ORDINANCE NO. 2018-006

AN ORDINANCE OF THE CITY OF CASTROVILLE, TEXAS, AMENDING THE CITY'S IMPACT FEE ORDINANCE (ORD. NO 2012-016) BY UPDATING LAND USE ASSUMPTIONS, POPULATION AND LAND USE PROJECTIONS, MAXIMUM & EFFECTIVE IMPACT FEES, WATER IMPROVEMENTS PLAN, AND WASTEWATER IMPROVEMENTS PLAN

WHEREAS, in 2011, the City of Castroville, Texas, ("the City"), pursuant to Chapter 395 of the Texas Local Government Code, undertook a comprehensive process to update the City's water and wastewater impact fees; and

WHEREAS, as a result of the statutory process required by Chapter 395 of the Local Government Code, the City Council adopted Ordinance No. 2011-005 on February 21, 2011; and

WHEREAS, Chapter 395 of the Local Government Code requires the periodic update of a municipality's land use assumptions and capital improvements plan; and

WHEREAS, as a result of the statutory process required by Chapter 395 of the Local Government Code, the City Council updated the municipality's land use assumptions and capital improvements plan by adopting Ordinance No. 2012-016 on September 24, 2012; and

WHEREAS, the amendments adopted herein were recommended to the City Council by the City's Impact Fee Advisory Committee, appointed in compliance with Local Government Code 395.058; and

WHEREAS, the City has determined, in conformance with Chapter 395 of the Texas Local Government Code, that certain assumptions, projections, fees and plans should be updated; and

WHEREAS, the City Council is required by law to timely approve or disapprove of amendments of the land use assumptions, capital improvements plan and modification of impact fees; and

WHEREAS, after notice of public hearing was published on February 22, 2018 and March 1, 2018, the City Council held such hearing on March 27, 2018 to consider the land use assumptions and the proposed Capital Improvements Plan;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CASTROVILLE, TEXAS:

1. Exhibit B ("Land Use Assumptions"), Exhibit C ("Maximum and Effective Impact Fees"), Exhibit D ("Water improvements Plan") and Exhibit E ("Wastewater Improvements Plan") to Ordinance Number 2012-016 as those Exhibits have been amended from time to time are hereby repealed and replaced with updated Exhibit B ("Land Use Assumptions"), Exhibit C ("Maximum and Effective Impact Fees"), Exhibit D ("Water Improvements Plan") and Exhibit E ("Wastewater Improvements Plan"), which are attached hereto and incorporated herein for all purposes.

2. This ordinance shall be and is hereby declared to be cumulative of all other ordinances of the City, and this ordinance shall not operate to repeal or affect any of such other ordinances except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, in such other ordinance or ordinances are hereby repealed.
3. If any sentence, section, subsection, clause, phrase, part or provision of the Ordinance be declared by a court of competent jurisdiction to be invalid, the same shall not affect the validity of the ordinance as a whole, or any part thereof, other than the part declared to be invalid.
4. The provisions of this Ordinance shall take effect immediately upon its passage.

PASSED AND APPROVED THIS 27th DAY OF March, 2018.

TIMOTHY KELLEY, MAYOR

ATTEST:

DEBRA HOWE, CITY SECRETARY

Exhibit B - Land Use Assumptions

Population and Land Use Projections for the City of Castroville

LAND USE	2020		2030	
	ACRES	%	ACRES	%
Single-Family Residential	1,765	13.73%	2,119	16.48%
Manufactured Housing	138	1.07%	138	1.07%
Multi-Family	27	0.21%	62	0.48%
Commercial	274	2.13%	303	2.36%
Industrial	25	0.19%	25	0.19%
Parks and Open Space	212	1.65%	212	1.65%
Public / Institutional	802	6.24%	802	6.24%
Right of Way (ROW)	505	3.93%	505	3.93%
Nonurban / Undeveloped	9,111	70.85%	8,693	67.60%
TOTAL ACREAGE	**12,859**	**100.00%**	**12,859**	**100.00%**
Population	3,067		4,696	
Water Service Population	2,515		4,039	
Sewer Service Population	2,392		3,898	
Water LUEs	2,383		3,827	
Sewer LUEs	2,267		3,693	
Population per Urban Acre	0.82		1.13	
Population per Acre (Total Acres)	0.24		0.37	

