or its successor statute.

B. Refund if funds not spent.

1. The City shall refund any impact fee or part of it that is not spent as authorized by this chapter within 10 years after the date of payment.
2. All refunds shall be made to the record owner of the property at the time the refund is paid. However, if the impact fees were paid by another political subdivision or governmental entity, payment shall be made to the political subdivision or governmental entity.
3. Any refund shall bear interest calculated from the date of collection to the date of refund at the statutory rate as set forth in Section 302.002 of the Finance Code, or its successor statute.
4. For purposes of this section, an impact fee collected shall be considered expended if the total expenditures for capital improvements or facility expansions within a service area within ten (10) years following the date of payment of the impact fee, equal or exceed the total impact fees collected within the service area for such improvements or facility expansions during such period.

15.20.160 Appeal Process

A. The property owner or applicant for a new development may appeal the following administrative decisions to the city manager or designee:

1. The applicability of an impact fee to the development or structure;
2. The amount of the impact fee assessed or collected;
3. Amount of a refund due.

15.20.197 Certification of Compliance

A. The City shall submit a written certification verifying compliance with this chapter to the attorney general each year not later than the last day of the City's fiscal year.

B. The certification must be signed by the Mayor and include a statement that reads substantially similar to the following: "This statement certifies compliance with Chapter 395, Local Government Code."

15.20.180 Updates to Plans and Revision of Fees.

A. The City shall update the land use assumptions and capital improvements plan at least every five years, commencing from the date of adoption of such plans, and shall, if necessary, recalculate the impact fees based thereon in accordance with the procedures of Chapter 395 of the Local Government Code or in any successor statute.

B. The City may review its land use assumptions, impact fees, capital improvements plan and other factors more frequently than provided in subsection A above to determine whether the land use assumptions and capital improvements plan should be updated and the impact fees recalculated accordingly.

C. After conducting the review required in subsection A above, the City Council determines that no change to the land use assumptions, capital improvements plan or impact fee is needed at the time of an update under subsection A above, the City Council may dispense with the update in accordance with Local Government Code section 395.0575.

15.20.190 Functions of Advisory Committee.

The Capital Improvements Advisory Committee shall have those duties and responsibilities as established under Chapter 2.80 of the El Paso City Code and Chapter 395 of the Texas Local Government Code.

Section 4. Severability

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs and sections of this ordinance be severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs or sections of this ordinance, and the remainder of this ordinance shall be enforced as written.

Section 5. Except as herein amended, Title 15, Public Services, of the El Paso City Code shall remain in full force and effect.

PASSED and APPROVED this _____ day of _____, 2009.

THE CITY OF EL PASO

John Cook, Mayor

ATTEST

Richarda Duffy Momsen
City Clerk

APPROVED AS TO FORM

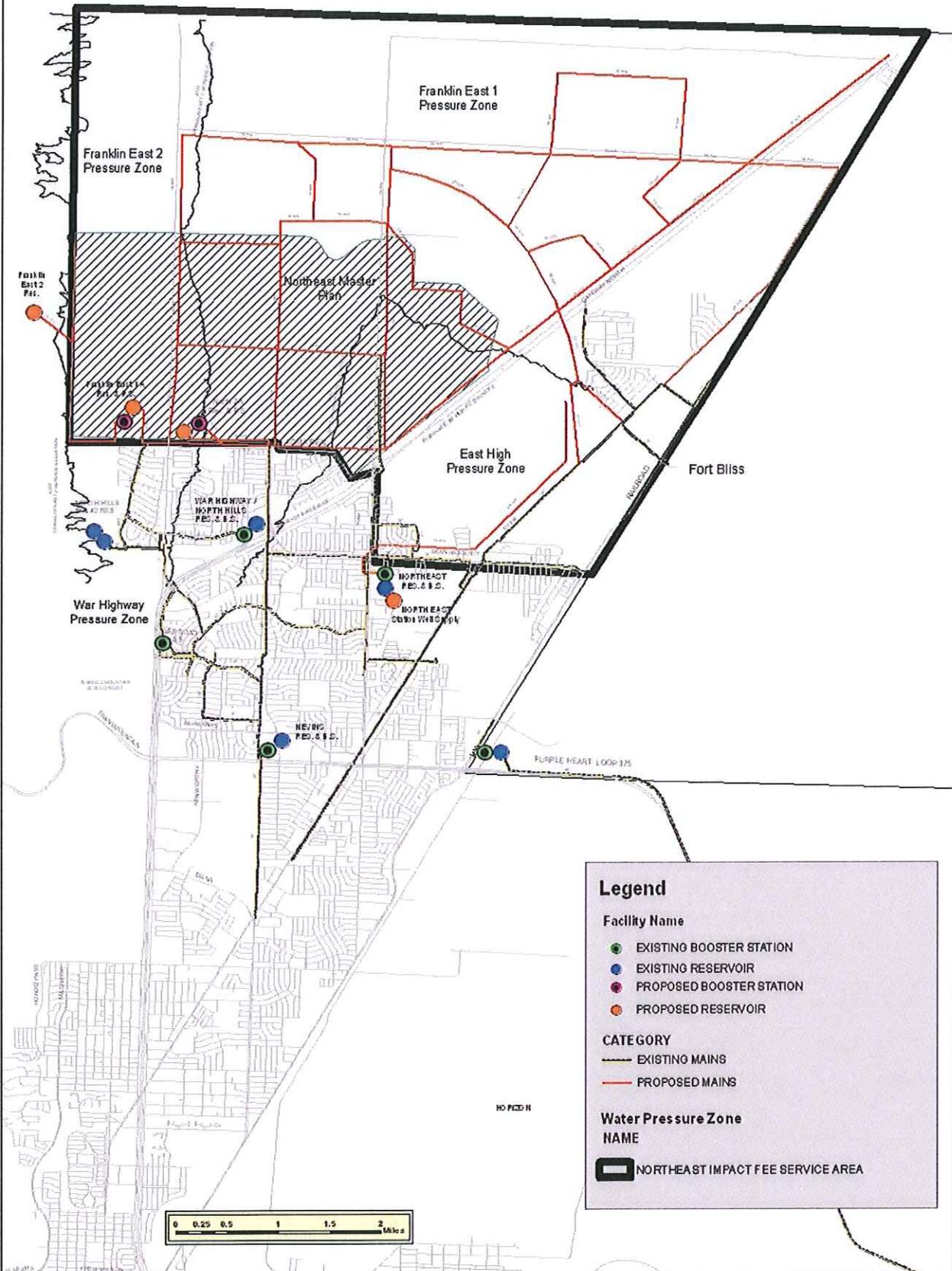
Lupe Cuellar
Assistant City Attorney

APPROVED AS TO CONTENT

Patricia D. Aduato, Deputy City Manager
Development & Infrastructure Services

APPENDIX A
Service Areas

NORTHEAST WATER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

- EXISTING BOOSTER STATION
- EXISTING RESERVOIR
- PROPOSED BOOSTER STATION
- PROPOSED RESERVOIR

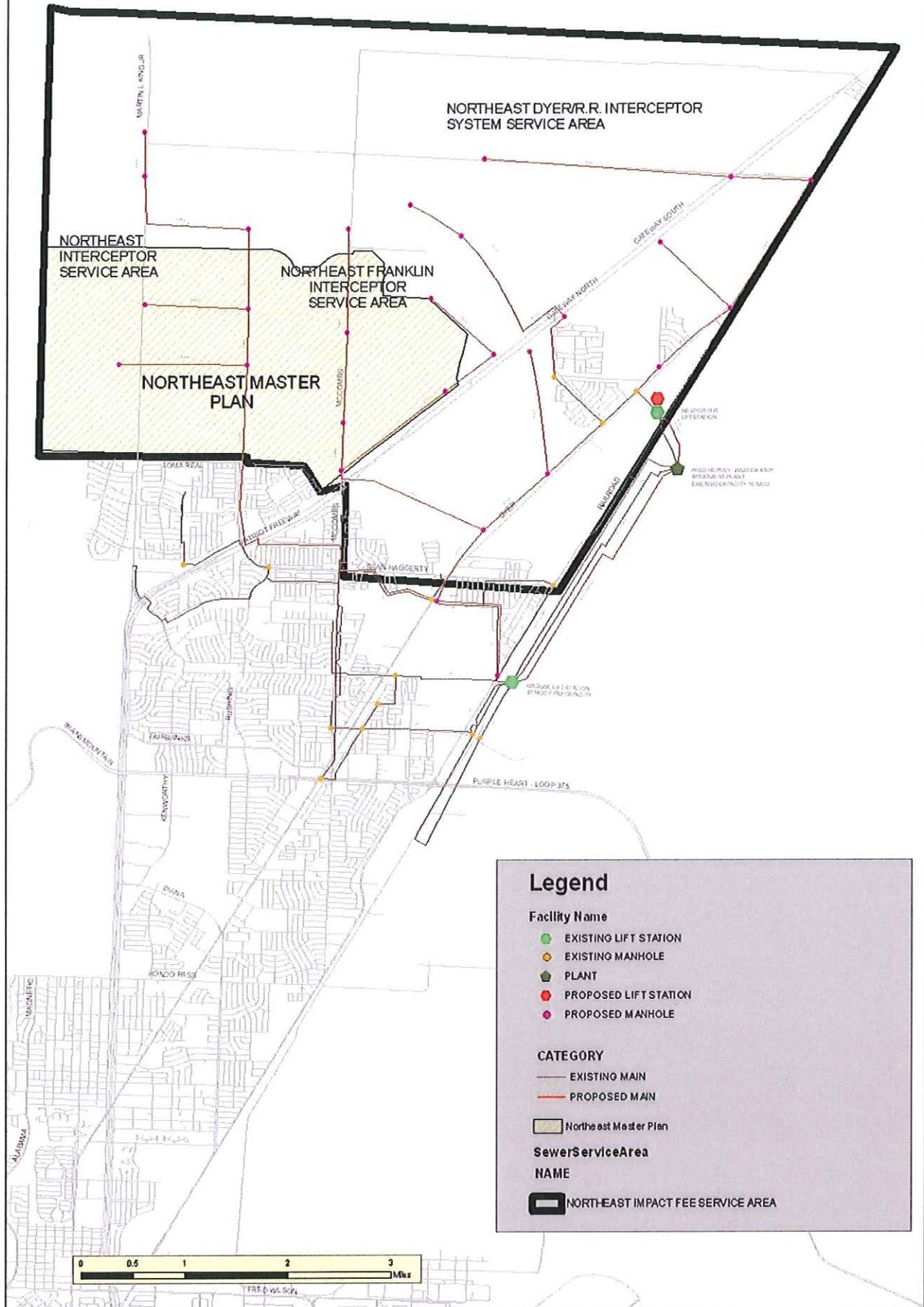
CATEGORY

- EXISTING MAINS
- PROPOSED MAINS

Water Pressure Zone NAME

- NORTHEAST IMPACT FEE SERVICE AREA

NORTHEAST SEWER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

- EXISTING LIFT STATION (Green circle)
- EXISTING MANHOLE (Yellow circle)
- PLANT (Green house icon)
- PROPOSED LIFT STATION (Red circle)
- PROPOSED MANHOLE (Pink circle)

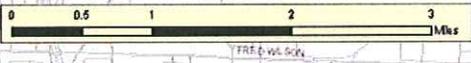
CATEGORY

- EXISTING MAIN (Black line)
- PROPOSED MAIN (Red line)

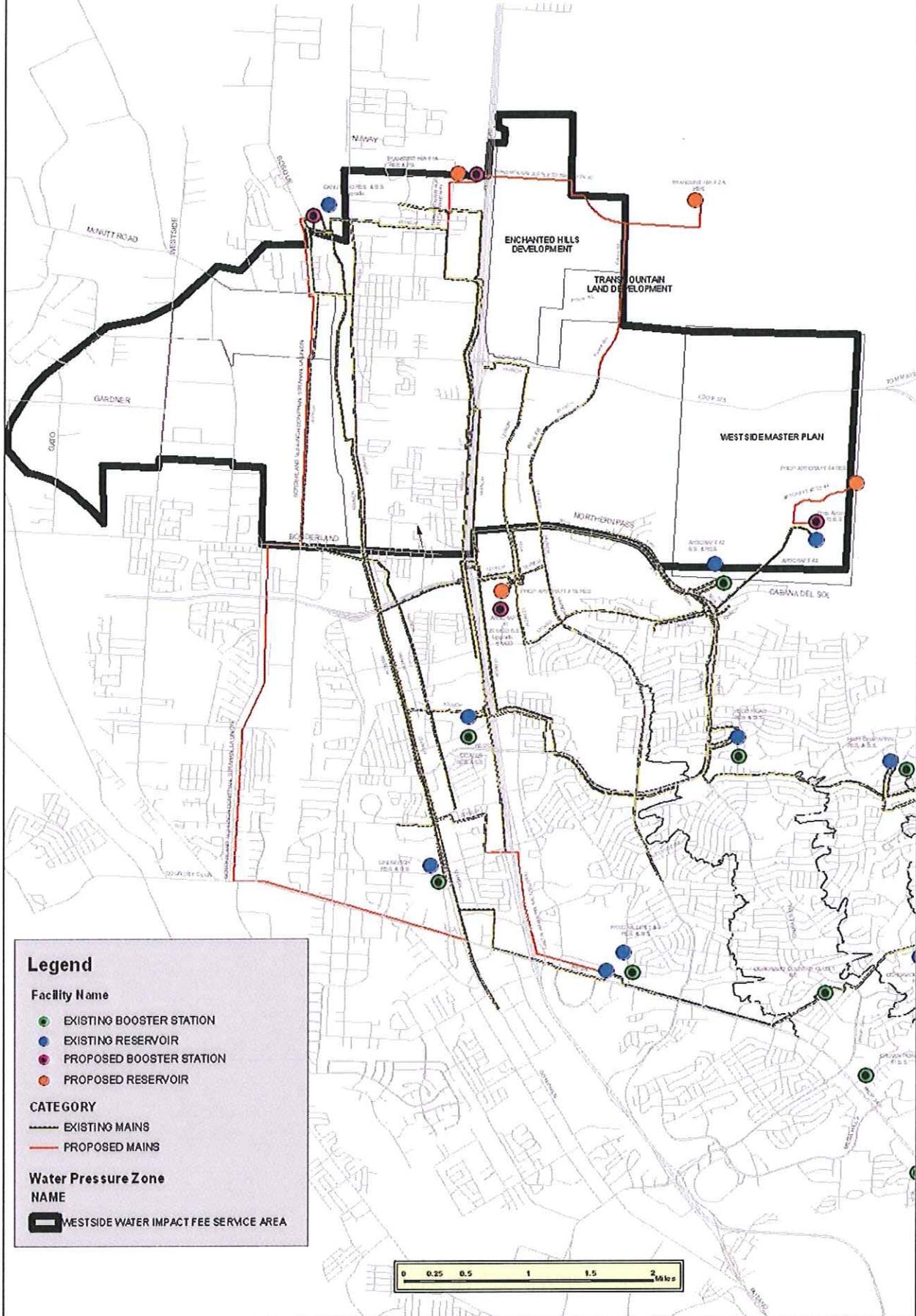
Northeast Master Plan (Yellow hatched area)

