# CITY OF ROUND ROCK Impact Fee Report

September 6, 2023





This page intentionally left blank to facilitate two-sided printing

# Contents

1. Introduction	on and Summary	1
2. Chapter 3	95 Requirements	2
2.1. Capital	Improvement Advisory Committee	2
2.2. Public H	learings	2
2.3. Impact	Fee	2
2.3.1.	Capital Improvement Plan	3
2.3.2.	Impact Fee Calculation	3
3. Land Use	Assumptions	4
4. Current an	d Projected Utility Demand and Supply	7
5. Major Cap	ital Improvement Needs and Costs	12
6. Methods o	f Capital Payment	15
7. Impact Fe	e Calculations	18
8. Advisory C	Committee Actions and Recommendations	20

# **Tables**

Table 1 Land Use Assumptions	6
Table 2 Water and Wastewater LUEs	8
Table 3 Estimated Water and Wastewater Growth	9
Table 4 Water Capacities	10
Table 5 Wastewater Capacities	11
Table 6 Water Supply, Water Treatment and Water Pumping	12
Table 7 Ground Storage, Elevated Storage and Transmission Lines	13
Table 8 Wastewater Treatment, Pumping and Interceptors	14
Table 9 Water Debt	16
Table 10 Wastewater Debt	17
Table 11 Water and Wastewater Impact Fee Credit	18
Table 12 Water Impact Fee	18
Table 13 Wastewater Impact Fee	19

## **Figures**

Figure 1 Water Service Area Map	4
Figure 2: Wastewater Service Area Map	5

THIS PAGE INTENTIONALLY LEFT BLANK

# **1. Introduction and Summary**

The City of Round Rock (City) is currently updating its impact fees to reflect the latest 10-year Capital Improvements Program (CIP) from the City's latest master plan. The CIP reflects the latest information about future projects. This report establishes the maximum impact fee applicable to the City of Round Rock.

Raftelis has completed the impact fee study in compliance with Chapter 395 of the Texas Local Government Code. Chapter 395 dictates how impact fees are calculated in Texas. This report outlines the details of the impact fee study.

As a result of the study, the maximum allowable impact fee that may be adopted was calculated. Chapter 395 allows either a rate credit by other methods of payment for utility capital by a new customer or a reduction of the unit capital costs by 50% to calculate the maximum allowable fee. The maximum fee amount is the maximum fee the city may lawfully charge based on given capital improvements, existing capacity, and the selected rate credit. City Council does not have to select the maximum rate and may select fees lower than the maximum allowable to be assessed.

Per this report, Raftelis and the Capital Improvement Advisory Committee (CIAC) have reviewed the overall water and wastewater maximum fees by classification. The water maximum fee is based on water supply, water treatment, pumping, storage, and transmission classifications. The wastewater maximum fee is based on wastewater treatment, pumping, and interceptor classifications. The City may add or subtract categories to reflect the developer's contribution by utilizing these classifications. For example, if a developer is contributing the water transmission classification may be removed from the fee. In the future, if the City chooses to provide wholesale service to utilities, then these classifications may be used to calculate impact fees for relevant customers. Local distribution lines are not included in the impact fee calculations. Typically, distribution lines are contributed by the developers.

The design assumptions, service demand assumptions, and planning costs were obtained in coordination with the City and the City's engineers. The City provided the financial information. Raftelis utilized all this information to calculate a maximum impact fee.

# 2. Chapter 395 Requirements

The impact fee process in Texas is governed by Chapter 395 of the Texas Local Government Code. Chapter 395 dictates how impact fees are calculated and the process that must be followed. The process starts with creating a Capital Improvements Advisory Committee (CIAC) and the development of Land Use Assumptions, a 10-year Capital Improvement Plan, and finally, the calculation of the impact Fee. The CIAC must review and provide comments on the Land Use Assumptions, Capital Improvement Plan, and impact fee calculation.

## **2.1. Capital Improvement Advisory Committee**

The CIAC should be comprised of at least five members, with 40 percent of the membership being from the real estate, development, or building industries. As stated in Section 395.058(c), the advisory committee serves in an advisory capacity and is established to:

- 1) Advise and assist the political subdivision in adopting land use assumptions;
- 2) Review the capital improvements plan and file written comments
- 3) Monitor and evaluate the implementation of the capital improvements plan;
- 4) File semiannual reports concerning the progress of the capital improvements plan and report to the political subdivision any perceived inequities in implementing the plan or imposing the impact fee; and
- 5) Advise the political subdivision of the need to update or revise the land use assumptions, capital improvements plan, and impact fee.