Source for land use acreages: Frie Planning and Development Concepts, 2008, 2008 Land Use Totals.xls updated with Near Term Development Schedule provide by City of Castroville, Nina Nixon-Mendez, June 7, 2017.

Source for population estimates and projections: University of Texas IED November 2016 for Year 2020. University of Texas IED November 2016 plus 30% of the total buildout for near term development converted to population for year 2030 as requested by City of Castroville in personal communication with Nina Nixon-Mendez on August 3, 2017.

Current water LUEs based on water meter count and conversion to LUEs; current sewer LUEs based on 1.06 persons per LUE, applied to the sewer service population.

Exhibit C - Maximum and Effective Impact Fees
(1)

Categorization of Utility Debt - Water Utility

FACILITY TYPE / NAME	BOND ISSUE (if any)			FACILITY CAPACITY		TOTAL DEBT PRINCIPAL PER CURRENT LUE
	ISSUANCE DATE	ISSUANCE AMOUNT (a)	REMAINING PRINCIPAL (b, c)	TOTAL	FOR CURRENT CUST.	
WATER SUPPLY						
Water Well Country Village Phase 6 & 7	Prospective	$51,000.00	$51,000.00	0.100	0.050	$ 10.70
Subtotal Supply		**$51,000.00**	**$51,000.00**			**$ 10.70**
PUMPING						
2-Booster Pump Sta. Houston & Alsace (No additional capacity) (c)	2017	$308,856.00	$308,856.00	0.518	0.363	$ 90.83
Water Well Country Village Phase 6 &7	Prospective	$25,500.00	$25,500.00	0.100	0.050	$ 5.35
Rebuild Well No. 1, 2, and 3 Motor (No addl cap)	Prospective	$76,500.00	$76,500.00	1.060	1.060	$ 32.10
Variable Frequency Pump Drives (No addl cap)	Prospective	$91,800.00	$91,800.00	4.493	3.141	$ 26.93
Subtotal Pumping		**$502,656.00**	**$502,656.00**			**$ 155.21**
GROUND STORAGE						
West Side Ground Storage Tank - Raise (No addl cap)	Prospective	$1,020,000.00	$1,020,000.00	0.500	0.400	$ 342.43
Ground Storage Tank and Airport HSPS	Prospective	$2,040,000.00	$2,040,000.00	0.500	0.100	$ 171.21
Ground Storage Tank and Medina HSPS	Prospective	$510,000.00	$510,000.00	0.250	0.050	$ 42.80
Subtotal Ground Storage		**$3,570,000.00**	**$3,570,000.00**			**$ 556.44**

FACILITY TYPE / NAME	BOND ISSUE (if any)			FACILITY CAPACITY		TOTAL DEBT PRINCIPAL PER CURRENT LUE
	ISSUANCE DATE	ISSUANCE AMOUNT (a)	REMAINING PRINCIPAL (b, c)	TOTAL	FOR CURRENT CUST.	
ELEVATED STORAGE						
East Side Elevated Storage Tank	Prospective	$3,952,500.00	$3,952,500.00	0.500	0.100	$ 331.72
Subtotal Elevated Storage		**$3,952,500.00**	**$3,952,500.00**			**$ 331.72**
MAJOR TRANSMISSION LINES						
6" mains (25,000 lf)	In Construction	$2,093,973.81	$1,889,347.81	100%	68%	$ 539.13
10" mains (5,000 lf)	Prospective	$510,000.00	$510,000.00	100%	18%	$ 33.52
12" mains (1,500 lf)	Prospective	$117,300.00	$117,300.00	100%	10%	$ 4.92
Medina Valley Interconnect & Hwy 90 Loop	Prospective	$765,000.00	$765,000.00	100%	20%	$ 64.20
Subtotal Transmission Lines		**$3,486,273.81**	**$3,281,647.81**			**$ 646.78**
Water Outstanding Debt Total		**$11,562,429.81**	**$11,357,803.81**			**$1,700.86**

(a) Assumes financing parameter: 4.5% interest; 20 years term; bonding costs of 2.0% over construction costs for prospective bond issues.

