



Woodlands Project Summary - Water

San Jacinto River Authority - Woodlands Division
2019 - 2028 Projects

PAGE No.	PROJECT ID	PROJECT NAME	PREVIOUS BUDGET	2019 ESTIMATE	2020 ESTIMATE	2021 ESTIMATE	2022 ESTIMATE	2023 ESTIMATE	2024 ESTIMATE	2025 ESTIMATE	2026 ESTIMATE	2027 ESTIMATE	2028 ESTIMATE	Total
5	WA19WR	Rehabilitation of Water Well Nos. 25 & 31		\$ 460,000										\$ 460,000
6	WAEST2	Elevated Storage Tank No. 2 Rehabilitation		\$ 100,000	\$ 1,050,000									\$ 1,150,000
7	WAEST1	Elevated Storage Tank No. 1 Rehabilitation			\$ 105,000	\$ 913,000								\$ 1,018,000
8	WA20WR	Rehabilitation of Water Well No. 33			\$ 315,000									\$ 315,000
9	WA21WL	Water Line Renewal				\$ 592,000	\$ 3,258,000							\$ 3,850,000
10	WASCTO	Water System SCADA Tower Replacement				\$ 42,000	\$ 226,000							\$ 268,000
11	WATCPL	Trade Center Water Line Loop to Harper's Landing						\$ 76,000	\$ 422,000					\$ 498,000
12	WA23WL	Water Line Renewal						\$ 1,306,000	\$ 3,592,000	\$ 3,771,000				\$ 8,669,000
13	WA23WR	Rehabilitation of Water Well Nos. 7 & 19						\$ 532,000						\$ 532,000
14	WA25WL	Water Line Renewal								\$ 1,440,000	\$ 3,960,000	\$ 4,158,000		\$ 9,558,000
15	WA25WR	Rehabilitation of Water Well Nos. 9 & 29								\$ 587,000				\$ 587,000
16	WAET5R	Elevated Storage Tank No. 5 Rehabilitation									\$ 1,373,000			\$ 1,373,000
17	WA27WL	Water Line Renewal										\$ 1,588,000	\$ 4,366,000	\$ 5,954,000
18	WA27WR	Rehabilitation of Water Well Nos. 5 & 27										\$ 647,000		\$ 647,000
19	WA2GT1	Water Plant No. 2 Ground Storage Tank No. 1 Replacement										\$ 638,000	\$ 6,692,000	\$ 7,330,000
20	WAET7R	Elevated Storage Tank No. 7 Rehabilitation											\$ 1,178,000	\$ 1,178,000
	TOTALS		\$ -	\$ 560,000	\$ 1,470,000	\$ 1,547,000	\$ 3,484,000	\$ 1,914,000	\$ 4,014,000	\$ 5,798,000	\$ 5,333,000	\$ 7,337,000	\$ 13,916,000	\$ 45,373,000

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION										
Rehabilitation of Water Well Nos. 25 & 31				WA19WR		2019			Woodlands										
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE													
<p>The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.</p> <p>Based upon an evaluation of the 38 water wells, Well Nos. 25 and 31 were identified to have the most immediate need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well Nos. 25 and 31 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.</p> <p>Rehabilitation of the wells will be for maintenance, and will not include increasing capacity.</p>																			
													PROJECT SCHEDULE			DELIVERY		FUNDING	
													Initiate Cons. Selection	June 2018		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M	<input type="checkbox"/> O&M	
PSA/WO Issued:	August 2018		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds	<input type="checkbox"/> Bonds														
Final Proposal Docs:	November 2018		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R	<input checked="" type="checkbox"/> R&R														
Proposals/Bids Received:	December 2018		<input type="checkbox"/> Other	<input type="checkbox"/> Other	<input type="checkbox"/> Other														
Const. Contract to Board:	February 2019																		
Substantial Completion:	October 2019		<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed															
BUDGET *																			
	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028							
Planning/Permitting/PER																			
Engineering/Design	\$ 20,000		\$ 20,000																
Construction	\$ 400,000		\$ 400,000																
CPS, CM&I, and CMT	\$ 40,000		\$ 40,000																
Land Acquisition																			
Equipment Purchase																			
Total	\$ 460,000	\$ -	\$ 460,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							

* Budget includes contingency

PROJECT NAME				PROJECT ID	FISCAL YEAR	DIVISION						
Elevated Storage Tank No. 2 Rehabilitation				WAEST2	2019 - 2020	Woodlands						
PROJECT DESCRIPTION/JUSTIFICATION:					PROJECT MAP/PICTURE							
<p>Elevated Storage Tank No. 2 is a 1,000,000 gallon tank and was constructed in 1982. Based on the Dunham Engineering report completed in 2013, the tank was recoated approximately 15 years ago, and the coating is deteriorating and has reached the end of its useful life. It is recommended to replace the interior and exterior coating systems and perform minor vent and pipe work. A follow-up inspection will be completed in 2019 to verify the rehabilitation work identified in 2013 inspection is still appropriate, or if additional repairs will be necessary.</p> <p>To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.</p> <p>This project is part of a phased asset management approach to continuously rehabilitate elevated storage tanks in the system, to ensure that all the tanks are rehabilitated to maintain reliability and structural integrity over the next 10 years. Other projects as described in WAEST1, WAET5R, and WAET7R will accomplish the goal of keeping the tanks reliable and structurally sound.</p>												
PROJECT SCHEDULE			DELIVERY	FUNDING								
Initiate Cons. Selection	December 2018		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M								
PSA/WO Issued:	February 2019		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds								
Final Proposal Docs:	July 2019		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R								
Proposals/Bids Received:	August 2019		<input type="checkbox"/> Other	<input type="checkbox"/> Other								
Const. Contract to Board:	October 2019											
Substantial Completion:	May 2020		<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed								
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 50,000		\$ 50,000									
Engineering/Design	\$ 50,000		\$ 50,000									
Construction	\$ 950,000			\$ 950,000								
CPS, CM&I, and CMT	\$ 100,000			\$ 100,000								
Land Acquisition												
Equipment Purchase												
Total	\$ 1,150,000	\$ -	\$ 100,000	\$ 1,050,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION						
Elevated Storage Tank No. 1 Rehabilitation				WAEST1		2020 - 2021		Woodlands						
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE								
<p>Elevated Storage Tank No. 1 is a 500,000 gallon tank and was constructed in 1977. Based on the Dunham Engineering report completed in 2013, it is recommended to completely replace the interior and exterior coating systems. A follow-up inspection will be completed in 2019 to verify the rehabilitation work identified in the 2013 inspection is still appropriate, or if additional repairs will be necessary.</p> <p>To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.</p> <p>This project is the third in a phased asset management approach to continuously rehabilitate elevated storage tanks in the system, to ensure that all the tanks are rehabilitated to maintain reliability and structural integrity over the next 10 years. Other projects as described in WAEST2, WAET5R, and WAET7R will accomplish the goal of keeping the tanks reliable and structurally sound.</p>														
PROJECT SCHEDULE				DELIVERY									FUNDING	
Initiate Cons. Selection				2020		<input type="checkbox"/> DBB <input type="checkbox"/> O&M <input type="checkbox"/> CMAR <input type="checkbox"/> Bonds <input checked="" type="checkbox"/> CSP <input checked="" type="checkbox"/> R&R <input type="checkbox"/> Other <input type="checkbox"/> Other								
PSA/WO Issued:				2020										
Final Proposal Docs:				2020										
Proposals/Bids Received:				2020										
Const. Contract to Board:				2021										
Substantial Completion:				2021		<input type="checkbox"/> Capitalized <input checked="" type="checkbox"/> Expensed								
BUDGET *			TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER			\$ 52,500			\$ 52,500								
Engineering/Design			\$ 52,500			\$ 52,500								
Construction			\$ 830,000				\$ 830,000							
CPS, CM&I, and CMT			\$ 83,000				\$ 83,000							
Land Acquisition														
Equipment Purchase														
Total			\$ 1,018,000	\$ -	\$ -	\$ 105,000	\$ 913,000	\$ -						

* Budget includes contingency

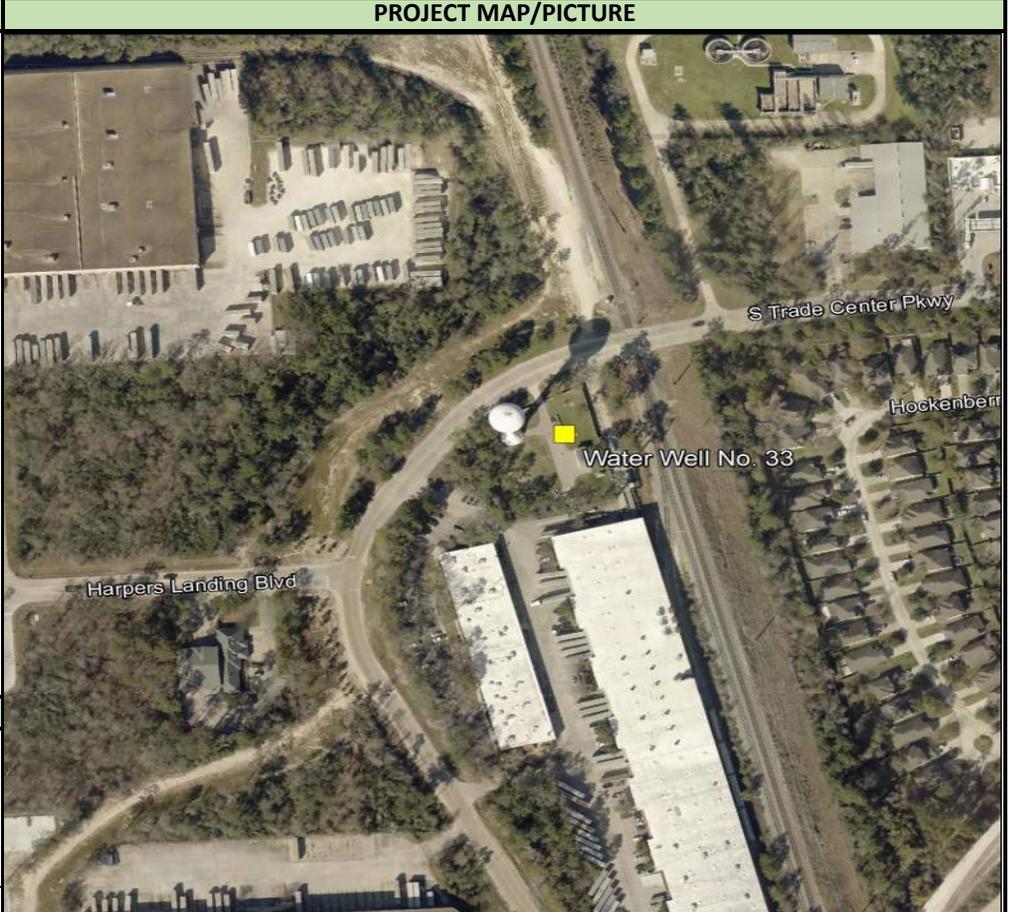
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Water Well No. 33	WA20WR	2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.

Based upon an evaluation of the 38 water wells, Well No. 33 is anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well No. 33 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.

Rehabilitation of the wells will be for maintenance, and will not include increasing capacity.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2020	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2020	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2020	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2020	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2020		
Substantial Completion:	2021	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER												
Engineering/Design	\$ 14,000			\$ 14,000								
Construction	\$ 274,000			\$ 274,000								
CPS, CM&I, and CMT	\$ 27,000			\$ 27,000								
Land Acquisition												
Equipment Purchase												
Total	\$ 315,000	\$ -	\$ -	\$ 315,000	\$ -							

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Line Renewal	WA21WL	2021 - 2022	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The SJRA owns and maintains approximately 120 miles of potable water distribution lines 12-inches and larger diameter in the Woodlands. The existing distribution system contains 47 miles of asbestos cement (AC) lines. Approximately 20 miles of all water lines are more than 40 years old, and the majority of which are made of AC material. Regional best asset management practices suggest that AC water lines have the higher frequency of failure, and average useful life of 45 years. Historically, SJRA has experienced on average 4 failures per year.

Due to the aging water distribution infrastructure and increasing rate of breaks, water line renewal is necessary to reduce the risk of failure or leakage, decrease repair frequencies, lessen the risk of property damage, and improve reliability.