The City shall make available to the CIAC any professional reports concerning developing and implementing the capital improvements plan. For the ongoing requirements of the CIAC, the City should adopt procedural rules for the CIAC to follow in carrying out its duties.

The CIAC must document its recommendations and considerations about the land use assumptions, capital improvement plan, and impact fee calculation. This report serves as the documentation of the CIAC.

## **2.2. Public Hearings**

The City must hold one public hearing to approve the impact fee. The public hearings are held after the CIAC's input is provided about the land use assumptions, CIP, and the impact fee calculation. The public hearing considers the land use assumptions, the capital improvement plan and the impact fee. The public hearing is held at least 30 days after the notice is published in one or more local newspapers in each county where the City is located.

## 2.3. Impact Fee

The adopted impact fee may be imposed within the city limits and within the city's extraterritorial jurisdiction. Impact fees can be used to fund the projects identified in the 10-year CIP, specifically on construction, surveying and engineering fees, land acquisition costs, and fees paid to a qualified engineer or financial consultant. The established CIP should include projects needed to serve future growth. In addition, impact fees can pay for interest and financing costs related to the issuance of bonds to fund projects identified in the 10-year CIP. Impact fees can only be used for the cost of facilities included in the 10-year CIPs. Any facility improvements that are not required to serve future growth are ineligible.

## 2.3.1. Capital Improvement Plan

The CIP should include a list of the projects and the costs of expanding existing facilities to serve future growth. To establish the CIP, an analysis of the system's total capacity was completed to determine the current level of usage and the future usage needed to serve the growth in the 10 years. The projected growth was determined based on the land uses of the service area. The total number of service units for the 10 years was established based on the system's future growth.

## 2.3.2. Impact Fee Calculation

Once the CIP is established, the cost per service unit is calculated by dividing the cost of capital projects by the number of service units. This calculation is done by facility type to ease in providing future impact fee credits to developers. Once the cost per service unit is determined, a rate credit must be applied. The rate credit can be based on 50% of the cost per service unit or the credit application based on the portion of utility service revenues generated by new service units during the 10 years. For the study, a rate credit was applied.

# **3. Land Use Assumptions**

Figure 1 and Figure 2 show the service area for the study. This reflects the area where the impact fee will be applied. The acres served represent the City's ETJ and certified water and wastewater service areas. The acreage is then further broken down into classifications.



#### Figure 1 Water Service Area Map



Table 1 shows the current and future land use assumptions in the model. The 2023 classifications are based on current land uses. Currently, the ETJ is 37,643 acres with 30,227 water service area acres and 35,337 wastewater service area acres. The projected 2033 numbers do not change in total acreage but change in use of acreage. The change in acreage and the usage of acreage is based on extensive research by City staff and its engineering consultants.

### Figure 2: Wastewater Service Area Map

Land Use Classification		2023			2033	
	ETJ Acres	Water Acres	WW Acres	ETJ Acres	Water Acres	WW Acres
Agricultural	3,134	2,376	3,121	3,134	2,376	3,121
Undeveloped	3,922	2,807	3,890	732	839	783
Commercial	2,676	2,285	2,573	2,782	2,392	2,680
Educational Facility	1,302	1,066	1,141	1,302	1,066	1,141
Government/Institutional	1,012	957	967	1,012	957	967
Industrial	825	760	846	825	760	846
Mining	1,594	1,892	2,254	1,594	1,892	2,254
Mixed Use	111	90	111	395	373	395
Drainage	2,614	2,218	2,503	2,614	2,218	2,503
Multi-family	1,304	1,047	1,309	1,579	1,281	1,584
Office	636	623	629	788	676	782
Open Space	635	841	582	635	841	582
Recreational	3,431	3,038	3,267	3,431	3,038	3,267
Single Family	13,938	9,740	11,655	16,309	11,032	13,944
Two Family	277	271	261	277	271	261
Utilities	232	216	228	232	216	228
Total	37,643	30,227	35,337	37,643	30,227	35,337

### Table 1 Land Use Assumptions

# 4. Current and Projected Utility Demand and Supply

Table 2 displays the current counts of water and wastewater meters in Round Rock. The meter counts were provided by the City. The table displays the number of meters and the Living Unit Equivalent (LUE) conversion factor used. The typical single-family household in Round Rock uses a 5/8" meter. The 5/8" meter represents one LUE.

