



## **RESOLUTION**

**WHEREAS**, Chapter 395 (Impact Fee Statute) of the Texas Local Government Code provides for the establishment and collection of impact fees; and,

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

**WHEREAS**, the City of El Paso hired a consultant to prepare a capital improvement plan and develop land use assumptions in accordance with the Impact Fee Statute; and,

**WHEREAS**, the Consultant has 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 improvement plan and land use assumptions to the City; and,

**WHEREAS**, the Impact Fee Statute requires 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 capital improvement 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 improvement plan and land use assumptions; 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 land use assumptions and capital improvements plan; and,

**WHEREAS**, prior to holding the public hearing, the land use assumptions, time period of projections, and a description of the proposed capital improvements facilities were made available to the public as required under the Impact Fee Statute; 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;

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

That the findings and recitations set out in the preambles to this Resolution 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 Resolution for all purposes.

That the City Council, after conducting a public hearing on March 24, 2009 to consider adoption of the land use assumptions and capital improvements plan under which an impact fee may be imposed, and after giving members of the public an opportunity to present evidence for or against the land use assumptions and capital improvements plan, hereby adopt the land use assumptions and capital improvements plan attached hereto and made a part hereof by reference.

PASSED AND APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2009

**THE CITY OF EL PASO**

\_\_\_\_\_  
John F. Cook, Mayor

**ATTEST:**

\_\_\_\_\_  
Richarda Duffy Momsen  
City Clerk

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Lupe Cuellar  
Assistant City Attorney

**APPROVED AS TO CONTENT:**

\_\_\_\_\_  
Patricia D. Adauto, Deputy City Manager  
Development & Infrastructure Services

# CONSOLIDATED IMPACT FEE FILING FOR CITY COUNCIL



## MEMORANDUM

**To:** John Neal  
City of El Paso

**Date:** March 16, 2009

**From:** Rick Giardina  
Red Oak Consulting

**Copy:** Nick Costanzo  
El Paso Water Utilities

**Re: Land Use Assumptions and Capital Improvements Plan  
Water and Wastewater Impact Fees**

In advance of the City Council's public hearing on land use assumptions and the capital improvements plan relating to the possible adoption of impact fees, Red Oak Consulting has prepared this supplemental impact fee filing for the City Council's consideration.

This memorandum consolidates existing information previously provided as it relates to the land use assumptions and capital improvement plan as described in the Texas State Statutes, Local Government Code, Chapter 395 (State Impact Fee Statutes).

### Land Use Assumptions

Land use assumptions were obtained from master plans prepared by or on behalf of the El Paso Water Utilities (EPWU), and other sources generally used by EPWU when projecting water and wastewater service demands, including:

- City of El Paso Annexation Assessment and Strategy (September 2008)
- Smart Growth Plan for the Northeast (January 2007)
- Eastside Planned Service Area Annexation Fee Analysis (September 2005)
- Land Study for Westside PSB properties (June 2005)
- Northwest Upper Valley Plan (January 2004)

Land use assumptions not provided in the above sources were prepared jointly by the City of El Paso and EPWU.

Land use assumptions were identified for three service areas (Northeast, Westside, and Eastside) and a composite service area (Systemwide). If adopted, impact fees would only apply within the defined service areas. In the event Systemwide fees are adopted, they too would only apply within each of the three EPWU service areas; development outside

the defined areas would not pay an impact fee. Maps depicting the EPWU proposed service areas are provided in **Attachment A**.

Land use densities provided in **Attachment B** were used to arrive at the number of residential service units (SUs) in each of the three service areas (Northeast, Westside, and Eastside). The residential SUs, population, and average persons per residential SU are shown in Table 1.

**Table 1**  
**Land Use Assumptions**

Service Area	Total Residential Service Units (Build-Out)						Build-Out Population	Average Household Size (persons per SU)
	Luxury Low	Senior Low	Medium	Medium High	High	Total		
<b>Northeast</b>								
1	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
<b>Westside</b>								
2	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
<b>Eastside</b>								
06.	-	-	652	-	-	652	2,607	4.0
08	-	-	-	8,132	-	8,132	24,395	3.0
08B	-	-	-	22,515	-	22,515	67,544	3.0
10B	-	-	2,477	-	-	2,477	9,908	4.0
12	-	-	4,663	-	-	4,663	18,652	4.0
12B	-	-	-	3,150	-	3,150	12,600	4.0
<b>Total</b>	<b>2,278</b>	<b>1,600</b>	<b>45,656</b>	<b>57,328</b>	<b>2,747</b>	<b>109,609</b>	<b>353,461</b>	<b>3.2</b>

---

### Equivalent Service Unit Characteristics

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 a persons per service unit value of 3.5 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)	115	70
Ratio of Maximum Day Demand (MDD) to Average Day Demand (ADD)	1.71 <sup>1</sup>	1.39
Adjusted Usage per Capita (MDD)	197	98
Persons per Service Unit	3.50	3.50
Flows per Equivalent Service Unit (gallons per day)	688	341
1. Elevated water storage capacity is calculated based on 50% of MDD. 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) are used to calculate the number of facility service units in Attachment E.

### Time Period of the Projections

The land use assumptions include projections of population over at least a 10-year period and through full development (build-out). Population projections vary by service area and/or master plan – see Table 1 for the service units and population to be served at build-out.

Table 3 presents the 10-year population and service unit projections for the water and wastewater impact fee service areas under consideration.

### **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. The service unit totals in Table 3 are used in the maximum impact fee calculation.

**Table 3**  
**10-Year Population and Service Unit Projections**

Service Area	Developable Acres	Population	Residential Service Units	Non-Residential Service Unit Equivalents <sup>1</sup>	Total Service Units
<u>Northeast Area</u>					
01 NE MP	1,605	22,721	6,225	909	7,134
05A Northeast	139	1,812	600	166	766
05B Northeast	591	7,171	2,390	974	3,364
05C Northeast	88	1,133	375	24	399
<b>Northeast Total</b>	<b>2,423</b>	<b>32,837</b>	<b>9,590</b>	<b>2,072</b>	<b>11,663</b>
<u>Westside Area</u>					
02 Westside	281	3,939	1,300	359	1,659
03A Westside	154	1,404	469	-	469
03E West	36	429	142	111	253
04A Westside	171	1,592	527	-	527
04B Westside	72	853	282	29	311
04C Westside	36	408	135	76	211
04D Westside	71	767	254	12	266
04E Westside	363	3,389	1,122	-	1,122
Westside – Other	184	2,597	734	-	734
<b>Westside Total</b>	<b>1,367</b>	<b>15,377</b>	<b>4,965</b>	<b>587</b>	<b>5,552</b>
<u>Eastside Area</u>					
06. Eastside	98	464	154	256	410
08 Eastside	88	681	225	-	225
08B Eastside	582	8,314	2,753	1,194	3,947
10B Eastside	32	257	85	14	99
12 Eastside	314	2,007	665	255	920
12B Eastside	147	544	180	670	850
<b>Eastside Total</b>	<b>1,261</b>	<b>12,267</b>	<b>4,062</b>	<b>2,390</b>	<b>6,452</b>
<b>Systemwide Total</b>	<b>5,050</b>	<b>60,482</b>	<b>18,617</b>	<b>5,049</b>	<b>23,667</b>

1. Population and service unit projections are based on assumptions from the City of El Paso *Annexation Assessment and Strategy*, September 29, 2008, 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, Generalized Distribution of Land Uses.

### **Proposed Capital Improvements Plan**

The proposed capital improvement plan includes 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 capital improvement projects and costs for each service area is provided in **Attachment D**. Capital improvement costs, financing costs, capacity, and facility service units for each service area are provided in **Attachment E**. A comparison of the requirements of the State Impact Fee Statutes and the capital improvement plan is provided in **Attachment F**.

