



2021 COST OF SERVICE STUDY Water & Wastewater Impact Fees Update

City of Baytown

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City of Baytown
2021 Cost of Service Study

WATER & WASTEWATER IMPACT FEES UPDATE

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Contents

Section 1 — INTRODUCTION	1
1.1 Water and Wastewater System Overview	1
1.2 Chapter 395 of Texas Local Government Code	1
1.3 History of Baytown Impact Fees	1
Section 2 — LAND USE ASSUMPTIONS	3
2.1 Service Area	3
2.2 Population Projections	3
Section 3 — WATER CAPITAL IMPROVEMENT PLAN	4
3.1 Existing Capacity Information	4
3.1.1 Existing Maximum Water Capacity	4
3.1.2 Existing Used Water Capacity	5
3.2 Eligible Existing and CIP Costs	6
3.2.1 Existing Assets	6
3.2.2 CIP Projects	7
3.3 Projected Water Usage and Capacity Needs	8
3.3.1 Existing Average Water Usage	8
3.3.2 Additional Water Service Units (Future)	9
3.4 Cost Allocation	9
3.4.1 Distribution System Allocation	10
Section 4 — MAXIMUM ALLOWABLE WATER IMPACT FEE	11
4.1 Calculation of Maximum Allowable Water Impact Fee	11
4.2 Summary and Recommendations	11
Section 5 — WASTEWATER CAPITAL IMPROVEMENT PLAN	13
5.1 Existing Capacity Information	13
5.1.1 Existing Average Daily Demand Wastewater Capacity	13
5.1.2 Existing Used Wastewater Capacity	14
5.2 Eligible Existing and CIP Costs	15
5.2.1 Existing Assets	15
5.2.2 CIP Projects	16
5.3 Projected Wastewater Usage and Capacity Needs	16

5.3.1 Existing Average Wastewater Flow	16
5.3.2 Additional Wastewater Service Units (Future)	17
5.4 Cost Allocations	18
5.4.1 Collection System Allocation	19
Section 6 — MAXIMUM ALLOWABLE WASTEWATER IMPACT FEE	20
6.1 Calculation of Maximum Allowable Wastewater Impact Fee	20
6.2 Summary and Recommendations	20
Section 7 — COMPARATIVE ANALYSIS	22

Appendices

Appendix A	WATER AND WASTEWATER SERVICE AREA
Appendix B	WATER ELIGIBLE CIP PROJECTS
Appendix C	WASTEWATER ELIGIBLE CIP PROJECTS

Tables

Table 1.1	Existing Impact Fees	2
Table 2.1	Service Area Population Projections	3
Table 3.1	Existing Capacity by Category	5
Table 3.2	Existing Capacity by Category	6
Table 3.3	Existing Capacity Costs by Category	7
Table 3.4	CIP Costs by Category	7
Table 3.5	Added Capacities by Category	7
Table 3.6	Average Daily Demand	8
Table 3.7	Average Consumption per Service Unit	8
Table 3.8	10-year Additional Service Units	9
Table 3.9	Cost Allocation	10
Table 3.10	Distribution System Allocation – Blended Approach	10
Table 4.1	Calculation of Maximum Allowable Impact Fee	11
Table 4.2	Summary of Recommended Impact Fees by Meter Size	12
Table 5.1	Existing Asset Costs by Category	15
Table 5.2	CIP Costs by Category	16
Table 5.3	Added Capacities by Category	16
Table 5.4	Average Daily Flow	17

Table 5.5	Average Flow per Service Unit	17
Table 5.6	10-year Additional Service Units	18
Table 5.7	Cost Allocation	18
Table 5.8	Collection System Allocation — Blended Approach	19
Table 6.1	Total Recoverable Impact Fees	20
Table 6.2	Summary of Impact Fees by Meter Size	21

Figures

Figure 7.1	Comparative Analysis	23
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Section 1

INTRODUCTION

1.1 Water and Wastewater System Overview

The City of Baytown, Texas (City) provides water and wastewater service to thousands of customer accounts. The water and wastewater systems are infrastructure-intensive, including wastewater treatment plants, water pump stations, wastewater lift stations, and many miles of water and wastewater pipes.

The City must continue to remain financially viable in order to meet its objectives of providing safe and reliable water and wastewater service and superior customer service. Financial viability includes having adequate impact fees to recover capital costs associated with future growth. In other words, ensuring “growth pays for growth”. Should the City choose to forgo adoption of the maximum allowable impact fee, an increase to water and wastewater rates would be required to supplement reduced impact fee revenues and result in rates above and beyond customers’ true cost of service.

1.2 Chapter 395 of Texas Local Government Code

Texas Local Government Code Chapter 395 (Chapter 395) authorizes a political subdivision, such as the City of Baytown, to impose impact fees on new development within its corporate boundaries and extraterritorial jurisdiction (ETJ). Chapter 395 requires the political subdivision imposing an impact fee to update its land use assumptions plan (LUAP) and capital improvement plan (CIP) at least once every five years. The schedule of costs associated with providing capacity in the water and wastewater systems for growth that is used to calculate the impact fee is known as the CIP. This may not be the same as the City’s CIP that is part of the budget, although there may be projects that coincide in both CIPs.

According to Chapter 395, an impact fee may be imposed only to pay the costs of constructing capital improvements or facility expansions, including and limited to the construction contract price; surveying and engineering fees; land acquisition costs; court awards and costs; attorney’s fees; expert witness fees; fees paid to an engineer or financial consultant to prepare or update the CIP; and projected financing costs associated with growth-related projects identified in the CIP.

Impact fees may not be used to pay for non-growth related projects identified in the CIP such as repair, operation, or maintenance of existing or new capital improvements or facility expansions; upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards; upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development; administrative and operating costs of the political subdivision; or financing costs for non-growth-related projects.

1.3 History of Baytown Impact Fees

In 2004, the City adopted water and wastewater impact fees in accordance with Chapter 395. Since that time the City has conducted and completed subsequent impact fee analysis studies every 5 years, in accordance with Chapter 395. The most recent impact fee analysis was completed in 2014 with resulting fees from that analysis shown below in Table 1.1.

Table 1.1 Existing Impact Fees

Description	2014 Study
Water Impact Fee:	
Maximum Impact Fee	\$1,087
Wastewater Impact Fee:	
Maximum Impact Fee	\$2,437

In recoverable costs applied equitably, based on meter size and type, to all new customers.

Section 2

LAND USE ASSUMPTIONS

Chapter 395 authorizes a political subdivision, such as the City of Baytown, to impose impact fees on new development within its corporate boundaries and ETJ. Chapter 395 requires the political subdivision imposing an impact fee to update its LUAP and CIP every five years.

As part of the 2021 Impact Fee Study, the City updated its LUAP and CIP. This section updates the LUAP for years 2021 through 2030 (study period). This information will be used to update the water and wastewater impact fees.

2.1 Service Area

Baytown provides water and wastewater services to customers within the Service Area (see Appendix A). The Service Area includes the area within the City of Baytown limits as well as areas outside the city limits where water is currently being provided on a retail and wholesale basis and/or may be provided to additional retail and wholesale customers in the future. Areas served by other utility providers (including the Baytown Area Water Authority) are excluded from the Service Area.

Appendix A provides the Service Area Map, which shows the existing Service Area boundaries.

The City provides water and wastewater services to customers who reside within this Service Area. These customers consist of residents and businesses located inside and outside the city limits. The City also provides service to wholesale customers inside and outside its city limits.

2.2 Population Projections

This section describes the population growth projections within the Service Area. The projections were developed by referencing the population increases from the previous five years in development of an average growth percentage. The population increase from 2020 to 2030 was extrapolated using a 2.3 percent growth index. Projections for the study period are shown below in Table 2.1.

Table 2.1 Service Area Population Projections

	2020	2030	Variance
Population	96,457	117,789	21,332

Section 3

WATER CAPITAL IMPROVEMENT PLAN

Impact fees provide the City of Baytown a mechanism for recouping costs associated with providing water service to new customers within the Service Area. The City of Baytown owns and operates an infrastructure intensive system comprised of production facilities, pumping stations, storage facilities, and pipelines that are continuously improved and expanded. The CIP was updated as part of this study with capital project scope and costs provided by the City.

This section describes the basis for establishing which water facilities are eligible for inclusion in the water impact fee analysis. Next, the criteria for measuring infrastructure capacity are explained for each infrastructure type. Finally, the additional facilities required to accommodate growth during the study period are summarized.

A complete list of water impact fee eligible projects is provided in Appendix B.

3.1 Existing Capacity Information

This section discusses the capacity of facilities eligible for inclusion in the calculation of the water impact fees. The only capacities considered for inclusion are existing available capacities plus any planned increases in capacities to serve growth projected to occur during the study period. Available existing capacity is infrastructure already constructed but not yet fully utilized as a result of existing demands being less than existing capacity.

3.1.1 Existing Maximum Water Capacity

Maximum water capacity has been broken into three major categories consisting of distribution, storage, and water supply. These categories represent the main infrastructure associated with providing water to both existing and future customers. It is important to understand a system's maximum capacity to ensure the City can provide water service to new customers, quantify what impact new customers will have on the system, and calculate how much a new customer should pay for their connection to the water system. System capacity data has been provided by the City for inclusion in the water impact fee analysis.

3.1.1.1 Water Supply

Water supply consists of the system's capacity for capturing and treating water for use by the public. Water supply infrastructure includes water collection systems such as wells and surface water intake structures. The City's existing maximum water supply capacity is 22.7 million gallons per day (mgd) and represents the maximum capacity Baytown can supply to customers. The water supply capacity has been validated through a thorough review of existing infrastructure and will be used throughout the water impact fee analysis.

3.1.1.2 Distribution

Distribution can most easily be described as the infrastructure required to transport and deliver water to customers throughout the Service Area. Distribution infrastructure encompasses all infrastructure used to supply a dwelling unit with water from a water supply facility. The water supply category is a capacity indicator for the water distribution category. As such, it is assumed that the distribution system is built to a capacity that can sustain the maximum water supply intake.

Therefore, the distribution system is assumed to have enough capacity to handle water supply output of 22.7 mgd. This assumption has been validated through the City’s capacity estimations.

3.1.1.3 Storage

Water storage relates to the system’s capacity to store water for use during times in which customers’ water demands are at their highest. Storage infrastructure includes both elevated and ground storage tanks. The current storage capacity of the system was evaluated based on existing storage infrastructure as well as the Texas Commission on Environmental Quality (TCEQ) requirements per connection. The TCEQ requires the City’s water system to provide 200 gallons of storage per connection. The City provided Carollo Engineers, Inc. (Carollo) with an estimated maximum storage capacity of 7.4 mgd, based on current connections and existing capacities of storage infrastructure.

A summary of the existing maximum capacities, by category, can be found in Table 3.1.

Table 3.1 Existing Capacity by Category

Category	2020 Capacity (mgd)
Water Supply	22.70
Distribution	22.70
Storage	7.40

3.1.2 Existing Used Water Capacity

The capacity currently utilized by existing customers is an important metric in determining the remaining and available capacity to serve future customers. The remaining and available capacity provides the City with a reasonable estimate of how many new customers (connections) with which existing infrastructure can serve and concurrently allows for determining what portion of recoverable costs, from existing assets, should be allocated to new customers connecting to the water system.

Existing used capacity is the demand placed on the system by existing customers. As with the maximum capacities, existing demand has been broken into the three categories described in Section 3.1.1 : water supply, distribution, and storage. The existing demand used for each of the three categories was provided by the City and validated through usage data.

3.1.2.1 Water Supply

The City provided Carollo with historical water usage data that supports an estimated existing demand of 12.20 mgd for water supply facilities. The demand evaluation has been validated by the City and is used throughout the water impact fee analysis.

3.1.2.2 Distribution

As with the maximum capacities, the water supply demand is a determinate to the estimated distribution demand in that the supplied water must be distributed to customers through existing distribution infrastructure. Therefore, the current used distribution capacity for the City’s water system is estimated at 12.2 mgd.

3.1.2.3 Storage

The storage capacity currently used by existing customers has been estimated through applying the TCEQ gallons per connection requirement to the number of connections currently being served by the City. The TCEQ requires the City’s water system to provide 200 gallons of storage per connection.

The City estimated their existing water storage facilities currently serve 21,250 connections. Therefore, the current capacity being used by existing customers is 4.25 mgd.

A summary of the existing utilized capacities, by category, can be found in Table 3.2.

Table 3.2 Existing Capacity by Category

Category	2020 Capacity Used (mgd)
Water Supply	12.20
Distribution	12.20
Storage	4.25

3.2 Eligible Existing and CIP Costs

The capacity criteria were used to determine which existing and planned water facilities are eligible for inclusion in the calculation of the maximum allowable water impact fee. A portion of the cost of existing assets may be included if there is unused capacity available to serve new customers projected throughout the study period. The value associated with these assets is determined using the Replacement Cost New Less Depreciation (RCNLD) approach¹.

Projects included in the fully adopted CIP can serve to rehabilitate and renew the system, enhance the system to improve efficiency and meet regulatory requirements, increase the system capacity, or achieve a combination of these objectives. Only those projects or portions of projects related to the capacity required to serve projected growth throughout the study period can be included in the water impact fee calculation. Additionally, projects are excluded from the water impact fee calculation if the costs cannot be accurately delineated or if alternate mechanisms for cost recovery are already in place.

Financing costs associated with the water system have been estimated based on outstanding debt and historic funding policies, remaining consistent with the City’s previous water impact fee studies.

Facilities included in the water impact fee study are water supply and production facilities, pump stations, storage facilities, transmission mains and engineering studies. Eligible water assets and CIP projects for the study period are detailed in Appendix B.

Each of the existing assets and CIP projects accounted for in this study have been categorized into the three categories discussed in previous sections – water supply, distribution, and storage – with inclusion of an additional, fourth, category encompassing all “advisory costs.”

3.2.1 Existing Assets

Existing assets are treated differently in the water impact fee analysis model than CIP projects. Existing assets have been assigned a reclaimable cost that can be included in the water impact fee calculation that estimates the value of the asset at the time of the study. The reclaimable cost takes into consideration depreciation, remaining useful life, inflation, etc.

Each existing asset has been categorized with asset values summed within each category to produce a total value by asset category. The categorical dollar amounts, by category, are shown below in Table 3.3.

¹ The Replacement Cost New Less Depreciation approach uses the estimated replacement cost assuming modern desing, materials and workmanship less straight-line accumulated depreciation based on infrastructure age and assumed useful life. Other valuation approaches include Original Cost, Original Cost Less Depreciation, and Replacement Cost New.

Table 3.3 Existing Capacity Costs by Category

Category	Total Category Cost	Existing Category Capacity (mgd)
Water Supply	\$5,574,675	22.7
Storage	\$12,090,302	7.4
Distribution	\$15,982,490	22.7
Advisory	\$4,237,222	#N/A

The Advisory category represents past rate studies, engineering reviews, master plans, etc. and are assumed to have been paid for by existing customers and therefore not applicable for recovery through the water impact fee analysis.