The LUE conversion factors are primarily based on standard AWWA meter equivalent ratios, with the exception of the 3" meter. Meters larger than 5/8" are defined in terms of a 5/8" meter. For example, a 2" meter has a conversion factor of 8 LUEs/meter. The 3" has a conversion factor of 16 LUEs instead of the 15 LUEs that the AWWA standard calls for. This factor is set according to Round Rock's internal conversion standards. The conversion factors and the number of meters are then used to determine the service demand for water and wastewater. This allows for an intuitive process when calculating correct impact fees for developments, especially for developments with meters larger than 5/8".

Meter Size	Living Unit Equivalents (LUEs per Meter) (a)	Number of Meters in 2023 (b)	Number of LUEs in 2023		
WATER					
5/8"	1.00	34,457	34,457		
3/4"	1.50	724	1,086		
1"	2.50	840	2,100		
1.5"	5.00	606	3,030		
2"	8.00	691	5,528		
3"	16.00	182	2,912		
4"	25.00	50	1,250		
6"	50.00	21	1,050		
8"	80.00	47	3,760		
10"	115.00	4	460		
Total Water		37,622	55,633		
WASTEWATER					
5/8"	1.00	33,661	33,661		
3/4"	1.50	697	1,045		
1"	2.50	808	2,021		
1.5"	5.00	583	2,916		
2"	8.00	665	5,319		
3"	16.00	175	2,802		
4"	25.00	48	1,203		
6"	50.00	20	1,010		
8"	80.00	45	3,618		
10"	115.00	4	443		
Total Wastewater		36,707	54,039		

### **Table 2 Water and Wastewater LUEs**

(a) Derived from AWWA C700-C703 standards for continue rated flow performance scaled to 5/8" meter.

(b) Source: City of Round Rock, meter count as of 2023

Table 3 presents the projected growth of LUEs for water and wastewater service. Water connections are estimated to grow by 8,807 over the ten-year period (881 per year). For wastewater, the connections are estimated to grow by 15,131 over the ten-year period (1,513 per year). These growth projections come from the City's master plan document, which estimates annual water population growth of 16% and annual wastewater population growth of 28% over the ten-year period. The projected LUE's then increase at the same rate as the connections. In 2030, water LUEs are projected to be at 64,440 LUEs and wastewater LUEs are projected to be at 69,169 LUEs.

		Wastewater					
Year	Connections	LUEs	Population	Connections	LUEs	Population	
2023	37,622	55,633	152,286	36,707	54,039	149,383	
2033	43,578	64,440	176,393	46,985	69,169	191,210	
Growth	5,956	8,807	24,107	10,278	15,131	41,827	

### **Table 3 Estimated Water and Wastewater Growth**

and Table 5 display the existing capacities and estimated demands for water and wastewater, respectively. Growth in demand is based on the growth in connections. The current and projected service demands are compared to the existing capacities. It should be noted that although elevated storage appears to need capacity investments over the ten-year study period, ground storage delivers the same benefit to Round Rock, so the combined capacities are more then met. The estimated capacities for wastewater pumping are calculated differently than the other capacities. Most of Round Rock's wastewater pumping capacity is served by gravity pumping, so lift stations are only needed in certain areas of Round Rock. To accurately reflect wastewater pumping capacity/demand, Raftelis and City staff calculated the capacity for the areas that utilize pumping capacity in the system.