(b) Including soft costs

(c) Was paid under the city general fund

Exhibit C - Maximum and Effective Impact Fees
(2)

Categorization of Utility Debt - Wastewater Utility

FACILITY TYPE / NAME		BOND ISSUE		FACILITY CAPACITY		
	ISSUANCE DATE	ISSUANCE AMOUNT (a)	REMAINING PRINCIPAL (b, c)	TOTAL	FOR CURRENT CUST.	TOTAL DEBT PRINCIPAL PER CURRENT LUE
TREATMENT						
WWTP Expansion	In Construction	$11,842,800.78	$11,475,504.28	0.700	0.230	$ 1,663.22
Subtotal Supply		**$11,842,800.78**	**$11,475,504.28**	0.700	0.230	$ 1,663.22
PUMPING						
Lift Station at Regional Park	Prospective	$255,000.00	$255,000.00	1.728	1.010	$ 65.75
East Side Lift Station & Force Main	In Construction	$1,051,897.43	$948,780.45	1.000	0.230	$ 96.26
Subtotal Pumping		**$1,306,897.43**	**$1,203,780.45**	2.728	1.240	$ 162.00
MAJOR TRANSMISSION LINES						
8" Gravity Mains (4800 lf)	Prospective	$207,982.08	$207,982.08	100.00%	40.00%	$ 36.70
12" Gravity Mains (7500 lf)	Prospective	$675,941.76	$675,941.76	100.00%	30.00%	$ 89.45
21" Gravity Mains (2000 lf)	Prospective	$510,000.00	$510,000.00	100.00%	10.00%	$ 22.50
24" Gravity Mains (3650 lf)	In Construction	$685,186.02	$618,017.57	100.00%	10.00%	$ 27.26
Subtotal Transmission Lines		**$2,079,109.86**	**$2,011,941.41**			$ 175.91
Wastewater Outstanding Debt Total		**$15,228,808**	**$14,691,226**			**$2,001.13**

(a) Assumes financing parameter: 4.5% interest; 20 years term; bonding costs of 2.0% over construction costs for prospective bond issues.
(b) Including soft costs

Exhibit C - Maximum and Effective Impact Fees

3)

Water and Wastewater Maxiumum Impact Fees

UTILITY	FACILITY	COST/ LUE*	ALTERNATIVE ADJUSTMENTS A Rate Credit	ALTERNATIVE ADJUSTMENTS B 50% Credit	MAXIMUM FEE AMOUNTS A Rate Credit	MAXIMUM FEE AMOUNTS B 50% Credit	HIGHER OF A OR B
WATER	Supply	$281.40	$10.70	$140.70	$270.70	$140.70	$270.70
	Pumping	$73.24	$155.21	$36.62	-$81.97	$36.62	$36.62
	Ground Storage	$1,174.93	$556.44	$587.47	$618.49	$587.47	$618.49
	Elevated Storage	$1,824.79	$331.72	$912.40	$1,493.07	$912.40	$1,493.07
	Major Transmission	$1,093.85	$646.78	$546.92	$447.06	$546.92	$546.92
	Study Costs	$30.10	$0.00	$15.05	$30.10	$15.05	$30.10
TOTAL WATER		$4,478.31	$1,700.86	$2,239.15	$2,777.45	$2,239.15	$2,995.90
SEWER	Treatment	$4,679.19	$1,663.22	$2,339.60	$3,015.97	$2,339.60	$3,015.97
	Lift Stations (a)	$482.20	$162.00	$241.10	$320.20	$241.10	$320.20
	Major Collection	$627.59	$175.91	$313.80	$451.69	$313.80	$451.69
	Study Costs	$30.10	$0.00	$15.05	$30.10	$15.05	$30.10
TOTAL SEWER		$5,819.09	$2,001.13	$2,909.54	$3,817.96	$2,909.54	$3,817.96
					(a)		(a)
TOTAL WATER AND SEWER		$10,297.40	$3,701.99	$5,148.70	$6,595.41	$5,148.70	$6,813.85
					(a)		(a)