SewerServiceArea NAME

- NORTHEAST IMPACT FEE SERVICE AREA (Thick black outline)



WESTSIDE WATER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

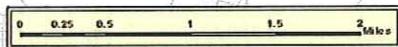
- EXISTING BOOSTER STATION
- EXISTING RESERVOIR
- PROPOSED BOOSTER STATION
- PROPOSED RESERVOIR

CATEGORY

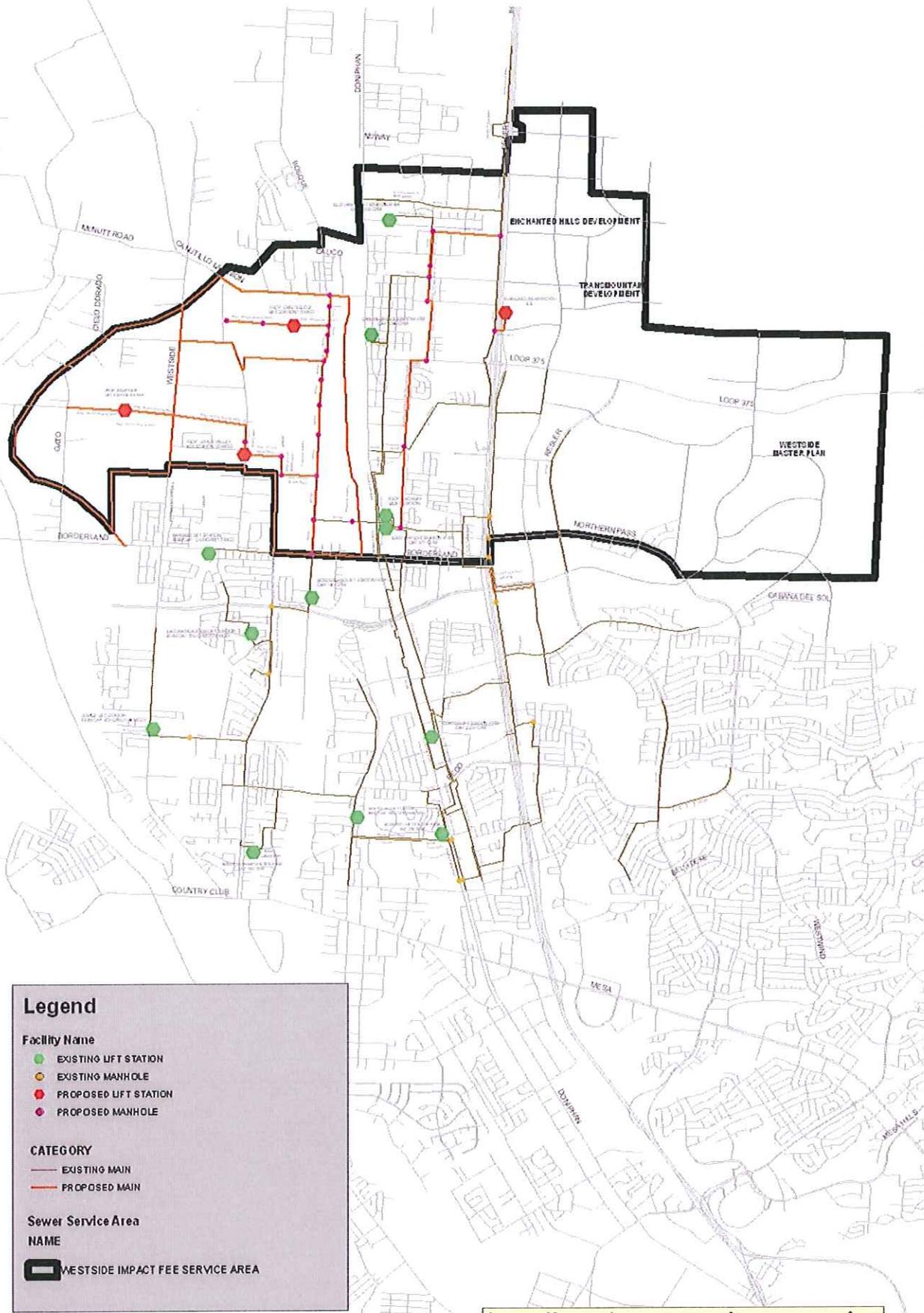
- EXISTING MAINS
- PROPOSED MAINS

Water Pressure Zone NAME

- WESTSIDE WATER IMPACT FEE SERVICE AREA



WESTSIDE SEWER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

- EXISTING LIFT STATION
- EXISTING MANHOLE
- PROPOSED LIFT STATION
- PROPOSED MANHOLE

CATEGORY

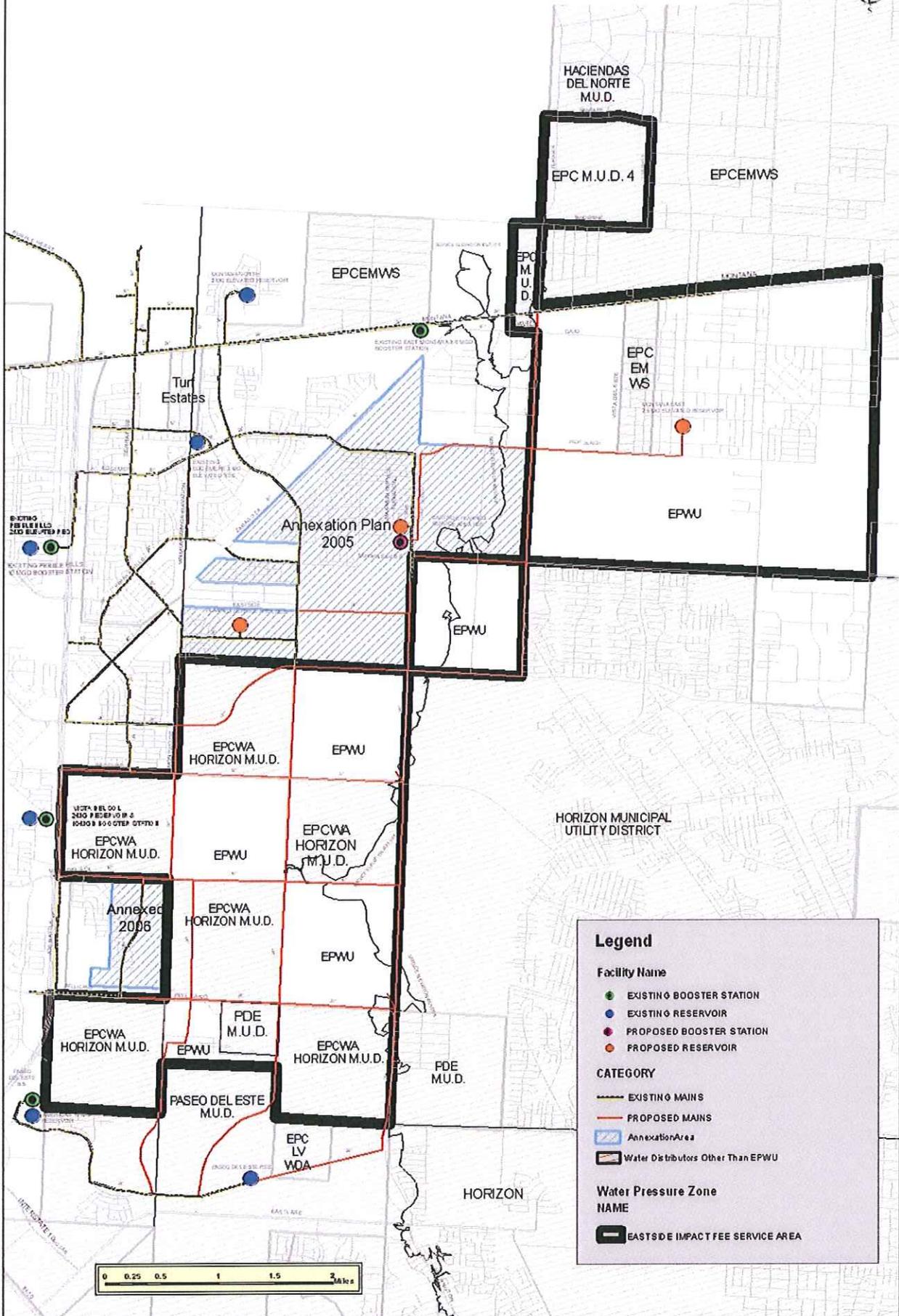
- EXISTING MAIN
- PROPOSED MAIN

Sewer Service Area NAME

- ▭ WESTSIDE IMPACT FEE SERVICE AREA



EASTSIDE WATER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

- EXISTING BOOSTER STATION
- EXISTING RESERVOIR
- PROPOSED BOOSTER STATION
- PROPOSED RESERVOIR

CATEGORY

- EXISTING MAINS
- PROPOSED MAINS
- Annexation Area
- Water Distributors Other Than EPWU

Water Pressure Zone NAME

- EASTSIDE IMPACT FEE SERVICE AREA

APPENDIX B

Impact Fee Assessment Schedules

Northeast Service Area

Meter Size	Meter Capacity Ratio	Water*	Wastewater
Less than 1 inch	1.00	\$1,570.00	\$388.00
1 inch	1.67	\$2,622.00	\$648.00
1½ inch	3.33	\$5,228.00	\$1,292.00
2 inch	5.33	\$8,368.00	\$2,068.00
3 inch	10.00	\$15,700.00	\$3,880.00
4 inch	16.67	\$26,172.00	\$6,468.00
6 inch	33.33	\$52,328.00	\$12,932.00
8 inch	53.33	\$83,728.00	\$20,692.00
10 inch	76.67	\$120,372.00	\$29,748.00
12 inch	143.33	\$225,028.00	\$55,612.00

Westside Service Area

Meter Size	Meter Capacity Ratio	Water*	Wastewater
Less than 1 inch	1.00	\$ 879.00	\$1,236.00
1 inch	1.67	\$1,468.00	\$2,064.00
1½ inch	3.33	\$2,927.00	\$4,116.00
2 inch	5.33	\$4,685.00	\$6,588.00
3 inch	10.00	\$8,790.00	\$12,360.00
4 inch	16.67	\$14,653.00	\$20,604.00
6 inch	33.33	\$29,297.00	\$41,196.00
8 inch	53.33	\$46,877.00	\$65,916.00

10 inch	76.67	\$67,393.00	\$94,764.00
12 inch	143.33	\$125,987.00	\$177,156.00

***Fees do not apply to water meter or connections made for standby fire protection service**

Eastside Service Area

Meter	Meter Capacity	Water*	Wastewater
Size	Ratio		
Less than 1 inch	1.00	\$929.00	\$1,227.00
1 inch	1.67	\$1,551.00	\$2,049.00
1½ inch	3.33	\$3,094.00	\$4,086.00
2 inch	5.33	\$4,952.00	\$6,540.00
3 inch	10.00	\$9,290.00	\$12,270.00
4 inch	16.67	\$15,486.00	\$20,454.00
6 inch	33.33	\$30,964.00	\$40,896.00
8 inch	53.33	\$49,544.00	\$65,436.00
10 inch	76.67	\$71,226.00	\$94,074.00
12 inch	143.33	\$133,154.00	\$175,866.00

***Fees do not apply to water meter or connections made for standby fire protection service**

CIAC Statement to the El Paso City Council 4/16/09

The Committee finds that the "MAXIMUM IMPACT FEE PER SERVICE UNIT" has been developed and calculated by qualified professionals in accordance with the Texas Local Government Code Chapter 395.

CIAC comments and actions 4/29/09

Motion to recommend 100% credit on affordable housing per 395.016(g) passed 5-4

Motion to recommend 100% of allowable impact fee failed 5-4

Motion to recommend "50% or less" of allowable impact fee
Passed 5-4

Motion to request staff to review possible exemption for irrigation meters ultimately to be dedicated to the City passed 6-2.

Motion to recommend a separate program for a system of credit compensation similar to Austin and San Antonio based on the square footage of the house (no credit 3,000 square feet or more, maximum credit 1,500 square feet or less) passed 5-4.

To: Nick Costanzo
Vice President of Strategic,
Financial and Management Services
El Paso Water Utilities

Date: March 26, 2009

From: Rick Giardina
Vice President
Red Oak Consulting

Re: Water and Wastewater Impact Fees – Report Addendum

This memorandum serves as an addendum to the Annexation Assessment and Strategy report prepared by Halff and Associates, dated September 29, 2008 (the Halff Report) and replaces previous versions of the Water and Wastewater Impact Fees – Report Addendum prepared by Red Oak Consulting.

Impact fees were determined for three specific service areas (Northeast, Westside, and Eastside) defined by the El Paso Water Utilities (EPWU) and the composite service area (Systemwide). The EPWU service areas include portions or all of the service areas defined in the Halff Report¹ and other areas not defined in the Halff Report, as listed below.