## Table 4 Water Capacities

			10-Yr Demand	2023 LUE Conversion	2033 LUE Conversion
Facility Type	2023	2033	Increment	Factor	Factor
Supply					
Existing 2023 Capacity (mgd)	42.85	42.85			
Est. Service Demand	19.47	22.55	3.08	350	350
Excess (Deficiency)	23.38	20.30		gpd/LUE	gpd/LUE
	400,400	400 400			
Existing 2023 Capacity (LUEs)	122,429	122,429	0.007		
Est. Service Demand	55,633	64,440	8,807		
Excess (Deficiency)	66,796	57,989			
Treatment					
Existing 2023 Capacity (mgd)	62.50	62.50			
Est. Service Demand	38.94	45.11	6.16	700	700
Excess (Deficiency)	23.56	17.39		gpd/LUE	gpd/LUE
, , , , , , , , , , , , , , , , , , ,				51	51
Existing 2023 Capacity (LUEs)	89,286	89,286			
Est. Service Demand	55,633	64,440	8,807		
Excess (Deficiency)	33,653	24,846			
Pumping					
Existing 2023 Capacity (mgd)	87.90	87.90			
Est. Service Demand	62.31	72.17	9.86	1,120	1,120
Excess (Deficiency)	25.59	15.73		gpd/LUE	gpd/LUE
Existing 2023 Capacity (LLIEs)	78 485	78 482			
Existing 2020 Capacity (2023)	55 633	64 440	8 807		
Excess (Deficiency)	22,852	14,042	0,001		
Ground Storage					
Existing 2023 Capacity (mg)	9.11	9.11			
Est. Service Demand	4.17	4.83	0.66	75	75
Excess (Deficiency)	4.94	4.28		gallons/LUE	gallons/LUE
Evicting 2022 Consoity (LLIEs)	101 467	101 467			
Existing 2023 Capacity (LUES)	121,407	64 440	9 907		
Est. Service Demand	55,033	64,440 57,027	0,007		
Excess (Deliciency)	05,654	57,027			
Elevated Storage					
Existing 2023 Capacity (mg)	10.57	10.57			
Est. Service Demand	9.29	10.76	1.47	167	167
Excess (Deficiency)	1.28	(0.19)		gallons/LUE	gallons/LUE
Eviating 2022 Canadity (LUEA)	62 202	62 202			
Existing 2023 Capacity (LUES)	03,293 55,622	64 440	9 907		
	7 660	(1 146)	0,007		
	7,000	(1,140)			
Transmission (>6 inch)					
Existing 2023 Capacity (mgd)	90.30	90.30			
Est. Service Demand	62.31	72.17	9.86	1,120	1,120
Excess (Deficiency)	27.99	18.13		apd/LUE	apd/LUE
······································				51	51
Existing 2023 Capacity (LUEs)	80,625	80,625			
Est. Service Demand	55,633	64,440	8,807		
Excess (Deficiency)	24,992	16,185			

### **Table 5 Wastewater Capacities**

			10-Yr	2023 LUE	2033 LUE
			Demand	Conversion	Conversion
Facility Type	2023	2033	Increment	Factor	Factor
Treatment					
Existing 2023 Capacity (mgd)	20.05	20.05			
Est. Service Demand	15.13	19.37	4.24	280	280
Excess (Deficiency)	4.92	0.68		gpd/LUE	gpd/LUE
Existing 2023 Capacity (LUEs)	71,607	71,607		3.85	
Est. Service Demand	54,039	69,169	15,131		
Excess (Deficiency)	17,568	2,438			
Pumping					
Existing 2023 Capacity (mgd)	8.86	8.86			
Est. Service Demand	2.17	2.78	0.61	1,077	1,077
Excess (Deficiency)	6.69	6.08		gpd/LUE	gpd/LUE
Existing 2023 Capacity (LUEs)	8,227	8,227			
Est. Service Demand	2,016	2,580	564		
Excess (Deficiency)	6,211	5,647			
Interceptors					
Existing 2023 Capacity (mgd)	61.70	61.70			
Est. Service Demand	58.20	74.50	16.30	1,077	1,077
Excess (Deficiency)	3.50	(12.80)		gpd/LUE	gpd/LUE
Existing 2023 Capacity (LUEs)	57,289	57,289			
Est. Service Demand	54,039	69,169	15,131		
Excess (Deficiency)	3,250	(11,881)			

# 5. Major Capital Improvement Needs and Costs

City staff and the City's engineering consultants identified impact fee eligible projects over the ten-year study period. The CIP includes existing facilities with available capacity for future growth as well as future projects that will be required to meet future capacity needs. The capital improvement projects included in this report were developed through rigorous modeling of the existing water and wastewater systems based on existing and future demands. Projects were also identified through extensive discussions with City staff regarding existing infrastructure needs and associated costs to adequately serve future growth. The projects identified in the CIP also include reuse projects that will result in additional water capacity for the system.