This project is part of a phased asset management approach to continuously replace old AC water lines in the system, to ensure that all the AC lines are replaced within the next 20 years. Other projects as described in WA23WL, WA25WL, and WA27WL will accomplish the goal of replacing all of the AC pipe in the system. The AC lines will be replaced with PVC or HDPE lines with an average expected useful life of more than 80 years. This project includes replacing approximately two (2) miles of AC pipelines throughout the Woodlands.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2021	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2021	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2021	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2022	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2022		
Substantial Completion:	2023	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 296,000				\$ 296,000							
Engineering/Design	\$ 296,000				\$ 296,000							
Construction	\$ 2,962,000					\$ 2,962,000						
CPS, CM&I, and CMT	\$ 296,000					\$ 296,000						
Land Acquisition												
Equipment Purchase												
Total	\$ 3,850,000	\$ -	\$ -	\$ -	\$ 592,000	\$ 3,258,000	\$ -					

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION					
Water System SCADA Tower Replacement				WASCTO		2021-2022		Woodlands					
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE							
<p>This project consists of replacement of five (5) communication towers at various water facilities, as towers begin to deteriorate due to exposure to the elements which cause corrosion to the towers. The towers are necessary to maintain reliable communication between water facilities. The proposed towers will be constructed on existing foundations.</p>													
PROJECT SCHEDULE			DELIVERY		FUNDING								
Initiate Cons. Selection	2022		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2021		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2021		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2022		<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2022												
Substantial Completion:	2022		<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed									
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Planning/Permitting/PER	\$ 21,000				\$ 21,000								
Engineering/Design	\$ 21,000				\$ 21,000								
Construction	\$ 205,000					\$ 205,000							
CPS, CM&I, and CMT	\$ 21,000					\$ 21,000							
Land Acquisition													
Equipment Purchase													
Total	\$ 268,000	\$ -	\$ -	\$ -	\$ 42,000	\$ 226,000	\$ -						

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Trade Center Water Line Loop to Harper's Landing	WATCPL	2023-2024	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Village of Harper's Landing is located north of SH 242 and east of IH-45, and currently is served with potable water pumped from SJRA Water Plant No. 5, located on the west side of IH-45. Between the Trade Center Parkway/Harper's Landing Blvd. intersection and Elevated Storage Tank No. 7 (EST 7), only one water line exists that delivers the water to this neighborhood. In the event of the need for shut-down of this water line, Harper's Landing would have no source of potable water.

A 12-inch water line is proposed to be installed along Trade Center Parkway between Harper's Landing and EST 7, a distance of approximately 470 linear feet. This will complete the loop to the system which will provide another source of potable water to Harper's Landing. Due to multiple utilities in this area, and to minimize disturbance to the route, trenchless installation is proposed for construction.



PROJECT SCHEDULE	DELIVERY	FUNDING
Initiate Cons. Selection 2023	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued: 2023	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs: 2023	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received: 2024	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board: 2024		
Substantial Completion: 2024	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 38,000						\$ 38,000					
Engineering/Design	\$ 38,000						\$ 38,000					
Construction	\$ 384,000							\$ 384,000				
CPS, CM&I, and CMT	\$ 38,000							\$ 38,000				
Land Acquisition												
Equipment Purchase												
Total	\$ 498,000	\$ -	\$ 76,000	\$ 422,000	\$ -	\$ -	\$ -	\$ -				

* Budget includes contingency

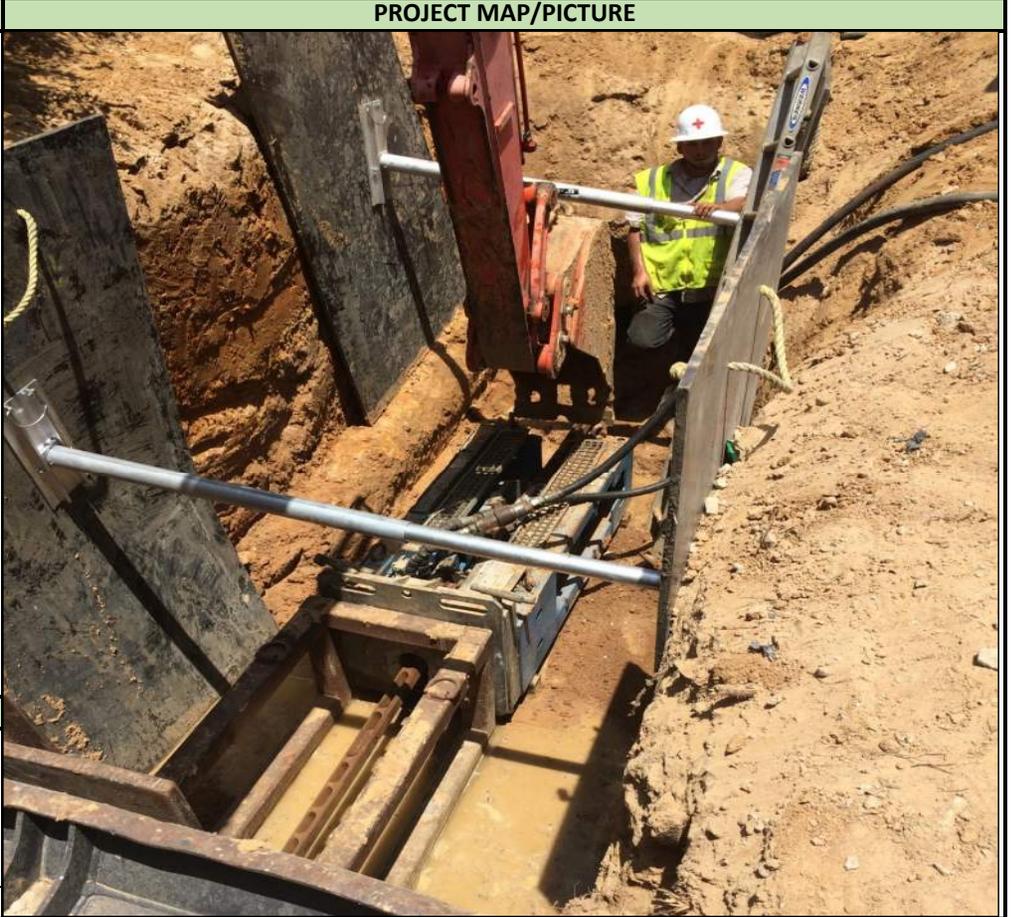
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Line Renewal	WA23WL	2023-2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The SJRA owns and maintains approximately 120 miles of potable water distribution lines 12-inches and larger diameter in the Woodlands. The existing distribution system contains 47 miles of asbestos cement (AC) lines. Approximately 20 miles of all water lines are more than 40 years old, and the majority of which are made of AC material. Regional best asset management practices suggest that AC water lines have the higher frequency of failure, and average useful life of 45 years. Historically, SJRA has experienced on average 4 failures per year.

Due to the aging water distribution infrastructure and increasing rate of breaks, water line renewal is necessary to reduce the risk of failure or leakage, decrease repair frequencies, lessen the risk of property damage, and improve reliability.

This project is part of a phased asset management approach to continuously replace old AC water lines in the system, to ensure that all the AC lines are replaced within the next 20 years. Other projects as described in WA21WL, WA25WL, and WA27WL will accomplish the goal of replacing all of the AC pipe in the system. The AC lines will be replaced with PVC or HDPE lines with an average expected useful life of more than 80 years. This project includes replacing approximately four (4) miles of AC pipelines throughout the Woodlands.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2023	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2023	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2023	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2024	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2024		
Substantial Completion:	2025	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 653,000						\$ 653,000					
Engineering/Design	\$ 653,000						\$ 653,000					
Construction	\$ 6,693,000							\$ 3,265,000	\$ 3,428,000			
CPS, CM&I, and CMT	\$ 670,000							\$ 327,000	\$ 343,000			
Land Acquisition												
Equipment Purchase												
Total	\$ 8,669,000	\$ -	\$ 1,306,000	\$ 3,592,000	\$ 3,771,000	\$ -	\$ -	\$ -				

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Water Well Nos. 7 & 19	WA23WR	2023	Woodlands

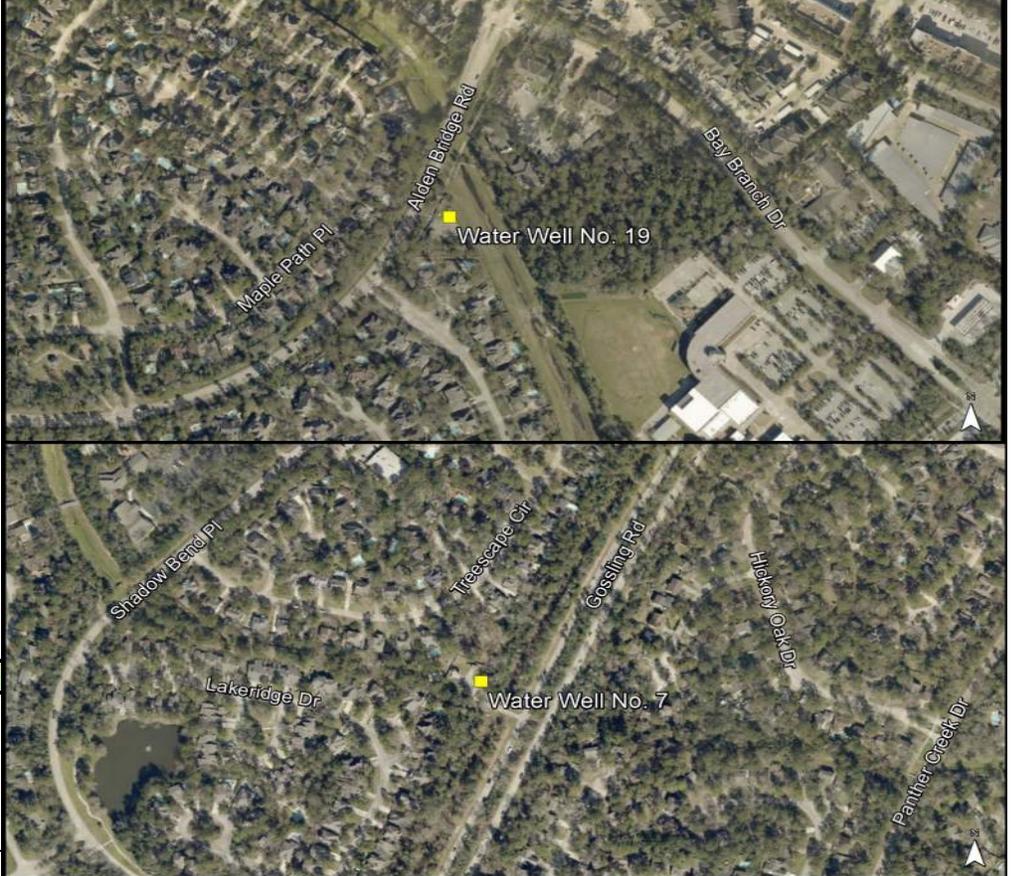
PROJECT DESCRIPTION/JUSTIFICATION:

The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.

Based upon an evaluation of the 38 water wells, Well Nos. 7 and 19 are anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well Nos. 7 and 19 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.

Rehabilitation of the wells will be for maintenance, and will not include increasing capacity.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2023	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2023	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2023	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2023	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2023		
Substantial Completion:	2024	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER												
Engineering/Design	\$ 23,000						\$ 23,000					
Construction	\$ 463,000						\$ 463,000					
CPS, CM&I, and CMT	\$ 46,000						\$ 46,000					
Land Acquisition												
Equipment Purchase												
Total	\$ 532,000	\$ -	\$ 532,000	\$ -								

* Budget includes contingency

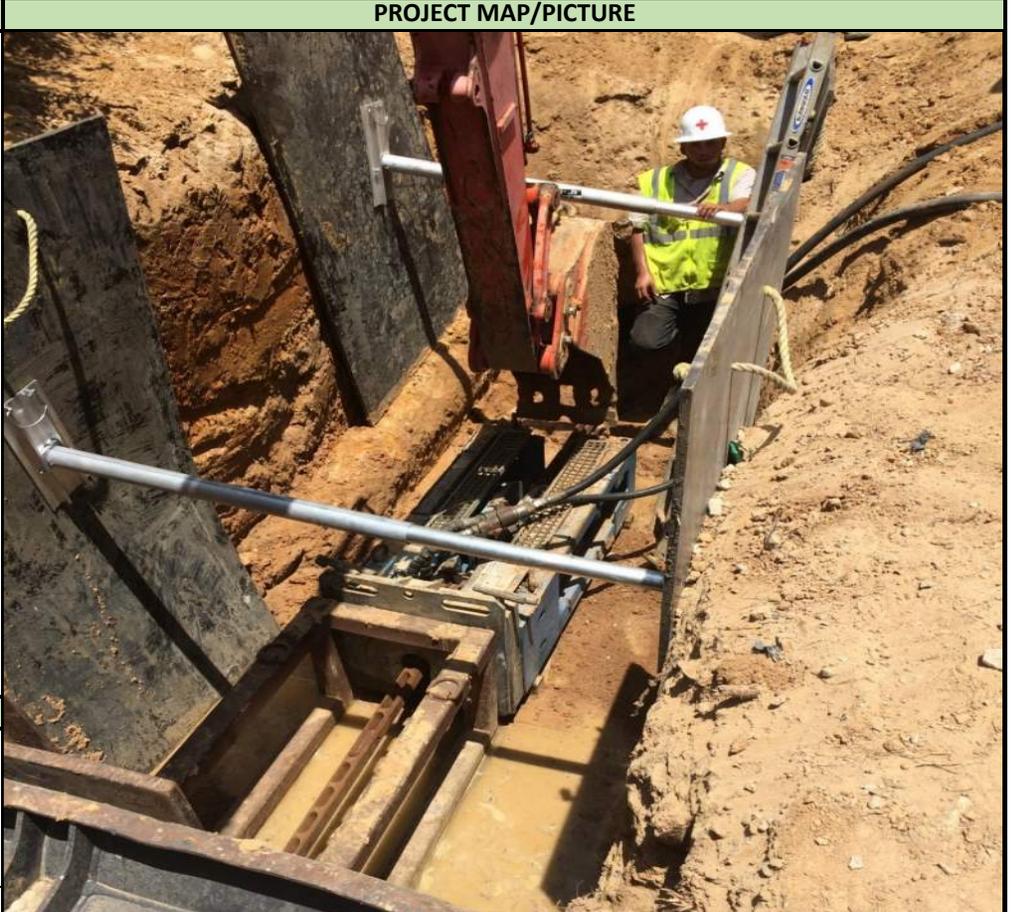
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Line Renewal	WA25WL	2025-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The SJRA owns and maintains approximately 120 miles of potable water distribution lines 12-inches and larger diameter in the Woodlands. The existing distribution system contains 47 miles of asbestos cement (AC) lines. Approximately 20 miles of all water lines are more than 40 years old, and the majority of which are made of AC material. Regional best asset management practices suggest that AC water lines have the higher frequency of failure, and average useful life of 45 years. Historically, SJRA has experienced on average 4 failures per year.