* An LUE is equal to use by a typical household with a 5/8" x 3/4" water meter.

(a) Feepayers requiring construction of additional new lift stations will also be charged the cost of their prorata shares of those facilities.

Exhibit C - Maximum and Effective Impact Fees
(4)

Maximum and Effective (Collected) Impact Fees for Various Water Meter Sizes

METER TYPE	METER SIZE	MULTIPLIER	MAXIMUM CAPITAL RECOVERY FEE			EFFECTIVE COLLECTED FEE		
			WATER	SEWER	BOTH	WATER	SEWER	BOTH
SIMPLE	5/8" x 3/4"	1	$ 2,995.90	$ 3,817.96	$ 6,813.85	$ 2,995.90	$ 3,817.96	$ 6,813.85
SIMPLE	3/4"	1.5	$ 4,493.85	$ 5,726.93	$ 10,220.78	$ 4,493.85	$ 5,726.93	$ 10,220.78
SIMPLE	1"	2.5	$ 7,489.75	$ 9,544.89	$ 17,034.63	$ 7,489.75	$ 9,544.89	$ 17,034.63
SIMPLE	1 1/2"	5	$ 14,979.49	$ 19,089.78	$ 34,069.27	$ 14,979.49	$ 19,089.78	$ 34,069.27
SIMPLE	2"	8	$ 23,967.19	$ 30,543.65	$ 54,510.83	$ 23,967.19	$ 30,543.65	$ 54,510.83
COMPOUND	2"	8	$ 23,967.19	$ 30,543.65	$ 54,510.83	$ 23,967.19	$ 30,543.65	$ 54,510.83
TURBINE	2"	10	$ 29,958.98	$ 38,179.56	$ 68,138.54	$ 29,958.98	$ 38,179.56	$ 68,138.54
COMPOUND	3"	16	$ 47,934.37	$ 61,087.29	$ 109,021.66	$ 47,934.37	$ 61,087.29	$ 109,021.66
TURBINE	3"	24	$ 71,901.56	$ 91,630.94	$ 163,532.49	$ 71,901.56	$ 91,630.94	$ 163,532.49
COMPOUND	4"	25	$ 74,897.46	$ 95,448.89	$ 170,346.35	$ 74,897.46	$ 95,448.89	$ 170,346.35
TURBINE	4"	42	$ 125,827.73	$ 160,354.14	$ 286,181.87	$ 125,827.73	$ 160,354.14	$ 286,181.87
COMPOUND	6"	50	$ 149,794.91	$ 190,897.78	$ 340,692.70	$ 149,794.91	$ 190,897.78	$ 340,692.70
TURBINE	6"	92	$ 275,622.64	$ 351,251.92	$ 626,874.56	$ 275,622.64	$ 351,251.92	$ 626,874.56
COMPOUND	8"	80	$ 239,671.86	$ 305,436.45	$ 545,108.32	$ 239,671.86	$ 305,436.45	$ 545,108.32
TURBINE	8"	160	$ 479,343.73	$ 610,872.91	$ 1,090,216.63	$ 479,343.73	$ 610,872.91	$ 1,090,216.63
COMPOUND	10"	115	$ 344,528.30	$ 439,064.90	$ 783,593.20	$ 344,528.30	$ 439,064.90	$ 783,593.20
TURBINE	10"	250	$ 748,974.57	$ 954,488.92	$ 1,703,463.49	$ 748,974.57	$ 954,488.92	$ 1,703,463.49
TURBINE	12"	330	$ 988,646.43	$ 1,259,925.37	$ 2,248,571.80	$ 988,646.43	$ 1,259,925.37	$ 2,248,571.80