Table 6, Table 7, and Table 8 calculate the cost per LUE for each project identified in the 10-year CIP. The tables show the project's estimated cost, start date, and addition to capacity. The weighted average unit service cost is based on the share of the existing versus new capacity (based on the projected growth in population). The capacity growth for water transmission and wastewater interceptors is based on the estimated total capacity added by all the projects. The additional lines all work together to produce the added capacity.

										Facility	Capacity Allo	cations (LL	JEs)
	Date of	Cost			Capacity			Cost	Existing	Growth in Exc	Excess	Total	
Facility Name	Need		Original		Installed <sup>1</sup>	Total	LUEs	- p	er LUE	Customers	Next 10 Yrs	Capacity	Capacity
WATER SUPPLY			•										
Existing Facilities													
Total Existing Water Supply Facilities	N/A	\$	55,376,265	\$	55,376,265	42.85	122,429	\$	452	55,633	4,500	62,296	122,429
Future Facilities													
Phase 2 Deep Water Intake at Lake Travis	2027			\$	77,437,930								
East Groundwater Supply (Joint Project with Georg	2030			\$	35,000,000								
Subtotal Future Facilities		\$	-	\$	112,437,930	10.00	28,571	\$	3,935	-	4,307	24,265	28,571
Total Water Supply		\$	55,376,265	\$	167,814,195	52.85	151,000	\$	1,111	55,633	8,807	86,560	151,000
			WEIGHTED /	AVEF	RAGE CAPITAL	COST PE	R NEW LUE =	\$	2,156				
WATER TREATMENT													
Existing Facilities													
Existing Water Treatment Facilities	N/A	\$	97,117,382	\$	97,117,382	62.50	89,286	\$	1,088	55,633	4,000	29,653	89,286
Future Facilities													
Phase 1D Capacity Increase at BCRUA WTP	2027			\$	4,934,911								
Phase 2A Capacity Increase at BCRUA WTP	2028			\$	35,000,000								
Subtotal Future Facilities				\$	39,934,911	12.67	18,100	\$	2,206	-	4,807	13,293	18,100
Total Water Treatment		\$	97,117,382	\$	137,052,293	75.17	107,386	\$	1,276	55,633	8,807	42,946	107,386
			WEIGHTED A	AVEF	RAGE CAPITAL	COST PE	R NEW LUE =	\$	1,698				
WATER PUMPING													
Existing Facilities													
Existing Pumping Facilities	N/A	\$	7,619,055	\$	7,619,055	87.90	78,485	\$	97	55,633	6,000	16,852	78,485
Future Facilities													
Reuse High Service Pump Addition	2025			\$	750,000								
Subtotal Future Facilities				\$	750,000	3.33	2,973	\$	252	-	2,807	166	2,973
Total Water Pumping		\$	7,619,055	\$	8,369,055	91.23	81,458	\$	103	55,633	8,807	17,019	81,458
			WEIGHTED A	AVEF	RAGE CAPITAL	COST PE	R NEW LUE =	\$	147				