3.2.2 CIP Projects

Similar to existing assets, CIP projects are also categorized into the same four main categories. CIP projects were provided by the City and cross referenced to ensure their costs can be incorporated into the water impact fee analysis. The associated costs for each CIP category are shown below in Table 3.4.

Table 3.4 CIP Costs by Category

Totals	
Category	Total Project Cost
Water Supply	\$0
Distribution	\$87,846,000
Storage	\$9,250,000
Advisory	\$286,875

The CIP projects in the advisory category have been included in the water impact fee analysis and are recovered by new customers connecting to the water system. Allocation of advisory costs is explained in further detail below in Section 4.1.

3.2.2.1 CIP Added Capacity

CIP projects contained within the Study may result in increased water system capacities. The added capacity is the amount of capacity, per category, the projects within that category add to existing capacity. Added capacity was estimated by the City and incorporated into the water impact fee study. Added capacity is used in calculating cost allocation in subsequent sections and is shown below in Table 3.5.

Table 3.5 Added Capacities by Category

Category	2020 Capacity (mgd)	2020 Capacity Used (mgd)	CIP Added Capacity (mgd)
Water Supply	22.70	12.20	5.67
Distribution	22.70	12.20	5.67
Storage	7.40	4.25	0.00

It's important to note, both distribution and water supply capacities increase by 5.67 mgd as a result of projects identified in the CIP while existing storage capacity remains unchanged based on projects identified within the CIP. A detailed list of CIP projects can be found in Appendix C.

3.3 Projected Water Usage and Capacity Needs

The water impact fee analysis determines the predicted future capacities that will be utilized within the study period and allocates costs of the expected projects based on added future capacity. The following sections outline the process and steps taken to project and predict future capacity needs of the City's water system.

3.3.1 Existing Average Water Usage

Carollo received monthly usage data from the City detailing existing customers' monthly water demands. To ensure an accurate representation of the data, Carollo reviewed historical usage data from the past five years to identify any potential anomalies.

3.3.1.1 Water Usage Per Person

Average day demands per person are an important metric used within the water impact fee analysis that assist in estimating existing capacity available for new connections. Carollo evaluated average day demands per person based on an average of the past five years' population and associated systemwide average day demands and developed a gallons per capita per day (gpcd) metric. Table 3.6 illustrates calculation of historical average day demands per person for the past 5-years.

Table 3.6 Average Daily Demand

Year	2016	2017	2018	2019	2020	Average
Average Day Demand (mgd)	11.7	11.5	12	11.9	12.1	12
Population	88,409	90,442	92,522	94,650	96,457	92,496
Average Day Demand (gpcd)	132	127	130	126	125	128

Based on data from the past 5 years, the City's average day demand is approximately 128 gpcd. This metric is important in understanding how many future connections can be served throughout the study period.

3.3.1.2 Water Usage Per Dwelling Unit

Water usage per dwelling unit is another consumptive metric to help extrapolate and predict the necessary system capacities to account for growth. Carollo assumed a dwelling unit contains an average of 2.8 people per household and developed a consumption per service unit metric based on population and historical actual average day demands for the past five years. Table 3.7 illustrates the derivation of average consumption per service unit.

Table 3.7 Average Consumption per Service Unit

Year	Population	Residential Units (2.8 persons/unit)	Water Usage Average Day Demand (mgd)	Consumption per Service Unit (GPD)
2020	96,457	34,449	12.1	351
2019	94,650	33,804	11.9	352
2018	92,522	33,044	12	363
2017	90,442	32,301	11.5	356
2016	88,409	31,575	11.7	371
Average Consumption per Service Unit (GPD)				359

The average consumption per service unit is a metric used to forecast future usage. The City’s average consumption per service unit, based on the past five years of actual demands, is 359 gallons per dwelling unit per day.

3.3.2 Additional Water Service Units (Future)

Additional service units were extrapolated based on usage data provided in the sections above and further forecasted into 2030. It is important to understand the growth of the population and service units to understand the necessary growth of the water service infrastructure.

3.3.2.1 Additional Service Units

Additional service units were developed by taking the projected 2030 population and the existing 2020 population data and applying the difference of their respective service units. Table 3.8 below provides this analysis.

Table 3.8 10-year Additional Service Units

Year	Average Day Demand (mgd)	Service Unit Demand (GPD)	Service Units
2020	12.35	359	34,449
2030	15.09	359	42,068
10-year Additional Service Units			7,619

Projected additional service units for the study period total 7,619. Service unit growth provides the basis for developing cost allocation based on capacity usage increases.

3.3.2.2 Additional Capacity Requirements –Water Supply and Distribution

Additional capacity required is important in understanding the impact population growth will have on the water system’s capacity demands and if a combination of existing and future capacity can adequately meet projected growth demands. Projected additional capacity demands were based on average demands per person developed in pervious sections in conjunction with expected population growth. The 2030 expected capacity requirement is a metric used in determining CIP costs allocable to new customers, which is further explained in the subsequent sections. Total expected capacity required for 2030 is 15.09 mgd.

3.3.2.3 Additional Capacity Requirements – Storage

Additional storage capacity is based on the expected number of meters the City will be servicing in the year 2030. The value is based on the TCEQ requirement of 200 gallons per connection. In 2030, the City expects to serve 24,380 meters or an equivalent of 4.88 million gallons.

3.4 Cost Allocation

Cost allocation is a term used to describe the process of determining what percentage of growth can be serviced through existing infrastructure and what percentage will require facility expansion.

Cost allocation considers projected increased capacity requirements through 2030 and determines whether the water system’s existing infrastructure can service the projected increase in demands. Any shortfalls require an increase in the system’s capacity through CIP expenditures that expand capacity to meet future demands. Table 3.9 shows a detailed breakdown, by category, of existing, remaining, and future capacities.

Table 3.9 Cost Allocation

Existing Assets Cost								
Capacity Categories	Existing Capacity (mgd)	Existing Demand	Remaining Available Capacity (mgd)	2030 Demand (mgd)	2030 Demand Increase (mgd)	% Existing Allocation	% of Existing Assets	Impact Fee Eligible Cost
Distribution	22.70	12.20	10.50	15.09	2.89	100%	13%	\$2,031,658
Water Supply	22.70	12.20	10.50	15.09	2.89	100%	13%	\$708,640
Storage	7.40	4.25	3.15	4.88	0.63	100%	8%	\$1,023,428
Total								\$3,763,726

As illustrated in the table above, existing capacity for all three categories is sufficient to service increased demands throughout the study period and as such added capacity expenses are fully contained within the eligible costs of the existing assets.

3.4.1 Distribution System Allocation

Although Table 3.9 shows that the existing distribution system infrastructure has sufficient capacity to serve future customers, there are still distribution system projects included in the CIP that are required to provide capacity for growth, where needed. Since there will be no designation between CIP and existing assets for future customers (i.e., water will not solely be routed through new pipes or existing pipes but instead a combination of new and existing pipes), future customers should pay a blend of the eligible CIP costs and existing asset value.

The calculated maximum allowable impact fee is the sum of the water supply and storage components, which include only eligible costs associated with available existing capacity, and the distribution system component, which is a blend of eligible CIP costs and existing asset value. Table 3.10 shows how the distribution system is allocated under the blended approach.

Table 3.10 Distribution System Allocation – Blended Approach

Distribution System Allocation					
Existing Capacity (mgd)	Added Capacity (mgd)	2030 Demand Increase (mgd)	% of Total 2030 Capacity	CIP Costs + Existing Asset Value	Impact Fee Eligible Cost
22.70	5.67	2.89	10.17%	\$103,828,490	\$10,560,616

This approach to allocating distribution system costs sums the existing and added capacity and applies the percentage of the 2030 capacity needed for future customers and applies it to total costs. The increased demand from 2020 to 2030 accounts for roughly 10 percent of the planned 2030 capacity. Therefore, 10 percent of the existing and planned distribution system costs are eligible to be included in the impact fee calculation.

Section 4

MAXIMUM ALLOWABLE WATER IMPACT FEE

4.1 Calculation of Maximum Allowable Water Impact Fee

Once eligible infrastructure costs from the capacity allocations are determined, the final steps are to add financing and advisory costs and then apply a credit to reduce the impact fee so new customers do not pay for the infrastructure required to serve them through both the impact fee and their future user rates.

Table 4.1 shows a breakdown of how the calculated water impact fee is transformed into the recommended maximum allowable water impact fee.

Table 4.1 Calculation of Maximum Allowable Impact Fee

Eligible Cost for Impact Fee	\$12,292,684
Financing Cost (4.0% provided by City)	\$491,707
Advisory Costs	\$286,875
Pre-Credit Subtotal	\$13,071,266
Credit for Utility Rate Revenues (50%)	(\$6,535,633)
Maximum Recoverable Cost for Impact Fee	\$6,535,633

Financing costs are assumed at 4.0 percent of the eligible costs based on information provided by City staff. Advisory costs, as discussed in previous sections, are the sum of CIP projects associated with master plans and impact fee studies, which are eligible to be recovered through new connections to the water system because these projects are required to determine where and when growth-related capital projects are needed. As required by Chapter 395 of the Texas Local Government Code, a 50 percent credit for utility rate revenues is applied to the Pre-Credit Subtotal and results in a maximum recoverable cost for the water system's impact fee of \$6,535,633.

4.2 Summary and Recommendations

The maximum allowable water impact fee is calculated using the maximum recoverable cost for impact fee divided by the expected added dwelling units found in Section 4.

Table 4.2 illustrates the water impact fee for various meter sizes. The standard meter size is 5/8-inch by 3/4-inch and is assessed a service unit equivalent of 1.0. From there, different meter sizes are assigned a fee based on the service unit equivalents provided in the table, which are developed using the Safe Maximum Operating Capacity for each meter size and type as published by AWWA.

Table 4.2 Summary of Recommended Impact Fees by Meter Size

Meter Size	Maximum Continuous Operating Capacity (GPM)	Service Unit Equivalent	Maximum Assessable Fee	Existing Fee	Variance
5/8"x 3/4" PD	20	1.0	\$857	\$1,087	(\$230)
3/4" PD	30	1.5	\$1,285	\$1,631	(\$346)
1" PD	50	2.5	\$2,142	\$2,718	(\$576)
1 1/2" PD	100	5.0	\$4,285	\$5,435	(\$1,150)
2" PD	160	8.0	\$6,856	\$8,696	(\$1,840)
2" Compound	160	8.0	\$6,856	\$8,696	(\$1,840)
2" Turbine	160	8.0	\$6,856	\$8,696	(\$1,840)
3" Compound	320	16.0	\$13,712	\$17,392	(\$3,680)
3" Turbine	350	17.5	\$14,997	\$19,023	(\$4,026)
4" Compound	630	31.5	\$26,995	\$34,241	(\$7,246)
4" Turbine	500	25.0	\$21,425	\$27,175	(\$5,750)
6" Compound	1,000	50.0	\$42,850	\$54,350	(\$11,500)
6" Turbine	1,300	65.0	\$55,705	\$70,655	(\$14,950)

Section 5

WASTEWATER CAPITAL IMPROVEMENT PLAN

Impact fees provide the City of Baytown a mechanism for recouping costs associated with providing wastewater service to new customers (connections) within the Service Area. The City of Baytown owns and operates an infrastructure intensive system comprised of treatment facilities, lift stations, and collection mains that must be continuously improved and expanded. The schedule for future investment in the wastewater system is known as the CIP. The CIP was updated as part of this Study with capital project scope and costs provided by the City².

This section describes the basis for establishing which wastewater facilities are eligible for inclusion in the wastewater impact fee analysis. Next, the criteria for measuring infrastructure capacity are explained for each infrastructure type. Finally, the additional facilities required to accommodate growth during the study period are summarized.

A complete list of wastewater impact fee eligible projects is provided in Appendix C.

5.1 Existing Capacity Information

This section discusses the capacity of facilities eligible for inclusion in the calculation of the wastewater impact fees. The only capacities considered for inclusion are existing available capacities plus any planned increases in capacities to serve growth projected to occur during the study period. Available existing capacity is infrastructure already constructed but not yet fully utilized as a result of existing demands being less than existing capacity.

5.1.1 Existing Average Daily Demand Wastewater Capacity

Wastewater capacity has been classified into three major categories consisting of; wastewater treatment, lift stations, and collection systems. These categories represent the main infrastructure associated with providing wastewater services to both existing and future customers. It is important to understand the wastewater systems average daily demand capacity to ensure the City can provide wastewater service to new customers, quantify what impact new customers will have on the system, and calculate how much a new customer should pay for their connection to the wastewater system. System capacity data has been provided by the City for inclusion in the wastewater impact fee analysis.

5.1.1.1 Wastewater Treatment

Wastewater Treatment is the process of treating sewage water conveyed to the facility for reuse or environmentally safe disposal. The wastewater treatment infrastructure includes four fully functioning wastewater treatment plants (Central, East, West, and Northeast) that operate at a combined capacity of 24.2 mgd.

² Capital project scope and cost information is provided from multiple sources, including the full adopted City CIP and the City's needs assessment analysis.

5.1.1.2 Lift Stations

Lift stations are assumed to have adequate capacity to accommodate the four plants and their combined capacities. This assumption has been thoroughly discussed and validated by the City and as such, it is assumed lift stations have an identical capacity as the combined treatment plants which totals 24.2 mgd. The 24.2 mgd assumption is used throughout the wastewater impact fee analysis.

5.1.1.3 Collection Systems

Similar to the lift stations assumption, collection systems are also assumed to have adequate capacity to accommodate the four plants and their combined capacities. This assumption has been thoroughly discussed and validated by the City and as such, it is assumed total capacity for the collection system is 24.2 mgd. The 24.2 mgd assumption is used throughout the wastewater impact fee analysis.

5.1.2 Existing Used Wastewater Capacity

The capacity currently utilized by existing customers is an important metric in determining the remaining and available capacity to serve future customers. The remaining and available capacity provides the City with a reasonable estimate of how many new customers (connections) with which existing infrastructure can serve and concurrently allows for determining what portion of recoverable costs, from existing assets, should be allocated to new customers connecting to the wastewater system.

Existing used capacity is the demand placed on the system by existing customers. As with the maximum capacities, the existing capacity usage has been divided into three categories described in Section 5.1.1; wastewater treatment, lift stations, and collection systems. The existing demand used for each category has been provided by the City and validated through usage data.

5.1.2.1 Wastewater Treatment

Currently utilized wastewater treatment capacity is based on the average demand value provided by the City. The currently utilized wastewater treatment capacity for the Baytown Wastewater System is estimated at 11.06 mgd. The capacity evaluation has been validated by the City and is used throughout the wastewater impact fee analysis.

5.1.2.2 Lift Stations

Lift stations are assumed to have a utilized capacity equivalent to that of the four plants. The assumption has been thoroughly discussed and validated by the City. As such, the City's lift stations have a capacity of 11.06 mgd. The 11.06 mgd assumption is used throughout the wastewater impact fee analysis.

5.1.2.3 Collection systems

Similar to lift stations, collection systems are assumed to have a utilized capacity equivalent to that of the four plants. The assumption has been thoroughly discussed and validated by the City. As such, the City's collection systems have a capacity of 11.06 mgd. The 11.06 mgd assumption is used throughout the wastewater impact fee analysis.