Northeast Area

- 01, Northeast Master Plan
- 05A, NW Fort Bliss A
- 05B, NW Fort Bliss B
- 05C, NW Fort Bliss C

Westside Area

- 02, Westside Master Plan
- 03A, Westside
- 03E, I-10/375 1050 Master Plan
- 04A, NW Artcraft A
- 04B, NW Artcraft B
- 04C, NW Artcraft C
- 04D, Westside
- 04E, Westside
- Westside – other areas

¹ Halff Report, Section 5.7 Annexation Assessment Recommendations, Page 73.

Eastside Area

- 08B, Eastside Master Plan
- 12, South Montana
- 12B, South Montana
- 06<dot>
- 08, East Battle
- 10B, South Fort Bliss B

If adopted, water and wastewater impact fees would only be charged within the EPWU defined service areas. In the event the Systemwide fee is adopted, it would only apply within the three EPWU service areas. Development outside the EPWU defined areas would not pay an impact fee.

Maps depicting the EPWU proposed service areas are provided in **Attachment A**.

Calculations and results in this addendum are based on numerical analysis using rounded figures. However, the analysis itself uses figures carried to their ultimate decimal places. Therefore the sums and products generated may not exactly equal the sum or product if the reader replicates the calculation with the factors shown in the addendum (due to rounding).

Impact Fee Methodology

The impact fee calculations are based on the incremental method, as opposed to the hybrid method used previously in the Halff Report.² Under the incremental method, new customers pay a fee representing their proportionate share of only the expansion-related costs of new facilities necessitated by and attributable to new development. The impact fee is calculated using a projected 10-year capital improvement plan (CIP) as opposed to a CIP that also includes past investments with capacity to serve future development.

To calculate the impact fee per service unit, the value of the expansion or growth-related CIP is divided by the total service units associated with the CIP. This results in a cost per unit. A service unit represents the water and wastewater flows in gallons per day (gpd) for a single family residential or equivalent unit with a water meter smaller than 1-inch.

² Halff Report, Section 11.4 Fee Development, Page 140.

Land Use Assumptions and Service Unit Characteristics

Impact fees in Texas must meet the requirements of the Texas Statutes, Local Government Code, Chapter 395 (State Impact Fee Statutes). In accordance with the State Impact Fee Statutes, the land use assumptions provided in **Attachment B** were used to arrive at the residential service units (SUs), population, and average persons per residential service unit shown in Table 1. The land use assumptions were obtained from master plans prepared by or on behalf of EPWU, and other sources generally used by EPWU in projecting water and wastewater service demands.

Table 1
Land Use Assumptions

Service Area	Total Residential Service Units (Build-Out)						Population	Average Household Size Persons/SU
	Luxury Low	Senior Low	Medium	Medium High	High	Total		
Northeast								
01	1,995	1,600	4,166	6,793	1,799	16,353	46,268	2.8
05A	-	-	8,470	-	190	8,660	24,135	2.8
05B	-	-	-	13,668	95	13,763	48,047	3.5
05C	-	-	5,810	-	-	5,810	16,268	2.8
Westside								
02	283	-	858	3,070	662	4,874	14,767	3.0
03A	-	-	450	-	-	450	1,364	3.0
03E	-	-	2,741	-	-	2,741	9,594	3.5
04A	-	-	4,592	-	-	4,592	18,368	4.0
04B	-	-	2,620	-	-	2,620	10,480	4.0
04C	-	-	560	-	-	560	2,240	4.0
04D	-	-	880	-	-	880	3,520	4.0
04E	-	-	1,684	-	-	1,684	6,736	4.0
Other	-	-	5,033	-	-	5,033	15,968	3.2
Eastside								
08B	-	-	652	-	-	652	2,607	4.0
12	-	-	-	8,132	-	8,132	24,395	3.0
12B	-	-	-	22,515	-	22,515	67,544	3.0
06<dot>	-	-	2,477	-	-	2,477	9,908	4.0
08	-	-	4,663	-	-	4,663	18,652	4.0
10B.	-	-	-	3,150	-	3,150	12,600	4.0
Total	2,278	1,600	45,656	57,328	2,747	109,609	353,461	3.2

The assumptions in Table 1 provide the residential component – 3.2 persons per service unit – of future development. These land use and demographic assumptions were used to determine residential service units and future capacity requirements. Utility capacity characteristics should also include a commercial and industrial component (and result in a reasonable planning or design criteria) and this is reflected in the use of 3.5 persons per service unit shown in Table 2, as opposed to the 3.2 persons per service unit shown in Table 1.

Utilizing 3.5 persons per service unit, other generally accepted engineering or planning standards (EPWU planning or design criteria), and historical data and trends applicable to EPWU’s service area, Table 2 summarizes the water and wastewater flow, or capacity, for an equivalent service unit.

Table 2
Equivalent Service Unit Flows

Description	Water	Wastewater
Average Usage per Capita (gallons per day - gpd)	115	70
Ratio of Maximum Day Demand to Average Day Demand	1.71 ¹	1.39
Maximum Day Demand per Capita (gpd)	197	98
Persons per Service Unit	3.50	3.50
Flows per Equivalent Service Unit (gpd) ²	688	341
1. Elevated water storage capacity is calculated based on 50% of Maximum Day Demand. 2. Equivalent service unit flows represent flow to a residential, commercial, or industrial user with a water meter size less than 1-inch.		

The flows per service unit (688 and 341 gallons per day for water and wastewater, respectively) are used to calculate the number of facility service units in Attachment E and F.

10-Year Population and Service Unit Projections

When considering future water and wastewater investments, it is difficult to provide an exact matching between population and/or development growth and the necessary capital investment to serve only the expected development within a given timeframe. The timeframe when the additional capacity is fully utilized will depend upon the actual rate of development or growth.

Table 3 presents the population and development units for the water and wastewater impact fee areas under consideration.

Table 3
2018 Population and Service Units

Service Area	Developable Acres	Population	Residential Service Units	Non-Residential Service Unit Equivalents ¹	Total Service Units
Northeast	2,423	32,837	9,590	2,072	11,663
Westside	1,367	15,378	4,965	587	5,552
Eastside	1,261	12,267	4,062	2,390	6,452
Total	5,050	60,482	18,617	5,049	23,667

1. Calculated based on assumptions from the Half Report, Section 8.2 Land Use Types, page 95 (1,000 square feet per commercial and industrial service unit, and 2,000 square feet per service unit for mixed use), and non-residential developable square footage information from Appendix B of the Half Report, Generalized Distribution of Land Uses.

Proposed Capital Improvement Facilities

In accordance with the State Impact Fee Statutes, proposed capital improvements were prepared by Felipe Lopez, Jr., P.E., Engineering Division Manager, with the EPWU. Mr. Lopez is a professional engineer licensed to perform professional engineering services in the State of Texas. The capital improvements include facilities necessitated by and attributable to new development within the next 10 years. Descriptions of the proposed capital improvements are provided in **Attachment C**. The complete list of CIP projects, including capital costs, for each service area is provided in **Attachment D**. CIP capital and financing costs, capacity, facility service units, unit cost of capacity, and weighted average cost of capacity for each service area is provided in **Attachment E**.

Maximum Impact Fee Calculation

The capital projects identified in EPWU's 10-year CIP will result in capacity in both the water and wastewater systems that will serve development beyond the 10-year planning period. As such, it is necessary to allocate the cost of the growth-related CIP not just to the projected development/population occurring over the 10-year period, but to the total number of new service units that can be served by the planned capacity additions; to do otherwise would overstate the cost or impact fee to those service units developed in the 10-year planning period. It should be noted, however, that although the 10-year CIP serves capacity beyond the 10-year period, it does not provide capacity through ultimate buildout of the service areas.

This approach to determining the impact fee does not rely on estimates of when growth will occur, but assigns the cost of new capacity (provided by the CIP) to all units that will be served by that capacity regardless of when they may occur. The service unit totals (as shown on Table 3), are used in the maximum impact fee calculation, as shown in the following section.

The Halff Report new service unit projections for the 10 years ending in 2018 (from Table 3) are less than the total new service units served by the EPWU planned capacity additions as reported in the 10-year CIP. Therefore, in accordance with the State Impact Fee Statutes, the maximum impact fee per service unit is calculated by dividing the costs of that portion of the CIP necessitated by and attributable to projected new service units by the total projected new service units served by the CIP.

Attachment F lists the cost of capital improvements, financing costs, facility service units, new service units through 2018, the portion of the CIP required through 2018, and the maximum impact fee per unit. Assuming 35 percent debt funding of the CIP, financing costs reflect the net present value of interest and transaction costs for a 20-year, five percent loan. Table 4 provides a summary of the maximum impact fee per service unit equivalent.

Table 4
Maximum Impact Fee per Service Unit Equivalent

Service Area	Projected New Service Units (through 2018)	Maximum Impact Fee per Unit
<u>Northeast</u>		
Water	11,663	\$1,865
Wastewater	11,663	<u>538</u>
Total Northeast		\$2,403
<u>Westside</u>		
Water	5,552	\$1,044
Wastewater	5,552	<u>1,711</u>
Total Westside		\$2,755
<u>Eastside</u>		
Water	6,452	\$1,103
Wastewater	6,452	<u>1,698</u>
Total Eastside		\$2,801
<u>Systemwide</u>		
Water	23,667	\$1,465
Wastewater	23,667	<u>1,129</u>
Total Systemwide		\$2,594

The Systemwide service area is a composite fee based on the three service areas, and is not a Systemwide fee for all areas served by EPWU (i.e., the Systemwide fee would only be assessed in the three, defined, service areas).

Impact Fee Credits

In order to establish equity between existing and new customers, impact fee credits for the portion of ad valorem tax and utility service revenues generated by new service units are required by the State Impact Fee Statutes. The Statute provides two options when calculating the credit:

- a credit against the impact fee for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of capital improvements, including the payment of debt, that are included in the capital improvements plan; or
- in the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan.

Since no City of El Paso ad valorem tax revenues will be used to fund EPWU capital improvements or associated debt service, a credit component based on ad valorem tax revenues is not appropriate, nor therefore, required. However, a credit is warranted that recognizes the portion of utility service revenues generated by new service units during the capital improvements program period that might be used for the payment of capital improvements, including the payment of debt, that are included in the CIP upon which the fees are based. The credit recognizes the cost of debt included in the maximum impact fees shown in Table 4 and the applicable service area impact fee determination.

Because utility service revenues are the primary pledge in the repayment of debt, the calculated credit represents an apportionment (to each forecast new service unit) of the utility service revenue projected to be paid by a new service unit that may be used to retire the debt used to finance the growth-related CIP (including principal, the net present value of interest, and issuance costs). Application of a credit determined in this way ensures that a new service unit will not pay twice for the utility capital improvements and related financing costs attributable to that new unit, i.e., once through the impact fee and a second time through utility service revenues.

The impact fee credit was determined to be 15.8 percent for water, and 27.8 percent for wastewater. **Attachment G** provides the projection of service units, debt service, and the debt service credit. These values are stated as a percentage of the maximum impact fee per unit as shown in Table 5 on a per-unit equivalent basis.

Table 5
Impact Fee Credits per Service Unit Equivalent

Service Area	Water			Wastewater			Total
	Maximum Impact Fee	Impact Fee Credit (15.8%)	Net Impact Fee	Maximum Impact Fee	Impact Fee Credit (27.8%)	Net Impact Fee	Net Impact Fee
Northeast	\$1,865	(\$295)	\$1,570	\$538	(\$149)	\$388	\$1,958
Westside	\$1,044	(\$165)	\$879	\$1,711	(\$475)	\$1,236	\$2,115
Eastside	\$1,103	(\$174)	\$929	\$1,698	(\$472)	\$1,227	\$2,156
Systemwide	\$1,465	(\$231)	\$1,233	\$1,129	(\$314)	\$816	\$2,049

Impact fee credits will be applied uniformly across all meter sizes (i.e., the credit is the percent of the maximum impact fee for each meter size).

Impact Fee Assessment Schedule

The impact fee assessment schedule is the result of calculating the net impact fee cost per service unit using the incremental method for a single family service unit equivalent (less than 1-inch meter), and scaling-up impact fees for 1-inch and larger meters, regardless of development type. Impact fees for larger meters are the product of the ¾-inch meter and the respective American Water Works Association (AWWA) meter capacity ratio³.

The AWWA meter capacity ratios are based on the rated maximum flow capacity (in gallons per minute) between meters of varying sizes. The meter capacity ratio is used as a proxy to represent the ratio of potential water demand for larger meter sizes to that of a ¾-inch meter, and is therefore used to escalate impact fees for meter sizes of 1-inch and larger. Table 6 summarizes the Systemwide impact fees based on differing demands as defined by the meter capacity ratio.