Exhibit D - Water Improvements Plan
(1)

Current Meter Count and Estimation of Living Units Equivalent

METER SIZE	NUMBER OF METERS (a)	LUEs PER METER (b)	NUMBER OF LUEs
5/8" x 3/4"	1,170	1.000	1,170
3/4"	189	1.500	284
1"	118	2.500	295
1 1/4"; 1 1/2"	38	5.000	190
2"	31	8.000	248
3"	6	16.000	96
4"	-	25.000	-
6"	2	50.000	100
Total	1,554		2,383
Population/LUE			1.06

(a) Source: City of Castroville, Larry Heinrich, April 28, 2017 via Kim Hanson, April 27, 2017.

(b) Derived from AWWA c700-C703 standards for continuous rated flow performance of meters scaled to 5/8" meter.

Exhibit D - Water Improvements Plan
(2)

Capacity Demand for Each New Water LUE

FACILITY	BASIS	CAPACITY PER LUE
Supply	Average Day	269.4 gallons daily
Booster Pumps	TCEQ Requirement	864 gallons daily
Ground Storage	TCEQ Requirement	100 gallons
Elevated Storage	TCEQ Requirement	100 gallons

Source: Don McCrary & Associates, inc., 2010.

Exhibit D - Water Improvements Plan
(3)

Estimated Water Service Demand by Facility Type

	VOLUME	
FACILITY TYPE	2020	2030
LUE's (a)	2,383	3,827
WATER SUPPLY MGD: (b)		
Estimated Demand	0.642	1.031
Existing Capacity	6.606	6.606
Excess/ (Defficiency	**5.964**	**5.575**
BOOSTER PUMP MGD: (c)		
Estimated Demand	2.059	3.307
Existing Capacity	4.4934	4.4934
Excess/ (Deficiency)	**2.434**	**1.187**
GROUND STORAGE MG: (d)		
Estimated Demand	0.238	0.383
Existing Capacity	0.5	0.5
Excess/ (Deficiency)	**0.262**	**0.117**
ELEVATED WATER STORAGE MG: (e)		
Estimated Demand	0.238	0.383
Existing Capacity	0	0
Excess/ (Deficiency)	**-0.238**	**-0.383**

(a) 2020 LUE's based on count of equivalent meters. 2030 LUE's determined by 2020 persons per LUE (LUE = 1.06 persons) applied to projected service population

(b) Capacity Demand = 269.4 gallons/LUE/day.

(c) Capacity Demand = 864 gallons/LUE/day.

(c) Capacity Demand = 100 gallons/LUE.

(d) Capacity Demand = 100 gallons/LUE.

Exhibit D - Water Improvements Plan
(4)