5.2 Eligible Existing and CIP Costs

The capacity criteria were used to determine which existing and planned wastewater facilities are eligible for inclusion in the calculation of the maximum allowable wastewater impact fee. A portion of the cost of existing assets may be included if there is unused capacity available to serve new customers projected throughout the study period. The value associated with these assets is determined using the Replacement Cost New Less Depreciation (RCNLD) approach³.

Projects included in the fully adopted CIP can serve to rehabilitate and renew the system, enhance the system to improve efficiency and meet regulatory requirements, increase the system capacity, or achieve a combination of these objectives. Only those projects or portions of projects related to the capacity required to serve projected growth throughout the study period can be included in the wastewater impact fee calculation. Additionally, projects are excluded from the wastewater impact fee calculation if the costs cannot be accurately delineated or if alternate mechanisms for cost recovery are in place.

Financing costs associated with the wastewater system have been estimated based on outstanding debt and historic funding policies, remaining consistent with the City's previous wastewater impact fee studies.

Appendix C provides detailed information for eligible wastewater assets and CIP projects for the study period.

Each of the existing and CIP projects accounted for in this study has been categorized into the three categories discussed in previous sections; wastewater treatment, lift stations, collection systems, with inclusion of an additional, fourth, category encompassing all "advisory costs".

5.2.1 Existing Assets

Existing assets are treated differently in the wastewater impact fee analysis model than CIP projects. Existing assets have been assigned a reclaimable cost that can be included in the wastewater impact fee calculation that estimates the value of the asset at the time of the study. The reclaimable cost takes into consideration depreciation, remaining useful life, usage, inflation, etc.

Each existing asset has been categorized with asset values summed within each category to produce a total value by asset category. The categorial dollar amounts are shown below in Table 5.1.

Table 5.1 Existing Asset Costs by Category

Category	Total Category Cost	Existing Category Capacity
Wastewater Treatment	\$83,966,678	24.2
Lift Stations	\$48,303,197	24.2
Collection System	\$113,267,314	24.2
Advisory	\$4,348,378	#N/A

The Advisory category represents past rate studies, engineering reviews, master plans, etc. and are assumed to have been paid for by existing customers and therefore not applicable for recovery through the wastewater impact fee analysis.

³ The Replacement Cost New Less Depreciation approach uses the estimated replacement cost assuming modern design, materials and workmanship less straight-line accumulated depreciation based on infrastructure age and assumed useful life. Other valuation approaches include Original Cost, Original Cost Less Depreciation, and Replacement Cost New.

5.2.2 CIP Projects

Similar to existing assets, CIP projects are also categorized into the same four main categories. CIP projects were provided by the City and cross referenced to ensure their costs can be incorporated into the wastewater impact fee analysis. The associated costs for each CIP category are shown below in Table 5.2.

Table 5.2 CIP Costs by Category

Project Category	Total Project Cost
Wastewater Treatment	\$65,717,806
Lift Stations	\$59,171,421
Collection System	\$59,415,156
Advisory	\$286,875

The CIP projects have an advisory cost which has been included in the wastewater impact fee analysis and are recovered by new customers connecting to the wastewater system. Allocation of advisory costs is explained in further detail below in Section 6.1.

5.2.2.1 CIP Added Capacity

CIP projects contained within the Study may result in increased wastewater system capacities. The added capacity is the amount of capacity, per category, the projects within that category add to or increase existing capacity. Added capacity was estimated by the City and incorporated into the wastewater impact fee study. However, none of the projects identified within the CIP added capacity and as such, Table 5.3 illustrates existing capacity and capacity in use while added capacity from CIP remains unchanged among all categories.

Table 5.3 Added Capacities by Category

Category	Capacity (mgd)	Capacity Used (mgd)	CIP Added Capacity (mgd)
Wastewater Treatment	24.20	11.06	0.00
Lift Stations	24.20	11.06	0.00
Collection System	24.20	11.06	0.00

A detailed list of CIP projects can be found in Appendix C.

5.3 Projected Wastewater Usage and Capacity Needs

The wastewater impact fee analysis determines the predicted future capacities that will be utilized within the study period and allocates costs of the expected projects based on added future capacity. The following sections outline the process and steps taken to project and predict the future capacity needs of the City's wastewater system.

5.3.1 Existing Average Wastewater Flow

Carollo received monthly flow data from the City detailing existing customers' monthly wastewater flows. To ensure an accurate representation of the data, Carollo reviewed historical flow data from the past five years to identify any potential anomalies.

5.3.1.1 Wastewater Usage Per Person

Wastewater flow per person is an important metric that describes the capacity requirement from each existing customer. To evaluate this flow per capita, Carollo took an average of the last five years population and wastewater flows and developed a gpcd metric that represented the last five years average flow. Table 5.4 illustrates calculation of historical average wastewater flows per capita for the past 5-years.

Table 5.4 Average Daily Flow

Year	2016	2017	2018	2019	2020	Average
Average Daily Flow (mgd)	12.70	11.90	11.80	11.80	10.23	11.69
Population	88,409	90,442	92,522	94,650	96,457	92,496
Average Daily Flow (gpcd)	144	132	128	125	106	126

Based on data from the past 5 years, the City's average daily flow is approximately 126 gpcd. This metric is important in understanding how many future connections can be served throughout the study period.

5.3.1.2 Wastewater Usage Per Dwelling Unit

Wastewater flows per dwelling unit is another consumptive metric to help extrapolate and predict the necessary system capacities to account for growth. In tandem with the water impact fee analysis, Carollo assumed a dwelling unit contains an average of 2.8 people per household and developed a consumption per service unit metric based on population and historical actual average daily flows for the past five years. Table 5.5 illustrates the derivation of average flow per service unit.

Table 5.5 Average Flow per Service Unit

Year	Population ¹	Residential Units (2.8 persons/unit)	Wastewater Average Daily Flow (mgd)	Average Flow per Service Unit (GPD)
2020	96,457	34,449	10.23	297
2019	94,650	33,804	11.80	349
2018	92,522	33,044	11.80	357
2017	90,442	32,301	11.90	368
2016	88,409	31,575	12.70	402
Average Flow per Service Unit				355

The average flow per service unit is a metric used to forecast future flows. The City's average flow per service unit, based on the past five years of actual flows, is 355 gallons per dwelling unit per day.

5.3.2 Additional Wastewater Service Units (Future)

Additional service units were extrapolated based on flow data provided in the sections above and further forecasted into 2030. It is important to understand the growth of the population and service units to understand the necessary growth of the wastewater service infrastructure.

5.3.2.1 Additional Service Units

Additional service units were developed by taking the projected 2030 population and the existing 2020 population data and applying the difference of their respective service units. Table 5.6 provides this analysis.

Table 5.6 10-year Additional Service Units

Year	Average Daily Flow (mgd)	Service Unit Flow (GPD)	Service Units
2020	12.19	355	34,352
2030	14.88	355	41,949
10-year Additional Service Units			7,597

Projected additional service units for the study period total 7,597. Service unit growth provides the basis for developing cost allocations based on projected increased wastewater flow.

5.3.2.2 Additional Capacity Requirements – Wastewater Treatment, Lift Stations, Collection System

Additional capacity required is important in understanding the impact population growth will have on the wastewater system’s capacity demands and if a combination of existing and future capacity can adequately meet projected growth demands. Projected additional capacity demands were based on average demands per person developed in previous sections in conjunction with expected population growth. The 2030 expected capacity requirement is a metric used in determining CIP costs allocable to new customers, which is further explained in the subsequent sections. Total expected capacity required for 2030 is 14.88 mgd.

5.4 Cost Allocations

Cost allocation is a term used to describe the process of determining what percentage of the growth can be serviced through existing infrastructure and what percentage will require facility expansion.

Cost allocation considers projected increased capacity requirements through 2030 and determines whether the wastewater system’s existing infrastructure can serve the projected increase in demands. Any shortfalls require an increase in the system’s capacity through CIP expenditures that expand capacity to meet future demands. Table 5.7 shows a detailed breakdown, by category, of existing, remaining, and future capacities.

Table 5.7 Cost Allocation

Capacity Categories	Existing Assets Cost							
	Existing Capacity (mgd)	Existing Flow	Remaining Available Capacity (mgd)	2030 Flow (mgd)	2030 Increased Flow (mgd)	% Existing Allocation	% of Existing Assets	Impact Fee Eligible Cost
Wastewater Treatment	24.20	11.06	13.14	14.88	3.82	100%	15.79%	\$13,259,701
Lift Stations	24.20	11.06	13.14	14.88	3.82	100%	15.79%	7,627,859
Collection System	24.20	11.06	13.14	14.88	3.82	100%	15.79%	17,886,747
Total								\$38,774,308

As illustrated in the table above, existing capacity for all three categories is sufficient to serve increased demands throughout the study period and as such, added capacity expenses are fully contained within the reclaimable costs of the existing assets.

5.4.1 Collection System Allocation

Although Table 5.7 shows that the existing collection system infrastructure has sufficient capacity to serve future customers, there are still collection system projects included in the CIP that are required to provide capacity for growth where it is needed. Since there will be no designation between CIP and existing assets for future customers (i.e., wastewater will not solely be routed through new or existing pipes but instead a combination of new and existing pipes) that future customers should pay a blend of the eligible CIP costs and existing asset value.

The calculated maximum allowable impact fee is the sum of the wastewater treatment and lift stations components, which include only eligible costs associated with available existing capacity, and collection system component, which is a blend of eligible CIP costs and existing asset value). Table 5.8 shows how the collection system is allocated under the blended approach.

Table 5.8 Collection System Allocation — Blended Approach

Collection System Blended Alternative					
Existing Capacity (mgd)	Added Capacity (mgd)	2030 Increased Flow (mgd)	% of Total 2030 Capacity	CIP Costs + Existing Asset Value	Impact Fee Eligible Cost
24.20	0.00	3.82	15.79%	\$172,682,470	\$27,269,365

This approach to allocating collection system costs sums the existing and added capacity and applies the percentage of the 2030 capacity needed for future customers and applies it to total costs. The increased flow from 2020 to 2030 accounts for roughly 16 percent of the planned 2030 capacity. Therefore, 16 percent of the existing and planned collection system costs are eligible to be included in the wastewater impact fee calculation.

Section 6

MAXIMUM ALLOWABLE WASTEWATER IMPACT FEE

6.1 Calculation of Maximum Allowable Wastewater Impact Fee

Once the eligible infrastructure costs from the capacity allocations are determined, the final steps are to add financing and advisory costs and then apply a credit to reduce the impact fee so new customers do not pay for the infrastructure required to serve them through both the impact fee and their future user rates. Table 6.1 shows a breakdown of how the calculated wastewater impact fee is transformed into the recommended maximum allowable wastewater impact fee.

Table 6.1 Total Recoverable Impact Fees

Recoverable Cost for Impact Fee (Residential)	\$48,156,925
Financing Cost (4.0% Provided by City)	\$1,926,277
Advisory	\$286,875
Pre-Credit Total	\$50,370,077
Credit for Utility Revenues (50% credit)	(\$25,185,039)
Maximum Recoverable Cost for Impact Fee	\$25,185,039

Financing costs are assumed at 4.0 percent of the eligible costs based on information provided by City staff. Advisory costs, as discussed in previous sections, are the sum of CIP projects associated with master plans and impact fee studies, which are eligible to be recovered through new connections to the wastewater system because these projects are required to determine where and when growth-related capital projects are needed. As required by Chapter 395 of the Texas Local Government Code, a 50 percent credit for utility rate revenues is applied to the Pre-Credit Subtotal and results in a maximum recoverable cost for the wastewater system’s impact fee of \$20,306,078.

6.2 Summary and Recommendations

The maximum allowable wastewater impact fee is calculated using the maximum recoverable cost for impact fee divided by the expected added dwelling units found in Section 6.

Table 6.2 illustrates the wastewater impact fee for various meter sizes. The standard meter size is 5/8-inch by 3/4-inch and is assessed a service unit equivalent of 1.0. From there, different meter sizes are assigned a fee based on the TCEQ service unit equivalents provided in the table, which are developed using the Safe Maximum Operating Capacity for each meter size and type as published by AWWA.

Table 6.2 Summary of Impact Fees by Meter Size

Meter Size	Maximum Continuous Operating Capacity (GPM)	Service Unit Equivalent	Maximum Assessable Fee	Existing Fee	Variance
5/8"x 3/4" PD	20	1.0	\$3,315	\$2,437	\$878
3/4" PD	30	1.5	\$4,972	\$3,656	\$1,317
1" PD	50	2.5	\$8,287	\$6,093	\$2,195
1 1/2" PD	100	5.0	\$16,575	\$12,185	\$4,390
2" PD	160	8.0	\$26,520	\$19,496	\$7,024
2" Compound	160	8.0	\$26,520	\$19,496	\$7,024
2" Turbine	160	8.0	\$26,520	\$19,496	\$7,024
3" Compound	320	16.0	\$53,040	\$38,992	\$14,048
3" Turbine	350	17.5	\$58,012	\$42,648	\$15,365
4" Compound	630	31.5	\$104,422	\$76,766	\$27,657
4" Turbine	500	25.0	\$82,875	\$60,925	\$21,950
6" Compound	1,000	50.0	\$165,750	\$121,850	\$43,900
6" Turbine	1,300	65.0	\$215,475	\$158,405	\$57,070

Section 7

COMPARATIVE ANALYSIS

Carollo performed a survey of impact fees for similar sized and surrounding cities.