Due to the aging water distribution infrastructure and increasing rate of breaks, water line renewal is necessary to reduce the risk of failure or leakage, decrease repair frequencies, lessen the risk of property damage, and improve reliability.

This project is part of a phased asset management approach to continuously replace old AC water lines in the system, to ensure that all the AC lines are replaced within the next 20 years. Other projects as described in WA21WL, WA23WL, and WA27WL will accomplish the goal of replacing all of the AC pipe in the system. The AC lines will be replaced with PVC or HDPE lines with an average expected useful life of more than 80 years. This project includes replacing approximately four (4) miles of AC pipelines throughout the Woodlands.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2025	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2025	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2025	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2026	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2026		
Substantial Completion:	2027	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 720,000								\$ 720,000			
Engineering/Design	\$ 720,000								\$ 720,000			
Construction	\$ 7,380,000									\$ 3,600,000	\$ 3,780,000	
CPS, CM&I, and CMT	\$ 738,000									\$ 360,000	\$ 378,000	
Land Acquisition												
Equipment Purchase												
Total	\$ 9,558,000	\$ -	\$ 1,440,000	\$ 3,960,000	\$ 4,158,000	\$ -						

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION										
Rehabilitation of Water Well Nos. 9 & 29				WA25WR		2025			Woodlands										
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE													
<p>The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.</p> <p>Based upon an evaluation of the 38 water wells, Well Nos. 9 and 29 are anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well Nos. 9 and 29 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.</p> <p>Rehabilitation of the wells will be for maintenance, and will not include increasing capacity.</p>																			
													PROJECT SCHEDULE			DELIVERY		FUNDING	
													Initiate Cons. Selection	2025		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M	<input type="checkbox"/> O&M	
PSA/WO Issued:	2025		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds	<input type="checkbox"/> Bonds														
Final Proposal Docs:	2025		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R	<input checked="" type="checkbox"/> R&R														
Proposals/Bids Received:	2025		<input type="checkbox"/> Other	<input type="checkbox"/> Other	<input type="checkbox"/> Other														
Const. Contract to Board:	2025																		
Substantial Completion:	2026		<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed	<input checked="" type="checkbox"/> Expensed														
BUDGET *																			
	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028							
Planning/Permitting/PER																			
Engineering/Design	\$ 26,000								\$ 26,000										
Construction	\$ 510,000								\$ 510,000										
CPS, CM&I, and CMT	\$ 51,000								\$ 51,000										
Land Acquisition																			
Equipment Purchase																			
Total	\$ 587,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 587,000	\$ -	\$ -	\$ -							

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION				
Elevated Storage Tank No. 5 Rehabilitation				WAET5R		2026			Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE							
<p>Elevated Storage Tank No. 5 is a 1,000,000 gallon tank and was constructed in 2000. Based on the Dunham Engineering report completed in 2013, the exterior and interior coating systems were replaced in 2015 per the engineer's recommendation. This project (2024) will include recoating of the tank exterior and interior surfaces for maintenance and to continue to protect the exterior and interior from corrosion. An inspection of the tank will be completed in 2024 to identify any additional rehabilitation work.</p> <p>To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.</p>													
PROJECT SCHEDULE			DELIVERY		FUNDING								
Initiate Cons. Selection	2026		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2026		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2026		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2026		<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2026												
Substantial Completion:	2027		<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed									
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Planning/Permitting/PER	\$ 106,000									\$ 106,000			
Engineering/Design	\$ 106,000									\$ 106,000			
Construction	\$ 1,055,000									\$ 1,055,000			
CPS, CM&I, and CMT	\$ 106,000									\$ 106,000			
Land Acquisition													
Equipment Purchase													
Total	\$ 1,373,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,373,000	\$ -	\$ -	

* Budget includes contingency

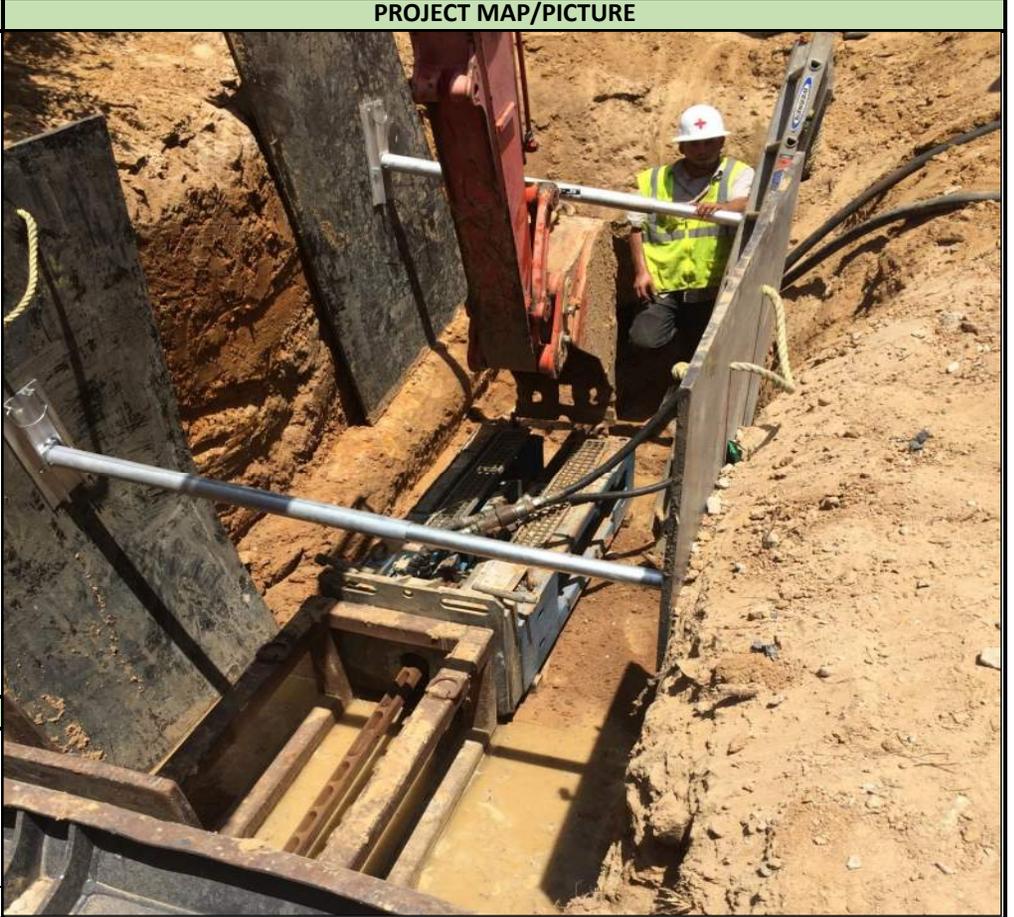
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Line Renewal	WA27WL	2027-2029	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The SJRA owns and maintains approximately 120 miles of potable water distribution lines 12-inches and larger diameter in the Woodlands. The existing distribution system contains 47 miles of asbestos cement (AC) lines. Approximately 20 miles of all water lines are more than 40 years old, and the majority of which are made of AC material. Regional best asset management practices suggest that AC water lines have the higher frequency of failure, and average useful life of 45 years. Historically, SJRA has experienced on average 4 failures per year.

Due to the aging water distribution infrastructure and increasing rate of breaks, water line renewal is necessary to reduce the risk of failure or leakage, decrease repair frequencies, lessen the risk of property damage, and improve reliability.

This project is part of a phased asset management approach to continuously replace old AC water lines in the system, to ensure that all the AC lines are replaced within the next 20 years. Other projects as described in WA21WL, WA23WL, and WA25WL will accomplish the goal of replacing all of the AC pipe in the system. The AC lines will be replaced with PVC or HDPE lines with an average expected useful life of more than 80 years. This project includes replacing approximately four (4) miles of AC pipelines throughout the Woodlands.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2027	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2027	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2028	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2028		
Substantial Completion:	2029	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 794,000										\$ 794,000	
Engineering/Design	\$ 794,000										\$ 794,000	
Construction	\$ 3,969,000											\$ 3,969,000
CPS, CM&I, and CMT	\$ 397,000											\$ 397,000
Land Acquisition												
Equipment Purchase												
Total	\$ 5,954,000	\$ -	\$ 1,588,000	\$ 4,366,000								

* Budget includes contingency

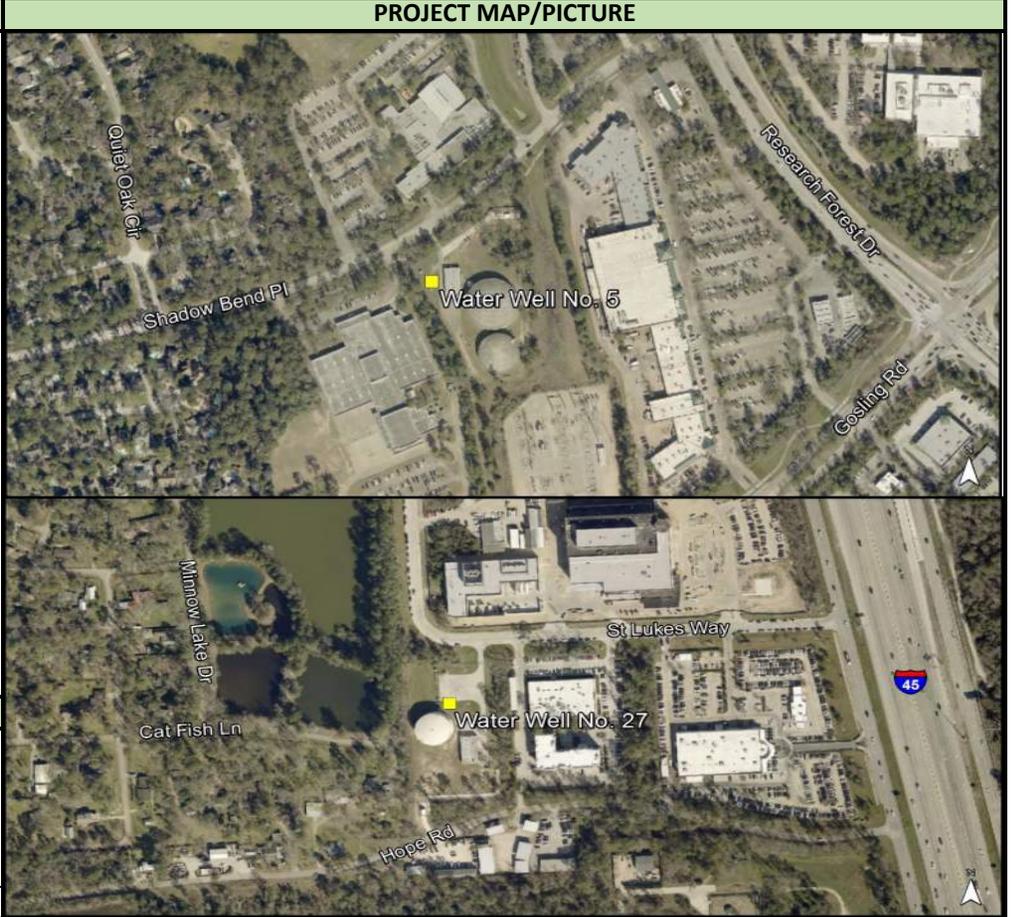
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Water Well Nos. 5 & 27	WA27WR	2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.