The service units associated with this 10-year capital plan will not necessarily occur within the same 10-year period. The timeframe when the additional capacity is fully utilized will depend upon the actual rate of development or growth. EPWU considered the total service units necessitated by and attributable to new development in accordance with generally accepted engineering and planning criteria, including total service units that may occur after the 10-year capital planning period, when determining the maximum cost per service unit.

The pro-rated portion of capital improvement costs over the 10-year period is directly proportional to the number of new service units assumed over the 10-year period. 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 capital improvements) to all units that will be served by that capacity regardless of when they occur.

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.

### **Impact Fee Calculation Methodology**

The projects identified in EPWU's 10-year capital improvement plan 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 projects 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 capital improvement plan serves capacity beyond the 10-year period, it does not provide capacity through ultimate buildout of the service areas.

This impact fee methodology does not rely on estimates of when growth will occur, but assigns the cost of new capacity (provided by the capital improvements) to all units that will be served by that capacity regardless of when they may occur.

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 capital improvement plan. 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 capital improvements necessitated by and attributable to projected new service units by the total projected new units served by the capital improvements.

### **Impact Fee Credit Plan**

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.

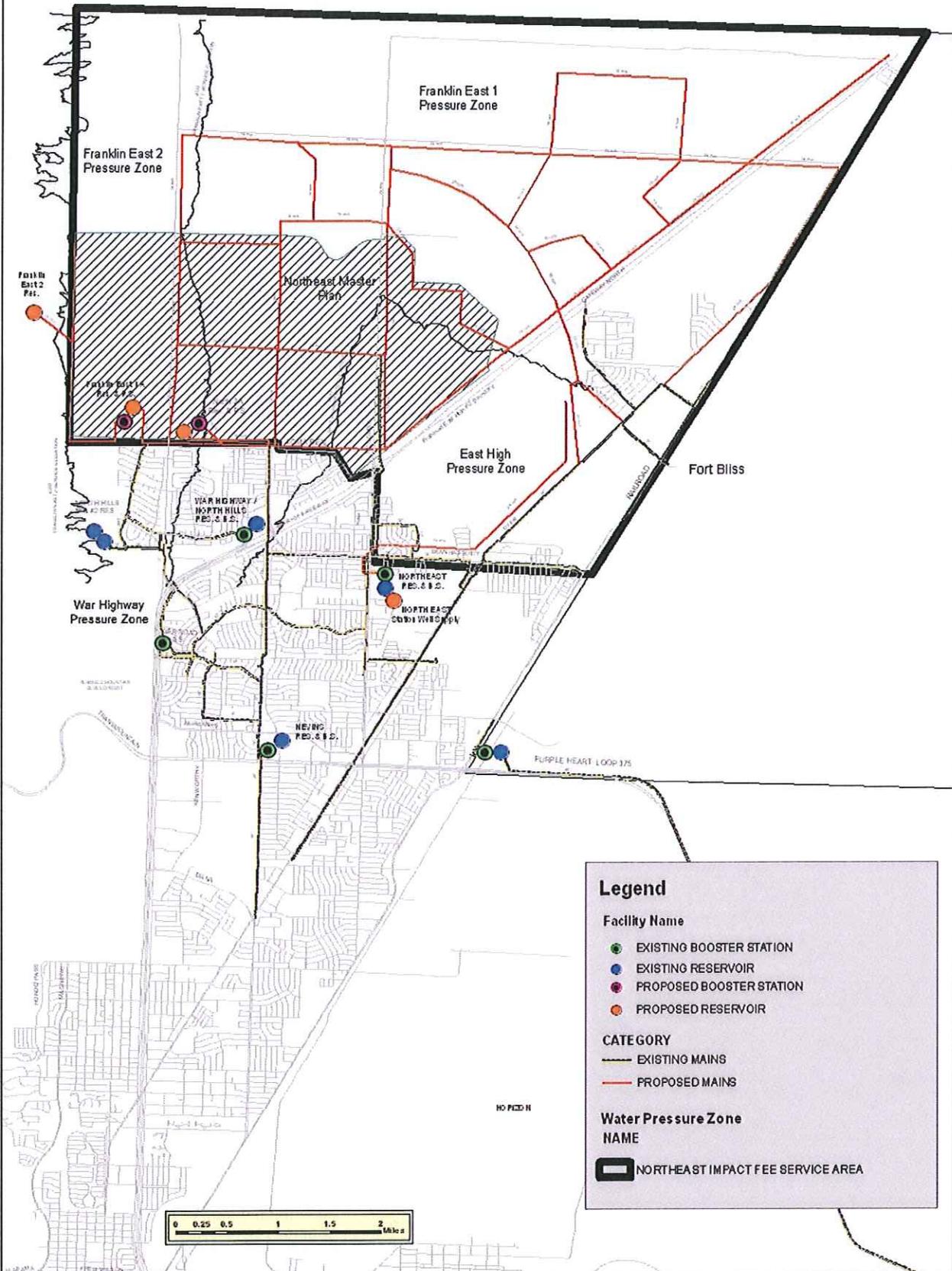
Since no City of El Paso ad valorem tax revenues will be used to fund EPWU capital improvements or associated debt service, a credit component based on ad valorem tax revenues is not appropriate, nor therefore, required. However, a credit is warranted that recognizes the portion of utility service revenues 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 capital improvement plan upon which the fees are based.

The credit recognizes the cost of debt included in the maximum impact fees. 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 capital improvements (including principal, the net present value of interest, and issuance costs). Application of a credit determined in this

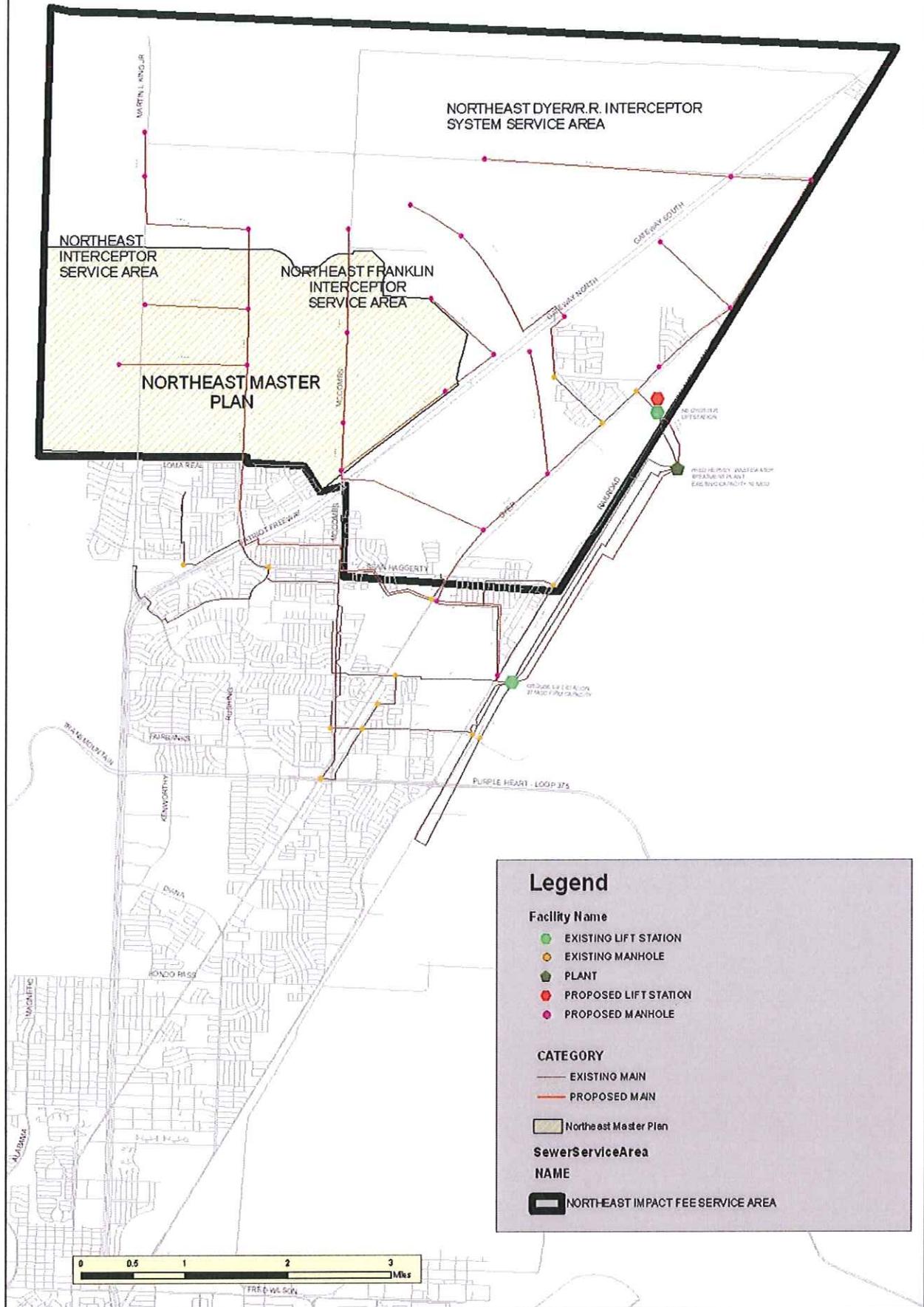
way ensures that a new service unit will not pay twice for the utility capital improvements attributable to that new unit, i.e., once through the impact fee and a second time through utility service revenues.