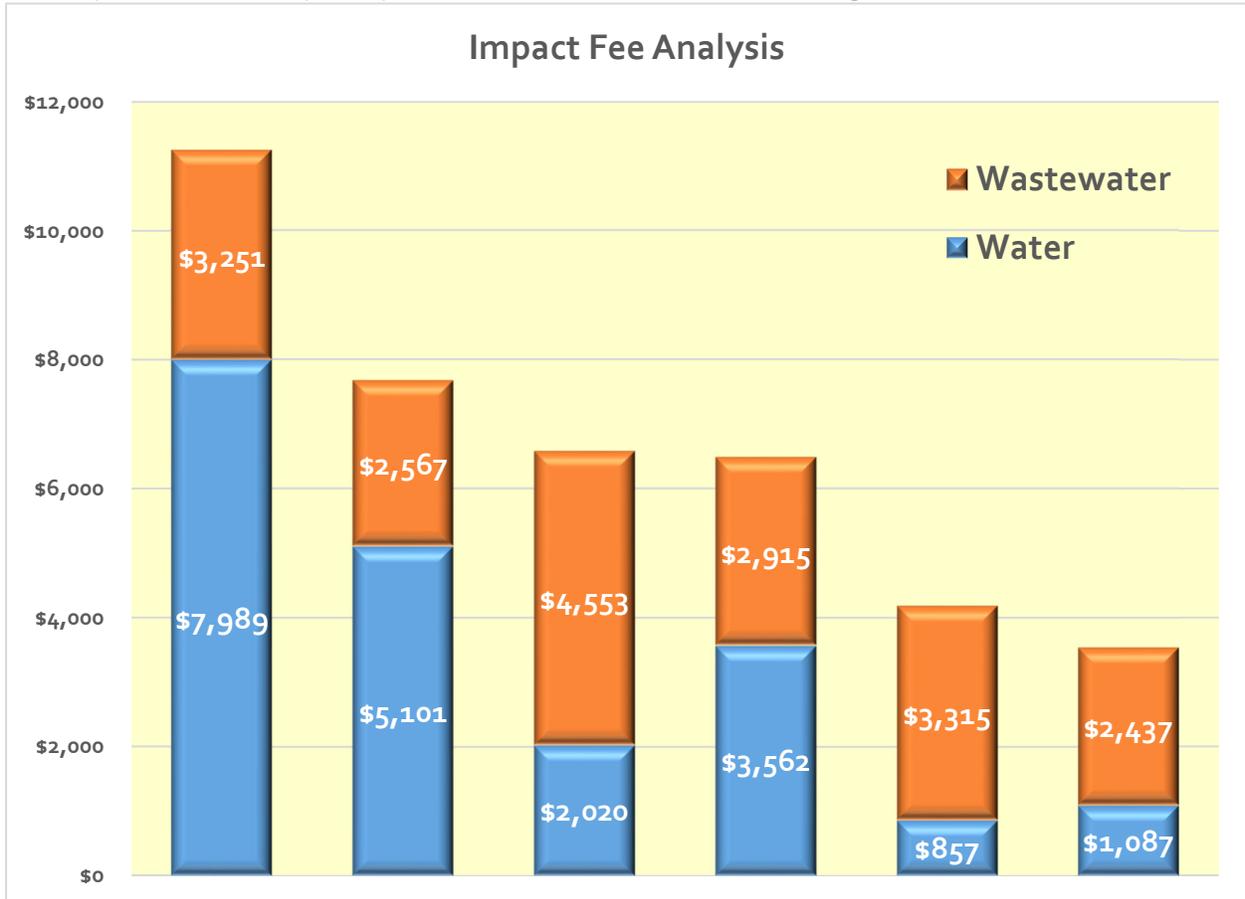


Figure 7.1 provides a summary of the impact fee survey results.

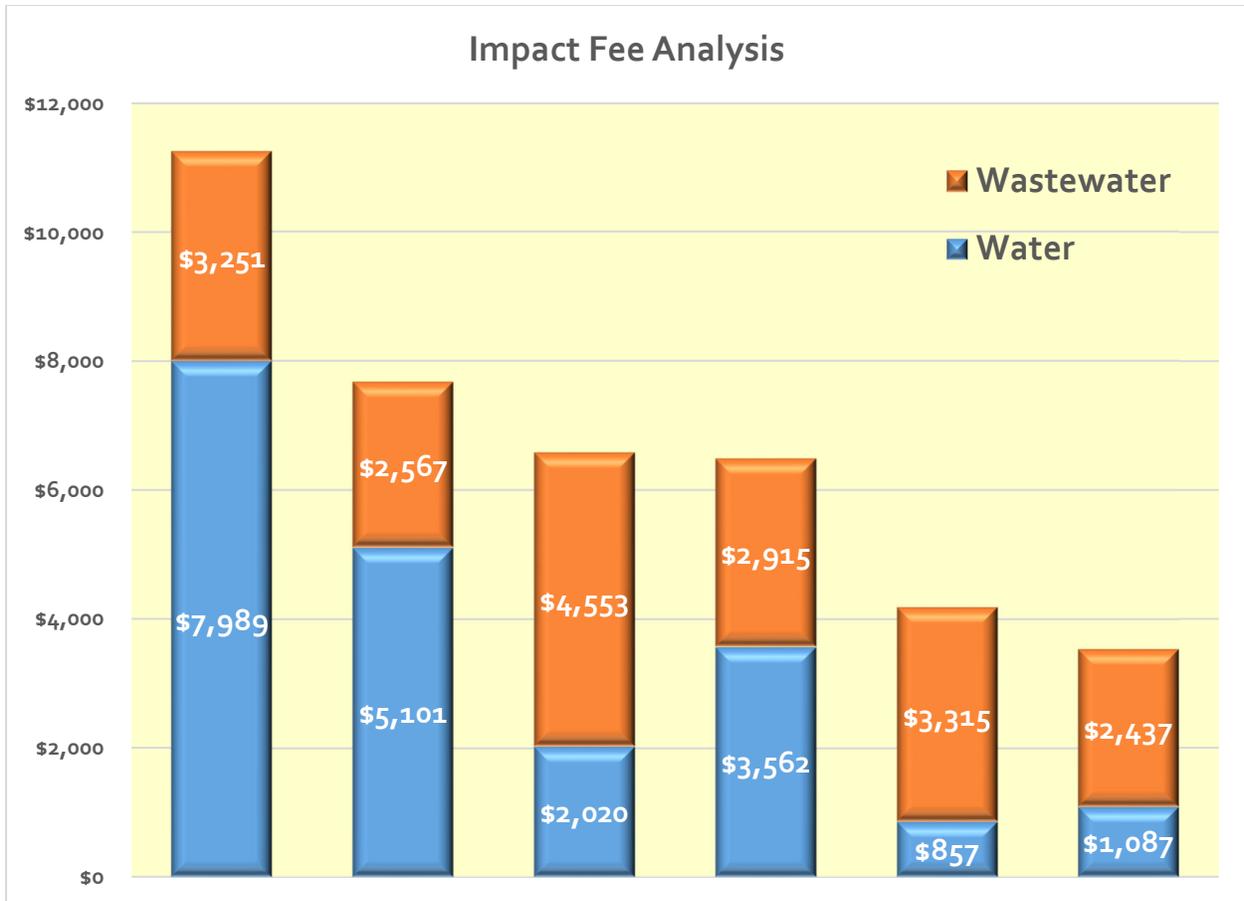
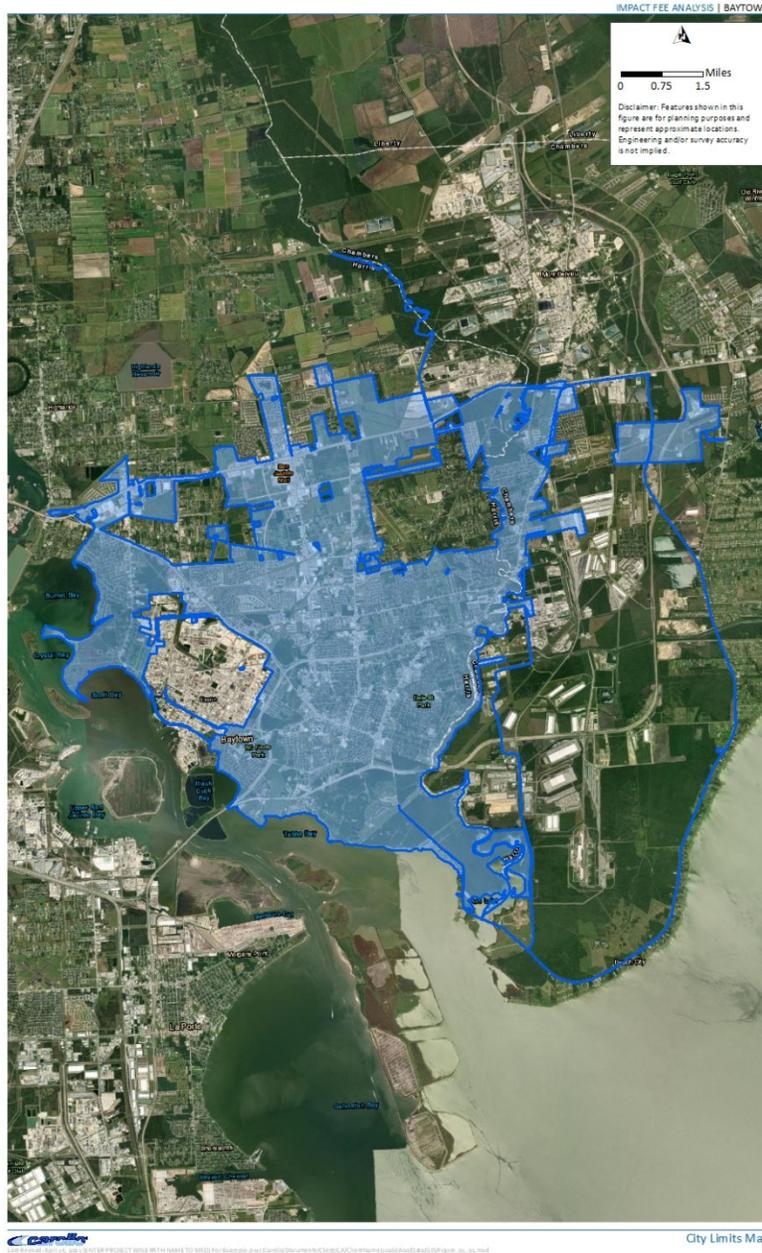


Figure 7.1 Comparative Analysis

The figure above provides a visual representation of how Baytown’s existing and proposed impact fees compare with other cities within their general area. It should be noted that the cities of Deer Park and Sugar Land do not charge impact fees to new customers. Additionally, please note that these impact fees represent the existing fees in place at the time of this report and do not accurately compare or reflect each utility’s operations, age or condition of infrastructure, capital improvement program, internal and external policies, and other important characteristics. As such, no two utilities are alike, and this information should be taken into consideration with many other factors before summarizing an opinion regarding the amount of the impact fee when comparing against other utilities.

Appendix A WATER AND WASTEWATER SERVICE AREA



Appendix B

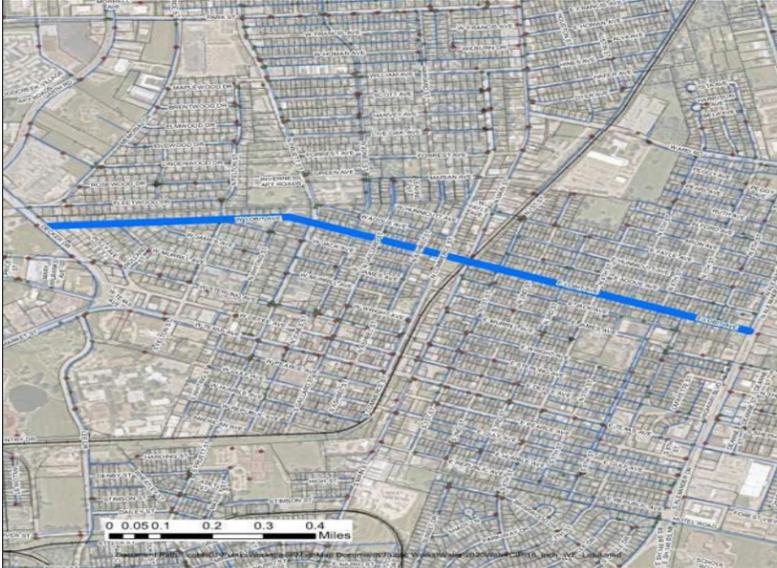
WATER ELIGIBLE CIP PROJECTS

CIP Water			
Proj. #	Project Description	Total Project Cost	Project Category
WL2101	Transite Pipe Waterline Replacement Program – Bayway	\$6,860,000	DS
WL2102	Annual Waterline Rehabilitation Program	\$11,000,000	DS
WL2201	Transite Pipe Waterline Replacement Program-2	\$3,143,000	DS
WL2202	Annual Elevated Storage Tank Painting and Repairs	\$9,250,000	ST
WL2203	Annual Water Line Relocation and Oversizing	\$7,500,000	DS
WL2204	Annual Waterline Neighborhood Rehabilitation Program	\$27,000,000	DS
WL2205	Water Well Plant Upgrades and Winterization	\$3,000,000.00	DS
WL2301	Transite Pipe Waterline Replacement Program-3	\$3,793,000	DS
WL2401	Transite Pipe Waterline Replacement Program-4A	\$5,337,000	DS

CIP Water			
Proj. #	Project Description	Total Project Cost	Project Category
WL2501	Transite Pipe Waterline Replacement Program-5	\$1,517,000	DS
WL2601	Transite Pipe Waterline Replacement Program-6	\$1,753,000	DS
WL2701	Archer Road 12" Waterline Extension	\$2,512,000	DS
AWL2801	Transite Pipe Waterline Replacement Program-7	\$4,926,000	DS
WL2901	Transite Pipe Waterline Replacement Program-8	\$4,127,000	DS
WL3001	Transite Pipe Waterline Replacement Program-Glen Meadows	\$2,217,000	DS
WL3101	Transite Pipe Waterline Replacement Program-Fair Park	\$3,161,000	DS
	Water Impact Fee Update	\$36,875	AD
	Water Master Plan	\$250,000	AD

PROJECT NAME		PROJECT #	PREFERENCE ORDER						
Transite Pipe Waterline Replacement Program - Bayway		WL2101							
WATER DISTRIBUTION		PROJECT DESCRIPTION							
		<p>Replace failing 16" Transite and RCCP water transmission line infrastructure along Bayway Drive from Decker Dr. to the 5200 block of Bayway Dr. line with modern reliable materials to reduce water leaks and outages, including all pavement repair. We are including minor pavement improvements and a reconfiguration of Bayway Dr. from Decker Dr. to Market Street to follow the Bayway Dr. Corridor Plan. The new pavement section will provide two sections, one two lane section with a center turn lane and the second section will provide two lanes. Both pavement sections will include a hike and bike trail along the entire route.</p>							
		PROJECT JUSTIFICATION							
		<p>The Bayway Drive waterline is over 40 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite and RCCP lines are responsible for a higher percentage of work orders per foot that comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/HDPE. This water line is a main City transmission line and outages due to breakage affect major industries and can cause pressure issues to large sections of town. We are including the pavement reconfiguration of Bayway Dr. to be completed at the same time to reduce costs of design and construction.</p>							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year	2022	2023	2024	2025	2026				
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way	\$750,000		\$750,000						
Design / Surveying	\$700,000			\$700,000					
Construction	\$11,608,900				\$11,608,900				
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$13,058,900	\$0	\$750,000	\$700,000	\$11,608,900	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$750,000		\$750,000						
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan	\$8,290,000				\$8,290,000				
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant	\$2,009,450			\$350,000	\$1,659,450				
Unfunded	\$2,009,450			\$350,000	\$1,659,450				
	0								
	0								
TOTAL SOURCES	\$13,058,900	\$0	\$750,000	\$700,000	\$11,608,900	\$0	\$0	\$0	\$0

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Annual Waterline Rehabilitation Program				WL2102						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				<p>Replace failing water line infrastructure with modern reliable materials to reduce water leaks and outages. This project is expected to be able to replace approximately 6,000 feet of waterline each year through on-call work order contract to make emergency system repairs and correct operation issues within the water distribution system.</p>						
				PROJECT JUSTIFICATION						
				<p>Water line infrastructure must be replaced and recapitalized on a regular basis to avoid failures from under sizing, age, and older, weaker materials. Newer pipe materials are far less susceptible to line breakage and retain value as a renewed asset. The project is issued on an ongoing basis to replace waterlines that meet the criteria city-wide.</p>						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$1,100,000		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	
Construction	\$9,900,000		\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$4,500,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$11,000,000	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$10,000,000			\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000	
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation	\$1,000,000		\$1,000,000							
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$11,000,000	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000	