Table 6
Systemwide Water and Wastewater Impact Fee Assessment Schedule
(Net Fee after Credit)

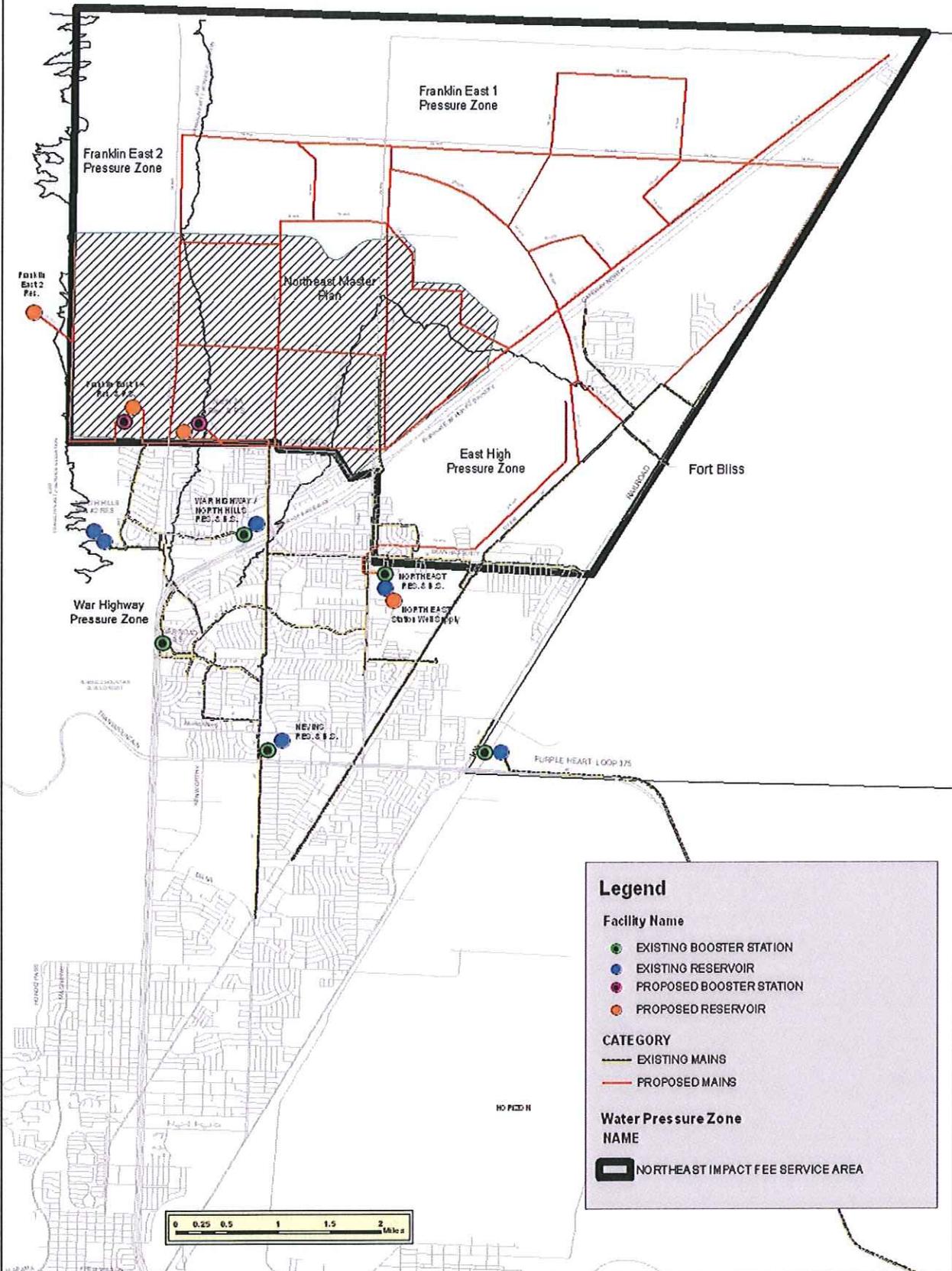
Meter Size	Meter Capacity Ratio	Water	Wastewater	Total
Less than 1-inch	1.00	\$1,233	\$816	\$2,049
1-inch	1.67	2,059	1,362	3,421
1½-inch	3.33	4,106	2,716	6,822
2-inch	5.33	6,573	4,347	10,920
3-inch	10.00	12,331	8,157	20,488
4-inch	16.67	20,556	13,597	34,153
6-inch	33.33	41,101	27,186	68,286
8-inch	53.33	65,763	43,499	109,262

A similar schedule of impact fees for each service area (Northeast, Eastside, and Westside) is provided in **Attachment H**.

³ M1 Manual of Supply Practices, Principles of Water Rates, Fees and Charges, Fifth Edition, page 201, American Water Works Association.

ATTACHMENT A
El Paso Water Utilities
Impact Fee Service Area Maps

NORTHEAST WATER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

- EXISTING BOOSTER STATION
- EXISTING RESERVOIR
- PROPOSED BOOSTER STATION
- PROPOSED RESERVOIR

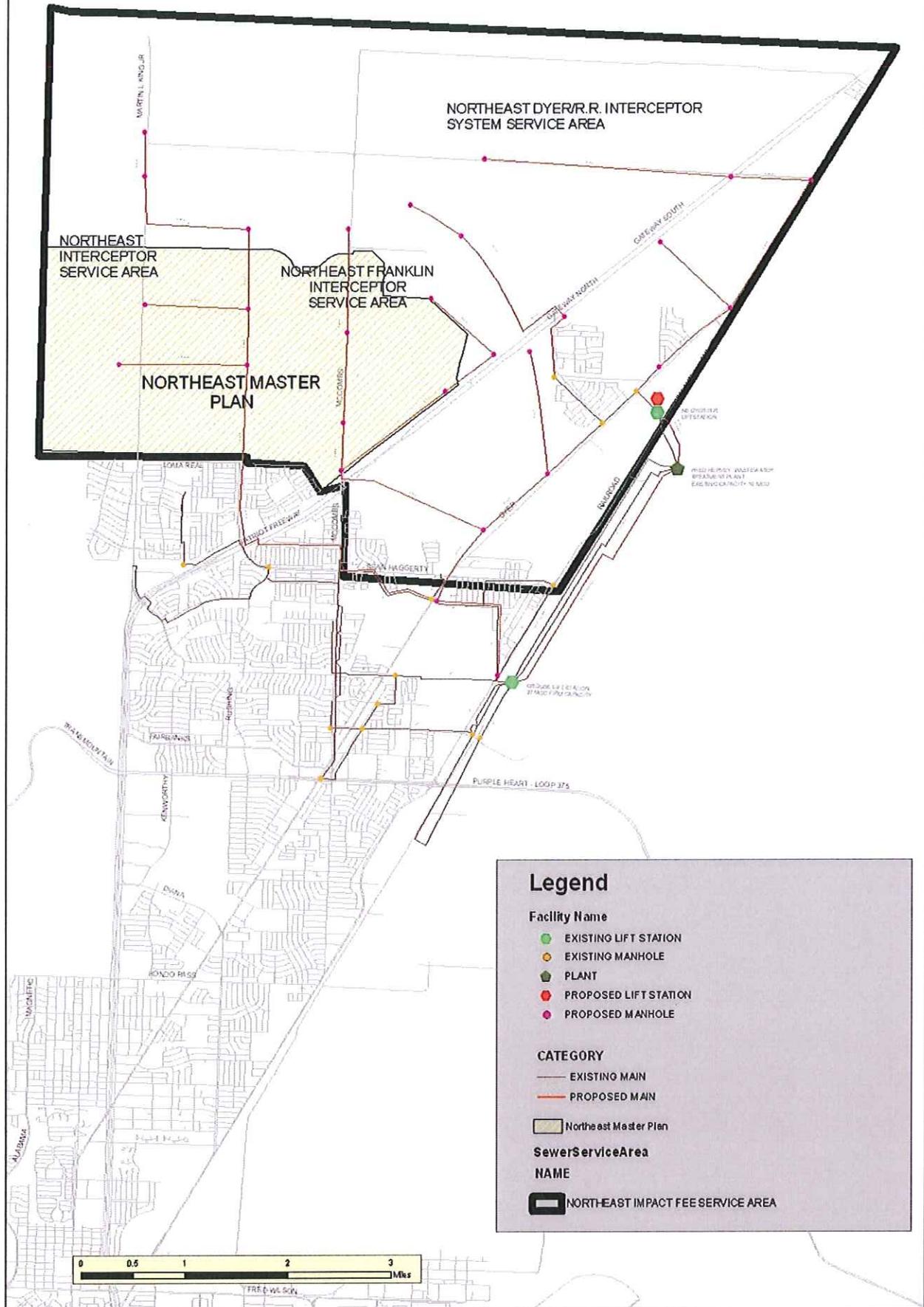
CATEGORY

- EXISTING MAINS
- PROPOSED MAINS

Water Pressure Zone NAME

- NORTHEAST IMPACT FEE SERVICE AREA

NORTHEAST SEWER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

- EXISTING LIFT STATION
- EXISTING MANHOLE
- PLANT
- PROPOSED LIFT STATION
- PROPOSED MANHOLE

CATEGORY

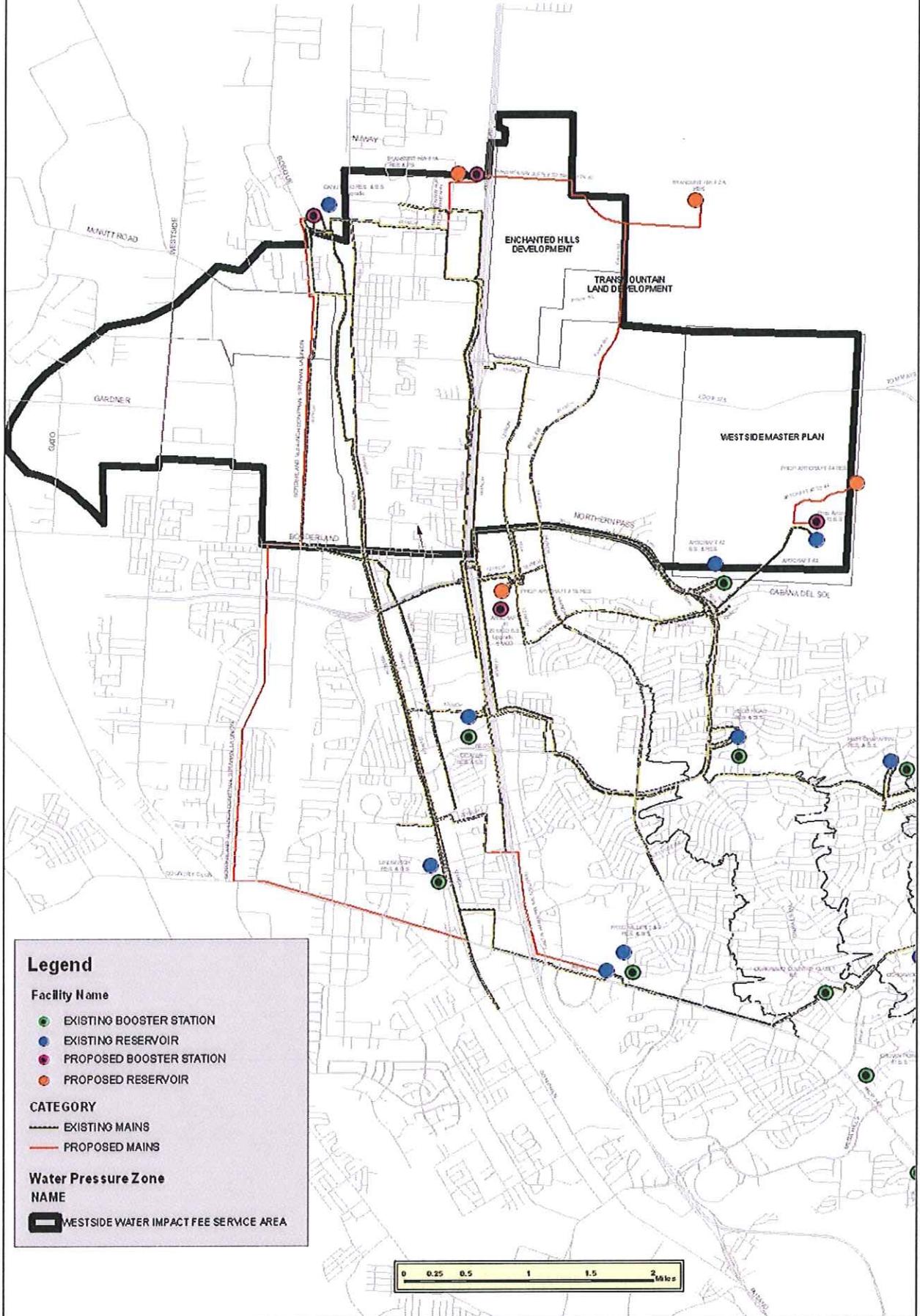
- EXISTING MAIN
- PROPOSED MAIN

Northest Master Plan

SewerServiceArea NAME

- NORTHEAST IMPACT FEE SERVICE AREA

WESTSIDE WATER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

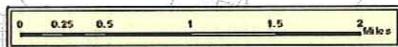
- EXISTING BOOSTER STATION
- EXISTING RESERVOIR
- PROPOSED BOOSTER STATION
- PROPOSED RESERVOIR