Based upon an evaluation of the 38 water wells, Well Nos. 5 and 27 are anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well Nos. 5 and 27 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.

Rehabilitation of the wells will be for maintenance, and will not include increasing capacity.



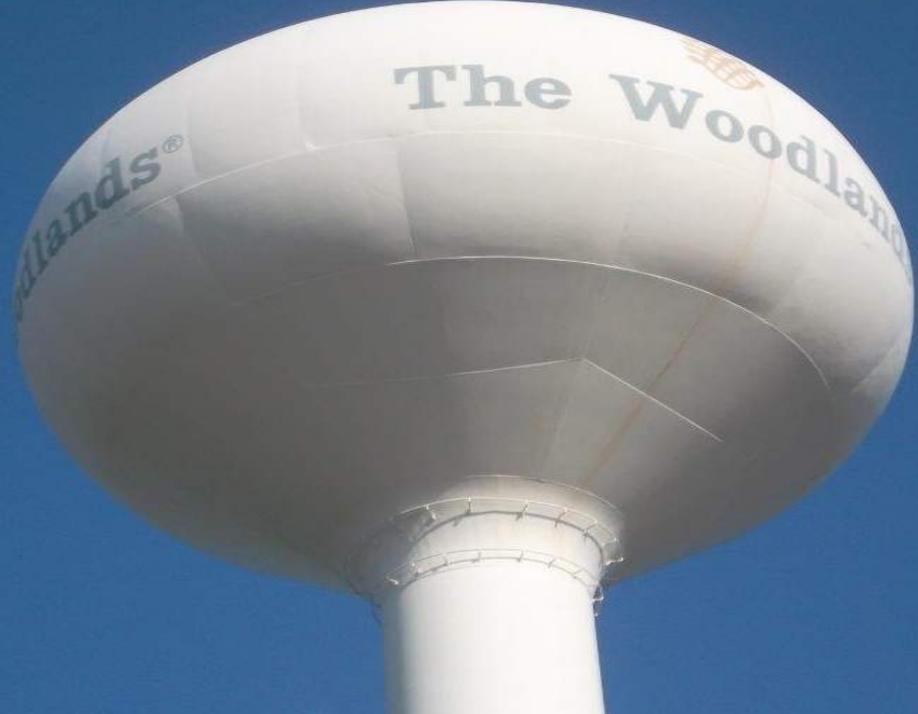
PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2027	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2027	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2027	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2027		
Substantial Completion:	2028	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ -											
Engineering/Design	\$ 28,000										\$ 28,000	
Construction	\$ 563,000										\$ 563,000	
CPS, CM&I, and CMT	\$ 56,000										\$ 56,000	
Land Acquisition	\$ -											
Equipment Purchase	\$ -											
Total	\$ 647,000	\$ -	\$ 647,000	\$ -								

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR				DIVISION		
Water Plant No. 2 Ground Storage Tank No. 1 Replacement				WA2GT1		2027-2028				Woodlands		
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Ground Storage Tank 1 (GST No. 1) at Water Plant 2 is a concrete storage tank with a capacity of 2 million gallons (MG), and was originally constructed in 1982. The typical useful life for concrete ground storage tanks storing potable water is 50 years. GST No. 1 will reach the end of its useful life by year 2032, and should be replaced before then in order to maintain adequate storage capacity and reliable potable water service. Also, in 2017, structural deficiencies were identified during an annual inspection and repairs made.</p> <p>The project will include demolition of the existing 2 MG concrete ground storage tank, construction of a new 2 MG concrete ground storage tank, and replacement of associated piping and appurtenances. Therefore, a condition assesment will be conducted over the next few years to re-assess the tank condition to determine the replacement date.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection	2027		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M								
PSA/WO Issued:	2027		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds								
Final Proposal Docs:	2027		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R								
Proposals/Bids Received:	2027		<input type="checkbox"/> Other	<input type="checkbox"/> Other								
Const. Contract to Board:	2028											
Substantial Completion:	2028		<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed								
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 319,000										\$ 319,000	
Engineering/Design	\$ 319,000										\$ 319,000	
Construction	\$ -											\$ 6,373,000
CPS, CM&I, and CMT	\$ -											\$ 319,000
Land Acquisition	\$ -											
Equipment Purchase	\$ -											
Total	\$ 7,330,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 638,000	\$ 6,692,000

* Budget includes contingency

PROJECT NAME		PROJECT ID		FISCAL YEAR		DIVISION							
Elevated Storage Tank No. 7 Rehabilitation		WAET7R		2028		Woodlands							
PROJECT DESCRIPTION/JUSTIFICATION:				PROJECT MAP/PICTURE									
<p>Elevated Storage Tank No. 7 is a 500,000 gallon tank and was constructed in 1977. Based on the Dunham Engineering report completed in 2013, the exterior and interior coating systems were replaced in 2016 per the engineer's recommendation. A follow-up inspection of the tank will be completed in 2027 to identify the need and scope for any additional rehabilitation work. Anticipated rehabilitation of the tank includes recoating of the tank exterior and interior surfaces for maintenance and to continue to protect the exterior and interior from corrosion.</p> <p>To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.</p>													
PROJECT SCHEDULE		DELIVERY										FUNDING	
Initiate Cons. Selection	2028	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M										
PSA/WO Issued:	2028	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds										
Final Proposal Docs:	2028	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R										
Proposals/Bids Received:	2028	<input type="checkbox"/> Other	<input type="checkbox"/> Other										
Const. Contract to Board:	2028												
Substantial Completion:	2029	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed										
BUDGET *		TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 91,000												\$ 91,000
Engineering/Design	\$ 91,000												\$ 91,000
Construction	\$ 905,000												\$ 905,000
CPS, CM&I, and CMT	\$ 91,000												\$ 91,000
Land Acquisition													
Equipment Purchase													
Total	\$ 1,178,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,178,000

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Gravity Main Rehabilitation - Segments 35, 50, and 50A	WW17GR	2017 - 2019	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation or renewal to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.

The following reinforced concrete pipe (RCP) lines are planned for rehabilitation: The northern portion of Segment 35 (3,198 linear feet of 18-inch RCP) in Grogans Point, Segment 50 (752 linear feet of 36-inch RCP) along Leeward Cove Drive west of Lake Woodlands, and Segment 50A (530 linear feet of 24-inch ductile iron) underneath Lake Woodlands. These segments consist of approximately 4,480 linear feet of rehabilitation.

This project is part of a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW21GR, WW23GR, WW24GR, and WW27GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	Completed	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	February 2017	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	April 2018	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	June 2018	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	August 2018		
Substantial Completion:	May 2019	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER												
Engineering/Design	\$ -											
Construction	\$ 1,002,500	\$ 600,000	\$ 402,500									
CPS, CM&I, and CMT	\$ 100,000		\$ 100,000									
Land Acquisition												
Equipment Purchase												
Total	\$ 1,102,500	\$ 600,000	\$ 502,500	\$ -								

* Budget includes contingency

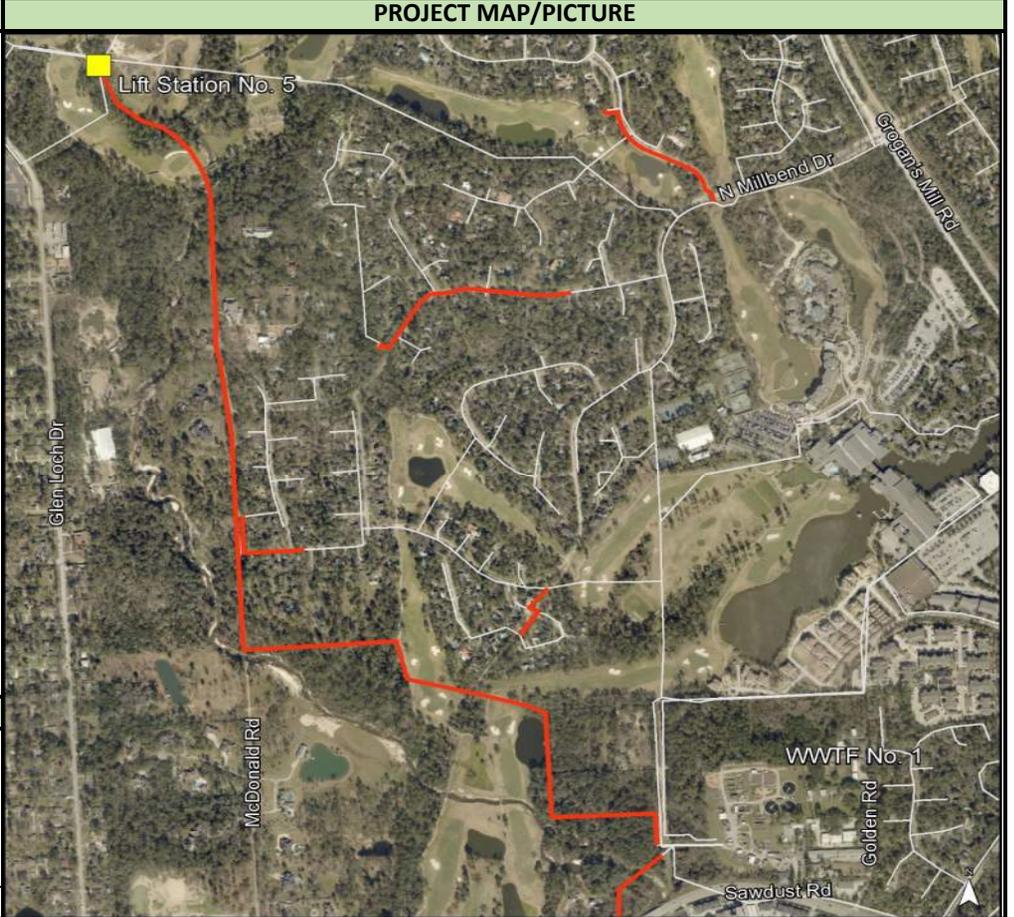
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 5 Force Main Replacement	WWFM5R	2018 - 2019	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some parts of the existing collection system have been in service in excess of 40 years. The aging system requires rehabilitation or replacement to avoid collection system failure. Through the Asset Management Program, specific force mains were identified as high risk for failure and were evaluated for rehabilitation or replacement.

Based on a risk analysis of all force mains, the force main associated with Lift Station No. 5 was identified as a candidate for replacement based on pipe material, age, and likelihood and consequence of failure. In 2014, a SmartBall condition assessment was performed for this force main which showed several areas of corrosion throughout the force main. Constructed in the early 1980's, this force main consists of approximately 8,100 linear feet of 24-inch cement mortar lined ductile iron pipe, all of which is recommended for replacement.

Replacement of portions of the force main were previously packaged with rehabilitation of Lift Station No. 5. The force main portion of the project has been removed and will be re-packaged and re-solicited as a stand-alone project.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	July 2017	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	September 2017	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	May 2018	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	July 2018	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	September 2018		
Substantial Completion:	August 2019	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 344,000	\$ 344,000										
Engineering/Design	\$ 410,000	\$ 410,000										
Construction	\$ 4,100,000		\$ 4,100,000									
CPS, CM&I, and CMT	\$ 410,000		\$ 410,000									
Land Acquisition												
Equipment Purchase												
Total	\$ 5,264,000	\$ 754,000	\$ 4,510,000	\$ -								