### Table 6 Water Supply, Water Treatment and Water Pumping

## Table 7 Ground Storage, Elevated Storage and Transmission Lines

								Facility Capacity Allocations (LUEs)					
	Date of		Cost			Capacity			Existing	Growth in	Excess	cess Total	
Facility Name	Need		Original	Installed <sup>1</sup>	Total LUEs		per LUE		Customers	Next 10 Yrs	Capacity	Capacity	
GROUND STORAGE			-										
Existing Facilities													
Existing Ground Storage Facilities	N/A	\$	1,783,937	\$ 1,783,937	9.11	121,467	\$	15	55,633	4,000	61,834	121,467	
Future Facilities													
2.0 mg Reuse Ground Storage Tank	2025			\$ 4,000,000									
Groundwater GST and Pump Station Land Purcha	2024			\$ 784.000									
BCRUA 6mg Clearwell	2027			\$ 4,760,000									
Subtotal Future Facilities				\$ 9,544,000	4.86	64,800	\$	147	-	4,807	59,993	64,800	
Total Ground Storage		\$	1,783,937	\$ 11.327.937	13.97	186.267	\$	61	55.633	8.807	121.827	186.267	
i otal oroana otorago		Ŷ	WEIGHTED		COST PER		ŝ	87	00,000	0,001			
ELEVATED STORAGE													
Existing Facilities													
Existing Elevated Storage Facilities	N/A		12,886,416	12,886,416	11	63,293	\$	204	55,633	8,807	(1,147)	63,293	
Future Facilities - None													
Subtotal Euture Eacilities		_								(0)	0		
Total Elevated Storage			10 006 /16	10 006 /16	- 11	62 202	¢	- 204	55 622	0 007	(1 146)	62 202	
Total Elevated Storage			WEIGHTED A		COST DED	03,293	¢.	204	55,055	0,007	(1,140)	03,293	
		_	WEIGHTED A		COSTFER	NLW LOL -	φ	204					
TRANSMISSION													
Existing Facilities													
Existing Transmission Facilities	N/A		98 939 553	98 939 553	90	80 625	s	1 227	55 633	4 000	20 992	80 625	
			00,000,000	00,000,000		00,020	Ť	.,	00,000	.,	20,002	00,020	
Future Facilities													
Hester's Crossing and CR-172 from west 971 zor	2025			2,500,000									
Kenny Fort Blvd from Old Settlers Blvd to	2024			4,212,134									
Sam Bass Rd from FM-1431 to Wyoming	2025			10,770,000									
Redbud Lane from south of Palm ValleyBlvd to G	2026			4,560,000									
Kenny Fort 24-in Reuse Water Line	2025			6,000,000									
Eagle's Nest in connection with Road Extension	2027			2,300,000									
Old Settler's from Red Bud to CR-110	2024			1,500,000									
Red Bud & Grattis School to High Country EST	2030			1,500,000									
Reuse Line to Dell Way	2027			4,995,000									
Kenny Fort from Forest Creek Blvd to SH 45	2023			1,787,073									
Kenny Fort Blvd from Forest Creek to Gattis	2023			1,705,468									
Kenny Fort 5/6 - 24" Waterline	2026			1,800,000									
Subtotal Future Facilities				43,629,675	43	38,536	\$	1,132	-	4,807	33,729	38,536	
Total Transmission			98,939,553	142,569,228	133	119,161	\$	1,196	55,633	8,807	54,721	119,161	
			WEIGHTED A	VERAGE CAPITAL	COST PER	NEW LUE =	\$	1,175					

Table 8 Wastewater Treatment, Pumping and Interceptors	
Facility Capacity Allocatio	n

										Facilit	y Capacity Allo	cations (LU	Es)	
	Date of		Cost			Capacity			Cost	Existing	Growth in	Excess	Total	
Facility Name	Need		Original		Installed	Total	LUEs	- pe	er LUE	Customers	Next 10 Yrs	Capacity	Capacity	
WASTEWATER TREATMENT														
Existing Facilities														
Existing Wastewater Treatment Facilities	N/A	\$	54,356,622	\$	54,356,622	20.05	71,607	\$	759	54,039	14,000	3,568	71,607	
Future Facilities														
WWTP Expansion to 40 mgd	2025			\$	99,000,000	9.00								
Subtotal Future Facilities				\$	99,000,000	9.00	32,143	\$	3,080	-	1,131	31,012	32,143	
Total Wastewater Treatment		\$	54,356,622	\$	153,356,622	29.05	103,750	\$	1,478	54,039	15,131	34,581	103,750	
		W	WEIGHTED AVERAGE CAPITAL COST PER NEW LUE = \$					933						
Existing Facilities														
Existing Pumping Facilites	N/A	\$	2 176 130	\$	2 176 130	8 86	8 227	\$	265	2 016	564	5 647	8 227	
Exercise running ruentee		Ť	2,0,.00	Ť	2,,	0.00	0,221	Ť	200	2,010		0,011	0,221	
Future Facilities														
Cottonwood Creek Lift Station	2025			\$	5,535,000									
Subtotal Future Facilities				\$	5,535,000	4.38	4,062	\$	1,363	-	873	3,189	4,062	
Total Wastewater Pumping		\$	2,176,130	\$	7,711,130	13.24	12,289	\$	627	2,016	1,437	8,836	12,289	
		W	EIGHTED AVE	RA	GE CAPITAL CO	OST PER N	EW LUE =	\$	932					
INTERCEPTORS														
Existing Facilities											15 101			
Existing interceptor Facilities	N/A	\$	83,120,305	\$	83,120,305	61.70	57,289	\$	1,451	54,039	15,131		69,170	
Euture Escilities														
MC 2	2024			¢	3 061 000									
	2024			φ ¢	3,901,000									
	2024			φ Φ	2,300,000									
MC 2	2020			φ	4 078 000									
BC-1	2020			ψ ¢	2 204 000									
CC-4	2020			φ \$	2,234,000									
MC-4	2027			¢ \$	7 433 000									
	2020			¢	2 7/8 000									
	2020			ψ ¢	3 694 000									
	2023			ψ ¢	3 786 150									
Cottonwood Crook Intercentor	2025			ψ ¢	4 363 000									
Kenny Fort Blvd (2/3) from Forest Creek Blvd	2025			Ψ	4,000,000									
to Gattis School	2023			\$	844 872									
Subtotal Future Facilities	2020			\$	39.270.022	-	-	\$	-	-	(0)	0	-	
Total Interceptors		\$	83,120,305	\$	122,390,327	61.70	57,289	\$	2.136	54.039	15,131	(11.881)	57.289	
		W	EIGHTED AVE	RA	GE CAPITAL CO	OST PER N	EW LUE =	\$	1,451	. ,	.,	( ,,	. ,	