**ATTACHMENT A**  
**El Paso Water Utilities**  
**Impact Fee Service Area Maps**

# NORTHEAST WATER IMPACT FEE SERVICE AREA MAP



# NORTHEAST SEWER IMPACT FEE SERVICE AREA MAP



NORTHEAST INTERCEPTOR SERVICE AREA

NORTHEAST FRANKLIN INTERCEPTOR SERVICE AREA

NORTHEAST MASTER PLAN

NORTHEAST DYER/R.R. INTERCEPTOR SYSTEM SERVICE AREA

### Legend

#### Facility Name

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

#### CATEGORY

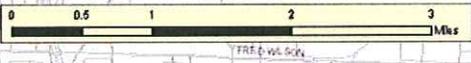
- EXISTING MAIN
- PROPOSED MAIN

Northeast Master Plan

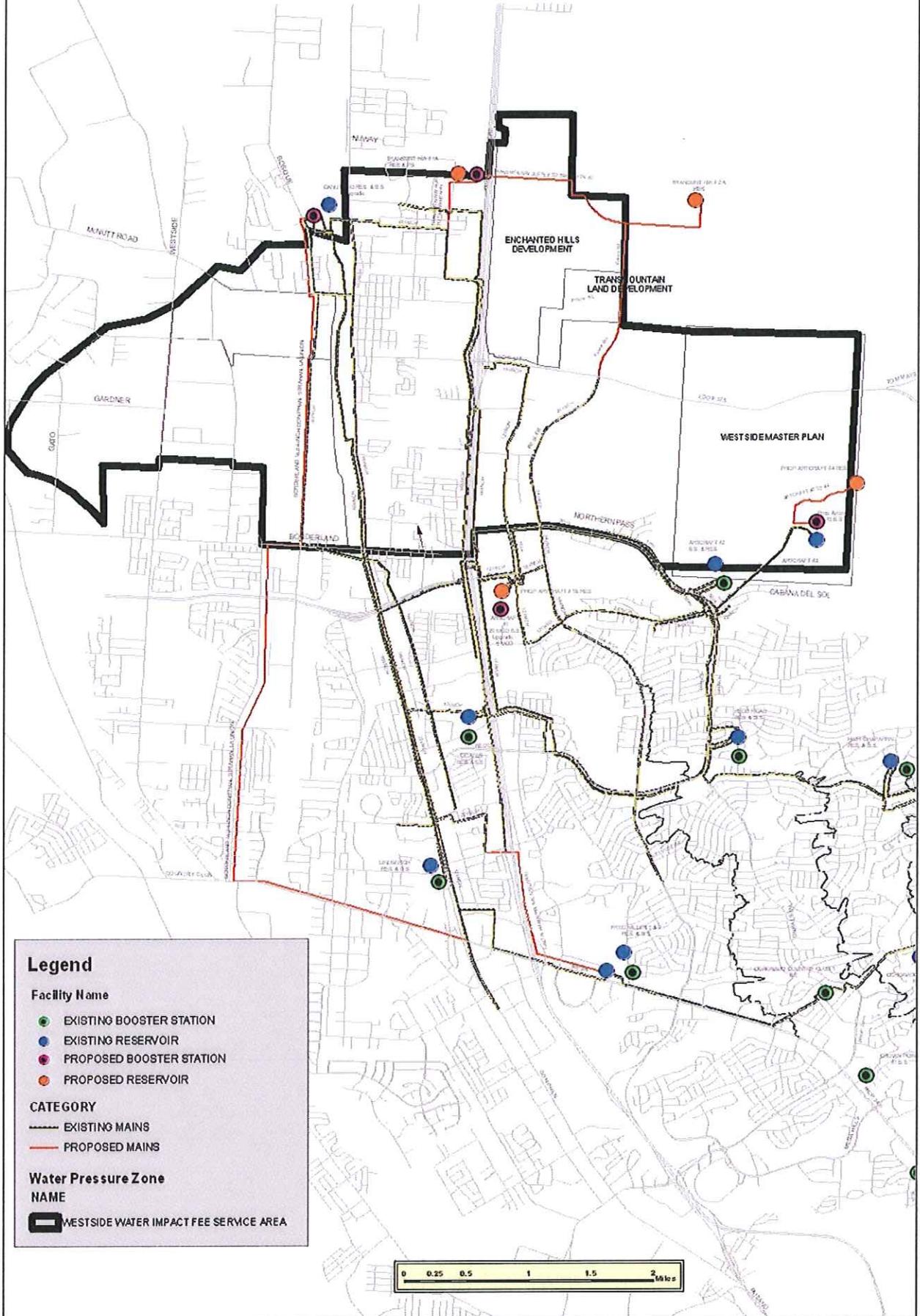
#### SewerServiceArea

NAME

NORTHEAST IMPACT FEE SERVICE AREA



# WESTSIDE WATER IMPACT FEE SERVICE AREA MAP



### Legend

#### Facility Name

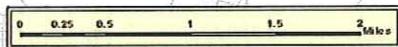
- EXISTING BOOSTER STATION
- EXISTING RESERVOIR
- PROPOSED BOOSTER STATION
- PROPOSED RESERVOIR