CATEGORY

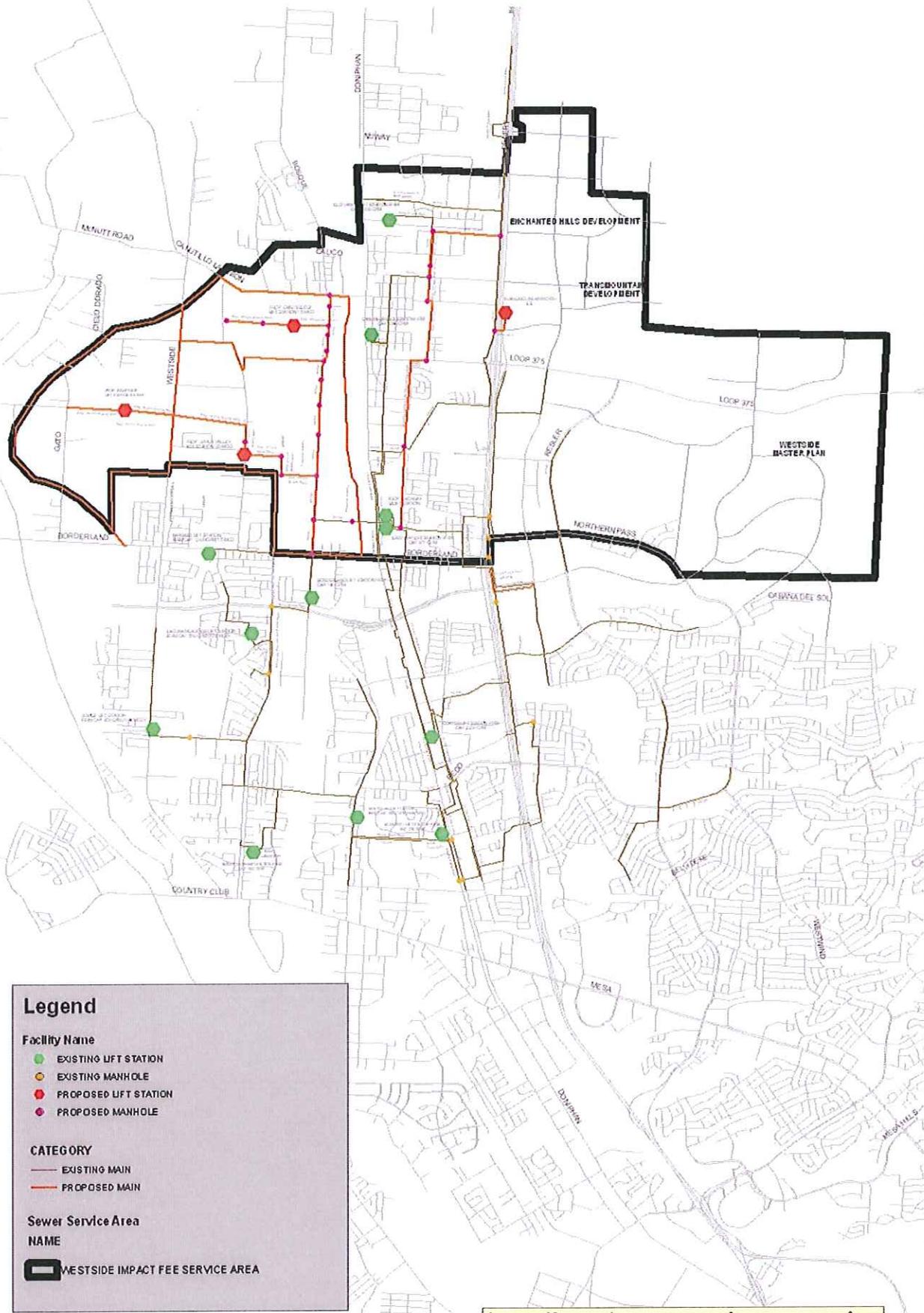
- EXISTING MAINS
- PROPOSED MAINS

Water Pressure Zone NAME

- WESTSIDE WATER IMPACT FEE SERVICE AREA



WESTSIDE SEWER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

- EXISTING LIFT STATION
- EXISTING MANHOLE
- PROPOSED LIFT STATION
- PROPOSED MANHOLE

CATEGORY

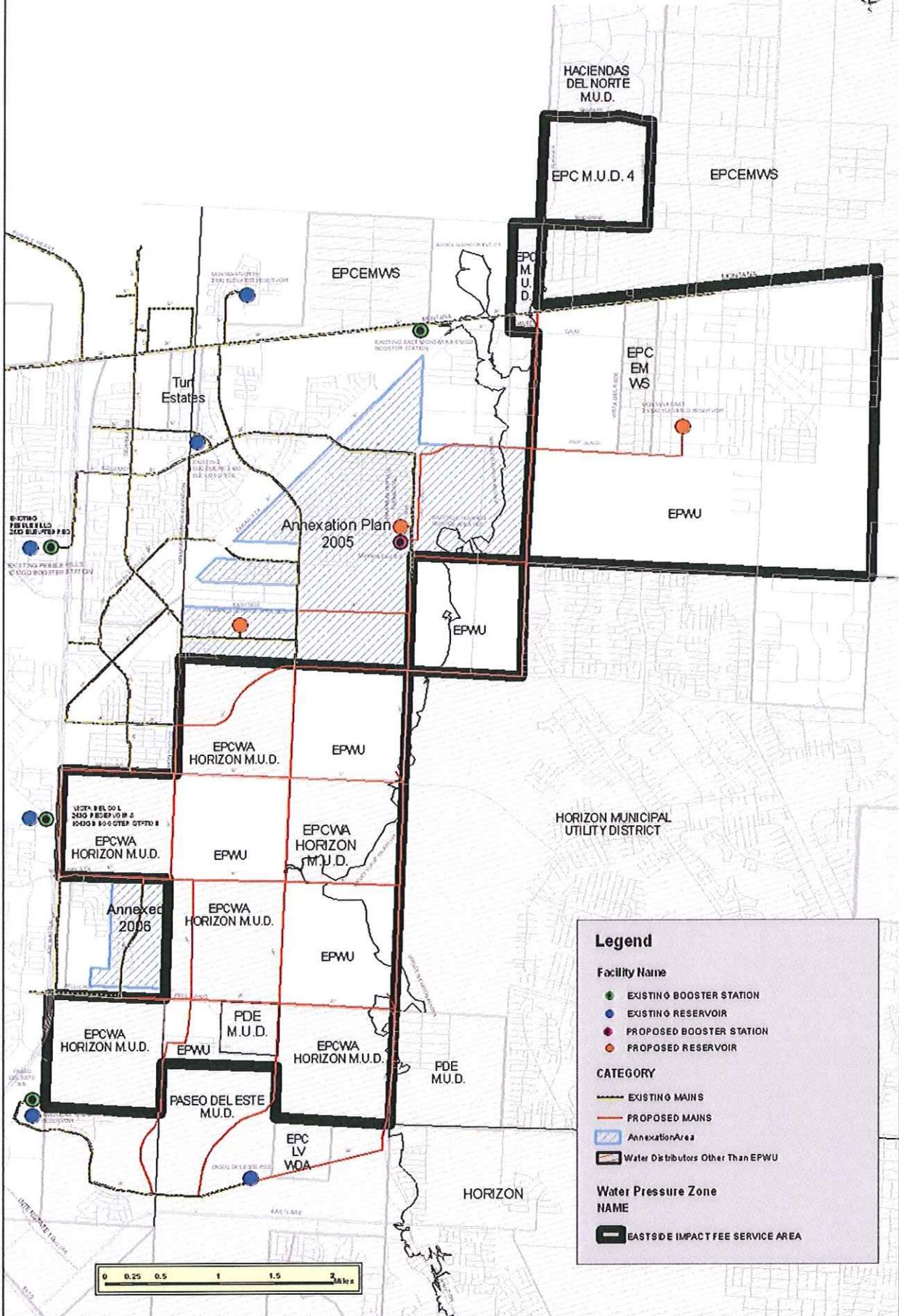
- EXISTING MAIN
- PROPOSED MAIN

Sewer Service Area NAME

- ▭ WESTSIDE IMPACT FEE SERVICE AREA



EASTSIDE WATER IMPACT FEE SERVICE AREA MAP



Legend

Facility Name

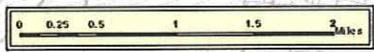
- EXISTING BOOSTER STATION
- EXISTING RESERVOIR
- PROPOSED BOOSTER STATION
- PROPOSED RESERVOIR

CATEGORY

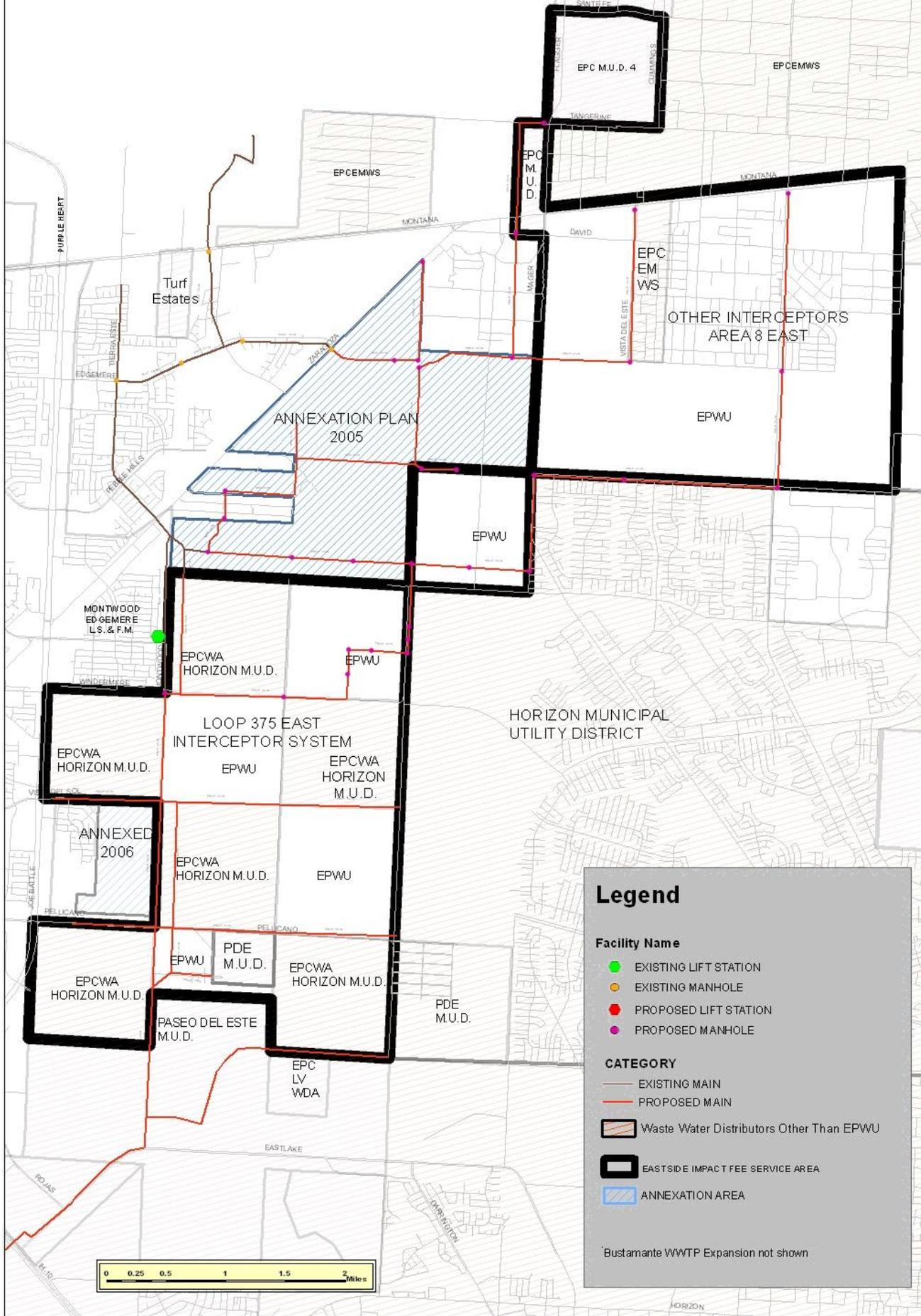
- EXISTING MAINS
- PROPOSED MAINS
- Annexation Area
- Water Distributors Other Than EPWU

Water Pressure Zone NAME

- EASTSIDE IMPACT FEE SERVICE AREA



EASTSIDE SEWER IMPACT FEE SERVICE AREA MAP



ATTACHMENT B
Water and Wastewater Impact Fee Study
Land Use Assumptions

	SU per Acre	Persons Per SU
NORTHEAST AREA 01		
Residential		
Luxury Low Density	3.00	2.00
Senior Low Density	4.00	1.80
Medium Density	3.50	2.80
Medium High Density	5.50	3.50
High Density	3.50	2.20
Average Density	4.08	2.83
NORTHEAST AREA 05A, 05B, 05C		
Residential		
Luxury Low Density	2.72	2.00
Senior Low Density	3.25	1.80
Medium Density	3.50	2.80
Medium High Density	5.50	3.50
High Density	2.38	2.20
Average Density (Area 05A)	3.46	2.79
Average Density (Area 05B)	5.45	3.49
Average Density (Area 05C)	3.50	2.80

	SU per Acre	Persons Per SU
WESTSIDE AREA 02		
Residential		
Low Density	2.00	3.03
Medium Density	4.50	3.03
Medium High Density	6.00	3.03
High Density	9.01	3.03
Average Density	4.70	3.03
WESTSIDE AREA 03A	4.50	3.03
Average Density		
WESTSIDE AREA 03E		
Residential		
Average Density	5.00	3.50
Mixed Use , 60% Res., 25% Comm., 15% Ind.		
WESTSIDE AREA 04A		
Average Density	4.00	4.00
WESTSIDE AREA 04B		
Average Density	4.00	4.00
WESTSIDE AREA 04C		
Average Density	3.20	4.00
WESTSIDE AREA 04D		
Average Density	4.00	4.00
WESTSIDE AREA 04E		
Average Density	4.00	4.00
WESTSIDE-OTHER		
Average Density	3.45	3.17

	SU per Acre	Persons Per SU
EASTSIDE AREA 06.		
Average Density	6.00	4.00
EASTSIDE AREA 08		
Average Density	7.00	3.00
EASTSIDE AREA 08B		
Average Density	7.00	3.00
EASTSIDE AREA 10B		
Average Density	6.00	4.00
EASTSIDE AREA 12		
Average Density	2.23	4.00
EASTSIDE AREA 12B		
Average Density	6.00	4.00

**ATTACHMENTS C and D
Water and Wastewater Impact Fee Study**

**Capital Improvements Plan
Prepared by Felipe Lopez, Jr., P.E.
Engineering Division Manager
Planning and Development
El Paso Water Utilities**



MEMORANDUM

To: Richard D. Giardina
Red Oak Consulting
Vice President

Date: March 6, 2009

Copy: Nick J. Costanzo
El Paso Water Utilities
Vice President of Strategic, Financial and Management Services

From: Felipe Lopez Jr., P.E.
El Paso Water Utilities
Engineering Division Manager
Planning and Development

Re: **Water and Wastewater Future Capital Improvements**

In preparation of the El Paso Water Utilities Impact Fee Study, and in accordance with the Texas State Statues, Local Government Code, Chapter 395, attached please find a description of the future capital improvements for the El Paso Water Utilities.

Attachment C contains a description of the future 10-year capital improvements and facility expansions necessitated by and attributed to new development based on the proposed service areas.

Attachment D contains a list of the proposed 10-year capital improvements and facility expansions, and costs necessitated by and attributed to new development based on the proposed service areas.

We trust that this information provides the capital improvements and costs required to complete the Impact Fee Study and meet the letter and intent of the Texas State Statutes.

Please feel free to contact me with any questions.

Attachments: 2



ATTACHMENT C
El Paso Water Utilities – Public Service Board
Water and Wastewater Impact Fee Study
Description of Capital Improvement Facilities

Associated Water

WATER SUPPLY AND TREATMENT SYSTEM

No water supply and treatment system capital improvements proposed.