CIP Inventory and Costing - Water Utility

FACILITY TYPE / NAME	TOTAL CONSTRUCT COST	FACILITY CAPACITY (MGD or MG)				2020-2030	
		TOTAL	CURRENT CUST.	2020-2030 GROWTH	POST-2030 GROWTH	CAPITAL COST TOTAL	COST PER LUE (a)
WATER SUPPLY							
EXISTING FACILITIES		AVG. MGD					
Water Well No.1. 703 Paris Street	$500,000.00	0.451	0.318	0.066	0.067	$73,170.73	
Water Well No.2. London & Isabella Street	$500,000.00	0.625	0.438	0.094	0.093	$75,200.00	
Water Well No.3. Vienna & Houston Street	$500,000.00	1.116	0.781	0.168	0.167	$75,268.82	
Water Well No.4. Airport Well	$1,000,000.00	0.526	0.368	0.079	0.079	$150,190.11	
Water Well No.6. Medina Valley Water Supply	$50,000.00	3.888	2.721	0.584	0.583	$7,510.29	
Subtotal Existing Supply	$2,550,000.00	6.606	4.626	0.991	0.989	$381,339.95	
FUTURE FACILITIES							
Water Well Country Village Phase 6 & 7	$50,000.00	0.1	0.050	0.050	0.000	$25,000.00	
Subtotal Future Supply	$50,000.00	0.1	0.050	0.050	0.000	$25,000.00	
TOTAL WATER SUPPL Y	$2,600,000.00	6.706	4.676	1.041	0.989	$406,339.95	$281.40
PUMPING							
EXISTING FACILITIES		PEAK HOUR MGD					
Pump @ Water Well No. 1	$40,000.00	0.223	0.156	0.034	0.033	$6,087.74	
Pump @ Water Well No. 2	$50,000.00	0.546	0.410	0.088	0.088	$7,508.53	
Pump @ Water Well No. 3	$35,000.00	0.251	0.176	0.038	0.037	$5,298.80	
Pump @ Water Well No. 4	$30,000.00	2.726	1.910	0.408	0.408	$4,490.10	
Pump @ Water Well No. 6	$70,000.00	0.189	0.132	0.029	0.028	$10,740.74	
2-Booster Pump Sta. Houston & Alsace (No additional capacity) (c)	$302,800.00	0.518	0.363	0.078	0.077	$45,595.37	
Subtotal Existing Pumpage	$527,800.00	4.49	3.15	0.68	0.67	$79,721.28	
FUTURE FACILITIES							
Water Well Country Village Phase 6 &7	$25,000.00	0.100	0.050	0.050	0.000	$12,500.00	
Rebuild Well No. 1, 2, and 3 Motor (No addl cap)	$75,000.00	1.060	1.060	0.000	0.000	$0.00	
Variable Frequency Pump Drives (No addl cap)	$90,000.00	4.194	3.141	0.676	0.676	$13,539.86	
Subtotal Future Pumpage	$190,000.00	0.100	0.050	0.050	0.000	$26,039.86	
TOTAL WATER PUMPAGE	$717,800.00	4.5934	3.197	0.725	0.671	$105,761.13	$73.24
GROUND STORAGE							
EXISTING FACILITIES		MG					
West Side Ground Storage Tank	$644,000.00	0.500	0.350	0.075	0.075	$96,600.00	
Subtotal Existing Facilities	$644,000.00	0.500	0.350	0.075	0.075	$96,600.00	
FUTURE FACILITIES							
West Side Ground Storage Tank - Raise (No addl cap)	$1,000,000.00	0.50	0.4	0.1	0	$200,000.00	
Ground Storage Tank and Airport HSPS	$2,000,000.00	0.50	0.1	0.25	0.15	$1,000,000.00	
Ground Storage Tank and Medina HSPS	$500,000.00	0.25	0.05	0.2	0	$400,000.00	
Subtotal Future Facilities	$3,500,000.00	0.75	0.15	0.45	0.15	$1,600,000.00	
TOTAL GROUND STORAGE	$4,144,000.00	1.2500	0.500	0.525	0.225	$1,696,600.00	$1,174.93

Exhibit D - Water Improvements Plan
(4)