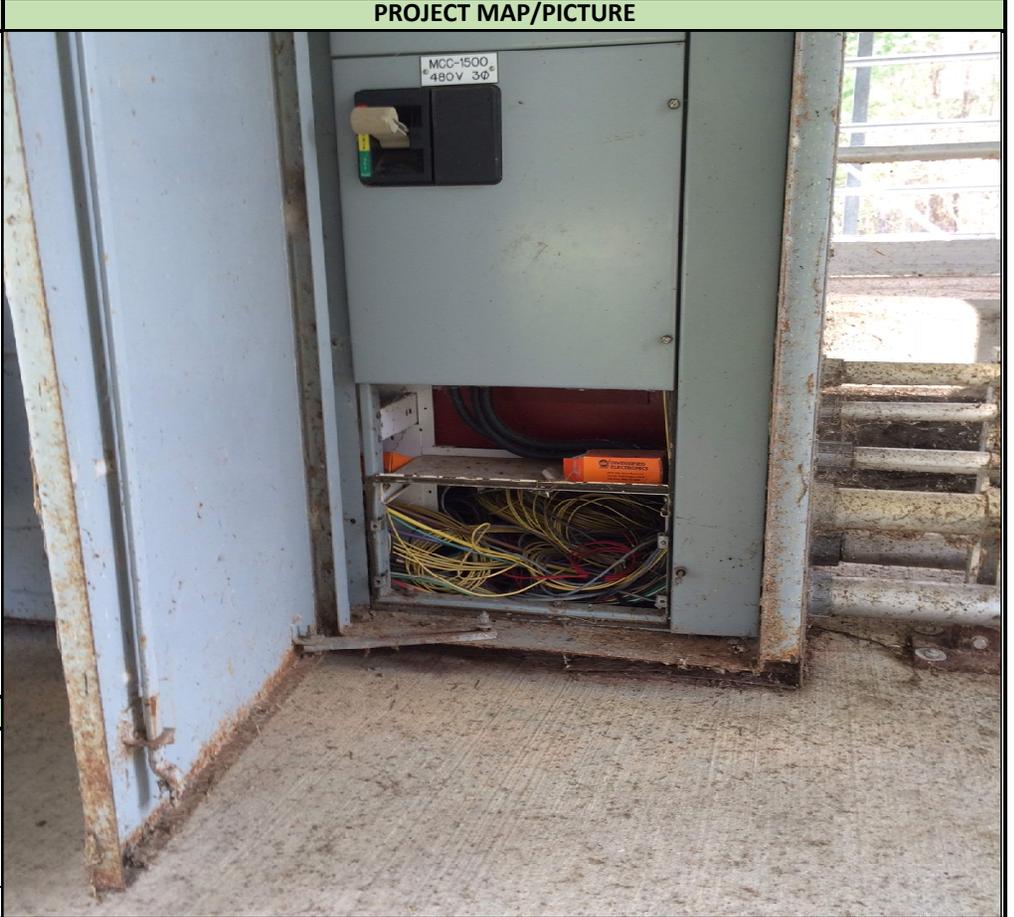
* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION								
Lift Stations No. 13 Rehabilitation				WW19LS		2019-2020		Woodlands								
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE										
<p>Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, rehabilitation of Lift Station No. 13 constructed in 1984, is recommended. Lift Station No. 13 (located on Flintridge Drive) is showing signs of deterioration, including degradation of concrete structure due to corrosive gas.</p> <p>For Lift Station No. 13, the anticipated rehabilitation includes coating the wet well, as well as structural and mechanical improvements. This rehabilitation also will include converting from a dry well to a submersible station, and installation of a new control panel and a natural gas generator on a raised platform to allow for continuous use during flood events where power may be interrupted. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained 10-15 years with continued preventative maintenance.</p>																
PROJECT SCHEDULE				DELIVERY		FUNDING										
Initiate Cons. Selection		August 2018		<input type="checkbox"/> DBB		<input type="checkbox"/> O&M										
PSA/WO Issued:		December 2018		<input type="checkbox"/> CMAR		<input type="checkbox"/> Bonds										
Final Proposal Docs:		July 2019		<input checked="" type="checkbox"/> CSP		<input checked="" type="checkbox"/> R&R										
Proposals/Bids Received:		August 2019		<input type="checkbox"/> Other		<input type="checkbox"/> Other										
Const. Contract to Board:		October 2019		<input type="checkbox"/> Capitalized		<input checked="" type="checkbox"/> Expensed										
Substantial Completion:		August 2020														
BUDGET *				TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Planning/Permitting/PER				\$ 133,000		\$ 133,000										
Engineering/Design				\$ 133,000		\$ 133,000										
Construction				\$ 1,327,000			\$ 1,327,000									
CPS, CM&I, and CMT				\$ 133,000			\$ 133,000									
Land Acquisition																
Equipment Purchase																
Total				\$ 1,726,000	\$ -	\$ 266,000	\$ 1,460,000	\$ -								

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Plant Process Water MCC	WW2MCC	2019-2021	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:
 The replacement of Motor Control Center (MCC) for the Plant Process Water (PPW) area of Wastewater Treatment Facility No. 2 is needed due to age (was installed in 1993) and exterior / interior corrosion. The replacement of the existing MCC will prevent eventual electrical device failures and treatment process failures resulting in non-compliance with the TCEQ discharge permit.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	July 2018	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	October 2018	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	June 2019	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	July 2019	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	September 2019		
Substantial Completion:	March 2020	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER												
Engineering/Design	\$ 64,000		\$ 64,000									
Construction	\$ 322,000			\$ 322,000								
CPS, CM&I, and CMT	\$ 32,000			\$ 32,000								
Land Acquisition												
Equipment Purchase												
Total	\$ 418,000	\$ -	\$ 64,000	\$ 354,000	\$ -							

* Budget includes contingency

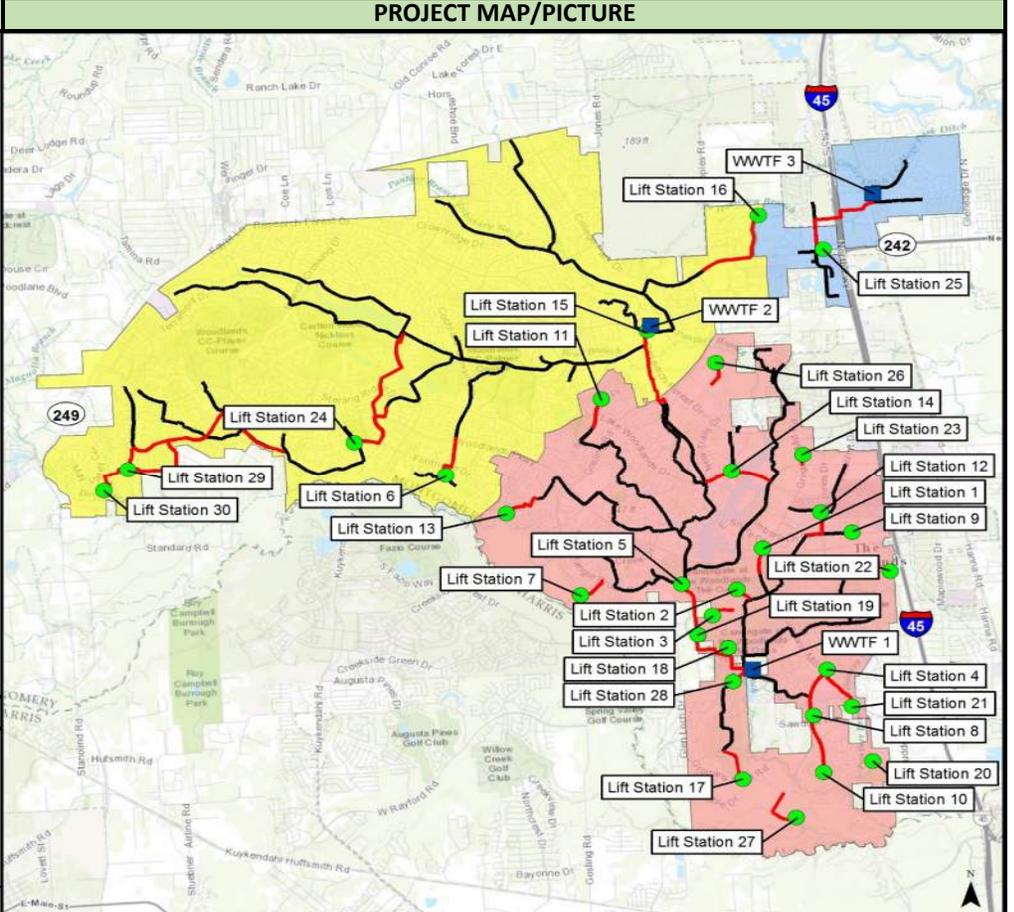
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Sanitary Sewer Evaluation Survey and Flow Monitoring	WWSSES	2019-2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

A Sanitary Sewer Evaluation Survey (SSES) is needed to evaluate the combined retail and wholesale wastewater collection system, with a focus on identifying areas with excessive infiltration and inflow (I&I). Measurements will be taken for a minimum of 9 months of flow data during dry weather and wet weather conditions. This data, and the previously adopted planning criteria, will also assist in re-calibrating the wastewater collection system model as is needed from time to time.

The project will include implementation of a multi-year SSES, including extensive flow monitoring of the combined retail and wholesale system, and analysis of flow monitoring and rainfall data. In addition, permanent flow monitors will be installed during the second year of the program, which will be utilized for the foreseeable future to monitor flows in the wholesale collection system.

The cost associated with this SSES and flow monitoring project is for the wholesale system only, and does not include targeted flow monitoring of the retail system.



PROJECT SCHEDULE	DELIVERY	FUNDING
Initiate Cons. Selection	June 2018	<input type="checkbox"/> DBB <input type="checkbox"/> O&M
PSA/WO Issued:	October 2018	<input type="checkbox"/> CMAR <input type="checkbox"/> Bonds
Final Proposal Docs:	N/A	<input type="checkbox"/> CSP <input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	N/A	<input checked="" type="checkbox"/> Other <input type="checkbox"/> Other
Const. Contract to Board:	N/A	<input type="checkbox"/> Capitalized <input checked="" type="checkbox"/> Expensed
Substantial Completion:	August 2020	

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 1,510,000		\$ 502,000	\$ 1,008,000								
Engineering/Design												
Construction												
CPS, CM&I, and CMT												
Land Acquisition												
Equipment Purchase					\$ 131,000	\$ 138,000	\$ 145,000	\$ 152,000	\$ 160,000	\$ 168,000	\$ 176,000	\$ 185,000
Total	\$ 2,765,000	\$ -	\$ 502,000	\$ 1,008,000	\$ 131,000	\$ 138,000	\$ 145,000	\$ 152,000	\$ 160,000	\$ 168,000	\$ 176,000	\$ 185,000

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 and WWTF No. 3 Generator Replacement	WW23GR	2019-2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

At Wastewater Treatment Facility No. 2, the 1,100 kW diesel generator which was installed in 1998. The generator is approaching the end of its useful life and experiencing frequent mechanical issues. Extensive corrosion has also been observed in the housing. This project will replace the generator with one of similar size and fuel source. This generator is the sole source of backup power.

The 500 kW natural gas standby generator at Wastewater Treatment Facility No. 3, which was installed in 2006, is in need of replacement due to frequent maintenance issues and its inefficient operation. Diesel generators tend to be smaller in size and cost less than natural gas generators of equal power. This generator is the sole source of backup power.

Replacement generators will be sized in accordance with current and future capacities at the wastewater treatment facilities based on the Sixth and Final Accounting.



PROJECT SCHEDULE	DELIVERY	FUNDING
Initiate Cons. Selection	N/A	<input type="checkbox"/> DBB <input type="checkbox"/> O&M
PSA/WO Issued:	N/A	<input type="checkbox"/> CMAR <input type="checkbox"/> Bonds
Final Proposal Docs:	October 2018	<input type="checkbox"/> CSP <input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	November 2018	<input checked="" type="checkbox"/> Other <input type="checkbox"/> Other
Const. Contract to Board:	January 2019	Equipment
Substantial Completion:	August 2020	<input checked="" type="checkbox"/> Capitalized <input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER												
Engineering/Design	\$ -											
Construction	\$ -											
CPS, CM&I, and CMT	\$ -											
Land Acquisition												
Equipment Purchase			\$ 631,000	\$ 132,000								
Total	\$ 763,000	\$ -	\$ 631,000	\$ 132,000	\$ -							

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Emergency Repair Service Center	WWERSC	2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

This project is for the construction of a metal building, tentatively sized at 40' x 80' with a 20' x 50' shed, adjacent to Wastewater Treatment Facility (WWTF) No. 1. The purpose of the building is for the following: proper and secure storage of repair materials for pipelines, storage of rolling stock, manhole repair stock, and separate secure area for SCADA / I&C stock. Currently, repair materials and equipment are stored in multiple locations around WWTF No. 1 site. Some of these materials, due to size, are being stored outside which reduces the lifespan of the material due to composition breakdown with UV exposure. Rolling stock is also stored outside in the elements, reducing its service life.