PROJECT NAME				PROJECT #	PREFERENCE ORDER					
Transite Pipe Waterline Replacement Program-2				WL2201						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				Replace failing 16" Transite water transmission line infrastructure along Lobit Ave. from Decker to N. Alexander with modern reliable materials to reduce water leaks and outages, including all pavement repair.						
				PROJECT JUSTIFICATION The Lobit Avenue water line is over 40 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. This water line is a main City transmission line and outages due to breakage can cause pressure issues to large sections of town. This section of line runs through major population areas.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$350,000				\$350,000					
Construction	\$2,793,000					\$2,793,000				
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$3,143,000		\$0	\$0	\$350,000	\$2,793,000	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$350,000				\$350,000					
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan	\$2,793,000					\$2,793,000				
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$3,143,000		\$0	\$0	\$350,000	\$2,793,000	\$0	\$0	\$0	\$0

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Annual Elevated Storage Tank Painting and Repairs				WL2202						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				To replace the current tank protective coating inside and outside, and perform any repairs needed as assessed by the Assistant Director of Public Works for Utilities.						
				PROJECT JUSTIFICATION						
				To replace the current protective coating to ensure the long term use of the elevated tank to maintain uniform water pressure and adequate water volume to fight fires.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$1,150,000			\$250,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	
Construction	\$8,100,000				\$900,000	\$900,000	\$900,000	\$900,000	\$4,500,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$9,250,000	\$0	\$0	\$250,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)	\$9,250,000			\$250,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000	
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$9,250,000	\$0	\$0	\$250,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000	

PROJECT NAME		PROJECT #	PREFERENCE ORDER							
Annual Water Line Relocation and Oversizing		WL2203								
WATER DISTRIBUTION		PROJECT DESCRIPTION								
		The City participates in projects associated with development and other governmental agencies that require the relocation, over sizing, and line extensions.								
		PROJECT JUSTIFICATION								
		To fund the Cities portion of utility relocation, over sizing, and line extensions needed for projects associated with Texas Department of Transportation, Harris County, Chambers County, Municipality Utility Districts, developments, and other projects to support our water distribution system.								
		INCREMENTAL OPERATING AND MAINTENANCE COSTS								
		Impact on operating budget								
		Fiscal Year	2022	2023	2024	2025	2026			
		Total Revenue								
		Personnel Services								
		Operation & Maintenance								
		Capital Outlay								
		Total Expense								
		FTE Staff Total								
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying										
Construction	\$7,500,000				\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$3,750,000
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$7,500,000	\$0	\$0	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$3,750,000
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)	\$7,500,000				\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$3,750,000
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$7,500,000	\$0	\$0	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$3,750,000

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Annual Waterline Neighborhood Rehabilitation Program				WL2204						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				Replace failing water line infrastructure with modern reliable materials to reduce water leaks and outages. This project is expected to be able to replace approximately 6,000 feet of waterline each year for entire neighborhoods or large areas.						
				PROJECT JUSTIFICATION						
				Water line infrastructure must be replaced and recapitalized on a regular basis to avoid failures from under sizing, age, and older, weaker materials. Newer pipe materials are far less susceptible to line breakage and retain value as a renewed asset. The project is issued on an ongoing basis to replace waterlines that meet the criteria city-wide.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$3,000,000			\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000	
Construction	\$24,000,000			\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$12,000,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$27,000,000	\$0	\$0	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$13,500,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$27,000,000			\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$13,500,000	
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$27,000,000	\$0	\$0	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$13,500,000	

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Water Well Plant upgrades and Winterization				WL2205						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				Operational components of the water wells need to be upgraded or due to the cold weather experienced during the Valentines Day Storm of 2021.						
				PROJECT JUSTIFICATION						
				The water well upgrades are necessary to continue to produce water due to extreme cold weather during emergencies. Some of the upgrades will include replacement of valves, pipes, equipment, backup generators, SCADA, and controls that were needed, damaged, or not operational due to the cold weather.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$600,000			\$600,000						
Construction	\$2,400,000			\$2,400,000						
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$3,000,000	\$0	\$0	\$3,000,000	\$0	\$0	\$0	\$0	\$0	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant	\$3,000,000			\$3,000,000						
Unfunded										
	0									
	0									
TOTAL SOURCES	\$3,000,000	\$0	\$0	\$3,000,000	\$0	\$0	\$0	\$0	\$0	

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Transite Pipe Waterline Replacement Program-3				WL2301						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				Replace failing 16" Transite water transmission line infrastructure along Decker Drive from Bayway to Baker with modern reliable materials to reduce water leaks and outages, including all pavement repair.						
				PROJECT JUSTIFICATION						
				The Decker Drive water line is over 40 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. This water line is a main City transmission line and outages due to breakage can cause pressure issues to large sections of town and affect local industry.						
				INCREMENTAL OPERATING AND MAINTENANCE COSTS						
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying		\$450,000				\$450,000				
Construction		\$3,343,000					\$3,343,000			
Equipment and Furniture										
Contingency										
TOTAL COSTS		\$3,793,000	\$0	\$0	\$0	\$450,000	\$3,343,000	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)		\$3,793,000				\$450,000	\$3,343,000			
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
		0								
		0								
TOTAL SOURCES		\$3,793,000	\$0	\$0	\$0	\$450,000	\$3,343,000	\$0	\$0	\$0

PROJECT NAME		PROJECT #	PREFERENCE ORDER						
Transite Pipe Waterline Replacement Program-4		WL2401							
WATER DISTRIBUTION		PROJECT DESCRIPTION							
		Replace failing 16" Transite water transmission line infrastructure along Decker Drive from Craigmont to Lanier with modern reliable materials to reduce water leaks and outages, including all pavement repair.							
		PROJECT JUSTIFICATION							
		The Decker Drive water line is over 40 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. This water line is a main City transmission line and outages due to breakage can cause pressure issues to large sections of town and affect local industry.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year	2022	2023	2024	2025	2026				
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$550,000					\$550,000			
Construction	\$4,787,000						\$4,787,000		
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$5,337,000	\$0	\$0	\$0	\$0	\$550,000	\$4,787,000	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$5,337,000					\$550,000	\$4,787,000		
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
	0								
	0								
TOTAL SOURCES	\$5,337,000	\$0	\$0	\$0	\$0	\$550,000	\$4,787,000	\$0	\$0

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Transite Pipe Waterline Replacement Program-5				WL2501						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				Replace failing 16" Transite water transmission line infrastructure along Lanier Drive from Decker Drive to Garth Road with modern reliable materials to reduce water leaks and outages, including all pavement repair.						
				PROJECT JUSTIFICATION						
				The Lanier Drive water line is over 30 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. This water line is a main City transmission line and outages due to breakage can cause pressure issues to large sections of town.						
				INCREMENTAL OPERATING AND MAINTENANCE COSTS						
				Impact on operating budget						
				Fiscal Year		2022	2023	2024	2025	2026
				Total Revenue						
				Personnel Services						
				Operation & Maintenance						
				Capital Outlay						
				Total Expense						
				FTE Staff Total						
PROJECT COST ALLOCATION			PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying			\$200,000					\$200,000		
Construction			\$1,317,000						\$1,317,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS			\$1,517,000	\$0	\$0	\$0	\$0	\$200,000	\$1,317,000	\$0
FUNDING SOURCES			PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)			\$1,517,000					\$200,000	\$1,317,000	
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
			0							
			0							
TOTAL SOURCES			\$1,517,000	\$0	\$0	\$0	\$0	\$200,000	\$1,317,000	\$0

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Transite Pipe Waterline Replacement Program-6				WL2601						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				Replace failing 16" Transite water transmission line infrastructure along Garth Road from Lanier Drive to Decker Drive with modern reliable materials to reduce water leaks and outages, including all pavement repair.						
				PROJECT JUSTIFICATION						
				The Garth Road water line is over 50 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. This water line is a main City transmission line and outages due to breakage can cause pressure issues to large sections of town.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$200,000							\$200,000		
Construction	\$1,553,000								\$1,553,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$1,753,000	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$1,553,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$1,753,000							\$200,000	\$1,553,000	
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$1,753,000	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$1,553,000	

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Archer Road 12" Waterline Extension				WL2701						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				Construct (12") waterline along East Archer from Sjolander to Barkuloo, including all pavement repair. New water and sewer service will be provided to the north east side addition area of the City. The project will construct new water service where no service previously existed.						
				PROJECT JUSTIFICATION						
				This is an extension project contingent upon development.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$300,000								\$300,000	
Construction	\$2,212,000								\$2,212,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$2,512,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,512,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$2,512,000								\$2,512,000	
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$2,512,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,512,000	

PROJECT NAME		PROJECT #	PREFERENCE ORDER							
Transite Pipe Waterline Replacement Program-7		WL2801								
WATER DISTRIBUTION		PROJECT DESCRIPTION								
		Replace failing 16" Transite water transmission line infrastructure along West Baker Road from Decker Drive to Garth Road with modern reliable materials to reduce water leaks and outages, including all pavement repair.								
		PROJECT JUSTIFICATION								
		The West Baker Road water line is over 40 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. This water line is a main City transmission line and outages due to breakage can cause pressure issues to large sections of town.								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year	2022	2023	2024	2025	2026					
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying		\$550,000								\$550,000
Construction		\$4,376,000								\$4,376,000
Equipment and Furniture										
Contingency										
TOTAL COSTS		\$4,926,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,926,000
FUNDING SOURCES		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)		\$4,926,000								\$4,926,000
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
		0								
		0								
TOTAL SOURCES		\$4,926,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,926,000

PROJECT NAME		PROJECT #	PREFERENCE ORDER						
Transite Pipe Waterline Replacement Program-8		WL2901							
WATER DISTRIBUTION		PROJECT DESCRIPTION							
		Replace failing 12" Transite water transmission line infrastructure along North Alexander Drive from Lanier Drive to East Lobit Avenue with modern reliable materials to reduce water leaks and outages, including all pavement repair.							
		PROJECT JUSTIFICATION							
		The North Alexander Drive water line is over 40 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. This water line is a main City transmission line and outages due to breakage can cause pressure issues to large sections of town.							
		INCREMENTAL OPERATING AND MAINTENANCE COSTS							
		Impact on operating budget							
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$450,000								\$450,000
Construction	\$3,677,000								\$3,677,000
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$4,127,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,127,000
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$4,127,000								\$4,127,000
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
	0								
	0								
TOTAL SOURCES	\$4,127,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,127,000

PROJECT NAME		PROJECT #	PREFERENCE ORDER						
Transite Pipe Waterline Replacement Program-Glen Meadows		WL3001							
WATER DISTRIBUTION		PROJECT DESCRIPTION							
		Replace failing 6" and 8" Transite water line infrastructure with modern reliable materials to reduce water leaks and outages, including all pavement repair.							
		PROJECT JUSTIFICATION							
		The Glen Meadows subdivision water line is over 50 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. Glen Meadows has experienced a high amount of water line breaks during periods of ground movement due to dry/ drought and wet seasons.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year	2022	2023	2024	2025	2026				
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$250,000								\$250,000
Construction	\$1,967,000								\$1,967,000
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$2,217,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,217,000
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$2,217,000								\$2,217,000
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
	0								
	0								
TOTAL SOURCES	\$2,217,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,217,000

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Transite Pipe Waterline Replacement Program-Fair Park				WL3101						
WATER DISTRIBUTION				PROJECT DESCRIPTION						
				Replace failing 6" and 8" Transite water line infrastructure with modern reliable materials to reduce water leaks and outages, including all pavement repair.						
				PROJECT JUSTIFICATION						
				The Fair Park subdivision water line is over 50 years old. Transite pipe water lines have a failure rate significantly higher than that of comparable and like sized PVC or HDPE. This program will replace the failing Transite pipe infrastructure with an alternate pipe material (PVC or HDPE), which as a significantly newer pipe type is far less susceptible to line breakage due to weather changes. Transite lines are responsible for a higher percentage of work orders per foot than comparable PVC or HDPE lines and require an inordinate amount of resources to maintain relative to PVC/ HDPE. Glen Meadows has experienced a high amount of water line breaks during periods of ground movement due to dry/ drought and wet seasons.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$350,000								\$350,000	
Construction	\$2,811,000								\$2,811,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$3,161,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,161,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$3,161,000								\$3,161,000	
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded	0									
	0									
TOTAL SOURCES	\$3,161,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,161,000	

Appendix C

WASTEWATER ELIGIBLE CIP PROJECTS

CIP Wastewater			
Proj. #	Project Description	Total Project Cost	Required Capacity (Percent Utilization)
SS2001	Sjolander/Crosby Cedar Bayou/Barkuloo Utilities	\$13,589,222.00	CS
SS2002	Connally Annexation Utilities	\$7,452,000.00	CS
SS2101	West District Wastewater Treatment Plant	\$3,297,934.00	CS
SS2102	Oakwood Addition Sanitary Sewer Rehabilitation	\$120,000.00	CS
SS2103	Annual Sanitary Sewer Rehabilitation	\$11,000,000.00	CS
SS2201	Plumwood Subdivision Sanitary Sewer Rehabilitation	\$446,000.00	CS
SS2202	Annual Sanitary Sewer Relocation and Oversizing	\$7,500,000.00	CS
SS2203	Annual Sanitary Sewer Neighborhood Rehabilitation	\$15,750,000.00	CS
SS301	Garth Road Diversion Structural Removal	\$260,000.00	CS

CIP Wastewater			
Proj. #	Project Description	Total Project Cost	Required Capacity (Percent Utilization)
LS2001	IH-10 Lift Station #1 Improvements	\$24,696,000.00	LS
LS2002	Goose Creek Lift Station Rehabilitation	\$5,290,771.00	LS
LS2003	Chambers Commons Lift Station & Gravity Relief Interceptors	\$4,371,650.00	LS
LS2004	Baker Road Lift Station	\$3,150,000.00	LS
LS2101	Lannie Lift Station Improvements	\$4,150,000.00	LS
LS2102	Texas Avenue Lift Station Improvements	\$4,294,000.00	LS
LS2103	Annual Lift Station Rehabilitation Program	\$5,850,000.00	LS
LS201	Lift Station Upgrades and Winterization	\$600,000.00	LS
LS2301	Abbe Addition Lift Station (SSOI)	\$1,650,000.00	LS
LS2602	N. Main #1 LS	\$1,952,000.00	LS

CIP Wastewater			
Proj. #	Project Description	Total Project Cost	Required Capacity (Percent Utilization)
LS2603	Gulf Coast LS Rehab	\$3,167,000.00	LS
WW2001	Northeast Wastewater Treatment Plant – Copper and Zinc Compliance Project	\$96,826.00	TP
WW2002	EDWWTP Phase 1 Rehabilitation	\$7,334,000.00	TP
WW2101	EDWWTP Phase 2 Rehabilitation	\$25,000,000.00	TP
WW2201	Wastewater Treatment Plant Upgrades and Winterization	\$3,350,000.00	TP
WW2302	West District WWTP SCADA Install	\$4,200,000.00	TP
WW2304	West District Wastewater Treatment Plant Building	\$1,310,000.00	TP
WW2305	North East District Wastewater Treatment Plant Building	\$850,000.00	TP
WW2401	NE WWTP SCADA Install	\$4,200,000.00	TP
WW2501	Central District WWTP Operations and improvements	\$4,200,000.00	TP