#### CATEGORY

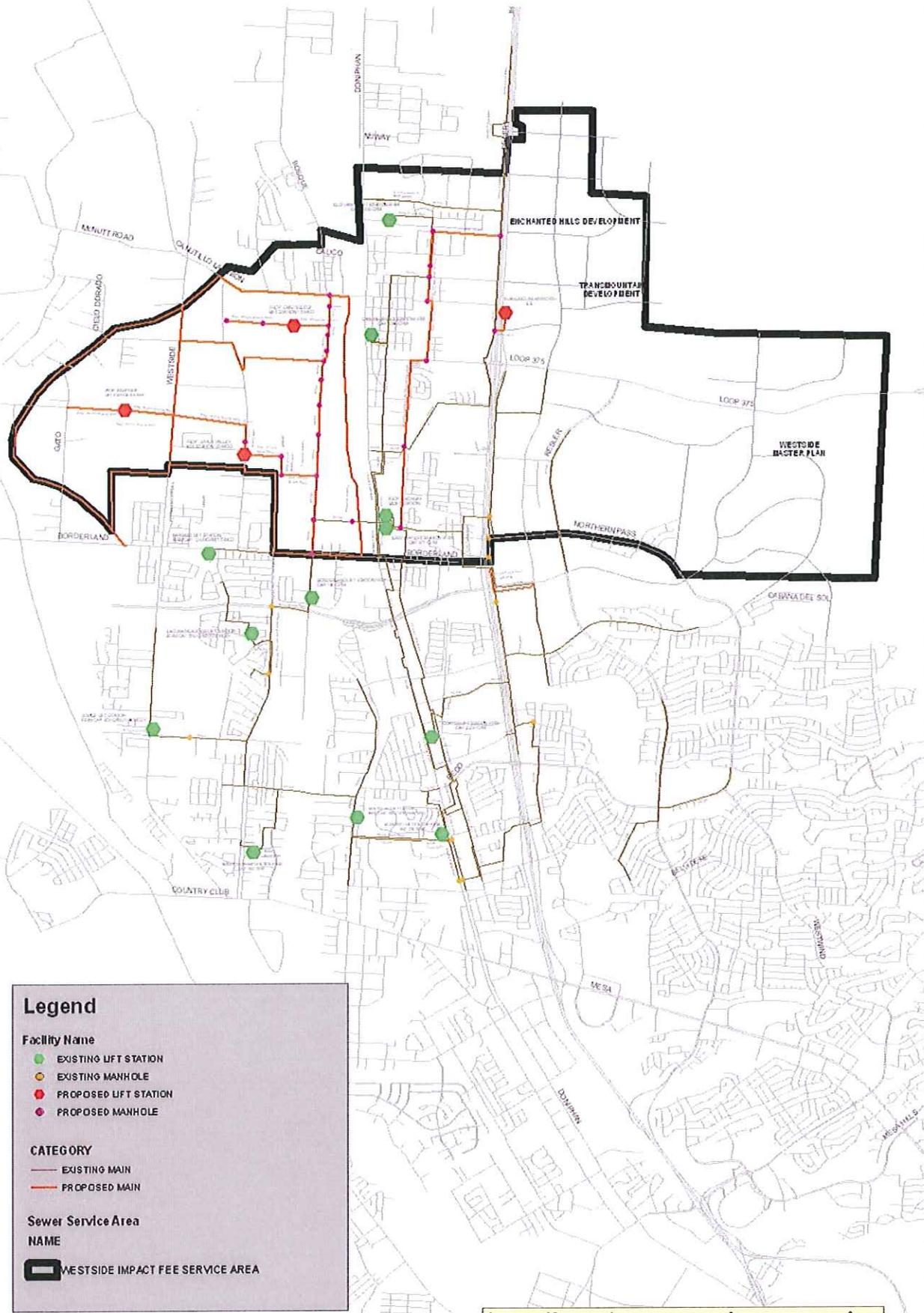
- EXISTING MAINS
- PROPOSED MAINS

#### Water Pressure Zone NAME

- WESTSIDE WATER IMPACT FEE SERVICE AREA



# WESTSIDE SEWER IMPACT FEE SERVICE AREA MAP



**Legend**

**Facility Name**

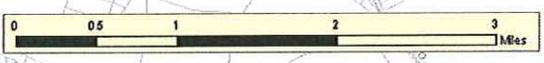
- EXISTING LIFT STATION
- EXISTING MANHOLE
- PROPOSED LIFT STATION
- PROPOSED MANHOLE

**CATEGORY**

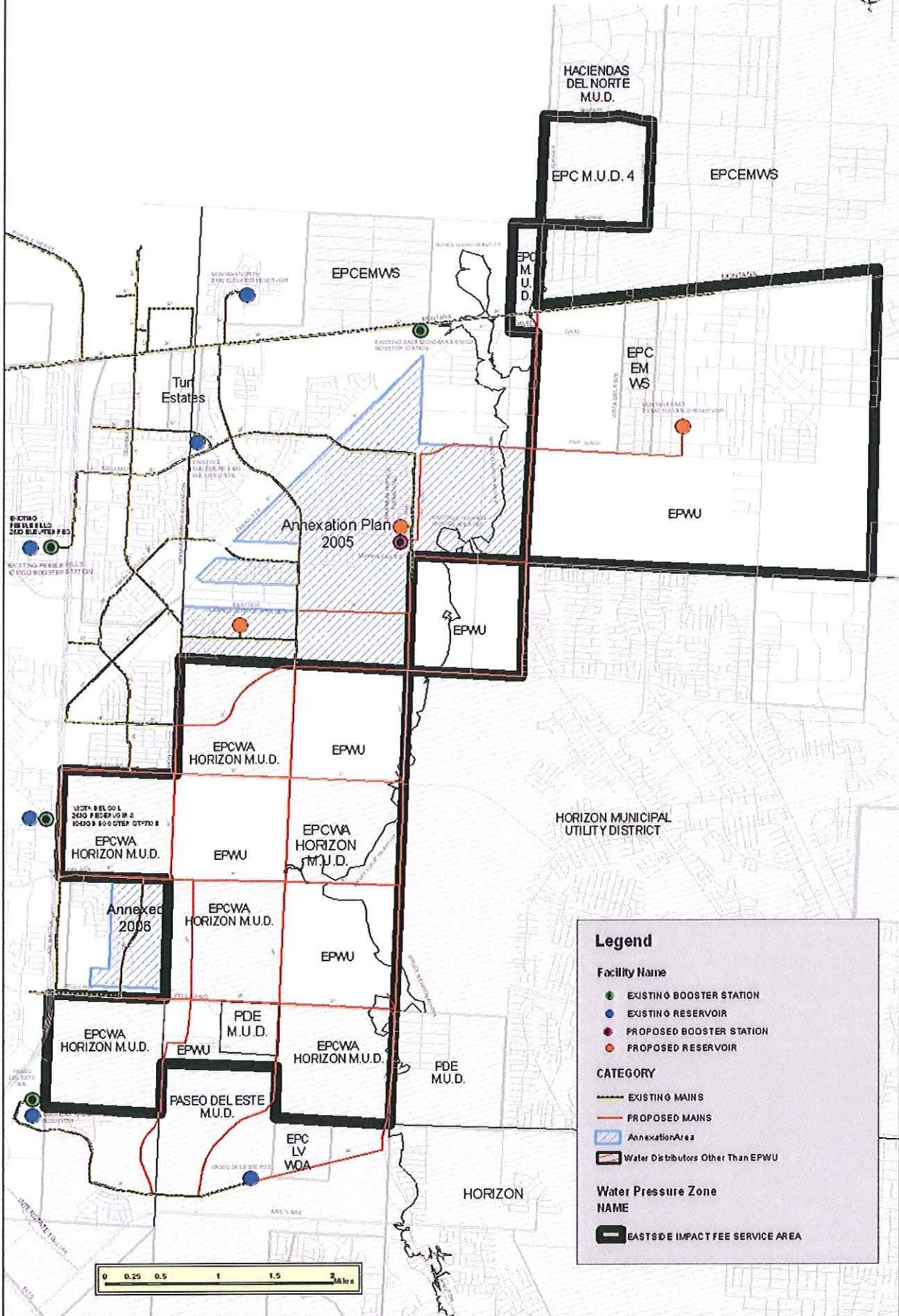
- EXISTING MAIN
- PROPOSED MAIN

**Sewer Service Area NAME**

- ▭ WESTSIDE IMPACT FEE SERVICE AREA



# EASTSIDE WATER IMPACT FEE SERVICE AREA MAP



**Legend**

**Facility Name**

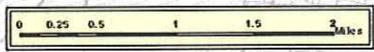
- EXISTING BOOSTER STATION
- EXISTING RESERVOIR
- PROPOSED BOOSTER STATION
- PROPOSED RESERVOIR