The project also includes paving, most likely reinforced concrete, for a driveway and additional parking.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	June 2019	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	September 2019	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	December 2019	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	February 2020	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	April 2020		
Substantial Completion:	October 2020	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER												
Engineering/Design	\$ 10,000			\$ 10,000								
Construction	\$ 509,000			\$ 509,000								
CPS, CM&I, and CMT	\$ 10,000			\$ 10,000								
Land Acquisition												
Equipment Purchase												
Total	\$ 529,000	\$ -	\$ -	\$ 529,000	\$ -							

* Budget includes contingency

PROJECT NAME				PROJECT ID	FISCAL YEAR	DIVISION						
WWTF No. 2 Tertiary Filter Improvements (2nd Filter)				WW02FR	2020-2021	Woodlands						
PROJECT DESCRIPTION/JUSTIFICATION:					PROJECT MAP/PICTURE							
<p>Wastewater Treatment Facility (WWTF) No. 2 utilizes tertiary filters to treat effluent prior to disinfection. Filter Nos. 1 and 2 are sand filters, while Filter No. 3 was replaced with a new cloth media filter in 2016. The existing sand filters have been in service since the plant was expanded in 2006, and have experienced performance and hydraulic flow issues which limit wastewater flows through WWTF No. 2. This project will replace one of the remaining two sand filters with a cloth media filter which will eliminate the performance and hydraulic issues with the filter. Additionally, the typical useful life for sand filters is 15-25 years, so the filters will be nearing the end of their useful service life.</p>												
PROJECT SCHEDULE			DELIVERY	FUNDING								
Initiate Cons. Selection	2020	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2020	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2020	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2020	<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2021											
Substantial Completion:	2022	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed									
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 245,000			\$ 245,000								
Engineering/Design	\$ 245,000			\$ 245,000								
Construction	\$ 2,446,000				\$ 2,446,000							
CPS, CM&I, and CMT	\$ 245,000				\$ 245,000							
Land Acquisition												
Equipment Purchase												
Total	\$ 3,181,000	\$ -	\$ -	\$ 490,000	\$ 2,691,000	\$ -						

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Gravity Main Rehabilitation	WW21GR	2021-2023	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation or renewal to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.

The following Acrylonitrile-Butadiene-Styrene (ABS), ductile iron (DI), vitrified clay pipe (VCP), and reinforced concrete pipe (RCP) lines are planned for rehabilitation: Segment 43 (2,107 linear feet of 15-inch ABS); Segment 48 (3,487 linear feet of 42-inch DI) starting in The Cove subdivision and extending south across Woodlands Parkway, terminating at Lift Station No. 5; Segment 65 (3,309 linear feet of 24-inch DI) in the West Isle subdivision; Segment 68 (66 linear feet of 18-inch VCP); and Segment 73 (97 linear feet of 18-inch RCP) terminating at WWTF No. 1. These segments consist of approximately 9,066 linear feet of rehabilitation. However, the results of the sanitary sewer evaluation survey (SSES) and flow monitoring performed in FY2019-2020 may modify the wastewater line rehabilitation prioritization, resulting in other wastewater lines being rehabilitated.

This project is part of a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW17GR, WW23GR, WW24GR, and WW27GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2021	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2021	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2021	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2021	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2022		
Substantial Completion:	2023	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 491,000				\$ 491,000							
Engineering/Design	\$ 491,000				\$ 491,000							
Construction	\$ 5,029,000					\$ 2,453,000	\$ 2,576,000					
CPS, CM&I, and CMT	\$ 503,000					\$ 245,000	\$ 258,000					
Land Acquisition												
Equipment Purchase												
Total	\$ 6,514,000	\$ -	\$ -	\$ -	\$ 982,000	\$ 2,698,000	\$ 2,834,000	\$ -				

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION				
Forcemain Renewal - LS Nos. 7 and 11				WW22FM		2022-2023		Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Some parts of the existing collection system have been in service for over 40 years. The aging system requires renewal to avoid collection system failure. Through the Asset Management Program, specific force mains were identified as high risk for failure and were evaluated for rehabilitation or replacement.</p> <p>Based on a risk analysis of all force mains, including age, pipe material and likelihood of failure, the force mains associated with Lift Station Nos. 7 and 11 were identified as candidates for rehabilitation or replacement. The Lift Station No. 7 force main was constructed in 1978 and the Lift Station No. 11 force main was constructed in 1983.</p> <p>The Preliminary Engineering Report (PER) conducted in 2015 recommended the replacement of the force main for Lift Station No. 7, which consists of approximately 1,700 linear feet of 10-inch ductile iron pipe, and the force main for Lift Station No. 11, which consists of approximately 1,900 linear feet of 10-inch ductile iron pipe. The PER indicated that these two force mains were good candidates for replacement based on heavy corrosion visible at the downstream manhole.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection	2022	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2022	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2022	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2022	<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2023											
Substantial Completion:	2023	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed									
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 115,000					\$ 115,000						
Engineering/Design	\$ 115,000					\$ 115,000						
Construction	\$ 1,152,000						\$ 1,152,000					
CPS, CM&I, and CMT	\$ 115,000						\$ 115,000					
Land Acquisition												
Equipment Purchase												
Total	\$ 1,497,000	\$ -	\$ -	\$ -	\$ -	\$ 230,000	\$ 1,267,000	\$ -				

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Stations No. 1 and No. 8 Rehabilitation	WW22LS	2022 - 2023	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, rehabilitation of Lift Station No. 1, constructed in 1973, and No. 8, constructed in 1978, are recommended. Lift Station No. 1 (located near Grogans Mill and Woodlands Parkway) and Lift Station No. 8 (located near Sawmill Road and Sawdust Road) are showing signs of deterioration, including degradation of concrete structures due to corrosive sewer gases.

At Lift Station No. 1, the anticipated rehabilitation will include coating the wet well, replacing piping and valves, and electrical improvements. At Lift Station No. 8, the anticipated rehabilitation will include recoating the wet well, replacing pumps, replacing piping and valves, electrical improvements, and site improvements. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained with continued preventative maintenance.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2022	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2022	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2022	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2022	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2023		
Substantial Completion:	2023	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 92,000					\$ 92,000						
Engineering/Design	\$ 92,000					\$ 92,000						
Construction	\$ 915,000						\$ 915,000					
CPS, CM&I, and CMT	\$ 92,000						\$ 92,000					
Land Acquisition												
Equipment Purchase												
Total	\$ 1,191,000	\$ -	\$ -	\$ -	\$ -	\$ 184,000	\$ 1,007,000	\$ -				

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION				
WWTF No. 1 Clarifer Rehabilitation				WW01CR		2022-2023		Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Two clarifiers at Wastewater Treatment Facility (WWTF) No. 1 were installed in 1982, and one clarifier was installed in the mid-1990's. The existing metal components are beginning to show signs of corrosion, however, the corrosion is currently being monitored. Typical useful life for wastewater treatment facility mechanical equipment is 20 years. The mechanical equipment in two of the clarifiers is nearing the end of its useful life, and will be evaluated for replacement as part of this project.</p> <p>The project includes replacement of the mechanical components of Clarifier Nos. 1 and 2 including clarifier mechanisms, weirs and baffles, weir cleaning brushes, electrical, and instrumentation. The stilling well of Clarifier No. 3 will also be replaced.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection	2022	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2022	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2022	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2023	<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2023	<input type="checkbox"/> Capitalized <input checked="" type="checkbox"/> Expensed										
Substantial Completion:	2023											
BUDGET *												
TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Planning/Permitting/PER	\$ 168,000				\$ 168,000							
Engineering/Design	\$ 168,000				\$ 168,000							
Construction	\$ 1,679,000					\$ 1,679,000						
CPS, CM&I, and CMT	\$ 168,000					\$ 168,000						
Land Acquisition												
Equipment Purchase												
Total	\$ 2,183,000	\$ -	\$ -	\$ -	\$ -	\$ 336,000	\$ 1,847,000	\$ -	\$ -	\$ -	\$ -	

* Budget includes contingency

PROJECT NAME			PROJECT ID		FISCAL YEAR		DIVISION											
Gravity Main Rehabilitation			WW23GR		2023-2024		Woodlands											
PROJECT DESCRIPTION/JUSTIFICATION:					PROJECT MAP/PICTURE													
<p>Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.</p> <p>The following ductile iron (DI) lines that run along the north side of the Bear Branch Reservoir are planned for rehabilitation: Segment 2 (4,663 linear feet of 20-inch DI); and Segment 3 (2,046 linear feet of 24-inch DI). These segments consist of approximately 6,709 linear feet of rehabilitation. However, the results of the sanitary sewer evaluation survey (SSES) and flow monitoring performed in FY2019-2020 may modify the wastewater line rehabilitation prioritization, resulting in other wastewater lines being rehabilitated.</p> <p>This project is part of a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW17GR, WW21GR, WW24GR, and WW27GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.</p>																		
													PROJECT SCHEDULE		DELIVERY		FUNDING	
													Initiate Cons. Selection	2023	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M		
PSA/WO Issued:	2023	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds															
Final Proposal Docs:	2023	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R															
Proposals/Bids Received:	2023	<input type="checkbox"/> Other	<input type="checkbox"/> Other															
Const. Contract to Board:	2024																	
Substantial Completion:	2024	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed															
BUDGET *		TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028					
Planning/Permitting/PER		\$ 249,000						\$ 249,000										
Engineering/Design		\$ 249,000						\$ 249,000										
Construction		\$ 2,493,000							\$ 2,493,000									
CPS, CM&I, and CMT		\$ 249,000							\$ 249,000									
Land Acquisition																		
Equipment Purchase																		
Total		\$ 3,240,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 498,000	\$ 2,742,000	\$ -	\$ -	\$ -	\$ -					

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION				
Forcemain Renewal - LS Nos. 8, 9, 10, & 21				WW23FM		2023-2024		Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Some aging components of the existing collection system have been in service for over 40 years and will require renewal to avoid collection system failure. Through the Asset Management Program, specific force mains were identified as high risk for failure and will be evaluated for rehabilitation or replacement.</p> <p>Based on a risk analysis of all force mains, the force mains associated with Lift Station Nos. 8, 9, 10, and 21 were identified as potential candidates for replacement due to age, pipe material and likelihood of failure. These force mains consist of: Lift Station No. 8 approximately 600 linear feet of 4-inch ductile iron pipe; Lift Station No. 9 approximately 414 linear feet of 12-inch ductile iron pipe; Lift Station No. 10 approximately 4,900 linear feet of 12-inch ductile iron pipe; and Lift Station No. 21 approximately 2,500 linear feet of 6-inch ductile iron pipe.</p> <p>The Preliminary Engineering Report (PER) conducted in 2015 indicated that the condition of these force mains was better than others in the SJRA system, and were not in immediate need of replacement. However based on observed corrosion of similar ductile iron force mains in the SJRA system, these force mains should be reinspected. Upon reinspection, if corrosion has progressed, these force mains should be replaced.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection	2023	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2023	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2023	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2024	<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2024	<input type="checkbox"/> Capitalized <input checked="" type="checkbox"/> Expensed										
Substantial Completion:	2024											
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 495,000						\$ 495,000					
Engineering/Design	\$ 495,000						\$ 495,000					
Construction	\$ 4,948,000							\$ 4,948,000				
CPS, CM&I, and CMT	\$ 495,000							\$ 495,000				
Land Acquisition												
Equipment Purchase												
Total	\$ 6,433,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 990,000	\$ 5,443,000	\$ -	\$ -	\$ -	\$ -

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION				
WWTF No. 1 Rehabilitation of Lift Stations				WWF1LS		2024-2025		Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Wastewater Treatment Facility (WWTF) No. 1, Lift Station No. 1 was constructed in 1975 and Lift Station No. 2 was constructed in 1982. After a visual inspection of the two existing lift stations at WWTF No. 1 by SJRA staff, it was found that Lift Station No. 1 was in fair/good condition, however Lift Station No. 2's wet well concrete structures display corrosion and should be repaired and coated to prevent additional corrosion in the future. Additionally, mechanical ventilation and odor control may be included as further means for corrosion reduction. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained with continued preventative maintenance.</p> <p>The anticipated rehabilitation may include conversion of one of the lift stations to a submersible lift station, electrical improvements, valve and pump replacement, and other repairs/improvements as defined in the Preliminary Engineering Report.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection	2024	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2024	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2024	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2025	<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2025											
Substantial Completion:	2025	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed									
BUDGET *												
TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Planning/Permitting/PER	\$ 277,000						\$ 277,000					
Engineering/Design	\$ 277,000						\$ 277,000					
Construction	\$ 2,767,000							\$ 2,767,000				
CPS, CM&I, and CMT	\$ 277,000							\$ 277,000				
Land Acquisition												
Equipment Purchase												
Total	\$ 3,598,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 554,000	\$ 3,044,000	\$ -	\$ -	\$ -	

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION				
WWTF No. 2 Lift Station Pumping Improvements				WW02LS		2024-2025		Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, an increase in the firm pumping capacity of the influent lift station at Wastewater Treatment Facility (WWTF) No. 2 is needed.</p> <p>The project includes the expansion of the firm pumping capacity from 15.6 MGD to 23.1 MGD. The improvements include the replacement of four influent pumps with larger units, as well as replacement of riser and discharge piping.</p>												
PROJECT SCHEDULE				DELIVERY		FUNDING						
Initiate Cons. Selection		2024		<input type="checkbox"/> DBB		<input type="checkbox"/> O&M						
PSA/WO Issued:		2024		<input type="checkbox"/> CMAR		<input type="checkbox"/> Bonds						
Final Proposal Docs:		2024		<input checked="" type="checkbox"/> CSP		<input checked="" type="checkbox"/> R&R						
Proposals/Bids Received:		2025		<input type="checkbox"/> Other		<input type="checkbox"/> Other						
Const. Contract to Board:		2025										
Substantial Completion:		2025		<input checked="" type="checkbox"/> Capitalized		<input type="checkbox"/> Expensed						
BUDGET *												
	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 379,000							\$ 379,000				
Engineering/Design	\$ 379,000							\$ 379,000				
Construction	\$ 3,791,000								\$ 3,791,000			
CPS, CM&I, and CMT	\$ 379,000								\$ 379,000			
Land Acquisition												
Equipment Purchase												
Total	\$ 4,928,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 758,000	\$ 4,170,000	\$ -	\$ -	\$ -