CIP Wastewater			
Proj. #	Project Description	Total Project Cost	Required Capacity (Percent Utilization)
WW2601	EDWWTP Phase 3 Rehabilitation (Non-Harvey)	\$12,000,000.00	TP
WW2602	Central District WWTP Equipment and Operations Efficiency Infrastructure Project Phase 2	\$3,176,980.00	TP
	Wastewater Impact Fee Update	\$36,875.00	AD
	Wastewater Master Plan	\$250,000.00	AD

**CITY OF BAYTOWN
2022 - 2026 CAPITAL IMPROVEMENT PROGRAM
WASTEWATER COLLECTION**

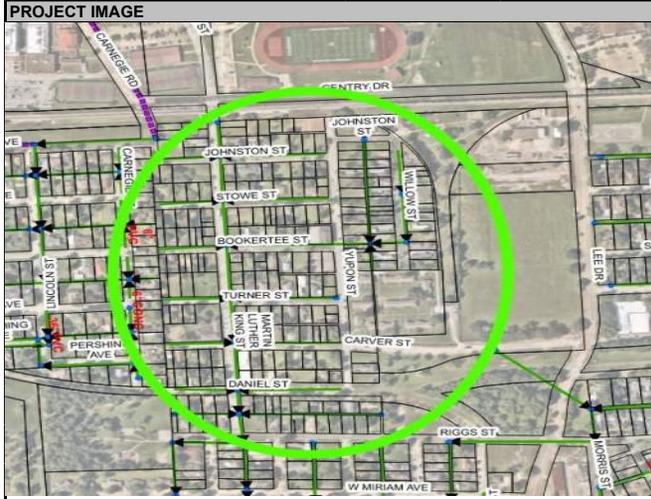
Project No.	Project Name	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	PROJECT TOTAL
SS2001	Sjolander/Crosby Cedar Bayou/Barkuloo Utilities	\$1,392,222	\$12,197,000							\$13,589,222
SS2002	Connally Annexation Utilities	\$987,000	\$6,465,000							\$7,452,000
SS2101	West District Wastewater Treatment Plant - Second Feed			\$3,297,934						\$3,297,934
SS2102	Oakwood Addition Sanitary Sewer Rehabilitation		\$120,000							\$120,000
SS2103	Annual Sanitary Sewer Rehabilitation		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000	\$11,000,000
SS2201	Plumwood Subdivision Sanitary Sewer Rehabilitation			\$446,000						\$446,000
SS2202	Annual Sanitary Sewer Relocation and Oversizing			\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000	\$2,500,000
SS2203	Trunkline Sewer Evaluation and Rehabilitation			\$250,000	\$250,000	\$250,000	\$1,750,000		\$1,500,000	\$3,500,000
SS2301	Garth Road Diversion Structural Removal				\$53,000	\$207,000				\$260,000
LS2001	IH-10 Lift Station #1 Improvements	\$460,000	\$2,636,000	\$21,600,000						\$24,696,000
LS2002	Goose Creek Lift Station Rehabilitation	\$510,975	\$4,779,796							\$5,290,771
LS2003	Chambers Commons Lift Station & Gravity Relief Interceptors	\$406,650	\$3,965,000							\$4,371,650
LS2004	Baker Road Lift Station		\$450,000	\$2,700,000						\$3,150,000
LS2101	Lannie Lift Station Improvements & Wastewater Model and Targeted Strat		\$950,000	\$3,200,000						\$4,150,000
LS2102	Texas Avenue Lift Station Improvements			\$390,000	\$3,904,400					\$4,294,400
LS2103	Annual Lift Station Rehabilitation Program		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$3,500,000
LS2201	Lift Station upgrades and Winterization			\$600,000						\$600,000
LS2301	Abbe Addition Lift Station				\$250,000	\$1,400,000				\$1,650,000
LS2602	N. Main #1 LS							\$372,000	\$1,580,000	\$1,952,000
LS2603	Gulf Coast LS Rehab							\$527,000	\$2,640,000	\$3,167,000
	TOTAL	\$3,756,847	\$33,062,796	\$33,983,934	\$6,207,400	\$3,357,000	\$3,500,000	\$2,649,000	\$12,470,000	\$98,986,977

SOURCE OF FUNDS	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	PROJECT TOTAL
Street Maintenance (211)									
MDD Fund (215)		\$251,439	\$2,750,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000	\$5,251,439
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)	\$83,810								\$83,810
W&S CIPF (527)	\$124,079	\$2,570,000	\$5,733,934	\$2,053,000	\$3,107,000	\$3,250,000	\$1,500,000	\$7,000,000	\$25,338,013
Impact Fees - Cash (529)	\$970,975	\$2,384,561	\$8,000,000						\$11,355,536
Impact Fees - Debt			\$14,300,000						\$14,300,000
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)	\$1,415,033	\$16,976,796							\$18,391,829
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement	\$175,950	\$1,004,400							\$1,180,350
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan				\$3,904,400			\$899,000	\$4,220,000	\$9,023,400
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant			\$500,000						\$500,000
Unfunded									
2020 Certificates of Obligation	\$987,000	\$9,875,600	\$2,700,000						\$13,562,600
American Rescue Plan Fund									
<i>Less Projects Appropriated in Previous Year</i>									
TOTAL	\$3,756,847	\$33,062,796	\$33,983,934	\$6,207,400	\$3,357,000	\$3,500,000	\$2,649,000	\$12,470,000	\$98,986,977

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Sjolander/Crosby Cedar Bayou/Barkuloo Utilities				SS2001						
PROJECT IMAGE				PROJECT DESCRIPTION						
				Construct sanitary services along Sjolander from Needlepoint to Blue heron pkwy along Crosby Cedar Bayou. New water and sewer service will be provided to the north side addition area of the City. The project will construct new water and sewer where no service previously existed. Construct lift station at NW Corner of Blue Heron Pkwy and Crosby Cedar bayou Road to provide sanitary sewer service for the surrounding annexed service area.						
				PROJECT JUSTIFICATION						
				This area was annexed into City Limits in August 2017. City is required by Texas Commission of Environmental Quality (TCEQ) to provide water and wastewater utility services within a required timeframe.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$1,392,222	\$1,392,222								
Construction	\$12,197,000		\$12,197,000							
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$13,589,222	\$1,392,222	\$12,197,000	\$0	\$0	\$0	\$0	\$0	\$0	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)	\$13,589,222	\$1,392,222	\$12,197,000							
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation	0									
TOTAL SOURCES	\$13,589,222	\$1,392,222	\$12,197,000	\$0	\$0	\$0	\$0	\$0	\$0	

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
Connally Annexation Utilities		SS2002								
PROJECT IMAGE		PROJECT DESCRIPTION								
		This project includes construction of waterlines along Connally, Thomas, Cedar Bayou Lynchburg and Archer Rd.								
		PROJECT JUSTIFICATION								
		Annexed into City Limits in 2017 the City is required to provide utility services within a specified timeframe. This project will serve the development in the recently constructed San Jacinto Blvd area.								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying		\$987,000	\$987,000							
Construction		\$6,465,000		\$6,465,000						
Equipment and Furniture										
Contingency										
TOTAL COSTS		\$7,452,000	\$987,000	\$6,465,000	\$0	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation		\$7,452,000	\$987,000	\$6,465,000						
TOTAL SOURCES		\$7,452,000	\$987,000	\$6,465,000	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
West District Wastewater Treatment Plant - Second Feed		SS2101							
PROJECT IMAGE		PROJECT DESCRIPTION							
		Design and redirection of two 30-inch sanitary sewer mains in the Thompson Ten Development to terminate at the West WWTP. Commonly referred to as the "Thompson Twin Force Main Project"							
		PROJECT JUSTIFICATION							
		The existing sanitary service line is at capacity and must be upsized. This project will alleviate sanitary flows from the 42-inch gravity along IH-10 and to allow for additional growth north of IH-10. Flows will be directed to West WWTP.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way	\$128,686			\$128,686					
Design / Surveying	\$343,248			\$343,248					
Construction	\$2,826,000			\$2,826,000					
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$3,297,934	\$0	\$0	\$3,297,934	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$3,297,934			\$3,297,934					
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$3,297,934	\$0	\$0	\$3,297,934	\$0	\$0	\$0	\$0	\$0



PROJECT DESCRIPTION
 The annual program will recapitalize aging sanitary sewer infrastructure. A common method to replace and renew this infrastructure is pipe bursting. The project will also include replacement of all sewer taps, and rehabilitating or replacing all manholes in the Oakwood Addition subdivision. Project is required under the SSOI Agreed Order.

PROJECT JUSTIFICATION
 To eradicate the sources of inflow or infiltration and eliminate sanitary sewer overflows.

INCREMENTAL OPERATING AND MAINTENANCE COSTS

Impact on operating budget

Fiscal Year	2022	2023	2024	2025	2026
Total Revenue					
Personnel Services					
Operation & Maintenance					
Capital Outlay					
Total Expense					
FTE Staff Total					

PROJECT COST ALLOCATION	PROJECT TOTAL	PREVIOUSLY APPROPRIATED	FY PROJECTED ALLOCATIONS						
			2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying									
Construction	\$120,000		\$120,000						
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$120,000	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$0

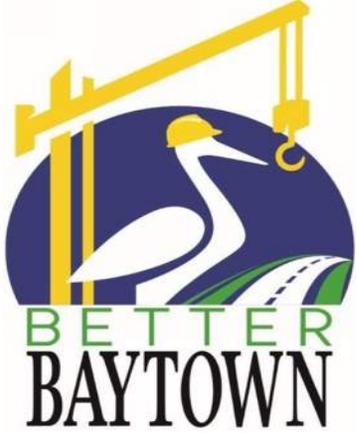
FUNDING SOURCES	PROJECT TOTAL	PREVIOUSLY APPROPRIATED	FY PROJECTED FUNDING SOURCES						
			2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$120,000		\$120,000						
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$120,000	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
Annual Sanitary Sewer Rehabilitation		SS2103							
PROJECT IMAGE		PROJECT DESCRIPTION							
		The City's sanitary sewer infrastructure is aging and weaker materials, ground movement and may become susceptible to inflow and infiltration, increasing the flows during wet weather events. This puts additional strain on lift stations and wastewater treatment plants. Focused and targeted repairs are needed and this program provides for this. On-call work order contact to make emergency repairs and correct operational issues within the wastewater collection system.							
		PROJECT JUSTIFICATION		To eradicate the sources of inflow or infiltration and eliminate sanitary sewer overflows.					
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying									
Construction	\$11,000,000		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$11,000,000	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$11,000,000		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$11,000,000	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Plumwood Subdivision Sanitary Sewer Rehabilitation				SS2201						
PROJECT IMAGE				PROJECT DESCRIPTION						
				Pipe burst old concrete pipe, replace all sewer taps, reline or replace all manholes in the Plumwood Subdivision.						
				PROJECT JUSTIFICATION						
				To eradicate the sources of inflow or infiltration and eliminate sanitary sewer overflows.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying										
Construction	\$446,000			\$446,000						
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$446,000	\$0	\$0	\$446,000	\$0	\$0	\$0	\$0	\$0	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$446,000			\$446,000						
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation	0									
TOTAL SOURCES	\$446,000	\$0	\$0	\$446,000	\$0	\$0	\$0	\$0	\$0	

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Annual Sanitary Sewer Relocation and Oversizing				SS2202						
PROJECT IMAGE				PROJECT DESCRIPTION						
				The City participates in projects associated with development and other governmental agencies that require the relocation, over sizing, and line extensions.						
				PROJECT JUSTIFICATION						
				To fund the Cities portion of utility relocation, over sizing, and line extensions needed for projects associated with Texas Department of Transportation, Harris County, Chambers County, Munciple Utility Districts, developments, and other projects to support our sanitary sewer system.						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying										
Construction	\$2,500,000			\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$2,500,000	\$0	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)	\$2,500,000			\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000	
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation	0									
TOTAL SOURCES	\$2,500,000	\$0	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000	

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
Trunkline Sewer Evaluation and Rehabilitation		SS2203							
PROJECT IMAGE		PROJECT DESCRIPTION							
		The City's sanitary sewer infrastructure is aging and weaker materials, ground movement and may become susceptible to inflow and infiltration, increasing the flows during wet weather events. This puts additional strain on lift stations and wastewater treatment plants. Focused and targeted repairs are needed and this program provides for this.							
		PROJECT JUSTIFICATION							
		To eradicate the sources of inflow or infiltration and eliminate sanitary sewer overflows for entire neighborhoods or large areas.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$500,000				\$250,000		\$250,000		
Construction	\$3,000,000						\$1,500,000		\$1,500,000
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$3,500,000	\$0	\$0	\$0	\$250,000	\$0	\$1,750,000	\$0	\$1,500,000
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$3,500,000				\$250,000		\$1,750,000		\$1,500,000
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$3,500,000	\$0	\$0	\$0	\$250,000	\$0	\$1,750,000	\$0	\$1,500,000

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
Garth Road Diversion Structural Removal		SS2301								
PROJECT IMAGE		PROJECT DESCRIPTION								
		The diversion project took the flow from I-10 #1 lift station and diverted it to Northeast. The project is currently taking Golden Eye Lift Station, East Point Lift, and a private lift station flow and it's being diverted to Northeast District.								
		PROJECT JUSTIFICATION								
		The project will have to be reversed after the completion of I-10 #1 back to West District so that the design capacity is not exceeded at the Northeast District when I-10, Needlepont & 565 lift stations come on line.								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$53,000					\$53,000				
Construction	\$207,000						\$207,000			
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$260,000		\$0	\$0	\$0	\$53,000	\$207,000	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$260,000					\$53,000	\$207,000			
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation	0									
TOTAL SOURCES	\$260,000		\$0	\$0	\$0	\$53,000	\$207,000	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
IH-10 Lift Station #1 Improvements		LS2001							
PROJECT IMAGE		PROJECT DESCRIPTION							
		Rehabilitate and upsize current lift station that serves the Northwest Baytown growth and development. Project will consist of upgrading current pumps and force main to carry sanitary sewer to West District WWTP.							
		PROJECT JUSTIFICATION							
		Project will serve current lift station is at capacity and is needing to be upsize to provide service to Northwest Baytown along with the 213-A development (Friendswood). Over 2,000 homes are anticipated to be constructed within the next 12-18 months in the IH-10 Lift Station service area MUD 213-A which will increase the contributing flow to the IH-10 lift station service area near Wallisville, Haney, and Garth Road. Portions of the area are anticipated to be developed similar to Springfield Estates and East Point which will significantly increase the flow to the IH-10 lift station.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report	\$460,000	\$460,000							
Land / Right of Way	\$300,000		\$300,000						
Design / Surveying	\$2,336,000		\$2,336,000						
Construction	\$21,600,000			\$21,600,000					
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$24,696,000	\$460,000	\$2,636,000	\$21,600,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)	\$2,751,439		\$251,439	\$2,500,000					
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)									
Impact Fees - Cash (529)	\$10,844,561	\$460,000	\$2,384,561	\$8,000,000					
Impact Fees - Debt	\$11,100,000			\$11,100,000					
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$24,696,000	\$460,000	\$2,636,000	\$21,600,000	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
Goose Creek Lift Station Rehabilitation		LS2002								
PROJECT IMAGE		PROJECT DESCRIPTION								
		Rehabilitation of the existing Goose Creek Lift Station (aka Cedar Bayou LS). Project will serve the Ginger Creek neighborhood along with the surrounding development while reducing flow by re-routing the Goose Creek force main to West District WWTP through the Thompson Ten Development.								
		PROJECT JUSTIFICATION								
		Lift station equipment is past its useful service life. The last rehabilitation was in 2005, over twenty years ago. Additional growth in the service area is now a factor leading to the lift station improvements.								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$510,975	\$510,975								
Construction	\$4,779,796		\$4,779,796							
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$5,290,771	\$510,975	\$4,779,796	\$0	\$0	\$0	\$0	\$0	\$0	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)										
Impact Fees - Cash (529)	\$510,975	\$510,975								
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)	\$4,779,796		\$4,779,796							
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation	0									
TOTAL SOURCES	\$5,290,771	\$510,975	\$4,779,796	\$0	\$0	\$0	\$0	\$0	\$0	