**CATEGORY**

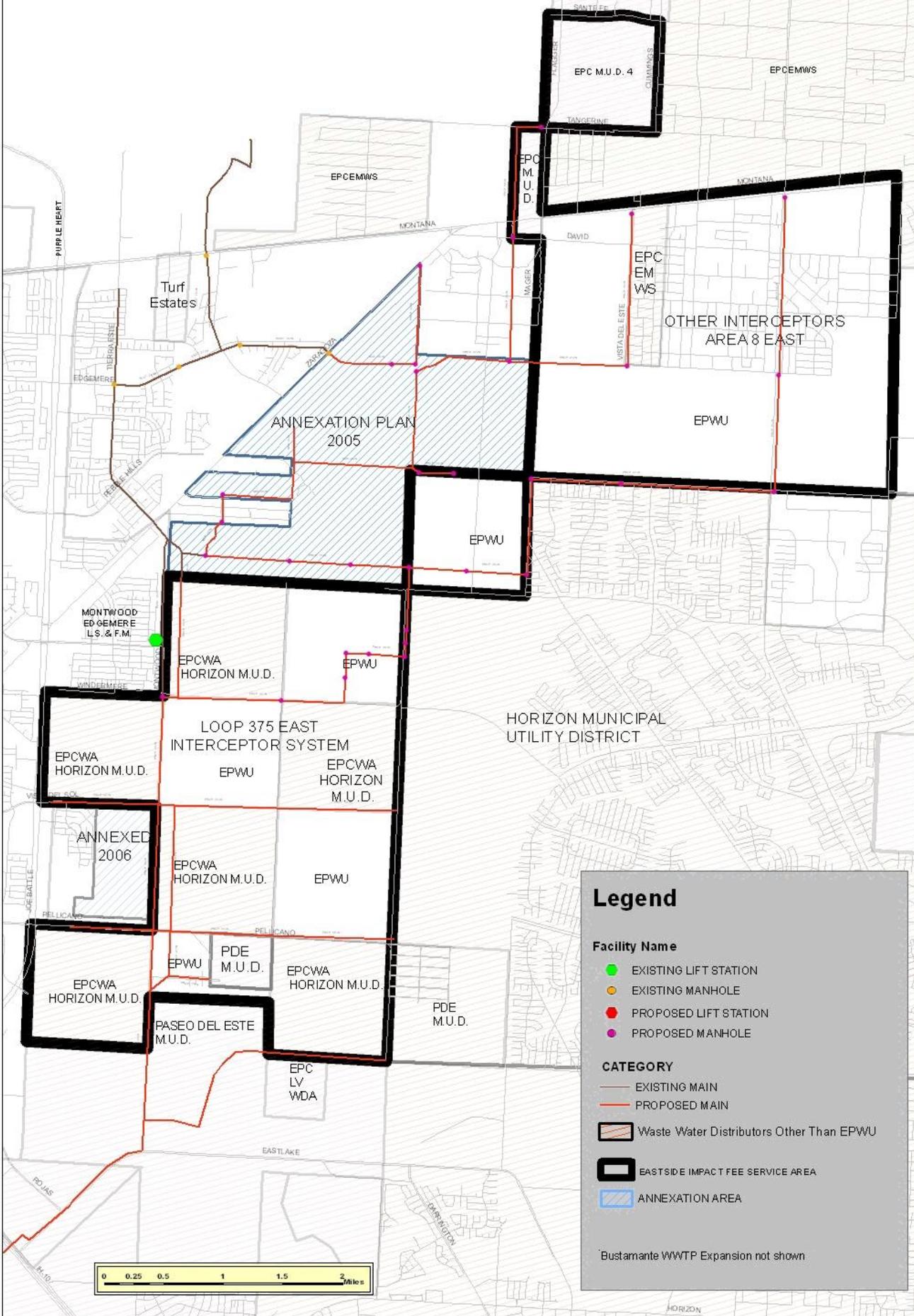
- EXISTING MAINS
- PROPOSED MAINS
- AnnexionArea
- Water Distributors Other Than EPWU

**Water Pressure Zone NAME**

- EASTSIDE IMPACT FEE SERVICE AREA



# EASTSIDE SEWER IMPACT FEE SERVICE AREA MAP



### Legend

**Facility Name**

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

**CATEGORY**

- EXISTING MAIN
- PROPOSED MAIN
- ▨ Waste Water Distributors Other Than EPWU
- ▭ EASTSIDE IMPACT FEE SERVICE AREA
- ▨ ANNEXATION AREA

Bustamante WWTP Expansion not shown

**ATTACHMENT B**  
**Water and Wastewater Impact Fee Study**  
**Land Use Assumptions**

	SU per Acre	Persons Per SU
<b>NORTHEAST AREA 01</b>		
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
 <b>NORTHEAST AREA 05A, 05B, 05C</b>		
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
<b>WESTSIDE AREA 02</b>		
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
 <b>WESTSIDE AREA 03A</b>	 4.50	 3.03
Average Density		
 <b>WESTSIDE AREA 03E</b>		
Residential		
Average Density	5.00	3.50
Mixed Use , 60% Res., 25% Comm., 15% Ind.		
 <b>WESTSIDE AREA 04A</b>		
Average Density	4.00	4.00
 <b>WESTSIDE AREA 04B</b>		
Average Density	4.00	4.00
 <b>WESTSIDE AREA 04C</b>		
Average Density	3.20	4.00
 <b>WESTSIDE AREA 04D</b>		
Average Density	4.00	4.00
 <b>WESTSIDE AREA 04E</b>		
Average Density	4.00	4.00
 <b>WESTSIDE-OTHER</b>		
Average Density	3.45	3.17

	SU per Acre	Persons Per SU
<b>EASTSIDE AREA 06.</b>		
Average Density	6.00	4.00
 <b>EASTSIDE AREA 08</b>		
Average Density	7.00	3.00
 <b>EASTSIDE AREA 08B</b>		
Average Density	7.00	3.00
 <b>EASTSIDE AREA 10B</b>		
Average Density	6.00	4.00
 <b>EASTSIDE AREA 12</b>		
Average Density	2.23	4.00
 <b>EASTSIDE AREA 12B</b>		
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>
<b>Total Water CIP</b>	<b><u>\$ 46,500,000</u></b>

<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
<b>Total Wastewater CIP</b>	<b><u>\$ 13,550,000</u></b>

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

<u>Westside 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	
TransMountain NW #1A (4)	3,600,000
TransMountain NW #2A (3)	5,400,000
Artcraft #4 Tank (2)	<u>3,500,000</u>
Subtotal	12,500,000
Distribution Pumping Equipment	
Artcraft #1-NW-WFMP	450,000
Sunset Pump Station Upgrade (16.4 MGD) (46% towards gro	1,020,000
TransMountain NW #1 Pump Station	2,000,000
Artcraft #3 Pump Station	2,000,000
Canutillo Pump Station Upgrade	<u>400,000</u>
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	<u>850,000</u>
Subtotal	<u>21,850,000</u>
<b>Total Water CIP</b>	<b><u>\$ 40,220,000</u></b>

<u>Westside Service Area - Wastewater</u>	<u>Capital Cost</u>
<u>Wastewater Treatment System</u>	
No wastewater treatment CIP proposed	\$ -
<u>Collection System</u>	
Lines	
TransMountain NW Interceptors	3,700,000
Mowad-Westway Interceptor	<u>7,000,000</u>
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)	<u>7,100,000</u>
Subtotal	<u>7,250,000</u>
<b>Total Wastewater CIP</b>	<b><u>\$ 17,950,000</u></b>

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

<b>Eastside Service Area - Water</b>	<b>Capital Cost</b>
<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>
<b>Total Water CIP</b>	<b><u>23,450,000</u></b>