RESERVOIRS

NORTH 2 TANK #2A – New storage facilities required to meet the development in the North Hills area of the East High pressure zone (PZ). This will also serve as the start for the future supply and distribution system of the PSB-created Franklin East #1 and #2 higher elevation PZs (pressure zone) that lie into the Franklin Mountains to the New Mexico state line. It consists of new 5-MG tank and its supply line from the NE booster station (BS) distribution system.

FRANKLIN EAST #1A - A 4-MG tank and a 5-MG future tank to be constructed in War Highway Zone, North of the North Hills development and west of Martin Luther King Blvd., which will service a new pressure zone comprising of the NE master planned areas. This reservoir is needed to meet future growth development of the lower reaches of the future NE master planned areas east of War Highway and to the state line.

TRANSMOUNTAIN NORTH #1A – Proposed 4-MG tank north of Transmountain on the westside, at the same overflow elevation of Artcraft # 1, to meet growth.

TRANSMOUNTAIN NORTH #2A – Proposed 3-MG tank north of Transmountain on the westside, at the same overflow elevation of Artcraft # 2, to meet growth.

EASTSIDE PLANNED SERVICE AREA (PSA) - New reservoirs to serve areas east of Loop 375. Recently completed project includes a new 3-MG Edgemere elevated tank to serve the triangle area bounded by Montana, Zaragoza, and Loop 375. This tank has a higher overflow elevation than the Pebble Hills tank and has consequently become a component of a new Edgemere-Zaragoza PZ in this triangle area. A second elevated tank, the 2-MG Montana North tank was completed in 2007. Future projects include the Tierra Del Este (Ranchos Real) 2-MG and Ventanas 2-MG new elevated tanks.

ARTCRAFT NO. 4 RESERVOIR – A 2-MG ground storage tank located on the west foothills of the Franklin Mountains, to serve future development in the upper service areas east of I-10 near Transmountain Road.

FRANKLIN EAST #2 – A 3-MG storage tank to be located in the upper reaches of the Franklin Mountains in NE El Paso. This structure will provide service to areas in the North Hills subdivisions and future growth between the eastern foothills of the mountain and War Highway (Martin Luther King Blvd.).

NORTHEAST STATION WELL SUPPLY TANK – A new 2-MG ground storage supply tank in northeast El Paso, at the intersection of Sean Haggerty Drive and McCombs Blvd., adjacent to the NE BS. This tank is needed to augment the existing storage capacity of the Northeast well production system, and to accommodate future supply from the Sherman Well Field. This storage tank will also allow for additional pumping capacity to be installed at the NE BS for pumping into the Northeast (East High) PZ and upper zone pumping related to future growth.

MONTANA EAST SERVICE AREA – A series of storage facilities have been conceptually planned to provide service outside the city to about 12 square miles of potential development along north and south of the Montana Ave. corridor, extending about 8 miles east of Loop 375. These areas include Hillcrest Estates, Vista Del Este, various properties owned by the People of Texas, and other private developers. EPWU's long range plan projects a multi-year three phase approach to extend pipelines, construct elevated storage tanks (3 totaling 6.5-MG), and one pump station (15 million gallons per day (MGD) phase I plus additional 10-MGD phase II) to supply these areas.

DISTRIBUTION PUMPING EQUIPMENT

ARTCRAFT #1 – A 20-MGD pumping station located at Northwestern and Paseo Del Norte (Arcraft Rd) in northwest El Paso, was completed in late 2002 and will supply Arcraft #2 tank. An additional 5-MGD engine driven pump will be added to meet future demand.

NEW SUNSET PUMP STATION - A new Sunset pump station will be required to meet the future demands of the West High and upper central zone service areas.

NORTH TWO PUMP STATION - Initial 11.8-MGD to future 22.3-MGD booster pump station that is designed to deliver water to the Franklin East 1 PZ by pumping to the proposed Franklin East 1 Tank via the Franklin East 1 Transmission Main. Pump Station will be located off of a 250-foot access road off Loma Real.

TRANSMOUNTAIN NORTH #1 PUMP STATION - Proposed pump station north of Transmountain on the Westside, to pump from Transmountain #1 reservoir to Transmountain #2 reservoir, to meet growth.

ARTCRAFT #3 PUMP STATION – A 3.0 MGD pumping station in northwest El Paso will supply Arcraft # 4 tank.

FRANKLIN EAST #1 PUMP STATION – A new 4.75-MGD pump station to be located west of Martin Luther King Blvd near the North Hills Subdivisions which will provide pumping

supply from the Franklin East #1A and 1B tanks to the Franklin East #2 tank and associated PZ, to supply future development.

MONTANA EAST SERVICE AREA – Distribution facilities have been conceptually planned to provide service outside the city to about 12 square miles of potential development along north and south of the Montana Ave. corridor, extending about 8 miles east of Loop 375. This program is a multi-year three phase approach to extend pipelines and construct elevated storage tanks. This CIP item considers the design and future construction of one pump station (15-MGD Phase I plus additional 10-MGD Phase II) to supply these areas.

CANUTILLO PUMP STATION UPGRADE – To increase the station’s pumping capacity from its current 37-MGD to approximately 50 MGD to meet future demand.

DISTRIBUTION LINES

CANUTILLO/UV TRANSMISSION MAIN PH. IV – Part of an existing major system of large diameter pipelines that extends and delivers water supply from the Canutillo Well Field and the Upper Valley (Arsenic) Water Treatment Plant in Vinton, to all major areas of northwest El Paso. Phase IV will consist of a 36” diameter line extending from Graphite & Mace to the Fred Miller Storage site.

NORTH 2 TO FRANKLIN EAST #1 - This transmission line shall convey water from the North Two booster station to the other tanks floating within the Franklin East #1 PZ: Tank #3 (3-MG), and tanks #4 (5-MG) and #5 (5-MG). These tanks shall serve the distribution system with Franklin East #1 as well as the northern most half of the NE PZ.

FRANKLIN EAST #1 TO #2 - This transmission line shall convey water from the Franklin East #1 booster station to the other tanks floating within the Franklin East #2 PZ. These tanks shall serve the distribution system with Franklin East #2 PZ.

TRANSMOUNTAIN NORTH SUPPLY MAIN TRANSMOUNTAIN #1 - A proposed transmission main on the Westside, from the Canutillo 60” diameter main to the Transmountain Reservoir #1, to meet growth.

TRANSMOUNTAIN SUPPLY TO TRANSMOUNTAIN #2 - A proposed transmission main on the Westside, from the Transmountain #1 Pump Station to the Transmountain #2 tank, to meet growth.

BORDERLAND, DONIPHAN, STRAHAN, & LA UNION – Part of the Northwest System upgrades to meet future growth on the Westside. A 24-inch diameter transmission main needed paralleling existing Doniphan system from Galindo Street, north along Doniphan or the Rio Grande River, tying to the 60” diameter just east of the Canutillo booster station at Doniphan Drive. Also, an extension of a 16” diameter or larger line from Galindo/Doniphan Drive, west along Borderland to Strahan Road is required to meet growth.

EASTSIDE PLANNED SERVICE AREA (PSA) – Proposed transmission main lines necessary to serve areas east of Loop 375. Extensions of transmission mains associated with the construction of three proposed new elevated tanks will be completed concurrent with completion of those tanks.

ARTCRAFT #3 BOOSTER STATION TO ARTCRAFT #4 RESERVOIR – 2,800 LF of 24” diameter pipe to connect the booster station to the reservoir.

MONTANA EAST SERVICE AREA – Distribution facilities have been conceptually planned to provide service outside the city to about 12 square miles of potential development along north and south of the Montana Ave. corridor, extending about 8 miles east of Loop 375. EPWU’s long range plan projects a multi-year three phase approach to extend pipelines, construct elevated storage tanks and a major pump station. This CIP item considers the design and future construction of a backbone network of water transmission mains (16” to 36” diameter) to supply these areas.

NORTHEAST DYER / RAILROAD WATER TRANSMISSION MAIN – Planned Project consisting of water service mains that will serve future development in the far northeast.

NE FRANKLIN DISTRIBUTION MAINS - A network of water distribution lines generally 16” to 24” diameter to be constructed within the Franklin East # 1 and #2 service areas to meet growth in northeast El Paso.

Associated Wastewater

LINES

NE DYER / RAILROAD INTERCEPTOR - Series of gravity lines that will collect and deliver wastewater to the Fred Hervey Reclamation Plant. Project will provide service to future development in far northeast El Paso.

OTHER NEW INTERCEPTORS (EAST) – Sewer trunk collectors related to master planned development along Zaragoza and Loop 375.

EAST OF LOOP 375 INTERCEPTORS - These multi-phase, multi-year interceptors will serve the entire ETJ area east of Loop 375. Three major interceptor systems comprise this program. The Eastside Interceptor System that extends from Montana Avenue south to I-10 and continuing to Carl Longuemare; the Mesa Drain (relief) System; and the Valley Interceptor System. All interceptors in this program will ultimately transport flow to the Roberto R. Bustamante Wastewater Treatment Plant.

TRANSMOUNTAIN NORTH INTERCEPTORS – Proposed sewer interceptors necessary to serve areas north of Transmountain Road and east of I-10 on the westside to meet growth.

NE INTERCEPTOR SYSTEM (EPWU NEMP) – A 30” diameter sanitary sewer pipeline that is designed to collect and convey wastewater flows to the Fred Hervey Water Reclamation Plant.

MOWAD-WESTWAY INTERCEPTOR – A proposed 33” diameter wastewater collector system in northwest El Paso, which will extend from the vicinity of the existing Westway collector/force main system near Canutillo Heights west of Interstate 10, then southerly connecting to the new proposed Easy Way II Lift Station. This system will convey about 11-MGD of wastewater generated from future developments along west and east of I-10 and north of Transmountain Road.

NE FRANKLIN SERVICE AREA – Approximately 53,000 LF of 12”, 15”, 18”, 21”, and 30” diameter sewer pipeline that is designed to collect and convey wastewater flows from northeast El Paso to the Fred Hervey Wastewater Treatment Plant.

PUMPING AND FORCE MAINS

MONTWOOD/EDGEMERE LIFT STATION & FM– This lift station is required as a result of the Regional Wastewater Plan for the East El Paso Area Study. A 6.4-MGD lift station was constructed in the initial phase of improvements (Year 2005-06) to serve the central portion of the undeveloped land located adjacent to and inside the city limits. The ultimate capacity in future years will be 21-MGD with improvements.

TRANSMOUNTAIN NORTH LIFT STATION & FORCE MAIN – This proposed station to be constructed along the east side of I-10 about a mile north of Transmountain Drive in northwest El Paso to meet growth.

NORTHEAST (DYER/RAILROAD DRIVE) LIFT STATION – Phase II, upgrade of lift station to meet growth in northeast El Paso.

UPPER VALLEY THREE LIFT STATIONS – A series of lift stations (1.5, 2.5, 3.5-MGD) proposed for new developments north of Borderland along the Strahan Road corridor. These stations will ultimately discharge into a proposed Strahan Interceptor that will extend and connect into the Easy Way II lift station.

TREATMENT PLANT EXPANSIONS

BUSTAMANTE WWTP EXPANSION – Multi-phase construction project to expand the Roberto Bustamante WWTP from 30 to 54-MGD.

ATTACHMENT D
Water and Wastewater Impact Fee Study
Proposed Capital Improvements and Costs

<u>Northeast Service Area - Water</u>	<u>Capital Cost</u>
<u>Water Supply and Treatment System</u>	
No water supply or treatment system CIP proposed	\$ -
<u>Water Distribution System</u>	
Reservoirs	
North 2 Tank #2A (5)	3,600,000
Franklin East #1A (4)	4,100,000
Franklin East #2 (3)	3,100,000
NE Station Well Supply Tank (2)	2,200,000
Subtotal	<u>13,000,000</u>
Distribution Pumping Equipment	
North Two Pump Station (11.8 MGD)	2,500,000
Franklin East #1 (4.75 MGD)	1,900,000
Subtotal	<u>4,400,000</u>
Distribution Lines	
North 2 to Franklin East #1	4,100,000
Dyer/RR Waterline	3,600,000
NE Franklin Distribution Line	18,200,000
Franklin East #1 to #2	3,200,000
Subtotal	<u>29,100,000</u>
Total Water CIP	<u>\$ 46,500,000</u>

<u>Northeast Service Area - Wastewater</u>	<u>Capital Cost</u>
<u>Wastewater Treatment System</u>	
No wastewater treatment CIP proposed	\$ -
<u>Collection System</u>	
Lines	
NE Dyer/RR Interceptor	5,200,000
NE Interceptor System (EPWU-NEMP)	2,200,000
NE Franklin Service Area	3,570,000
Subtotal	<u>10,970,000</u>
Pumping & Force Mains	
NE Dyer/RR Lift Station (7MGD)	2,580,000
Total Wastewater CIP	<u>\$ 13,550,000</u>

ATTACHMENT D (continued)
Water and Wastewater Impact Fee Study
Proposed Capital Improvements and Costs

Westside Service Area - Water	Capital Cost
<u>Water Supply and Treatment System</u>	
No water supply or treatment system CIP proposed	\$ -
<u>Water Distribution System</u>	
Reservoirs	
TransMountain NW #1A (4)	3,600,000
TransMountain NW #2A (3)	5,400,000
Artcraft #4 Tank (2)	3,500,000
Subtotal	12,500,000
Distribution Pumping Equipment	
Artcraft #1-NW-WFMP	450,000
Sunset Pump Station Upgrade (16.4 MGD) (46% towards growth)	1,020,000
TransMountain NW #1 Pump Station	2,000,000
Artcraft #3 Pump Station	2,000,000
Canutillo Pump Station Upgrade	400,000
Subtotal	5,870,000
Distribution Lines	
Canut/UV Trns Mn-NW PH IV (36")	5,700,000
TransMtn NW Supply to TransMtn #1	800,000
TransMtn NW Supply to TransMtn #2	2,000,000
Borderland 16"/24" Doniphan, Strahan, La Union	12,500,000
Artcraft #3 to #4 Trans Mountain	850,000
Subtotal	21,850,000
Total Water CIP	\$ 40,220,000