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
Chambers Commons Lift Station & Gravity Relief Interceptors		LS2003								
PROJECT IMAGE		PROJECT DESCRIPTION								
		<p>The Chambers Commons Utilities project is a City/Developer agreement that supports economic growth and development extending sanitary sewer service from the Old Needlepoint Road Lift Station to serve the Chambers Commons development, and commercial properties, and decommissioning four (4) lift stations. This utility project is threefold and includes: a) the Old Needlepoint Lift station and force main; b) the Julie Ann Villa Off Site Gravity sanitary sewer along Gloria Lane and East Circle Drive to the Julie Ann Villa lift station, which will be decommissioned; c) the North Offsite gravity sewer along the west side of SH-146 between Chambers Town Center Drive and IH-10.</p>								
		PROJECT JUSTIFICATION								
		<p>This project is part of an agreement to construct a Regional Lift Station to alleviate several smaller lift stations in the area and 2 gravity lines (including this north offsite gravity line) to serve the area improvements. This group of projects is funded via a Development Agreement with KM Realty in which the City will provide a cost share for the design and construction costs of the lift station and associated gravity wastewater lines.</p>								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report		\$44,000	\$44,000							
Land / Right of Way										
Design / Surveying		\$362,650	\$362,650							
Construction		\$3,965,000		\$3,965,000						
Equipment and Furniture										
Contingency										
TOTAL COSTS		\$4,371,650	\$406,650	\$3,965,000	\$0	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)		\$83,810	\$83,810							
W&S CIPF (527)		\$124,079	\$124,079							
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)		\$22,811	\$22,811							
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement		\$1,180,350	\$175,950	\$1,004,400						
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation		\$2,960,600		\$2,960,600						
0										
TOTAL SOURCES		\$4,371,650	\$406,650	\$3,965,000	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
Baker Road Lift Station		LS2004							
PROJECT IMAGE		PROJECT DESCRIPTION							
		The Baker Road Lift Station has a current capacity of 1300 GPM and pumps to the Central District WWTP. Sanitary sewer overflows within the service area has created a need for this lift station to be enlarged and rehabilitated to provide better service to the area and to reduce overflows during rain events and major tropical storms.							
		PROJECT JUSTIFICATION							
		Part of SSOI program to eradicate the sources of inflow or infiltration and eliminate sanitary sewer overflows (required by TCEQ A/O).							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year	2022	2023	2024	2025	2026				
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$450,000		\$450,000						
Construction	\$2,700,000			\$2,700,000					
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$3,150,000	\$0	\$450,000	\$2,700,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)									
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	\$3,150,000		\$450,000	\$2,700,000					
TOTAL SOURCES	\$3,150,000	\$0	\$450,000	\$2,700,000	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
Lannie Lift Station Improvements & Wastewater Model and Targeted Strategic Plan		LS2101							
PROJECT IMAGE		PROJECT DESCRIPTION							
		<p>Lannie Lift station pumps to the NE WWTP and has a current capacity of 1920 GPM. This lift station is needed to serve the west Chambers County service area but is needed to be upsized prior to taking any additional flow. This project will also include the creation of a Strategic Plan for the Northeast and East WWTP service areas to plan for future demands on the wastewater system. It also includes the creation of a hydraulic model for all four WWTP service areas to identify sources of Inflow and Infiltration (I&I) and potential solutions. The planning and modeling efforts are compatible and will be beneficial to be performed concurrently.</p>							
		PROJECT JUSTIFICATION							
		<p>Project is needed to serve CCID #2 (Ameriport) development. The lift station wet well does not have the capacity to hold the flow from the lines coming from 565 and Needlepoint LS, pumps needs to be upsized accordingly. We need a model for the Northeast and East WWTP service areas has the potential for rapid growth to properly size the liftstation. The Wastewater model will be used to evaluate the service area for future growth. The wastewater model will also support strategic decisions to provide wastewater service for the Northeast and East WWTP's to allow for the future growth of these areas. The city is also experiencing high I&I rates in older parts of the city, which results in recurring sanitary sewer overflows (SSOs). The creation of a wastewater hydraulic model will help identify deficiencies in the system that contribute to SSOs and projects that can eliminate them.</p>							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year	2022	2023	2024	2025	2026				
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$950,000		\$950,000						
Construction	\$3,200,000			\$3,200,000					
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$4,150,000	\$0	\$950,000	\$3,200,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$950,000		\$950,000						
Impact Fees - Cash (529)									
Impact Fees - Debt	\$3,200,000			\$3,200,000					
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$4,150,000	\$0	\$950,000	\$3,200,000	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
Texas Avenue Lift Station Improvements		LS2102								
PROJECT IMAGE		PROJECT DESCRIPTION								
		Texas Ave. Lift Station currently serves Baytown's Central WWTP service area and has difficulty servicing the area during rain events. This project would consist of replacing current electrical, backup generator, piping, valves, and pumps at this lift station to appropriately serve the central service area.								
		PROJECT JUSTIFICATION								
		Due to existing capacity deficiencies it was recommended in the Wastewater Master plan that an increase in the pumping capacity from 6700 GPM to 8,000 GPM be made to meet the current demand to maintain an acceptable level of service.								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying		\$390,000			\$390,000					
Construction		\$3,904,400				\$3,904,400				
Equipment and Furniture										
Contingency										
TOTAL COSTS		\$4,294,400	\$0	\$0	\$390,000	\$3,904,400	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)		\$390,000			\$390,000					
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan		\$3,904,400				\$3,904,400				
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation		0								
TOTAL SOURCES		\$4,294,400	\$0	\$0	\$390,000	\$3,904,400	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
Annual Lift Station Rehabilitation Program		LS2103							
PROJECT IMAGE		PROJECT DESCRIPTION							
		<p>This annual rehabilitation program would recapitalize key lift stations that are undersized, experiencing equipment failures or at the end of service life. The first project will be the Bay Oaks Harbor Lift Station & Force Main pumps into the evergreen lift station (2021). The current lift station capacity is 400 GPM and is needed to serve development in the Tri-City Beach service area. The current force main is 6" and would also be upsized to 10" by the time the development is active.</p>							
		PROJECT JUSTIFICATION							
		<p>The City operates 82 lift stations. These facilities are at various ages, requiring rehabilitation over time, as mechanical and electrical equipment ages or becomes obsolete. This is a proactive in assessing and correcting issues within the lift stations lowering overall operations costs. The City's focus is to progressively address problems instead of the "run to fail" and reacting to emergency repairs.</p>							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year	2022	2023	2024	2025	2026				
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION	PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying									
Construction	\$3,500,000		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$3,500,000	\$0	\$500,000						
FUNDING SOURCES	PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$3,500,000		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$3,500,000	\$0	\$500,000						

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
Lift Station upgrades and Winterization		LS2201							
PROJECT IMAGE		PROJECT DESCRIPTION							
		Operational components of five wastewater lift stations need to be upgraded due to the cold weather experienced during the Valentines Day Storm of 2021.							
		PROJECT JUSTIFICATION							
		The wastewater lift stations upgrades are necessary to continue to pump wastewater during extreme cold weather and during emergencies. Some of the upgrades will include new valves, pipes, equipment, and controls that were needed, damaged, or not operational due to the cold weather. The lift stations are required to be operational at all times by the TCEQ to prevent spills and illicit discharges or wastewater.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$100,000			\$100,000					
Construction	\$500,000			\$500,000					
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$600,000	\$0	\$0	\$600,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$100,000			\$100,000					
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant	\$500,000			\$500,000					
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$600,000	\$0	\$0	\$600,000	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
Abbe Addition Lift Station		LS2301							
PROJECT IMAGE		PROJECT DESCRIPTION							
		<p>The Abbe Lift Station experience surcharging and high flows due to inflow and infiltration during wet weather events. The lift station needs to be upsized and rehabilitated to provide better service to the area and to reduce overflows during rain events and major tropical storms.</p>							
		PROJECT JUSTIFICATION							
		<p>This project is needed to eradicate the sources of inflow or infiltration and eliminate sanitary sewer overflows during rain events. The Abbe Addition Lift Station area is in a critical area which is vulnerable to sanitary sewer overflows, and must be evaluated, designed and constructed to meet area sanitary collection system capacity requirements.</p>							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$250,000				\$250,000				
Construction	\$1,400,000					\$1,400,000			
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$1,650,000	\$0	\$0	\$0	\$250,000	\$1,400,000	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$1,650,000				\$250,000	\$1,400,000			
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Loan									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
2020 Certificates of Obligation	0								
TOTAL SOURCES	\$1,650,000	\$0	\$0	\$0	\$250,000	\$1,400,000	\$0	\$0	\$0

PROJECT NAME		PROJECT #	PREFERENCE ORDER							
N. Main #1 LS		LS2602								
PROJECT IMAGE		PROJECT DESCRIPTION								
		<p>The N. Main #1 LS wet well has shifted due to erosion and is causing issues with pump performance. The electrical wiring needs to be elevated, protected, and reworked. Site needs to be regraded and fence needs to be replaced due to erosion issues. SCADA needs to be added to monitor LS performance.</p>								
		PROJECT JUSTIFICATION								
		<p>The lift station is currently composed of (2) 300 GPM Gorman Rupp dry well pumps, a 140 gallon Cummins Diesel Generator, and a digi-gauge control system. The existing control panel is unreliable and is in need of replacement. The pumps are in need of replacement and often lose prime due to the shift of the wet well. Due to I&I in the area the pumps run an average of six hours during dry weather and around fifteen hours during heavy rain events.</p>								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report		\$190,000							\$190,000	
Land / Right of Way										
Design / Surveying		\$182,000							\$182,000	
Construction		\$1,580,000								\$1,580,000
Equipment and Furniture										
Contingency										
TOTAL COSTS		\$1,952,000	\$0	\$0	\$0	\$0	\$0	\$0	\$372,000	\$1,580,000
FUNDING SOURCES		PROJECT TOTAL	PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan		\$1,952,000							\$372,000	\$1,580,000
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation		0								
TOTAL SOURCES		\$1,952,000	\$0	\$0	\$0	\$0	\$0	\$0	\$372,000	\$1,580,000

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
Gulf Coast LS Rehab		LS2603								
PROJECT IMAGE		PROJECT DESCRIPTION								
		<p>Gulf coast LS currently is in need of capacity upsizing and electrical control panel upgrades. The control panel need to be rewired. The structure and fence line is exhibiting separation there are erosion issues at the fence line and around the wet well. Potential reconstruction of force main may be required as well as potential replacement of 36" concrete line.</p>								
		PROJECT JUSTIFICATION								
		<p>This lift station is comprised of (1) 5700 gpm ABS pump , (2) 7,000 gpm Flyght pumps, and (1) Diesel Generator. The forcemain is 36" concrete line and the service area has high I&I which is leading to blown off manhole lids and SSOI during rain events.</p>								
		INCREMENTAL OPERATING AND MAINTENANCE COSTS								
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report	\$317,000							\$317,000		
Land / Right of Way										
Design / Surveying	\$210,000							\$210,000		
Construction	\$2,640,000								\$2,640,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$3,167,000	\$0	\$0	\$0	\$0	\$0	\$0	\$527,000	\$2,640,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)				\$0						
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Loan	\$3,167,000							\$527,000	\$2,640,000	
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
2020 Certificates of Obligation	0									
TOTAL SOURCES	\$3,167,000	\$0	\$0	\$0	\$0	\$0	\$0	\$527,000	\$2,640,000	

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
Northeast Wastewater Treatment Plant - Copper and Zinc Compliance Project		WW2001								
PROJECT IMAGE		PROJECT DESCRIPTION								
		<p>This project seeks to identify solutions for reducing the amount of copper and zinc discharged from the NEWWTP effluent system to achieve compliance with TCEQ and TPDES discharge limits.</p>								
		PROJECT JUSTIFICATION								
		<p>In 2018, the TCEQ lowered the NEWWTP permitted amount for lead and copper. NEDWWTP was unable to meet the updated discharge limits and as a result began to be in violation of the 2018 permit. This project will identify remediation solutions in an effort to avoid regulatory enforcement by regulatory agencies.</p>								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report	\$61,826	\$61,826								
Land / Right of Way										
Design / Surveying	\$35,000			\$35,000						
Construction										
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$96,826	\$61,826	\$35,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$85,179	\$61,826	\$23,353							
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Grant										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$85,179	\$61,826	\$23,353	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
EDWWTP Phase 1 Rehabilitation		WW2002								
PROJECT IMAGE		PROJECT DESCRIPTION								
		<p>The current operations building will be demolished and replaced with a two story building that will house all the offices and laboratory on the second floor. Influent lift station #2 will be converted from a dry pit lift station to a wet well with submersible pumps. A SCADA system will be installed in order to remotely monitor operations, and the electrical panels and system will be assessed for areas of potential failures and hazards.</p>								
		PROJECT JUSTIFICATION								
		<p>The EDWWTP was inundated by flood waters from Harvey in 2017 causing extensive damage to the administration building and pumps at the WWTP. Due to the flood waters it was impossible to access and assess the plant safely directly after the hurricane event and due to the identified threats and risk realized from this event, SCADA has been identified as a contingency plan to rectify the identified issue and similar potential events in the near future. The electrical system of East District put all employees at risk as well plant equipment such as blowers, pumps, and meter monitoring equipment due to surges that the electrical structure could cause. The City received CDBG-DR funding for this project phase.</p>								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$790,000	\$790,000								
Construction	\$6,544,000		\$6,544,000							
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$7,334,000	\$790,000	\$6,544,000	\$0	\$0	\$0	\$0	\$0	\$0	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)	\$390,000	\$390,000								
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG	\$6,602,826	\$400,000	\$6,202,826							
HGAC - TIP										
Harris County										
TWDB Grant										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation	\$341,174		\$341,174							
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded										
	0									
	0									
TOTAL SOURCES	\$7,334,000	\$790,000	\$6,544,000	\$0	\$0	\$0	\$0	\$0	\$0	