<b>Eastside Service Area - Wastewater</b>	<b>Capital Cost</b>
<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
<b>Total Wastewater CIP</b>	<b><u>\$ 84,150,000</u></b>

**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
<b>Water Supply and Treatment System</b>				
1	No water supply or treatment system CIP proposed	-	-	-
<b>Water Distribution System</b>				
<b>Reservoirs</b>				
2	North 2 Tank #2A (5)	\$3,600,000	5.00	0
3	Franklin East #1A (4)	4,100,000	4.00	11,628
4	Franklin East #2 (3)	3,100,000	3.00	8,721
5	NE Station Well Supply Tank (2)	2,200,000	2.00	0
6	Subtotal	13,000,000		20,349
<b>Debt Issued</b>				
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		
<b>NPV of Interest</b>				
12	North 2 Tank #2A & 2B (5)	544,777		0
13	Franklin East #1A (4)	618,968		11,628
14	Franklin East #2 (3)	468,466		8,721
15	NE Station Well Supply Tank	332,801		0
16	Subtotal	1,965,012		20,349
<b>Distribution Pumping Equipment</b>				
17	North Two Pump Station (11.8 MGD)	2,500,000	11.80	17,151
18	Franklin East #1 (4.75 MGD)	1,900,000	3.33	4,840
19	Subtotal	4,400,000		21,991
<b>Debt Issued</b>				
20	North Two Pump Station (11.8 MGD)	890,000		
21	Franklin East #1 (4.75 MGD)	680,000		
22	Subtotal	1,570,000		
<b>NPV of Interest</b>				
23	North Two Pump Station (11.8 MGD)	377,316		17,151
24	Franklin East #1 (4.75 MGD)	288,286		4,840
25	Subtotal	665,603		21,991
<b>Distribution Lines</b>				
26	North 2 to Franklin East #1	4,100,000		
27	Dyer/RR Waterline	3,600,000	22.30	32,413
28	NE Franklin Distribution Line	18,200,000		
29	Franklin East #1 to #2	3,200,000		4,840
30	Subtotal	29,100,000		37,253
<b>Debt Issued</b>				
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		
<b>NPV of Interest</b>				
36	North 2 to Franklin East #1	618,968		
37	Dyer/RR Waterline	544,777		32,413
38	NE Franklin Distribution Line	2,745,081		
39	Franklin East #1 to #2	483,304		4,840
40	Subtotal	\$ 4,392,129		37,253

**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
<b>Wastewater Treatment System</b>				
1	No wastewater treatment CIP proposed	-	-	-
<b>Collection System</b>				
<b>Lines</b>				
2	NE Dyer/RR Interceptor	\$5,200,000		11,497
3	NE Interceptor System (EPWU-NEMP)	2,200,000		19,182
4	NE Franklin Service Area	3,570,000		14,089
5	Subtotal	10,970,000		44,768
<b>Debt Issued</b>				
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		
<b>NPV of Interest</b>				
10	NE Dyer/RR Interceptor	784,309		11,497
11	NE Interceptor System (EPWU-NEMP)	332,801		19,182
12	NE Franklin Service Area	538,417		14,089
13	Subtotal	1,655,528		44,768
<b>Pumping &amp; Force Mains</b>				
14	NE Dyer/RR Lift Station (7 MGD)	2,580,000	7.0	11,614
<b>Debt Issued</b>				
15	NE Dyer/RR Lift Station (7 MGD)	920,000		
<b>NPV of Interest</b>				
16	NE Dyer/RR Lift Station (7 MGD)	\$ 390,035		11,614

**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
<b>Water Supply and Treatment System</b>				
1	No water supply or treatment system CIP proposed	-	-	-
<b>Water Distribution System</b>				
<b>Reservoirs</b>				
1	TransMountain NW #1A (4)	\$3,600,000	4.0	11,628
2	TransMountain NW #2A (3)	5,400,000	3.0	8,721
3	Artcraft #4 Tank (2)	3,500,000	2.0	5,814
4	Subtotal	12,500,000		26,163
<b>Debt Issued</b>				
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		
<b>NPV of Interest</b>				
9	TransMountain NW #1A (4)	544,777		11,628
10	TransMountain NW #2A (3)	816,105		8,721
11	Artcraft #4 Tank (2)	527,819		5,814
12	Subtotal	1,888,700		26,163
<b>Distribution Pumping Equipment</b>				
13	Artcraft #1-NW-WFMP	450,000	5.0	7,267
14	Sunset Pump Station Upgrade (16.4 MGD) (46% towards growth)	1,020,000	7.6	11,076
15	TransMountain NW #1 Pump Station	2,000,000	3.0	4,360
16	Artcraft #3 Pump Station	2,000,000	3.0	4,360
17	Canutillo PS Upgrade	400,000	4.0	5,814
18	Subtotal	5,870,000		32,878
<b>Debt Issued</b>				
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		
<b>NPV of Interest</b>				
25	Artcraft #1-NW-WFMP	69,952		7,267
26	Sunset Pump Station Upgrade (16.4 MGD) (46% towards growth)	154,742		11,076
27	TransMountain NW #1 Pump Station	303,125		4,360
28	Artcraft #3 Pump Station	303,125		4,360
29	Canutillo PS Upgrade	61,473		5,814
30	Subtotal	892,416		32,878
<b>Distribution Lines</b>				
31	Canut/UV Trns Mn-NW PH IV (36")	5,700,000	22.0	31,977
32	TransMtn NW Supply to TransMtn #1	800,000	22.0	31,977
33	TransMtn NW Supply to TransMtn #2	2,000,000		
34	Borderland 16"/24" Doniphan, Strahan, La Union	12,500,000	10.0	14,535
35	Artcraft #3 to #4 Trans Mountain	850,000	6.0	8,721
36	Subtotal	21,850,000		87,209
<b>Debt Issued</b>				
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		
<b>NPV of Interest</b>				
43	Canut/UV Trns Mn-NW PH IV (36")	860,620		31,977
44	TransMtn NW Supply to TransMtn #1	120,826		31,977
45	TransMtn NW Supply to TransMtn #2	303,125		
46	Borderland 16"/24" Doniphan, Strahan, La Union	1,884,461		14,535
47	Artcraft #3 to #4 Trans Mountain	129,305		8,721
48	Subtotal	\$ 3,298,337		87,209

**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
<b>Wastewater Treatment System</b>				
1	No wastewater treatment CIP proposed	-	-	-
<b>Collection System</b>				
<u>Lines</u>				
2	TransMountain NW Interceptors	\$3,700,000		5,485
3	Mowad-Westway Interceptor	7,000,000		10,500
4	Subtotal	10,700,000		15,985
<b>Debt Issued</b>				
5	TransMountain NW Interceptors	1,320,000		
6	Mowad-Westway Interceptor	2,490,000		
7	Subtotal	3,810,000		
<b>NPV of Interest</b>				
8	TransMountain NW Interceptors	559,615		5,485
9	Mowad-Westway Interceptor	1,055,637		10,500
10	Subtotal	1,615,252		15,985
<b>Pumping &amp; Force Mains</b>				
11	TransMountain North LS & FM (0.344 MGD for development)	150,000	0.344	1,009
12	Upper Valley 3 LS (1.5+2.5+3.5 MGD)	7,100,000	7.5	7,864
13	Subtotal	7,250,000		8,873
<b>Debt Issued</b>				
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		
<b>NPV of Interest</b>				
17	TransMountain North LS & FM	23,317	0.344	1,009
18	Upper Valley 3 LS (1.5+2.5+3.5 MGD)	1,070,476	7.5	7,864
19	Subtotal	\$ 1,093,793		8,873