CIP Inventory and Costing - Water Utility

FACILITY TYPE / NAME	TOTAL CONSTRUCT COST	FACILITY CAPACITY (MGD or MG)				2020-2030	
		TOTAL	CURRENT CUST.	2020-2030 GROWTH	POST-2030 GROWTH	CAPITAL COST TOTAL	COST PER LUE (a)
ELEVATED STORAGE							
EXISTING FACILITIES		MG					
None		0					
Subtotal Existing Facilities	$0.00	0.000	0.000	0.000	0.000	$0.00	
FUTURE FACILITIES							
East Side Elevated Storage Tank	$3,875,000.00	0.500	0.100	0.340	0.060	$2,635,000.00	
Subtotal Future Facilities	$3,875,000.00	0.500	0.100	0.340	0.060	$2,635,000.00	
TOTAL ELEVATED STORAGE	$3,875,000.00	0.500	0.100	0.340	0.060	$2,635,000.00	$1,824.79
MAJOR TRANSMISSION LINES							
EXISTING FACILITIES		%					
8" mains (55,050 lf)	$2,261,055.00	100.00%	80.0%	10.0%	10.0%	$226,105.50	
10" mains (8,690 lf)	$408,430.00	100.00%	60.0%	28.0%	12.0%	$114,360.40	
12" mains (1150 lf)	$60,961.00	100.00%	68.0%	17.0%	15.0%	$10,363.37	
Subtotal Existing Facilities	$2,730,446.00	100.00%	76.7%	12.8%	10.4%	$350,829.27	$242.96
FUTURE FACILITIES							
6" mains (25,000 lf)	$2,052,915.50	100.00%	68.00%	32.00%	0.00%	$656,932.96	
10" mains (5,000 lf)	$500,000.00	100.00%	18.00%	44.00%	38.00%	$220,000.00	
12" mains (1,500 lf)	$115,000.00	100.00%	10.00%	45.00%	45.00%	$51,750.00	
Medina Valley Interconnect & Hwy 90 Loop	$750,000.00	100.00%	20.00%	40.00%	40.00%	$300,000.00	
Subtotal Future Facilities	$3,417,915.50	100.00%	48.20%	35.95%	15.85%	$1,228,682.96	
TOTAL TRANSMISSION LINES	$6,148,361.50	100.00%	60.88%	25.69%	13.43%	$1,579,512.23	$1,093.65
TOTALS	$17,485,161.50					$6,423,213.31	$4,691.17

Source: Don McCrary & Associates, Inc., September, 2010. Impact Fees Eddy 9 2 10.xls

(a) Assumes the following gals to LUE conversion factors:

Supply: 269.4 gals daily

Pumpage: 864 gals daily

Ground Storage: 100 gals

Elevated Storage: 100 gals

(b) Well pumps also function as booster pumps, per Eddy McNew, Non McCrary & Associates, inc., May 27, 2010.

(c) Was paid under the city general fund

Exhibit E - Wastewater Improvements Plan
(1)

Capacity Demand for Each New Wastewater LUE

FACILITY	BASIS	CAPACITY PER LUE
Treatment	Average Day	165 Gallons/day
Pumping	Engineering Analysis	330 gallons/day (existing customers) 489 gallons/day (future customers)

Source: Don McCrary & Associates, inc., 2010.

Exhibit E - Wastewater Improvements Plan
(2)

Estimated Wastewater Service Demand by Facility Type

FACILITY TYPE	VOLUME 2020	2030
LUE's (a)	2267	3693

WASTEWATER TREATMENT AVERAGE MGD:		
Estimated Demand (b)	0.374	0.609
Existing Capacity	0.700	0.700
Excess/ (Defficiency	0.326	0.091

WASTEWATER PUMPING:		
Estimated Demand (c)	0.748	1.806
Existing Capacity	2.164	2.164
Excess/ (Deficiency)	1.41589	0.358

(a) Same number of LUE's per person as water.

(b) Capacity demand = 165 gallons/LUE/daily.