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
EDWWTP Phase 2 Rehabilitation		WW2101							
PROJECT IMAGE		PROJECT DESCRIPTION							
		<p>The electrical system of East District plant was heavily damaged by past hurricane and storm events resulting in wet breakers, arc flashing and equipment shorting. The assessment of the panels and electrical system is necessary to identify safety hazards and electrical failure source so that we can identify replacements needed for equipment. Motor control centers and electrical panels need to be elevated above the flood plain. Belt press building has rotted frame supports and is no longer structurally sound and serves as the protection for costly equipment sludge equipment.</p>							
		PROJECT JUSTIFICATION							
		<p>The EDWWTP was inundated by flood waters from Harvey in 2017 causing extensive damage to the belt press building and pumps at the WWTP. Due to the flood waters it was impossible to access and assess the plant safely directly after the hurricane event and due to the identified threats and risk realized from this event, Employee safety is also a concern due electrical damage, break ins, potential chemical exposures, in addition to failing plant equipment.</p>							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$3,260,000		\$3,260,000						
Construction	\$21,740,000			\$21,740,000					
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$25,000,000	\$0	\$3,260,000	\$21,740,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)									
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Grant									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant	\$25,000,000		\$3,260,000	\$21,740,000					
Unfunded									
	0								
	0								
TOTAL SOURCES	\$25,000,000	\$0	\$3,260,000	\$21,740,000	\$0	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
WasteWater Treatment Plant upgrades and Winterization		WW2201							
PROJECT IMAGE		PROJECT DESCRIPTION							
		Operational components of the wastewater treatment plants need to be upgraded or due to the cold weather experienced during the Valentines Day Storm of 2021.							
		PROJECT JUSTIFICATION							
		The wastewater treatment plants upgrades are necessary to continue to treat wastewater during to extreme cold weather and during weather emergencies. Some of the upgrades will include replacement of valves, pipes, equipment, heaters, electrical, and controls that were needed, damaged, or not operational due to the cold weather.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$350,000			\$350,000					
Construction	\$3,000,000				\$3,000,000				
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$3,350,000	\$0	\$0	\$350,000	\$3,000,000	\$0	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$350,000			\$350,000					
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Grant									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant	\$3,000,000				\$3,000,000				
Unfunded									
	0								
	0								
TOTAL SOURCES	\$3,350,000	\$0	\$0	\$350,000	\$3,000,000	\$0	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
West District WWTP SCADA Install		WW2302							
PROJECT IMAGE		PROJECT DESCRIPTION							
		<p>This project would consist of new SCADA monitoring and control system, elimination of gas chemicals, implementation of SCADA hardware and software (PLC's, Servers, Clients) global data collection and programming and reporting standards. The plant SCADA hardware, software will be updated. The project includes detailed design, procurement, installation, integration, programming and configuration of SCADA for the WDWWTTP. The addition of analyzers to monitor the residual to maintain efficient disinfection of plant effluent. The addition of actuators to gate valves for off-site control of the gates at the plants through SCADA.</p>							
		PROJECT JUSTIFICATION							
		<p>A surveillance system is needed at East District to aid in the safety and security of staff and assets. Removing gas cylinders and replacing with liquid chlorine and sodium bisulfite will remove the hazardous chemicals and reduce the RMP. The plant is not staffed during 8 hours of the day and the chemicals are not monitored during that time. The implementation of the chemicals and analyzers will help monitor the disinfection process and assist with using the correct amount of chemical as well as assist in staying within permit limits.</p>							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year	2022	2023	2024	2025	2026				
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION	PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$400,000				\$400,000				
Construction	\$3,800,000					\$3,800,000			
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$4,200,000	\$0	\$0	\$0	\$400,000	\$3,800,000	\$0	\$0	\$0
FUNDING SOURCES	PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$4,200,000				\$400,000	\$3,800,000			
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Grant									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
	0								
	0								
TOTAL SOURCES	\$4,200,000	\$0	\$0	\$0	\$400,000	\$3,800,000	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
West District Wastewater Treatment Plant Building		WW2304							
PROJECT IMAGE		PROJECT DESCRIPTION							
		Perform a major reconfiguration of office space updating the finishes, and relocating and replacement of the HVAC system, security and cameras, replace the roof, plumbing upgrades, and electrical upgrades. This facility was evaluated in the Facility Master Plan completed in 2021.							
		PROJECT JUSTIFICATION							
		Due to the age of the building, safety, and security concerns the building needs to be reconfigured new HVAC system is needed for heating and cooling the facility, a new roof is necessary, security cameras are needed, and minor repairs and new office finishes to address wear on the building and the roof leaks.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$110,000				\$110,000				
Construction	\$1,200,000					\$1,200,000			
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$1,310,000	\$0	\$0	\$0	\$110,000	\$1,200,000	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)	\$110,000				\$110,000				
Water and Sewer Fund (520)									
W&S CIPF (527)									
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Grant									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded	\$1,200,000					\$1,200,000			
	0								
	0								
TOTAL SOURCES	\$1,310,000	\$0	\$0	\$0	\$110,000	\$1,200,000	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
North East District Wastewater Treatment Plant Building		WW2305							
PROJECT IMAGE		PROJECT DESCRIPTION							
		Perform a minor upgrades of office space updating the finishes, and major upgrades to mechanical systems, plumbing upgrades, add camera security system, and electrical upgrades. This facility was evaluated in the Facility Master Plan completed in 2021.							
		PROJECT JUSTIFICATION							
		Due to the age of the building and some accessibility and safety upgrades are needed, mechanical systems are needing major upgrades, and minor repairs and new office finishes to address wear on the building. A surveillance system is needed at Northeast District to aid in the safety and security of staff and assets.							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$100,000				\$100,000				
Construction	\$750,000					\$750,000			
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$850,000	\$0	\$0	\$0	\$100,000	\$750,000	\$0	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)	\$850,000				\$100,000	\$750,000			
Water and Sewer Fund (520)									
W&S CIPF (527)									
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Grant									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
	0								
	0								
TOTAL SOURCES	\$850,000	\$0	\$0	\$0	\$100,000	\$750,000	\$0	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
NE WWTP SCADA Install		WW2401							
PROJECT IMAGE		PROJECT DESCRIPTION							
		<p>This project would consist of new SCADA monitoring and control system, and elimination of gas chemicals. Implementation of SCADA hardware and software and programming to meet reporting standards. The project also includes chemical analyzers monitor the residual and communicate with the chemical feed system to maintain efficient disinfection of plant effluent. Add actuators to gate valves for off-site control of the gates at the plants through SCADA. The analyzers will keep continuous track of the residual and communicate with the chemical feed system to maintain efficient disinfection of the water. The actuators would help to adjust the gates to the plant off-site.</p>							
		PROJECT JUSTIFICATION							
		<p>Removing gas cylinders and replacing with liquid chlorine and sodium bisulfite will remove the hazardous chemicals and reduce the RMP. The plant is not staffed during 16 hours of the day and the chemicals are not monitored during that time. The implementation of the chemicals will help monitor the disinfection process and assist with using the correct amount of chemical as well as assist in staying within limits for entero.</p>							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year		2022	2023	2024	2025	2026			
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$400,000					\$400,000			
Construction	\$3,800,000						\$3,800,000		
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$4,200,000	\$0	\$0	\$0	\$0	\$400,000	\$3,800,000	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES						
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$4,200,000					\$400,000	\$3,800,000		
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Grant									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
	0								
	0								
TOTAL SOURCES	\$4,200,000	\$0	\$0	\$0	\$0	\$400,000	\$3,800,000	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER					
Central District WWTP Operations and Improvements		WW2501							
PROJECT IMAGE		PROJECT DESCRIPTION							
		<p>This project would consist of new SCADA monitoring and control system, elimination of gas chemicals and camera system. Implementation of SCADA hardware and software and programming to meet reporting standards. The project also includes chemical analyzers monitor the residual and communicate with the chemical feed system to maintain efficient disinfection of plant effluent. Add actuators to gate valves for off-site control of the gates at the plants through SCADA. The analyzers will keep continuous track of the residual and communicate with the chemical feed system to maintain efficient disinfection of the water. The actuators would help to adjust the gates to the plant off-site.</p>							
		PROJECT JUSTIFICATION							
		<p>A surveillance system is needed at Central District to aid in the safety and security of staff and assets. Removing gas cylinders and replacing with liquid chlorine and sodium bisulfite will remove the hazardous chemicals and reduce the RMP. The plant is not staffed during 8 hours of the day and the chemicals are not monitored during that time. The implementation of the analyzers will help monitor the disinfection process and assist with using the correct amount of chemical as well as assist in staying within limits for enterococci.</p>							
INCREMENTAL OPERATING AND MAINTENANCE COSTS									
Impact on operating budget									
Fiscal Year	2022	2023	2024	2025	2026				
Total Revenue									
Personnel Services									
Operation & Maintenance									
Capital Outlay									
Total Expense									
FTE Staff Total									
PROJECT COST ALLOCATION		PROJECT TOTAL		FY PROJECTED ALLOCATIONS					
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report									
Land / Right of Way									
Design / Surveying	\$400,000						\$400,000		
Construction	\$3,800,000						\$3,800,000		
Equipment and Furniture									
Contingency									
TOTAL COSTS	\$4,200,000	\$0	\$0	\$0	\$0	\$0	\$4,200,000	\$0	\$0
FUNDING SOURCES		PROJECT TOTAL		FY PROJECTED FUNDING SOURCES					
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Street Maintenance (211)									
MDD Fund (215)									
2017 Certificate of Obligation (320 Streets)									
2018 Certificate of Obligation (321 Fire)									
2019 Certificate of Obligation (322 Hotel)									
General CIPF (351)									
Storm Water Utility (505)									
2018 BAWA Revenue (512)									
2019 BAWA Revenue (513)									
BAWA - CIPF (518)									
Water and Sewer Fund (520)									
W&S CIPF (527)	\$4,200,000						\$4,200,000		
Impact Fees - Cash (529)									
Impact Fees - Debt									
Hotel Occupancy Tax									
2019 - Certificate of Obligation (546)									
TIRZ Reimbursable Debt									
B-WCEDF									
Development Agreement									
CDBG									
HGAC - TIP									
Harris County									
TWDB Grant									
Fund 352									
Enterprise IDA									
2021 Certificates of Obligation									
Hotel Revenue Bonds									
Chambers County ESD									
Proposed Grant									
Unfunded									
	0								
	0								
TOTAL SOURCES	\$4,200,000	\$0	\$0	\$0	\$0	\$0	\$4,200,000	\$0	\$0

PROJECT NAME		PROJECT #		PREFERENCE ORDER						
EDWWTP Phase 3 Rehabilitation (Non-Harvey)		WW2601								
PROJECT IMAGE		PROJECT DESCRIPTION								
		This project will complete the EDWWTP upgrades that were not funded through grant funding. The project includes a replacement of the conveyor and digester system rehabilitation.								
		PROJECT JUSTIFICATION								
		The EDWWTP was inundated by flood waters from Harvey in 2017 causing extensive damage to the belt press building and pumps at the WWTP. Due to the flood waters it was impossible to access and assess the plant safely directly after the hurricane event and due to the identified threats and risk realized from this event. Employee safety is also a concern due electrical damage, break ins, potential chemical exposures, in addition to failing plant equipment. The Conveyor Belt at East District is not operational in automatic. The conveyor can not be ran in automatic because it comes off track and trips. The rollers are frozen and will not move the belt as designed. As the erosion at East District continues to spread the viability of our digester will become subjected to separation from the facility because the ground will no longer be stable enough to secure the structure.								
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022	2023	2024	2025	2026				
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Preliminary Engineering Report										
Land / Right of Way										
Design / Surveying	\$2,000,000								\$2,000,000	
Construction	\$10,000,000								\$10,000,000	
Equipment and Furniture										
Contingency										
TOTAL COSTS	\$12,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000,000	
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
		PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031	
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Grant										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant	\$12,000,000								\$12,000,000	
Unfunded										
	0									
	0									
TOTAL SOURCES	\$12,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000,000	

PROJECT NAME				PROJECT #		PREFERENCE ORDER				
Central District WWTP Equipment and Operations Efficiency Infrastructure Project Phase 2				WW2602						
PROJECT IMAGE				PROJECT DESCRIPTION						
				<p>This project would consist of relocating return pumps, re-structuring/ refurbishing the Q-basin, demolition of an abandoned basin, adding airdrops to the influent channel for mixing, and constructing drains clarifiers to improve the efficiency of the plant operations.</p>						
				PROJECT JUSTIFICATION						
				<p>Central District WWTP has inadequate infrastructure throughout the plant that is hindering the plant performance. The Q-basin is not operating as designed due to structural breakdown and broken parts. The air drop will reduce the build up of grit in the influent channel. The abandoned contact basin on site is currently growing a vegetation and attracting small animals and is now a safety hazard for staff members. The return air lifts are causing uneven distribution of solids during rain events.</p>						
INCREMENTAL OPERATING AND MAINTENANCE COSTS										
Impact on operating budget										
Fiscal Year		2022		2023		2024		2025		2026
Total Revenue										
Personnel Services										
Operation & Maintenance										
Capital Outlay										
Total Expense										
FTE Staff Total										
PROJECT COST ALLOCATION		PROJECT TOTAL	FY PROJECTED ALLOCATIONS							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027 - 2031
Preliminary Engineering Report		\$140,000							\$140,000	
Land / Right of Way										
Design / Surveying		\$300,000							\$300,000	
Construction		\$2,736,980								\$2,736,980
Equipment and Furniture										
Contingency										
TOTAL COSTS		\$3,176,980	\$0	\$0	\$0	\$0	\$0	\$0	\$440,000	\$2,736,980
FUNDING SOURCES		PROJECT TOTAL	FY PROJECTED FUNDING SOURCES							
			PREVIOUSLY APPROPRIATED	2021 BUDGET	2022	2023	2024	2025	2026	2027-2031
Street Maintenance (211)										
MDD Fund (215)										
2017 Certificate of Obligation (320 Streets)										
2018 Certificate of Obligation (321 Fire)										
2019 Certificate of Obligation (322 Hotel)										
General CIPF (351)										
Storm Water Utility (505)										
2018 BAWA Revenue (512)										
2019 BAWA Revenue (513)										
BAWA - CIPF (518)										
Water and Sewer Fund (520)										
W&S CIPF (527)										
Impact Fees - Cash (529)										
Impact Fees - Debt										
Hotel Occupancy Tax										
2019 - Certificate of Obligation (546)										
TIRZ Reimbursable Debt										
B-WCEDF										
Development Agreement										
CDBG										
HGAC - TIP										
Harris County										
TWDB Grant										
Fund 352										
Enterprise IDA										
2021 Certificates of Obligation										
Hotel Revenue Bonds										
Chambers County ESD										
Proposed Grant										
Unfunded		\$3,176,980							\$440,000	\$2,736,980
TOTAL SOURCES		\$3,176,980	\$0	\$0	\$0	\$0	\$0	\$0	\$440,000	\$2,736,980