# 6. Methods of Capital Payment

Chapter 395 allows for two ways to pay for capital improvements:

- An up-front impact fee that allows the new customer to buy into the system.
- Monthly utility fees that go towards the debt service of the system.

To calculate the impact fee, the law allows the utility to either use a 50% credit of the total projected cost of capital for all projects or to apply a credit for rate payments. The utility may select the maximum fee amount after these credits have been assessed.

Table 9 and Table 10 summarize the present value of the existing and projected debt. This represents the amount of debt that will be paid through rates. The midpoint, in 2028, of LUEs are used to determine the rate credit. The total credit from existing and projected growth are then summed to arrive at a total rate credit number.

Table	9 Wa	ter C	)ebt
-------	------	-------	------

	Est. Debt	Mid-Point	Est. Debt in
Facility Type	in Rates	LUEs	Rates per LUE
WATER UTILITY			
Supply			
Existing Debt	\$ 2,613,074	60,036	\$ 44
Series 2020 - 2030 New Growth	\$ 13,604,801	60,036	\$ 227
Subtotal Water Supply	\$ 16,217,874		\$ 270
Treatment			
Existing Debt	\$ 3,021,367	60,036	\$ 50
Series 2020 - 2030 New Growth	\$ 4,836,464	60,036	\$ 81
Subtotal Treatment	\$ 7,857,831		\$ 131
Pumping			
Existing Debt	\$ -	60,036	\$-
Series 2020 - 2030 New Growth	\$ 98,887	60,036	\$2
Subtotal Water Pumping	\$ 98,887		\$ 2
Ground Storage			
Existing Debt	\$ -	60,036	\$-
Series 2020 - 2030 New Growth	\$ 1,225,450	60,036	\$ 20
Subtotal Ground Storage	\$ 1,225,450		\$ 20
Elevated Storage			
Existing Debt	\$ -	60,036	\$-
Series 2020 - 2030 New Growth	\$ -	60,036	\$-
Subtotal Elevated Storage	\$ -		\$-
Transmission			
Existing Debt	\$ 2,531,415	60,036	\$ 42
Series 2020 - 2030 New Growth	\$ 5,485,009	60,036	\$ 91
Subtotal Transmission	\$ 8,016,425		\$ 134
TOTAL WATER	\$ 33,416,467		\$ 557

### Table 10 Wastewater Debt

	Est. Debt	Mid-Point	Est. Debt in
Facility Type	in Rates	LUEs	Rates per LUE
WASTEWATER UTILITY			
Treatment			
Existing Debt	\$ 9,729,948	61,604	\$ 158
Series 2020 - 2030 New Growth	\$ 1,158,310	61,604	\$ 19
Subtotal Wastewater Treatment	\$ 10,888,258		\$ 177
Pumping			
Existing Debt	\$ -	61,604	\$ -
Series 2020 - 2030 New Growth	\$ 1,158,310	61,604	\$ 19
Subtotal Wastewater Pumping	\$ 1,158,310		\$ 19
Interceptors			
Existing Debt	\$ 4,604,136	61,604	\$ 75
Series 2020 - 2030 New Growth	\$ 7,793,972	61,604	\$ 127
Subtotal Interceptors	\$ 12,398,108		\$ 201
TOTAL WASTEWATER	\$ 24,444,677		\$ 397
TOTAL WATER AND WASTEWATER	\$ 57,861,144		\$ 953