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION				
Forcemain Renewal - LS Nos. 1, 13, 14, & 19				WW24FM		2024-2025		Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Some aging components of the existing collection system have been in service for over 40 years and will require renewal to avoid collection system failure. Through the Asset Management Program, specific force mains were identified as high risk for failure and will be evaluated for rehabilitation or replacement.</p> <p>Based on a risk analysis of all force mains, the force mains associated with Lift Station Nos. 1, 13, 14, and 19 were identified as candidates for replacement due to age, pipe material and likelihood of failure. These force mains consist of: Lift Station No. 1 approximately 1,663 linear feet of 12-inch cast iron pipe, Lift Station No. 13 approximately 2,432 linear feet of 12-inch ductile iron pipe, Lift Station No. 14 approximately 1,775 linear feet of 12-inch ductile iron pipe, and Lift Station No. 19 approximately 646 linear feet of 4-inch ductile iron pipe.</p> <p>Based on observed corrosion of similar ductile iron force mains in the SJRA system, these force mains should be inspected. Upon inspection, if severe corrosion is evident, these force mains should be replaced.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection	2024	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2024	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2024	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2025	<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2025											
Substantial Completion:	2026	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed									
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 293,000							\$ 293,000				
Engineering/Design	\$ 293,000							\$ 293,000				
Construction	\$ 2,927,000								\$ 2,927,000			
CPS, CM&I, and CMT	\$ 293,000								\$ 293,000			
Land Acquisition												
Equipment Purchase												
Total	\$ 3,806,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 586,000	\$ 3,220,000	\$ -	\$ -	\$ -

* Budget includes contingency

PROJECT NAME			PROJECT ID		FISCAL YEAR			DIVISION				
Lift Stations No. 2 and No. 19 Rehabilitation			WW24LS		2024-2025			Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, rehabilitation of Lift Station No. 2, constructed in 1973, and No. 19, constructed in the 1980's, are recommended. Lift Station No. 2 (located on Wildridge Drive) and Lift Station No. 19 (located on McDonald Road) are showing signs of deterioration, including degradation of concrete structures due to corrosive gases.</p> <p>For Lift Station No. 2, the anticipated rehabilitation will include coating the wet well and electrical improvements. For Lift Station No. 19, the anticipated rehabilitation will include coating the wet well and electrical improvements. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained with continued preventative maintenance.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection			2024		<input type="checkbox"/> DBB <input type="checkbox"/> O&M <input type="checkbox"/> CMAR <input type="checkbox"/> Bonds <input checked="" type="checkbox"/> CSP <input checked="" type="checkbox"/> R&R <input type="checkbox"/> Other <input type="checkbox"/> Other							
PSA/WO Issued:			2024									
Final Proposal Docs:			2024									
Proposals/Bids Received:			2025									
Const. Contract to Board:			2025									
Substantial Completion:			2025		<input type="checkbox"/> Capitalized <input checked="" type="checkbox"/> Expensed							
BUDGET *												
	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 50,000							\$ 50,000				
Engineering/Design	\$ 101,000							\$ 101,000				
Construction	\$ 1,008,000								\$ 1,008,000			
CPS, CM&I, and CMT	\$ 101,000								\$ 101,000			
Land Acquisition												
Equipment Purchase												
Total	\$ 1,260,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 151,000	\$ 1,109,000	\$ -	\$ -	\$ -

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION				
Gravity Main Rehabilitation				WW24GR		2024-2025		Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation or renewal to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.</p> <p>The ductile iron (DI) line that runs along the east side of Lake Woodlands is planned for rehabilitation. This segment consists of a total of 12,575 linear feet of 42-inch DI, which would be rehabilitated in two projects; the northernmost 5,245 linear feet in 2024, and the remaining 7,330 linear feet in 2026. However, the results of the sanitary sewer evaluation survey (SSES) and flow monitoring performed in FY2019-2020 may modify the wastewater line rehabilitation prioritization, resulting in other wastewater lines being rehabilitated.</p> <p>This project is the fourth in a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW17GR, WW21GR, WW23GR, and WW27GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection	2024	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2024	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2024	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2024	<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2025											
Substantial Completion:	2025	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed									
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 565,000							\$ 565,000				
Engineering/Design	\$ 565,000							\$ 565,000				
Construction	\$ 5,651,000								\$ 5,651,000			
CPS, CM&I, and CMT	\$ 565,000								\$ 565,000			
Land Acquisition												
Equipment Purchase												
Total	\$ 7,346,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,130,000	\$ 6,216,000	\$ -	\$ -	\$ -

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION					
WWTF No. 2 Belt Press and Conveyor Replacement				WW2SCR		2024-2025		Woodlands					
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE							
<p>One of two existing sludge belt filter presses and the dewatered sludge truck load-off conveyor at Wastewater Treatment Facility (WWTF) No. 2 were installed in 1997 and are approaching the end of their useful life. The belt filter press and the belt-type conveyor are experiencing reoccurring mechanical issues which require more frequent repairs. The existing 1.5 meter belt filter press will be replaced with a 2 meter belt filter press in order to optimize the operations of the facility.</p> <p>The belt-type conveyor is very steep and allows dewatered sludge to slough and fall onto the floor creating safety concerns and constant need for clean-up. The current belt-type conveyor system will be replaced with a screw-type conveyance system. The screw-type conveyor is in an enclosed unit, which will prevent spillage of dewatered sludge onto the floor, eliminating the need for regular cleaning.</p>													
PROJECT SCHEDULE				DELIVERY								FUNDING	
Initiate Cons. Selection	2024	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M										
PSA/WO Issued:	2024	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds										
Final Proposal Docs:	2024	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R										
Proposals/Bids Received:	2024	<input type="checkbox"/> Other	<input type="checkbox"/> Other										
Const. Contract to Board:	2025												
Substantial Completion:	2025	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed										
BUDGET *													
	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Planning/Permitting/PER	\$ 198,000							\$ 198,000					
Engineering/Design	\$ 198,000							\$ 198,000					
Construction	\$ 1,978,000								\$ 1,978,000				
CPS, CM&I, and CMT	\$ 198,000								\$ 198,000				
Land Acquisition													
Equipment Purchase													
Total	\$ 2,572,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 396,000	\$ 2,176,000	\$ -	\$ -	\$ -	

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR		DIVISION					
WWTF No. 3 PPW Pressure System Improvements				WWF3PW		2024-2025		Woodlands					
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE							
<p>The Plant Process Water (PPW) system at Wastewater Treatment Facility (WWTF) No. 3 was installed in 2001. For this facility, the PPW system includes a hydropneumatic tank which serves to maintain pressure within the PPW system piping during periods of less PPW use and allow the PPW pumps to shut off.</p> <p>The hydropneumatic tank will be removed and the system reconfigured to allow for on-demand continuous pumping, but with the flexibility to rotate the pumps so that not all are running continuously. SCADA controls will be added to allow for the pump rotation based upon run-time.</p>													
PROJECT SCHEDULE			DELIVERY		FUNDING								
Initiate Cons. Selection	2024		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2024		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2024		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2025		<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2025												
Substantial Completion:	2025		<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed									
BUDGET *		TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER		\$ 30,000							\$ 30,000				
Engineering/Design		\$ 30,000							\$ 30,000				
Construction		\$ 303,000								\$ 303,000			
CPS, CM&I, and CMT		\$ 30,000								\$ 30,000			
Land Acquisition													
Equipment Purchase													
Total		\$ 393,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,000	\$ 333,000	\$ -	\$ -	\$ -

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION			
WWTF No. 1 Addition of 4th Clarifer				WW01CL		2025-2026			Woodlands			
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, an additional clarifier is needed at Wastewater Treatment Facility (WWTF) No. 1.</p> <p>The project includes addition of a fourth clarifier of the same size (87-ft diameter) as the three existing clarifiers, for an additional 7.1 MGD capacity and a total secondary clarification capacity of 28.4 MGD. The project also includes adding new return activated sludge (RAS) pumps, waste activated sludge (WAS) pumps, and scum pumps.</p>												
PROJECT SCHEDULE			DELIVERY		FUNDING							
Initiate Cons. Selection	2025	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2025	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2025	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2026	<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2026											
Substantial Completion:	2027	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed									
BUDGET *												
	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 642,000								\$ 642,000			
Engineering/Design	\$ 642,000								\$ 642,000			
Construction	\$ 6,419,000									\$ 6,419,000		
CPS, CM&I, and CMT	\$ 642,000									\$ 642,000		
Land Acquisition												
Equipment Purchase												
Total	\$ 8,345,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,284,000	\$ 7,061,000	\$ -	\$ -

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION				
WWTF No. 1 Disinfection System Improvements				WW01DS		2025-2026			Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE							
<p>To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, significant improvements to the existing disinfection system at Wastewater Treatment Facility (WWTF) No. 1 are needed.</p> <p>The project includes addition of a third chlorine contact basin structure, two new chemical storage facilities, two new dry chemical scrubbers and duct work, thirty one-ton container scales and feed equipment, emergency shutoff valves, chemical dose equipment, piping and valves.</p>													
PROJECT SCHEDULE			DELIVERY		FUNDING								
Initiate Cons. Selection	2025		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2025		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2025		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2026		<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2026												
Substantial Completion:	2027		<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed									
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Planning/Permitting/PER	\$ 1,166,000								\$ 1,166,000				
Engineering/Design	\$ 1,166,000								\$ 1,166,000				
Construction	\$ 11,663,000									\$ 11,663,000			
CPS, CM&I, and CMT	\$ 1,166,000									\$ 1,166,000			
Land Acquisition													
Equipment Purchase													
Total	\$ 15,161,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,332,000	\$ 12,829,000	\$ -	\$ -	

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station 24B Expansion and Force Main Replacement	WWLS24	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 24B and its associated force main is needed. This project includes the expansion of Lift Station 24B firm pumping capacity from 3.76 MGD to 7.78 MGD. This project includes a new wet well, pumps, and electrical system. This project also includes a replacement 20-inch force main. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2026	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2026	<input type="checkbox"/> CSP	<input type="checkbox"/> R&R
Proposals/Bids Received:	2027	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2027		
Substantial Completion:	2028	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 913,000									\$ 913,000		
Engineering/Design	\$ 913,000									\$ 913,000		
Construction	\$ 9,129,000										\$ 9,129,000	
CPS, CM&I, and CMT	\$ 913,000										\$ 913,000	
Land Acquisition												
Equipment Purchase												
Total	\$ 11,868,000	\$ -	\$ 1,826,000	\$ 10,042,000	\$ -							

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Enlargement of Lift Station 24 Gravity Line	WWGL24	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, replacement of the gravity lines upstream of Lift Station No. 24 with larger lines is required.

This project includes the construction of replacement of existing 24-inch gravity lines with 30-inch and 36-inch gravity lines upstream of LS 24. The hydraulic wastewater model evaluation shows the existing gravity lines have insufficient capacity to convey the modeled instantaneous peak wastewater flows.



