

PROPOSED CAPITAL IMPROVEMENT PLAN FY2019 - FY2023

PROGRAM: WATER

Program Priority: **21**

PROJECT NAME: 18" Trunk Line from SSH BPS to FM2094

CIP NUMBER:

CONTACT PERSON: Jody Hooks

PROJECT COST BY FISCAL YEAR

Project Cost	Previously Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Future Years	Total
Planning/Design					170,000			\$170,000
Land								\$0
Construction						861,000		\$861,000
Equip/Furnishings								\$0
Total Cost	\$0	\$0	\$0	\$0	\$170,000	\$861,000	\$0	\$1,031,000

FUNDING SOURCE BY FISCAL YEAR

Funding Source	Previously Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Future Years	Total
Prior Bonds								\$0
Future Bonds					170,000	861,000		\$1,031,000
Potential Grant(s)								\$0
Park Dedication Fees								\$0
4B Funding								\$0
CRF Funds								\$0
Other								\$0
Total Funding	\$0	\$0	\$0	\$0	\$170,000	\$861,000	\$0	\$1,031,000

PROJECT DESCRIPTION

This project of the design and construction of approximately 3,800 LF of 18-inch water line from South Shore Harbour BPS to FM 2094.

PROJECT JUSTIFICATION

This project is identified in the 2012 water master plan and is required to address high demand pressure issues along FM 2094 and South Shore area.

ADDITIONAL CONSIDERATIONS

	YES	NO	Recurring M&O Costs	Amount
Is the project necessary under State/Federal Mandate, contractual obligation, or City Code?			Personnel/Benefits (50xx)	\$0
			Supplies (51xx)	\$0
Will this project create future Capital Projects?			Repairs/Maintenance (52xx)	\$0
Is your request in the current C I P ?			Services (53xx)	\$0
If yes, has the cost of the project changed?			TOTAL	\$0

Section 8

Water Capital Improvements Plan

8.1 Development of Project Priority

To assist the City with project planning, the recommended CIP projects were separated into categories based on priority. The five priority levels indicate the urgency of a project for optimum impact on the water system. Priority 1 projects are necessary immediately, Priorities 2 and 3 projects are necessary to meet 2028 needs, and Priorities 4 and 5 projects are needed for buildout conditions. Since the projects associated with each timeframe's alternatives are slightly different, the recommended prioritization for each alternative will be presented in the following subsections. We understand the City of League City is pursuing additional surface water from the SEWPP through the City of Houston. Should that plan not come to fruition, it is recommended that League City perform a source water planning study to evaluate and determine alternate sources. All CIP projects are shown in **Figure 8-1**.

8.1.1 Immediate Projects

Priority 1 projects are the most urgent to complete. They have a significant impact on the system's redundancy and take the burden off of the main transmission line leading from SH3 BPS for providing water to the majority of League City.

There are approximately 7 miles of small diameter (1, 2, 3") lines throughout the city. While these smaller diameters did not pose any delivery (pressure and flow) limitations, should these lines require maintenance and repairs in the future we recommend that they be replaced with larger (4 and 6") standardized pipe sizes. These replacements should be determined on a case by case basis.

Figure 8-2 shows the project prioritization for immediate need projects. The individual figures and project descriptions for all CIP projects can be found in **Appendix A**.

Table 8-1 shows the Priority 1 water facility projects recommended for the immediate future.

Table 8-1 Priority 1 Facility Projects for Immediate Future

Project Number	IMMEDIATE PROJECT NAME	COST
1.	36" Waterline SH3 to SSH Booster Station and 16" Waterline SSH BPS to FM 2094	\$14,499,816
2.	Raw Water Reservation from COH ¹	\$1,240,000
Total		\$14,600,00

Note:

1. Annual Cost.

8.1.1.1 36" Waterline SH3 to SSH Booster Station and 16" Waterline SSH BPS to FM 2094

This project consists of approximately 17,000 ft of 36" HDPE pipe and 3,800 LF of PVC 16-inch water line, ROW/easement acquisition, environment assessments, and final route determination. The 36-inch pipeline will connect Hwy 3 booster station with South Shore booster station. The 16-inch water line will run from South Shore Harbour BPS to FM 2094. The 16" water line provides additional flow and pressure capabilities to the South Shore Harbour marina area as well as additional redundancy.

Table 7-2 shows the Priority 1 water pipeline projects recommended for the 2020 scenario with no additional source water.

Project Title		Length (ft)	Diameter (in)	Total Cost
1	36" Line from SH3 Take Point to SSH BS	17,200	36	\$10,930,000
2	Beamer Rd 24" WL Extension	16,000	24	\$1,800,000
Total Cost				\$12,730,000

Table 7-2
Priority 1 Pipeline Projects for 2020 Scenario with No New Water

Table 7-3 shows the Priority 2 water facility projects recommended for the 2020 scenario with no additional source water.

Project Title		Storage Added (MGD)	Pumping Added (gpm)	Total Cost
1	Calder BS Phase I Upgrade	-	1,950	\$5,810,000
2	New East Side Elevated	2	-	\$3,000,000
3	New West Side Elevated Tank	2	-	\$3,000,000
Total Cost				\$11,810,000

Table 7-3
Priority 2 Facility Projects for 2020 Scenario with No New Water

Table 7-4 shows the Priority 2 water pipeline projects recommended for the 2020 scenario with no additional source water.

Project Title		Length (ft)	Diameter (in)	Total Cost
1	18" Line to New West Elevated Storage Tank	1,300	18	\$380,000
2	24" Line Parallel to League City Parkway	2,700	24	\$1,600,000
3	8" Line from Cross Colony to Mary Ln	1,600	8	\$230,000
4	24" Distribution Line - FM518 to Alderwood	3,000	24	\$835,000
5	New Water Lines to the West Side	15,000	24	\$5,610,000
6	Trunk Line from SSH BS to FM2094	3,800	18 1/2	\$700,000
7	Trunk Line from Walker WS to Louisiana	17,500	24	\$4,000,000
8	Trunk Lines along Bay Area Boulevard	23,500	18	\$3,500,000
Total Cost				\$16,855,000

Table 7-4
Priority 2 Pipeline Projects for 2020 Scenario with No New Water