# 7. Impact Fee Calculations

Table 11 summarizes the maximum possible impact fees. The maximum fee for each classification is selected to establish the recommended maximum impact fee. The impact fee and CIP study cost of \$30,242 is distributed based on the midpoint of total projected water and wastewater 20330 LUEs. This equals approximately \$3 for water and wastewater. The maximum fee for water is \$4,912. The maximum fee for wastewater is \$2,921.

	We	ighted	Optional A	djus	stments					
	Capita New	al Cost of Service	 Option A Rate	-	Option B 50% Cost				Hi	ghest of
Item	ре	r LUE	 Credit	1	Adjustment	 Option A	Op	otion B	Opt	ion A or B
WATER										
Supply	\$	2,156	\$ 270	\$	1,078	\$ 1,885	\$	1,078	\$	1,885
Treatment	\$	1,698	\$ 131	\$	849	\$ 1,567	\$	849	\$	1,567
Pumping	\$	147	\$ 2	\$	73	\$ 145	\$	73	\$	145
Ground Storage	\$	87	\$ 20	\$	44	\$ 67	\$	44	\$	67
Elevated Storage	\$	204	\$ -	\$	102	\$ 204	\$	102	\$	204
Transmission	\$	1,175	\$ 134	\$	588	\$ 1,042	\$	588	\$	1,042
Allocated Impact Fee Study Costs	\$	3				\$ 3	\$	3	\$	3
Total Water	\$	5,469	\$ 557	\$	2,733	\$ 4,912	\$	2,736	\$	4,912
WASTEWATER										
Treatment	\$	933	\$ 177	\$	466	\$ 756	\$	466	\$	756
Pumping	\$	932	\$ 19	\$	466	\$ 913	\$	466	\$	913
Interceptors	\$	1,451	\$ 201	\$	725	\$ 1,250	\$	725	\$	1,250
Allocated Impact Fee Study Costs	\$	3				\$ 3	\$	3	\$	3
Total Wastewater	\$	3,318	\$ 397	\$	1,658	\$ 2,921	\$	1,660	\$	2,921
TOTAL WATER/WASTEWATER										

### **Table 11 Water and Wastewater Impact Fee Credit**

Table 12 shows the water impact fee by meter size. Table 13 shows the wastewater impact fee by meter size.

	Living Unit	
Meter Size	Equivalents	Fee
5/8"	1.00	\$ 4,912
3/4"	1.50	\$ 7,368
1"	2.50	\$ 12,281
1.5"	5.00	\$ 24,562
2"	8.00	\$ 39,299
3"	16.00	\$ 78,597
4"	25.00	\$122,808
6"	50.00	\$245,616
8"	80.00	\$392,985
10"	115.00	\$564,916

### **Table 12 Water Impact Fee**

Table	13	<b>Wastewater</b>	Impact	Fee

Table 13 Wastewater Impact Fee					
Matar Cina	Living Unit	Faa			
		¢ 2.021			
0/0	1.00	\$ 2,921			
3/4"	1.50	\$ 4,381			
1"	2.50	\$ 7,302			
1.5"	5.00	\$ 14,604			
2"	8.00	\$ 23,366			
3"	16.00	\$ 46,733			
4"	25.00	\$ 73,020			
6"	50.00	\$146,039			
8"	80.00	\$233,663			
10"	115.00	\$335,890			

# 8. Advisory Committee Actions and Recommendations

The Capital Improvement Advisory Committee (CIAC) met on September 6, 2023. Raftelis presented the Land Use Assumption, Capital Improvement Plan and Impact Fee. As required by Chapter 395 of the Texas Local Government Code, the CIAC verified the following:

- The land use basis for the CIP,
- That the CIP has been reasonably defined,
- That the maximum impact fee has been reasonably calculated, and
- The resultant impact fees.

The CIAC recommends that the Council adopt the maximum allowable impact fee and assess the same amount.