**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
<b>Water Supply and Treatment System</b>				
1	No water supply or treatment system CIP proposed	-	-	-
<b>Water Distribution System</b>				
<b>Reservoirs</b>				
2	Montana East (2.5)	\$2,750,000	2.50	7,267
3	Eastside PSA Reservoirs (2.0 + 2.0)	6,000,000	4.00	11,628
4	Subtotal	8,750,000		18,895
<b>Debt Issued</b>				
5	Montana East (2.5)	980,000		
6	Eastside PSA Reservoirs (2.0 + 2.0)	2,135,000		
7	Subtotal	3,115,000		
<b>NPV of Interest</b>				
8	Montana East (2.5)	415,472	2.50	7,267
9	Eastside PSA Reservoirs (2.0 + 2.0)	905,135	4.00	11,628
10	Subtotal	1,320,606		18,895
<b>Distribution Pumping Equipment</b>				
11	Montana East (3 MGD)	1,200,000	3.00	4,360
<b>Debt Issued</b>				
12	Montana East (3 MGD)	430,000		
<b>NPV of Interest</b>				
13	Montana East (3 MGD)	182,299	3.00	4,360
<b>Distribution Lines</b>				
14	Eastside Planned Service Area	9,000,000	20.0	29,070
15	Montana East Supply Line	4,500,000	22.3	32,413
16	Subtotal	13,500,000		61,483
<b>Debt Issued</b>				
17	Eastside Planned Service Area	3,205,000		
18	Montana East Supply Line	1,605,000		
19	Subtotal	4,810,000		
<b>NPV of Interest</b>				
20	Eastside Planned Service Area	1,358,762		29,070
21	Montana East Supply Line	680,441		32,413
22	Subtotal	\$ 2,039,203		61,483

**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
<b>Wastewater Treatment System</b>				
1	Bustamante WWTP Expansion from 39 to 54 MGD	\$33,000,000	15.00	43,988
<b>Debt Issued</b>				
2	Bustamante WWTP Expansion from 39 to 54 MGD	11,735,000		
<b>NPV of Interest</b>				
3	Bustamante WWTP Expansion from 39 to 54 MGD	4,975,062	15.00	43,988
<b>Collection System</b>				
<b>Lines</b>				
1	Other Interceptors (Area 8 East)	10,000,000		23,055
2	Loop 375 East Interceptor System	40,300,000		54,422
3		Subtotal		77,477
<b>Debt Issued</b>				
4	Other Interceptors (Area 8 East)	3,560,000		
5	Loop 375 East Interceptor System	14,335,000		
6		Subtotal		17,895,000
<b>NPV of Interest</b>				
7	Other Interceptors (Area 8 East)	1,509,265		23,055
8	Loop 375 East Interceptor System	6,077,334		54,422
9		Subtotal		77,477
<b>Pumping &amp; Force Mains</b>				
10	Montwood/Edgemere Lift Station & FM	850,000		11,143
<b>Debt Issued</b>				
11	Montwood/Edgemere Lift Station & FM	305,000		
<b>NPV of Interest</b>				
12	Montwood/Edgemere Lift Station & FM			
13	Montwood/Edgemere Lift Station & FM	\$ 129,305		11,143

**ATTACHMENT F**  
**Impact Fee Study**  
**State Impact Fee Statutes Capital Improvement Plan Requirements**

Sec. 395.014. CAPITAL IMPROVEMENTS PLAN.	
(a) The political subdivision shall use qualified professionals to prepare the capital improvements plan and to calculate the impact fee. The capital improvements plan must contain specific enumeration of the following items:	The 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.
(1) a description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;	A description of the existing capital improvements was provided in the original City of El Paso Annexation Assessment and Strategy report, dated September 29, 2008. With the determination to calculate impact fees using an incremental approach only, existing capital improvements are no longer the basis for the assessment of impact fees.
(2) an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of the existing capital improvements, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;	An analysis of the total capacity and level of current usage was provided in the original City of El Paso Annexation Assessment and Strategy report, dated September 29, 2008. With the determination to calculate impact fees using an incremental approach only, existing capital improvements are no longer the basis for the assessment of impact fees.
(3) a description of all or the parts of the capital improvements or facility expansions and their costs necessitated by and attributable to new development in the service area based on the approved land use assumptions, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;	A description of all of the capital improvements and their costs necessitated by and attributable to new development are provided in Attachments D and E of this memorandum. The 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.
(4) a definitive table establishing the specific level or quantity of use, consumption, generation, or discharge of a service unit for each category of capital improvements or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, and industrial;	A definitive table expressing the quantity of use of a service unit for each category of capital improvements is provided in Attachment E of this memorandum. An equivalency table establishing the ratio of a service unit to residential, commercial, and industrial uses is provided in Table 3, on page 6 of this memorandum.
(5) the total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;	The total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria is provided in Table 1, on page 2 of this memorandum.
(6) the projected demand for capital improvements or facility expansions required by new service units projected over a reasonable period of time, not to exceed 10 years; and	The projected demand for capital improvements or facility expansions required by new service units projected over the next 10 years is provided in Table 2, on page 4 of this memorandum.
(7) a plan for awarding: (A) a credit 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 improvements, including the payment of debt, that are included in the capital improvements plan; or (B) in the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan.	A plan for awarding a credit 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 improvements, including the payment of debt, that are included in the capital improvements plan, is provided on page 7 of this memorandum.
(b) The analysis required by Subsection (a)(3) may be prepared on a systemwide basis within the service area for each major category of capital improvement or facility expansion for the designated service area.	Both a systemwide and area-specific analysis are provided in this memorandum.
(c) The governing body of the political subdivision is responsible for supervising the implementation of the capital improvements plan in a timely manner.	The governing body of the political subdivision is responsible for supervising the implementation of the capital improvements plan in a timely manner.

Capital Improvements Advisory Committee  
Water and Wastewater Impact Fees

Advice and Comments on Land Use Assumptions (LUA)  
and Capital Improvements Plan (CIP).

Adopted unanimously January 7, 2009.

I. IMPACT FEE METHODOLOGY:

Per the City Council direction the Addendum to the Report uses the “incremental method” of calculation for the Capital Improvements Plan. The Addendum designates more than one service area and different fees. The service areas follow the general direction and pace of growth reflected in the Land Use Assumptions. The consultant should consider creating two service areas in the Westside from the one currently proposed. (By separate vote of the Committee)

II. POPULATION AND SERVICE UNITS IN LAND USE  
ASSUMPTIONS:

The population and corresponding service units may be overstated for the next ten (10) years, particularly in the Northeast. However, given the methodology employed, only a significant shift in population projections could result in a need to update or revise the fees. The Committee intends to monitor this carefully in accordance with its statutory responsibility.

### III. MAXIMUM IMPACT FEE CALCULATION:

The maximum fees are the proper byproduct of the Land Use Assumptions and the Capital Improvements Plan.

### IV. IMPACT FEES CREDIT:

The impact fee credits of 13.5% for water and 30.7% for wastewater appear to be correctly calculated and are significantly less than the 50% default credit prescribed in the statute.

Overall, the Committee finds that the Land Use Assumptions and Capital Improvements Plan have been properly prepared by qualified professionals in accordance with Texas Local Government Code Chapter 395.

The Committee explicitly reserves any additional comments on impact fees until the “NOTICE ON HEARING ON IMPACT FEE” is made, presuming the City Council adopts the Land Use Assumptions and Capital Improvements Plan.

## Additional Comments March 4, 2009

Affirmed previous comments by unanimous vote:

Overall, the Committee finds that the Land Use Assumptions and Capital Improvements Plan have been properly prepared by qualified professionals in accordance with Texas Local Government Code Chapter 395.

By a separate vote (5-3)

Recommends that a separate wastewater Service Area be created within the proposed Westside Service Area. Its boundaries being Borderland (S), Transmountain (N), I-10 (E) and Doniphan (W).