Westside Service Area - Wastewater	Capital Cost
<u>Wastewater Treatment System</u>	
No wastewater treatment CIP proposed	\$ -
<u>Collection System</u>	
Lines	
TransMountain NW Interceptors	3,700,000
Mowad-Westway Interceptor	7,000,000
Subtotal	10,700,000
Pumping & Force Mains	
TransMountain North LS & FM (0.344 MGD for development)	150,000
Upper Valley 3 LS (1.5+2.5+3.5MGD)	7,100,000
Subtotal	7,250,000
Total Wastewater CIP	\$ 17,950,000

ATTACHMENT D (continued)
Water and Wastewater Impact Fee Study
Proposed Capital Improvements and Costs

<u>Eastside Service Area - Water</u>	<u>Capital Cost</u>
<u>Water Supply and Treatment System</u>	
No water supply or treatment system CIP proposed	\$ -
<u>Water Distribution System</u>	
Reservoirs	
Montana East (2.5)	2,750,000
Eastside PSA Reservoirs (2.0 + 2.0)	6,000,000
Subtotal	<u>8,750,000</u>
Distribution Pumping Equipment	
Montana East (3 MGD)	1,200,000
Distribution Lines	
Eastside Planned Service Area	9,000,000
Montana East Supply Line	4,500,000
Subtotal	<u>13,500,000</u>
Total Water CIP	<u>23,450,000</u>

<u>Eastside Service Area - Wastewater</u>	<u>Capital Cost</u>
<u>Wastewater Treatment System</u>	
Bustamante WWTP Expansion from 39 to 54 MGD	\$ 33,000,000
<u>Collection System</u>	
Lines	
Other Interceptors (Area 8 East)	10,000,000
Loop 375 East Interceptor System	40,300,000
Subtotal	<u>50,300,000</u>
Pumping & Force Mains	
Montwood/Edgemere Lift Station & FM	850,000
Total Wastewater CIP	<u>\$ 84,150,000</u>

ATTACHMENT E
Water and Wastewater Impact Fee Study
Northeast Service Area

Water Service Unit Flows (Max Day)

688 gpd

Line No.	Northeast Service Area - Water	Capital Cost	Capacity (MGD)	Total Service Units	Unit Cost of Capacity	Weighted Average	
Water Supply and Treatment System							
1	No water supply or treatment system CIP proposed	-	-	-	\$ -	\$ -	
Water Distribution System							
Reservoirs							
2	North 2 Tank #2A (5)	\$ 3,600,000	5.0	0	-		
3	Franklin East #1A (4)	4,100,000	4.0	11,628	\$ 353		
4	Franklin East #2 (3)	3,100,000	3.0	8,721	355		
5	NE Station Well Supply Tank (2)	2,200,000	2.0	0	-		
6	Subtotal	13,000,000		20,349		\$639	
Debt Issued							
7	North 2 Tank #2A & 2B (5)	1,285,000					
8	Franklin East #1A (4)	1,460,000					
9	Franklin East #2 (3)	1,105,000					
10	NE Station Well Supply Tank	785,000					
11	Subtotal	4,635,000					
NPV of Interest							
12	North 2 Tank #2A & 2B (5)	544,777		0	-		
13	Franklin East #1A (4)	618,968		11,628	53		
14	Franklin East #2 (3)	468,466		8,721	54		
15	NE Station Well Supply Tank	332,801		0	-		
16	Subtotal	1,965,012		20,349		97	
Distribution Pumping Equipment							
17	North Two Pump Station (11.8 MGD)	2,500,000	11.8	17,151	146		
18	Franklin East #1 (4.75 MGD)	1,900,000	3.3	4,840	393		
19	Subtotal	4,400,000		21,991		200	
Debt Issued							
20	North Two Pump Station (11.8 MGD)	890,000					
21	Franklin East #1 (4.75 MGD)	680,000					
22	Subtotal	1,570,000					
NPV of Interest							
23	North Two Pump Station (11.8 MGD)	377,316		17,151	22		
24	Franklin East #1 (4.75 MGD)	288,286		4,840	60		
25	Subtotal	665,603		21,991		30	
Distribution Lines							
26	North 2 to Franklin East #1	4,100,000			799		
27	Dyer/RR Waterline	3,600,000	22.3	32,413	799		
28	NE Franklin Distribution Line	18,200,000			799		
29	Franklin East #1 to #2	3,200,000		4,840	661		
30	Subtotal	29,100,000		37,253		781	
Debt Issued							
31	North 2 to Franklin East #1	1,460,000					
32	Dyer/RR Waterline	1,285,000					
33	NE Franklin Distribution Line	6,475,000					
34	Franklin East #1 to #2	1,140,000					
35	Subtotal	10,360,000					
NPV of Interest							
36	North 2 to Franklin East #1	618,968			19		
37	Dyer/RR Waterline	544,777		32,413	19		
38	NE Franklin Distribution Line	2,745,081			19		
39	Franklin East #1 to #2	483,304		4,840	\$ 100		
40	Subtotal	\$ 4,392,129		37,253		118	
41	Maximum Water Impact Fee - Northeast Service Area (Capital and Financing)					\$ 1,865	

ATTACHMENT E (continued)
Water and Wastewater Impact Fee Study
Northeast Service Area

Wastewater Service Unit Flows (Max Day)

341 gpd

Line No.	Northeast Service Area - Wastewater	Capital Cost	Capacity (MGD)	Total Service Units	Unit Cost of Capacity	Weighted Average
Wastewater Treatment System						
1	No wastewater treatment CIP proposed	-	-	-	-	-
Collection System						
Lines						
2	NE Dyer/RR Interceptor	\$ 5,200,000		11,497	\$ 452	
3	NE Interceptor System (EPWU-NEMP)	2,200,000		19,182	115	
4	NE Franklin Service Area	3,570,000		14,089	253	
5	Subtotal	10,970,000		44,768		\$ 245
Debt Issued						
6	NE Dyer/RR Interceptor	1,850,000				
7	NE Interceptor System (EPWU-NEMP)	785,000				
8	NE Franklin Service Area	1,270,000				
9	Subtotal	3,905,000				
NPV of Interest						
10	NE Dyer/RR Interceptor	784,309		11,497	68	
11	NE Interceptor System (EPWU-NEMP)	332,801		19,182	17	
12	NE Franklin Service Area	538,417		14,089	38	
13	Subtotal	1,655,528		44,768		37
Pumping & Force Mains						
14	NE Dyer/RR Lift Station (7 MGD)	2,580,000	7.0	11,614	222	222
Debt Issued						
15	NE Dyer/RR Lift Station (7 MGD)	920,000				
NPV of Interest						
16	NE Dyer/RR Lift Station (7 MGD)	\$ 390,035		11,614	\$ 34	34
17	Maximum Wastewater Impact Fee - Northeast Service Area (Capital and Financing)					\$ 538
18	Maximum Northeast Water and Wastewater Impact Fee					\$ 2,403

ATTACHMENT E (continued)
Water and Wastewater Impact Fee Study
Westside Service Area

Water Service Unit Flows (Max Day)

688 gpd

Line No.	Westside Service Area	Capital Cost	Capacity (MGD)	Total Service Units	Unit Cost of Capacity	Weighted Average
Water Supply and Treatment System						
1	No water supply or treatment system CIP proposed	-	-	-	-	-
Water Distribution System						
Reservoirs						
1	TransMountain NW #1A (4)	\$ 3,600,000	4.0	11,628	\$ 310	
2	TransMountain NW #2A (3)	5,400,000	3.0	8,721	619	
3	Artcraft #4 Tank (2)	3,500,000	2.0	5,814	602	
4	Subtotal	12,500,000		26,163		\$ 478
Debt Issued						
5	TransMountain NW #1A (4)	1,285,000				
6	TransMountain NW #2A (3)	1,925,000				
7	Artcraft #4 Tank (2)	1,245,000				
8	Subtotal	4,455,000				
NPV of Interest						
9	TransMountain NW #1A (4)	544,777		11,628		47
10	TransMountain NW #2A (3)	816,105		8,721		94
11	Artcraft #4 Tank (2)	527,819		5,814		91
12	Subtotal	1,888,700		26,163		72
Distribution Pumping Equipment						
13	Artcraft #1-NW-WFMP	450,000	5.0	7,267		62
14	Sunset Pump Station Upgrade (16.4 MGD) (46% towards growth)	1,020,000	7.6	11,076		92
15	TransMountain NW #1 Pump Station	2,000,000	3.0	4,360		459
16	Artcraft #3 Pump Station	2,000,000	3.0	4,360		459
17	Canutillo PS Upgrade	400,000	4.0	5,814		69
18	Subtotal	5,870,000		32,878		179
Debt Issued						
19	Artcraft #1-NW-WFMP	165,000				
20	Sunset Pump Station Upgrade (16.4 MGD) (46% towards growth)	365,000				
21	TransMountain NW #1 Pump Station	715,000				
22	Artcraft #3 Pump Station	715,000				
23	Canutillo PS Upgrade	145,000				
24	Subtotal	2,105,000				
NPV of Interest						
25	Artcraft #1-NW-WFMP	69,952		7,267		10
26	Sunset Pump Station Upgrade (16.4 MGD) (46% towards growth)	154,742		11,076		14
27	TransMountain NW #1 Pump Station	303,125		4,360		70
28	Artcraft #3 Pump Station	303,125		4,360		70
29	Canutillo PS Upgrade	61,473		5,814		11
30	Subtotal	892,416		32,878		27
Distribution Lines						
31	Canut/UV Trns Mn-NW PH IV (36")	5,700,000	22.0	31,977		178
32	TransMtn NW Supply to TransMtn #1	800,000				88
33	TransMtn NW Supply to TransMtn #2	2,000,000	22.0	31,977		88
34	Borderland 16"/24" Doniphan, Strahan, La Union	12,500,000	10.0	14,535		860
35	Artcraft #3 to #4 Trans Mountain	850,000	6.0	8,721		97
36	Subtotal	21,850,000		87,209		251
Debt Issued						
37	Canut/UV Trns Mn-NW PH IV (36")	2,030,000				
38	TransMtn NW Supply to TransMtn #1	285,000				
39	TransMtn NW Supply to TransMtn #2	715,000				
40	Borderland 16"/24" Doniphan, Strahan, La Union	4,445,000				
41	Artcraft #3 to #4 Trans Mountain	305,000				
42	Subtotal	7,780,000				
NPV of Interest						
43	Canut/UV Trns Mn-NW PH IV (36")	860,620		31,977		27
44	TransMtn NW Supply to TransMtn #1	120,826				13
45	TransMtn NW Supply to TransMtn #2	303,125		31,977		13
46	Borderland 16"/24" Doniphan, Strahan, La Union	1,884,461		14,535		130
47	Artcraft #3 to #4 Trans Mountain	129,305		8,721	\$	15
48	Subtotal	\$ 3,298,337		87,209		38
49	Maximum Water Impact Fee - Westside Service Area (Capital and Financing)					\$ 1,044

ATTACHMENT E (continued)
Water and Wastewater Impact Fee Study
Westside Service Area

Wastewater Service Unit Flows (Max Day)

341 gpd

Line No.	Westside Service Area	Capital Cost	Capacity (MGD)	Total Service Units	Unit Cost of Capacity	Weighted Average
Wastewater Treatment System						
1	No wastewater treatment CIP proposed	-	-	-	-	-
Collection System						
Lines						
2	TransMountain NW Interceptors	\$ 3,700,000		5,485	\$ 675	
3	Mowad-Westway Interceptor	7,000,000		10,500	667	
4	Subtotal	10,700,000		15,985		\$ 669
Debt Issued						
5	TransMountain NW Interceptors	1,320,000				
6	Mowad-Westway Interceptor	2,490,000				
7	Subtotal	3,810,000				
NPV of Interest						
8	TransMountain NW Interceptors	559,615		5,485	102	
9	Mowad-Westway Interceptor	1,055,637		10,500	101	
10	Subtotal	1,615,252		15,985		101
Pumping & Force Mains						
11	TransMountain North LS & FM (0.344 MGD for development)	150,000	0.344	1,009	149	
12	Upper Valley 3 LS (1.5+2.5+3.5 MGD)	7,100,000	7.5	7,864	903	
13	Subtotal	7,250,000		8,873		817
Debt Issued						
14	TransMountain North LS & FM	55,000				
15	Upper Valley 3 LS (1.5+2.5+3.5 MGD)	2,525,000				
16	Subtotal	2,580,000				
NPV of Interest						
17	TransMountain North LS & FM	23,317	0.344	1,009	23	
18	Upper Valley 3 LS (1.5+2.5+3.5 MGD)	1,070,476	7.5	7,864	136	
19	Subtotal	\$ 1,093,793		8,873		123
20	Maximum Wastewater Impact Fee - Westside Service Area (Capital and Financing)					\$ 1,711
21	Maximum Water and Wastewater Impact Fee - Westside Area					\$ 2,755

ATTACHMENT E (continued)
Water and Wastewater Impact Fee Study
Eastside Service Area

Water Service Unit Flows (Max Day)