(c) Capacity demand = 330 gallons/LUE/daily for existing customers and 489 gallons/LUE/daily for future customers

Exhibit E - Wastewater Improvements Plan
(3)

CIP Inventory and Costing - Wastewater Utility

FACILITY TYPE / NAME	TOTAL CONSTRUCT COST	FACILITY CAPACITY (MGD) TOTAL	CURRENT CUST.	2020-2030 GROWTH	POST-2030 GROWTH	2020-2030 CAPITAL COST TOTAL	COST PER LUE (a)
TREATMENT							
EXISTING FACILITIES		AVG. MGD					
WWTP No. 1, 800 Alsace St. (will be retired)	$1,225,000.00	0.350	0.145	0.153	0.052	$535,500.00	
WWTP No. 1 Upgrade (no addl capacity)	$150,000.00	0.000					
Subtotal Existing Supply	**$1,375,000.00**	**0.350**	**0.145**	**0.153**	**0.052**	$535,500.00	
FUTURE FACILITIES							
WWTP Expansion	$11,610,589.00	0.700	0.23	0.37	0.10	$6,137,025.61	
Subtotal Future Facilities	**$11,610,589.00**	**0.700**	**0.23**	**0.37**	**0.10**	**$6,137,025.61**	
TOTAL WASTEWATER TREATMENT	**$12,985,589.00**	1.050	0.375	0.523	0.152	$6,672,525.61	$4,679.19

PUMPING							
EXISTING FACILITIES		MGD					
Country Village Lift Station	$125,000.00	0.360	0.252	0.054	0.054	$18,750.00	
River Side MH Park Lift Station	$125,000.00	0.360	0.252	0.054	0.054	$18,750.00	
Koeing Park Lift Station	$125,000.00	0.360	0.252	0.054	0.054	$18,750.00	
Reata Lift Station	$125,000.00	0.360	0.152	0.154	0.054	$53,472.22	
Lift Station at WWTP	$200,000.00	0.724	0.406	0.209	0.109	$57,734.31	
Subtotal Existing Pumpage	**$700,000.00**	**2.164**	**1.314**	**0.525**	**0.325**	**$167,457.03**	
FUTURE FACILITIES							
Lift Station at Regional Park	$250,000.00	1.728	1.010	0.459	0.259	$66,406.25	
East Side Lift Station & Force Main	$1,031,271.99	1.000	0.230	0.440	0.330	$453,759.68	
Localized Lift Stations	(b)						
Subtotal Future Facilities	**$1,281,271.99**	2.728	1.240	0.899	0.589	**$520,165.93**	
	(b)					(b)	
TOTAL WASTEWATER PUMPAGE	**$1,981,271.99**	**4.892**	**2.554**	**1.424**	**0.914**	**$687,622.95**	**$482.20**
	(b)					(b)	(a,b)

MAJOR COLLECTION LINES							
EXISTING FACILITIES		%					
Existing Mains (8"-12")		100.00%	100.00%	0.00%	0.00%	$0.00	
Subtotal Existing Facilities	**$0.00**	**100.00%**	**100.00%**	**0.00%**	**0.00%**	**$0.00**	
FUTURE FACILITIES							
8" Gravity Mains (4800 lf)	$203,904.00	100.00%	40.00%	30.00%	30.00%	$61,171.20	
12" Gravity Mains (7500 lf)	$662,688.00	100.00%	30.00%	40.00%	30.00%	$265,075.20	
21" Gravity Mains (2000 lf)	$500,000.00	100.00%	10.00%	60.00%	30.00%	$300,000.00	
24" Gravity Mains (3650 lf)	$671,751.00	100.00%	10.00%	40.00%	50.00%	$268,700.40	
Subtotal Future Facilities	**$2,038,343.00**	**100.00%**	**19.50%**	**43.91%**	**36.59%**	**$894,946.80**	
TOTAL TRANSMISSION LINES	**$2,038,343.00**	**100.00%**	**19.50%**	**43.91%**	**36.59%**	**$894,946.80**	**$627.59**

TOTALS **$ 17,005,204** **$ 8,255,095** **$5,788.99**

Source: Don McCrary & Associates, Inc., September, 2010, Impact Fees Eddy 9 2 10.xls

(a) Assumes the following gals to LUE converstion factors:

Treatment: 165 gals daily

Pumpage: 489 gals daily

(b) Feepayers requiring construction of additional new lift stations will also be assessed cost of their prorate share of the facilities.

Total Future Facilities $ 14,930,204