Affirmed previous comments by a unanimous vote:

The Committee explicitly reserves any additional comments on impact fees until the “NOTICE ON HEARING ON IMPACT FEE” is made, presuming the City Council adopts the Land Use Assumptions and Capital Improvements Plan.



**MEMORANDUM**

**To:** Nick Costanzo  
El Paso Water Utilities

**Date:** February 20, 2009

**Copy:** John Neal  
City of El Paso

**From:** Rick Giardina  
Red Oak Consulting

**Re:** Westside Service Area Impact Fee

At the request of the Capital Improvements Advisory Committee (CIAC), Red Oak Consulting, together with the El Paso Water Utilities (EPWU), reviewed the geographical area shown on the attached map. This sub-area (outlined in red) is referred to as Westside Area B (Area B).

Based on the infrastructure to serve Area B, the maximum impact fee would be affected for the wastewater fee component only. Table 1 shows the recalculated maximum impact fee if Area B were considered independently from the larger Westside service area.

**Table 1: Maximum Impact Fees Calculated by Sub-Area**

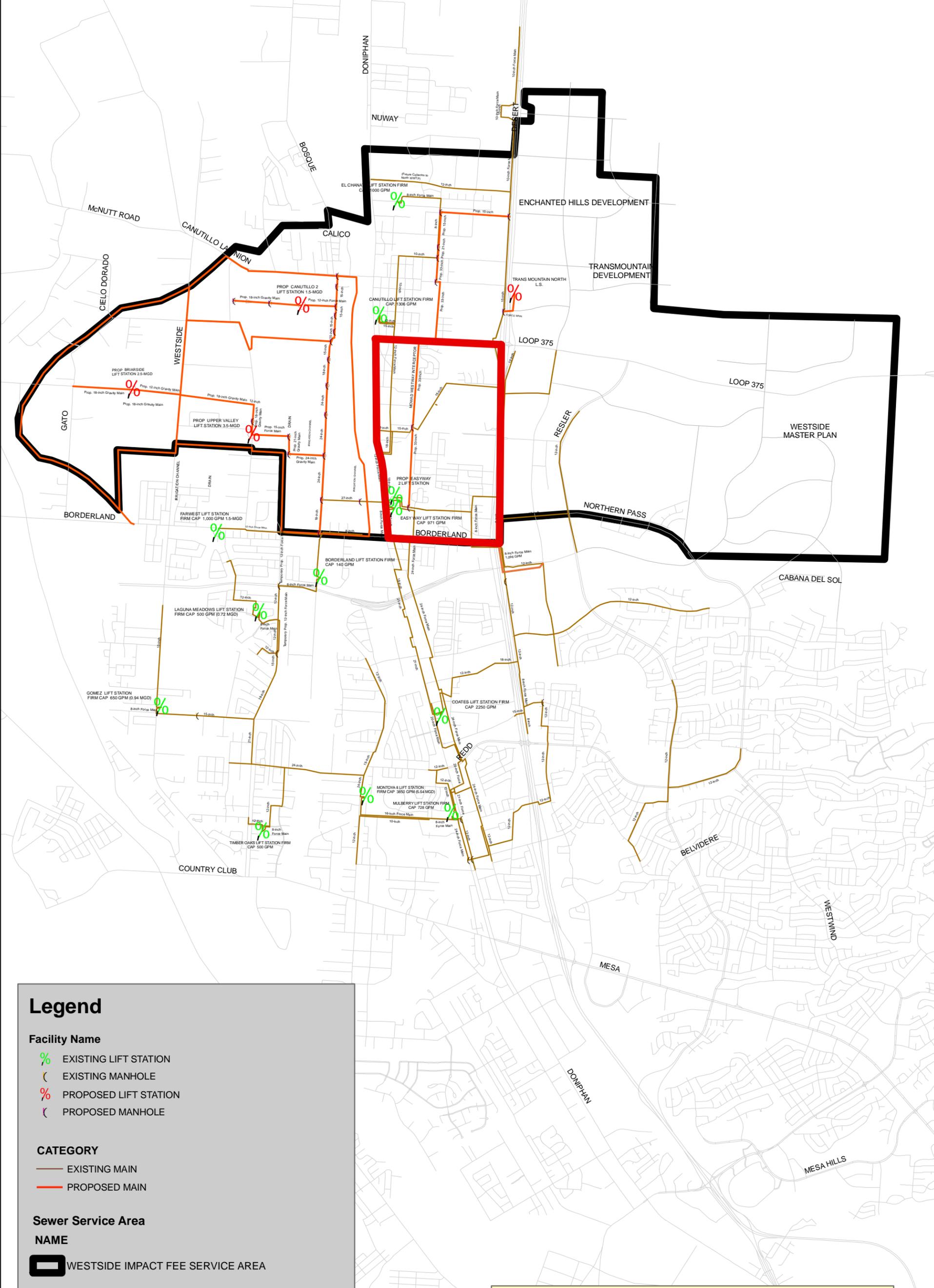
Area	Original Westside Fee			Recalculated by Sub-Area			Variance + (-)		
	Water	Wastewater	Total	Water	Wastewater	Total	Water	Wastewater	Total
Area A	\$1,044	\$1,711	\$2,755	\$1,044	\$1,712	\$2,756	\$0	\$1	\$1
Area B	\$1,044	\$1,711	\$2,755	\$1,044	\$767	\$1,811	\$0	(\$944)	(\$944)

As shown above, the maximum impact fee in Area B would decrease from \$2,755 to \$1,811 – a decrease of \$944. The maximum impact fee in the remaining area would increase from \$1,711 to \$1,712 – an increase of \$1.

Attachments: 2

# WESTSIDE SEWER IMPACT FEE SERVICE AREA MAP

## WESTSIDE SEWER IMPACT FEE SERVICE AREA B



**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



El Paso Water Utilities - Public Service Board  
 Impact Fee Study  
 Westside Service Area - Area B

Wastewater Service Unit Flows (Max Day)

341 gpd

Line No.	Westside Service Area - Area B		Capital Cost	Capacity (MGD)	Total Service Units	Unit Cost of Capacity	Weighted Average	
<b>Wastewater Treatment System</b>								
1	No wastewater treatment CIP proposed		-	-	-	-	-	
<b>Collection System</b>								
<b>Lines</b>								
2	TransMountain NW Interceptors	0%	\$0	-	-	-	-	
3	Mowad-Westway Interceptor	30%	\$2,100,000	-	-	667	\$667	
4	Subtotal		2,100,000	-	3,150			
<b>Debt Issued</b>								
5	TransMountain NW Interceptors		-	-	-	-	-	
6	Mowad-Westway Interceptor		735,000	-	3,150	233		
<b>NPV of Interest</b>								
7	TransMountain NW Interceptors		-	-	-	-	-	
8	Mowad-Westway Interceptor		316,691	-	3,150	101	101	
9	Subtotal		316,691	-	3,150			
<b>Pumping &amp; Force Mains</b>								
10	TransMountain North LS & FM (0.344 MGD for development)	0%	-	0	-	-	-	
11	Upper Valley 3 LS (1.5+2.5+3.5MGD)	0%	-	0	-	-	-	
12	Subtotal		-	-	-	-	-	
<b>Debt Issued</b>								
13	TransMountain North LS & FM		-	0	-	-	-	
14	Upper Valley 3 LS (1.5+2.5+3.5MGD)		-	0	-	-	-	
<b>NPV of Interest</b>								
15	TransMountain North LS & FM		-	0	-	-	-	
16	Upper Valley 3 LS (1.5+2.5+3.5MGD)		-	0	-	-	-	
17	Subtotal		-	-	-	-	-	
18	<b>Maximum Wastewater Impact Fee - Westside Service Area B (Capital and Financing)</b>						<b>\$</b>	<b>767</b>