688 gpd

Line No.	Eastside Service Area	Capital Cost	Capacity (MGD)	Total Service Units	Unit Cost of Capacity	Weighted Average
Water Supply and Treatment System						
1	No water supply or treatment system CIP proposed	-	-	-	-	-
Water Distribution System						
Reservoirs						
2	Montana East (2.5)	\$ 2,750,000	2.5	7,267	\$ 378	
3	Eastside PSA Reservoirs (2.0 + 2.0)	6,000,000	4.0	11,628	516	
4	Subtotal	8,750,000		18,895		\$ 463
Debt Issued						
5	Montana East (2.5)	980,000				
6	Eastside PSA Reservoirs (2.0 + 2.0)	2,135,000				
7	Subtotal	3,115,000				
NPV of Interest						
8	Montana East (2.5)	415,472	2.5	7,267	57	
9	Eastside PSA Reservoirs (2.0 + 2.0)	905,135	4.0	11,628	78	
10	Subtotal	1,320,606		18,895		70
Distribution Pumping Equipment						
11	Montana East (3 MGD)	1,200,000	3.0	4,360	275	275
Debt Issued						
12	Montana East (3 MGD)	430,000				
NPV of Interest						
13	Montana East (3 MGD)	182,299	3.0	4,360	42	42
Distribution Lines						
14	Eastside Planned Service Area	9,000,000	20.0	29,070	310	
15	Montana East Supply Line	4,500,000	22.3	32,413	139	
16	Subtotal	13,500,000		61,483		220
Debt Issued						
17	Eastside Planned Service Area	3,205,000				
18	Montana East Supply Line	1,605,000				
19	Subtotal	4,810,000				
NPV of Interest						
20	Eastside Planned Service Area	1,358,762		29,070	47	
21	Montana East Supply Line	680,441		32,413	21	
22	Subtotal	\$ 2,039,203		61,483		33
23	Maximum Water Impact Fee - Eastside Service Area (Capital and Financing)					\$ 1,103

ATTACHMENT E (continued)
Water and Wastewater Impact Fee Study
Eastside Service Area

Wastewater Service Unit Flows (Max Day)

341 gpd

Line No.	Eastside Service Area	Capital Cost	Capacity (MGD)	Total Service Units	Unit Cost of Capacity	Weighted Average
Wastewater Treatment System						
1	Bustamante WWTP Expansion from 39 to 54 MGD	\$ 33,000,000	15.0	43,988	\$ 750	\$ 750
Debt Issued						
2	Bustamante WWTP Expansion from 39 to 54 MGD	11,735,000				
NPV of Interest						
3	Bustamante WWTP Expansion from 39 to 54 MGD	4,975,062	15.0	43,988	113	113
Collection System						
Lines						
1	Other Interceptors (Area 8 East)	10,000,000		23,055	434	
2	Loop 375 East Interceptor System	40,300,000		54,422	741	649
3	Subtotal	50,300,000		77,477		
Debt Issued						
4	Other Interceptors (Area 8 East)	3,560,000				
5	Loop 375 East Interceptor System	14,335,000				
6	Subtotal	17,895,000				
NPV of Interest						
7	Other Interceptors (Area 8 East)	1,509,265		23,055	65	
8	Loop 375 East Interceptor System	6,077,334		54,422	112	98
9	Subtotal	7,586,598		77,477		
Pumping & Force Mains						
10	Montwood/Edgemere Lift Station & FM	850,000		11,143	76	76
Debt Issued						
11	Montwood/Edgemere Lift Station & FM	305,000				
NPV of Interest						
12	Montwood/Edgemere Lift Station & FM	\$ 129,305		11,143	\$ 12	12
14	Maximum Wastewater Impact Fee - Eastside Service Area (Capital and Financing)					\$ 1,698
15	Maximum Eastside Water and Wastewater Impact Fee					\$ 2,801

ATTACHMENT F

**Water and Wastewater Impact Fee Study
Maximum Impact Fee Per Service Unit**

<i>Column A</i>	<i>Column B</i>	<i>Column C</i>	<i>Column D</i>	<i>Column E</i>	<i>Column F</i>	<i>Column G</i>	<i>Column H</i>
Service Area and Category of Capital Improvement	Capital Improvement Costs	Amount Financed	Financing Costs (NPV of Interest)	Facility Service Units	Projected New Service Units through 2018	Portion of Capital Improvements and Financing	Maximum Impact Fee per Unit
Northeast							
Water							
Treatment	\$0	\$0	\$0	-	-	\$0	\$0
Reservoirs	13,000,000	4,635,000	1,965,012	20,349	11,663	8,577,243	735
Pumping	4,400,000	1,570,000	665,603	21,991	11,663	2,686,525	230
Distribution Lines	29,100,000	10,360,000	4,392,129	37,253	11,663	10,485,590	899
Total Water	46,500,000	16,565,000	7,022,744	N/A	11,663	21,749,358	1,865
Wastewater							
Treatment	0	0	0	-	-	0	0
Collection Lines	10,970,000	3,905,000	1,655,528	44,768	11,663	3,289,214	282
Pumping ¹	2,580,000	920,000	390,035	11,614	11,663	2,970,035	256
Total Wastewater	13,550,000	4,825,000	2,045,562	N/A	11,663	6,259,249	538
Total Northeast Area	\$60,050,000	\$21,390,000	\$9,068,306	N/A	11,663	\$28,008,607	\$2,403
Westside							
Water							
Treatment	\$0	\$0	\$0	-	-	\$0	\$0
Reservoirs	12,500,000	4,455,000	1,888,700	26,163	5,552	3,053,423	550
Pumping	5,870,000	2,105,000	892,416	32,878	5,552	1,141,950	206
Distribution Lines	21,850,000	7,780,000	3,298,337	87,209	5,552	1,601,017	288
Total Water	40,220,000	14,340,000	6,079,453	N/A	5,552	5,796,390	1,044
Wastewater							
Treatment	0	0	0	-	-	0	0
Collection Lines	10,700,000	3,810,000	1,615,252	15,985	5,552	4,277,403	770
Pumping	7,250,000	2,580,000	1,093,793	8,873	5,552	5,220,984	940
Total Wastewater	17,950,000	6,390,000	2,709,045	N/A	5,552	9,498,387	1,711
Total Westside Area	\$58,170,000	\$20,730,000	\$8,788,498	N/A	5,552	\$15,294,777	\$2,755
Eastside							
Water							
Treatment	\$0	\$0	\$0	-	-	\$0	\$0
Reservoirs	8,750,000	3,115,000	1,320,606	18,895	6,452	3,438,706	533
Pumping ¹	1,200,000	430,000	182,299	4,360	6,452	1,382,299	317
Distribution Lines	13,500,000	4,810,000	2,039,203	61,483	6,452	1,630,689	253
Total Water	23,450,000	8,355,000	3,542,108	N/A	6,452	6,451,694	1,103
Wastewater							
Treatment	33,000,000	11,735,000	4,975,062	43,988	6,452	5,570,010	863
Collection Lines	50,300,000	17,895,000	7,586,598	77,477	6,452	4,820,583	747
Pumping	850,000	305,000	129,305	11,143	6,452	567,035	88
Total Wastewater	84,150,000	29,935,000	12,690,965	N/A	6,452	10,957,629	1,698
Total Eastside Area	\$107,600,000	\$38,290,000	\$16,233,073	N/A	6,452	\$17,409,323	\$2,801
Systemwide							
Water ²	\$110,170,000	\$39,260,000	\$16,644,305		23,667	\$33,997,443	\$1,465
Wastewater ²	115,650,000	41,150,000	17,445,572		23,667	26,715,264	\$1,129
Systemwide Area	\$225,820,000	\$80,410,000	\$34,089,877		23,667	\$60,712,707	\$2,594

Notes

- (1) Pumping service units are based on the lesser of the facility service units or the projected new service units through 2018.
- (2) Systemwide weighted average. Water and wastewater service units are adjusted to reflect reduced pumping service units.

ATTACHMENT G
Water and Wastewater Impact Fee Study
Impact Fee Credit Calculation

Systemwide Water Credit Calculation

Line No.		Total (All Years)	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
1	Principal Payments	\$39,260,000	\$1,187,324	\$1,246,690	\$1,309,025	\$1,374,476	\$1,443,200	\$1,515,360	\$1,591,128	\$1,670,684	\$1,754,218
2	Interest Payments (present value)	16,644,305	1,869,524	1,726,652	1,590,584	1,460,995	1,337,577	1,220,036	1,108,092	1,001,479	899,942
3	Principal and Present Value of Interest	\$55,904,305	\$3,056,848	\$2,973,342	\$2,899,608	\$2,835,471	\$2,780,776	\$2,735,395	\$2,699,219	\$2,672,163	\$2,654,160
4	Beginning Year Service Units		223,670	226,037	228,403	230,770	233,137	235,504	237,870	240,237	242,604
5	Incremental Service Units		2,367	2,367	2,367	2,367	2,367	2,367	2,367	2,367	2,367
6	Total Service Units		226,037	228,403	230,770	233,137	235,504	237,870	240,237	242,604	244,970
7	Debt Service Credit per Unit	\$231	\$14	\$13	\$13	\$12	\$12	\$11	\$11	\$11	\$11

Notes:

1. Present value calculations apply a 5 percent discount rate.

ATTACHMENT G
Water and Wastewater Impact Fee Study
Impact Fee Credit Calculation

Systemwide Water Credit Calculation

Line No.		FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Principal Payments	\$1,841,929	\$1,934,026	\$2,030,727	\$2,132,263	\$2,238,876	\$2,350,820	\$2,468,361	\$2,591,779	\$2,721,368	\$2,857,437	\$3,000,309
2	Interest Payments (present value)	803,241	711,144	623,434	539,899	460,343	384,575	312,415	243,691	178,240	115,905	56,539
3	Principal and Present Value of Interest	\$2,645,170	\$2,645,170	\$2,654,160	\$2,672,163	\$2,699,219	\$2,735,395	\$2,780,776	\$2,835,471	\$2,899,608	\$2,973,342	\$3,056,848
4	Beginning Year Service Units	244,970	247,337	247,337	247,337	247,337	247,337	247,337	247,337	247,337	247,337	247,337
5	Incremental Service Units	2,367	0	0	0	0	0	0	0	0	0	0
6	Total Service Units	247,337	247,337	247,337	247,337	247,337	247,337	247,337	247,337	247,337	247,337	247,337
7	Debt Service Credit per Unit	\$11	\$11	\$11	\$11	\$11	\$11	\$11	\$11	\$12	\$12	\$12

Notes:

1. Present value calculations apply a 5 percent discount rate.

ATTACHMENT G (continued)
Water and Wastewater Impact Fee Study
Impact Fee Credit Calculation

Systemwide Wastewater Credit Calculation

Line No.		Total (All Years)	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
1	Principal Payments	\$41,150,000	\$1,244,482	\$1,306,707	\$1,372,042	\$1,440,644	\$1,512,676	\$1,588,310	\$1,667,726	\$1,751,112	\$1,838,667
5	Interest Payments (present value)	\$17,445,572	1,959,524	1,809,774	1,667,155	1,531,328	1,401,968	1,278,769	1,161,436	1,049,690	943,266
6	Principal and Present Value of Interest	\$58,595,572	\$3,204,006	\$3,116,481	\$3,039,197	\$2,971,972	\$2,914,644	\$2,867,079	\$2,829,161	\$2,800,802	\$2,781,933
7	Beginning Year Service Units		168,918	171,285	173,651	176,018	178,385	180,752	183,118	185,485	187,852
8	Incremental Service Units		2,367	2,367	2,367	2,367	2,367	2,367	2,367	2,367	2,367
9	Total Service Units		171,285	173,651	176,018	178,385	180,752	183,118	185,485	187,852	190,218
10	Debt Service Credit per Unit	\$314	\$19	\$18	\$17	\$17	\$16	\$16	\$15	\$15	\$15

Notes:

1. Present value calculations apply a 5 percent discount rate.

ATTACHMENT G (continued)
Water and Wastewater Impact Fee Study
Impact Fee Credit Calculation

Systemwide Wastewater Credit Calculation

Line No.		FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Principal Payments	\$1,930,601	\$2,027,131	\$2,128,487	\$2,234,912	\$2,346,657	\$2,463,990	\$2,587,190	\$2,716,549	\$2,852,377	\$2,994,995	\$3,144,745
5	Interest Payments (present value)	841,909	745,379	653,446	565,890	482,504	403,089	327,455	255,423	186,821	121,485	59,261
6	Principal and Present Value of Interest	\$2,772,510	\$2,772,510	\$2,781,933	\$2,800,802	\$2,829,161	\$2,867,079	\$2,914,644	\$2,971,972	\$3,039,197	\$3,116,481	\$3,204,006
7	Beginning Year Service Units	190,218	192,585	192,585	192,585	192,585	192,585	192,585	192,585	192,585	192,585	192,585
8	Incremental Service Units	2,367	0	0	0	0	0	0	0	0	0	0
9	Total Service Units	192,585	192,585	192,585	192,585	192,585	192,585	192,585	192,585	192,585	192,585	192,585
10	Debt Service Credit per Unit	\$14	\$14	\$14	\$15	\$15	\$15	\$15	\$15	\$16	\$16	\$17

Notes:

1. Present value calculations apply a 5 percent discount rate.

ATTACHMENT H
Water and Wastewater Impact Fee Study
Impact Fee Assessment Schedules (Net Fee after Credit)

Northeast

Meter Size	Meter Capacity Ratio	Water	Wastewater	Total
Less than 1-inch	1.00	\$1,570	\$388	\$1,958
1-inch	1.67	2,622	648	3,270
1½-inch	3.33	5,228	1,292	6,520
2-inch	5.33	8,368	2,068	10,436
3-inch	10.00	15,700	3,880	19,580
4-inch	16.67	26,172	6,468	32,640
6-inch	33.33	52,328	12,932	65,260
8-inch	53.33	83,728	20,692	104,420

Westside

Meter Size	Meter Capacity Ratio	Water	Wastewater	Total
Less than 1-inch	1.00	\$879	\$1,236	\$2,115
1-inch	1.67	1,468	2,064	3,532
1½-inch	3.33	2,927	4,116	7,043
2-inch	5.33	4,685	6,588	11,273
3-inch	10.00	8,790	12,360	21,150
4-inch	16.67	14,653	20,604	35,257
6-inch	33.33	29,297	41,196	70,493
8-inch	53.33	46,877	65,916	112,793

Eastside

Meter Size	Meter Capacity Ratio	Water	Wastewater	Total
Less than 1-inch	1.00	\$929	\$1,227	\$2,156
1-inch	1.67	1,551	2,049	3,601
1½-inch	3.33	3,094	4,086	7,179
2-inch	5.33	4,952	6,540	11,491
3-inch	10.00	9,290	12,270	21,560
4-inch	16.67	15,486	20,454	35,941
6-inch	33.33	30,964	40,896	71,859
8-inch	53.33	49,544	65,436	114,979