PROJECT SCHEDULE	DELIVERY	FUNDING
Initiate Cons. Selection	2026	<input type="checkbox"/> DBB <input type="checkbox"/> O&M
PSA/WO Issued:	2026	<input type="checkbox"/> CMAR <input type="checkbox"/> Bonds
Final Proposal Docs:	2026	<input checked="" type="checkbox"/> CSP <input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2027	<input type="checkbox"/> Other <input type="checkbox"/> Other
Const. Contract to Board:	2027	
Substantial Completion:	2027	<input checked="" type="checkbox"/> Capitalized <input type="checkbox"/> Expensed

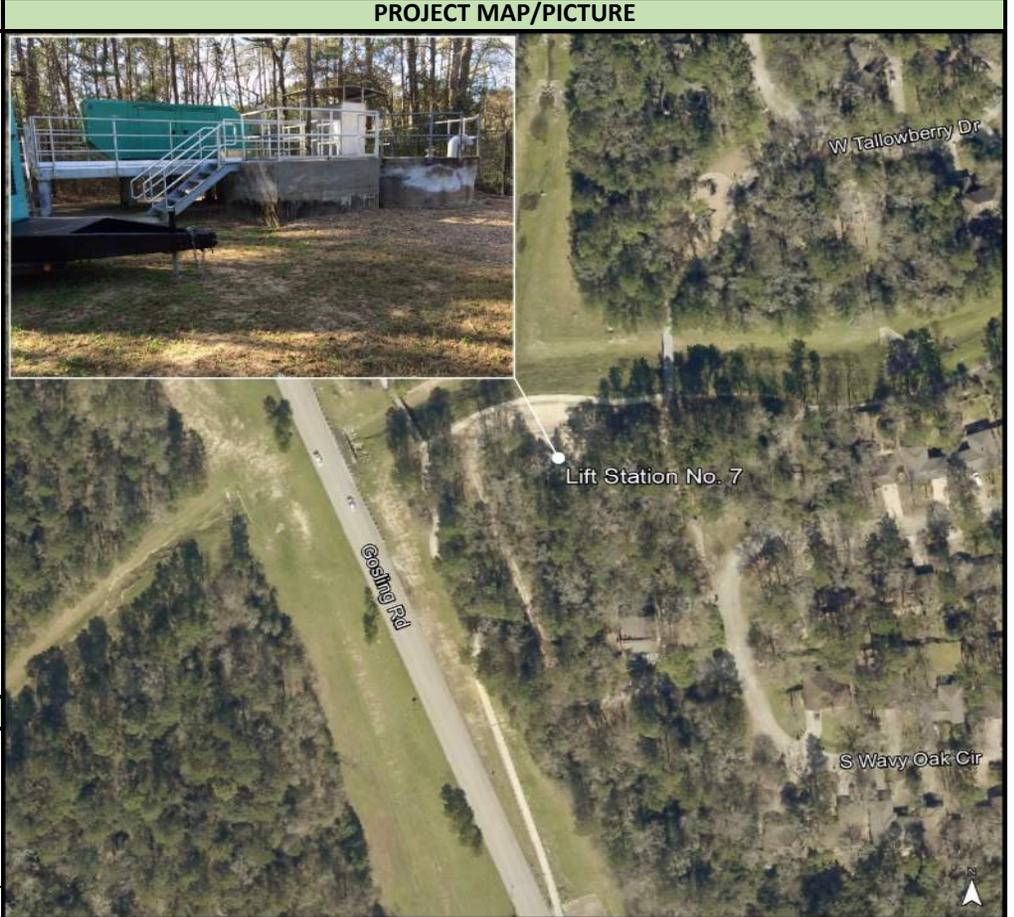
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 747,000									\$ 747,000		
Engineering/Design	\$ 747,000									\$ 747,000		
Construction	\$ 7,471,000										\$ 7,471,000	
CPS, CM&I, and CMT	\$ 747,000										\$ 747,000	
Land Acquisition												
Equipment Purchase												
Total	\$ 9,712,000	\$ -	\$ 1,494,000	\$ 8,218,000	\$ -							

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 7 Expansion	WWLS07	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 7 is needed. This project includes the expansion of Lift Station 7 firm pumping capacity from 1.0 MGD to 1.44 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2026	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2026	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2027	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2027		
Substantial Completion:	2027	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 65,000									\$ 65,000		
Engineering/Design	\$ 65,000									\$ 65,000		
Construction	\$ 646,000										\$ 646,000	
CPS, CM&I, and CMT	\$ 65,000										\$ 65,000	
Land Acquisition												
Equipment Purchase												
Total	\$ 841,000	\$ -	\$ 130,000	\$ 711,000	\$ -							

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION			
Lift Station Rehabilitation				WWLSRB		2026-2028			Woodlands			
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, one lift station is anticipated to be rehabilitated each year starting in FY 2026. The anticipated rehabilitation may include recoating the wet well, replacing pumps, replacing piping and valves, electrical improvements, and site improvements. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated the structure can be maintained for its intended useful life with continued preventative maintenance.</p>												
PROJECT SCHEDULE				DELIVERY		FUNDING						
Initiate Cons. Selection		2026		<input type="checkbox"/> DBB		<input type="checkbox"/> O&M						
PSA/WO Issued:		2026		<input type="checkbox"/> CMAR		<input type="checkbox"/> Bonds						
Final Proposal Docs:		2026		<input checked="" type="checkbox"/> CSP		<input checked="" type="checkbox"/> R&R						
Proposals/Bids Received:		2026		<input type="checkbox"/> Other		<input type="checkbox"/> Other						
Const. Contract to Board:		2026										
Substantial Completion:		2028		<input type="checkbox"/> Capitalized		<input checked="" type="checkbox"/> Expensed						
BUDGET *												
	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ -											
Engineering/Design	\$ 161,000									\$ 51,000	\$ 54,000	\$ 56,000
Construction	\$ 1,612,000									\$ 511,000	\$ 537,000	\$ 564,000
CPS, CM&I, and CMT	\$ 161,000									\$ 51,000	\$ 54,000	\$ 56,000
Land Acquisition												
Equipment Purchase												
Total	\$ 1,934,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 613,000	\$ 645,000	\$ 676,000

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Generator Replacement	WWF1GR	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:
 The 2,000 kW natural gas standby generator at Wastewater Treatment Facility No. 1 was installed in 2000. This generator provides the primary backup power source for Wastewater Treatment Plant No. 1 in the event of power outage. In order to maintain reliable power backup for the wastewater facility, it is recommended to replace this generator as it is anticipated to reach the end of its useful life. Also, continued maintenance costs rise as replacement parts become less available.



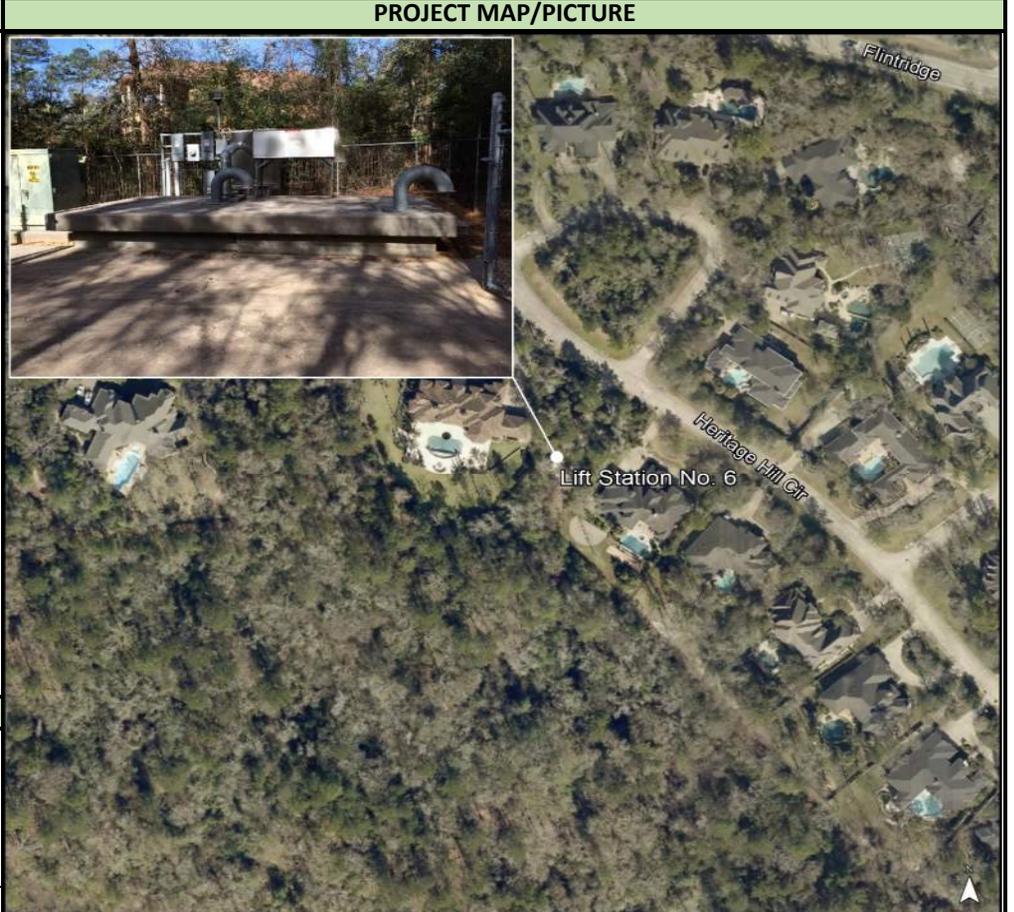
PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2026	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2026	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2026	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2027		
Substantial Completion:	2027	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ -											
Engineering/Design	\$ -											
Construction	\$ 1,180,000										\$ 1,180,000	
CPS, CM&I, and CMT	\$ 118,000										\$ 118,000	
Land Acquisition												
Equipment Purchase												
Total	\$ 1,298,000	\$ -	\$ 1,298,000	\$ -								

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 6 Expansion	WWLS06	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:
 To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 6 is needed. This project includes the expansion of Lift Station 6 firm pumping capacity from 0.97 MGD to 1.30 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2027	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2027	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2028	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2028		
Substantial Completion:	2028	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 61,000										\$ 61,000	
Engineering/Design	\$ 61,000										\$ 61,000	
Construction	\$ 611,000											\$ 611,000
CPS, CM&I, and CMT	\$ 61,000											\$ 61,000
Land Acquisition												
Equipment Purchase												
Total	\$ 794,000	\$ -	\$ 122,000	\$ 672,000								

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION				
Gravity Main Rehabilitation				WW27GR		2027-2028			Woodlands				
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE							
<p>Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation or renewal to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.</p> <p>The ductile iron (DI) line that runs along the east side of Lake Woodlands is planned for rehabilitation. This segment consists of a total of 12,575 linear feet of 42-inch DI, which would be rehabilitated in two projects; the northernmost 5,245 linear feet in 2024, and the remaining 7,330 linear feet in 2026. However, the results of the sanitary sewer evaluation survey (SSES) and flow monitoring performed in FY2019-2020 may modify the wastewater line rehabilitation prioritization, resulting in other wastewater lines being rehabilitated.</p> <p>This project is the fifth in a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW17GR, WW19GR, WW23GR, and WW24GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.</p>													
PROJECT SCHEDULE			DELIVERY		FUNDING								
Initiate Cons. Selection	2027		<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	2027		<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	2027		<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R									
Proposals/Bids Received:	2028		<input type="checkbox"/> Other	<input type="checkbox"/> Other									
Const. Contract to Board:	2028												
Substantial Completion:	2028		<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed									
BUDGET *		TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER		\$ 914,000										\$ 914,000	
Engineering/Design		\$ 914,000										\$ 914,000	
Construction		\$ 9,142,000											\$ 9,142,000
CPS, CM&I, and CMT													
Land Acquisition													
Equipment Purchase													
Total		\$ 10,970,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,828,000	\$ 9,142,000

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Clarifier No. 4 Addition	WW02CL	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, an additional clarifier is needed at Wastewater Treatment Facility (WWTF) No. 2.

The project includes addition of a fourth clarifier of the same size (80-ft diameter) as the three existing clarifiers, for an additional 6.0 MGD capacity and a total secondary clarification capacity of 18.0 MGD.



PROJECT SCHEDULE	DELIVERY	FUNDING
Initiate Cons. Selection 2027	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued: 2027	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs: 2027	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received: 2028	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board: 2028		
Substantial Completion: 2029	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 422,000										\$ 422,000	
Engineering/Design	\$ 422,000										\$ 422,000	
Construction	\$ 4,216,000											\$ 4,216,000
CPS, CM&I, and CMT	\$ 422,000											\$ 422,000
Land Acquisition												
Equipment Purchase												
Total	\$ 5,482,000	\$ -	\$ 844,000	\$ 4,638,000								

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR				DIVISION		
Lift Station No. 2 Expansion				WWLS02		2027-2028				Woodlands		
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 2 is needed. This project includes the expansion of Lift Station 2 firm pumping capacity from 0.49 MGD to 0.79 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.</p>												
PROJECT SCHEDULE				DELIVERY		FUNDING						
Initiate Cons. Selection		2027		<input type="checkbox"/> DBB		<input type="checkbox"/> O&M						
PSA/WO Issued:		2027		<input type="checkbox"/> CMAR		<input type="checkbox"/> Bonds						
Final Proposal Docs:		2027		<input checked="" type="checkbox"/> CSP		<input checked="" type="checkbox"/> R&R						
Proposals/Bids Received:		2028		<input type="checkbox"/> Other		<input type="checkbox"/> Other						
Const. Contract to Board:		2028										
Substantial Completion:		2028		<input checked="" type="checkbox"/> Capitalized		<input type="checkbox"/> Expensed						
BUDGET *												
	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 48,000										\$ 48,000	
Engineering/Design	\$ 48,000										\$ 48,000	
Construction	\$ 478,000											\$ 478,000
CPS, CM&I, and CMT	\$ 48,000											\$ 48,000
Land Acquisition												
Equipment Purchase												
Total	\$ 622,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 96,000	\$ 526,000

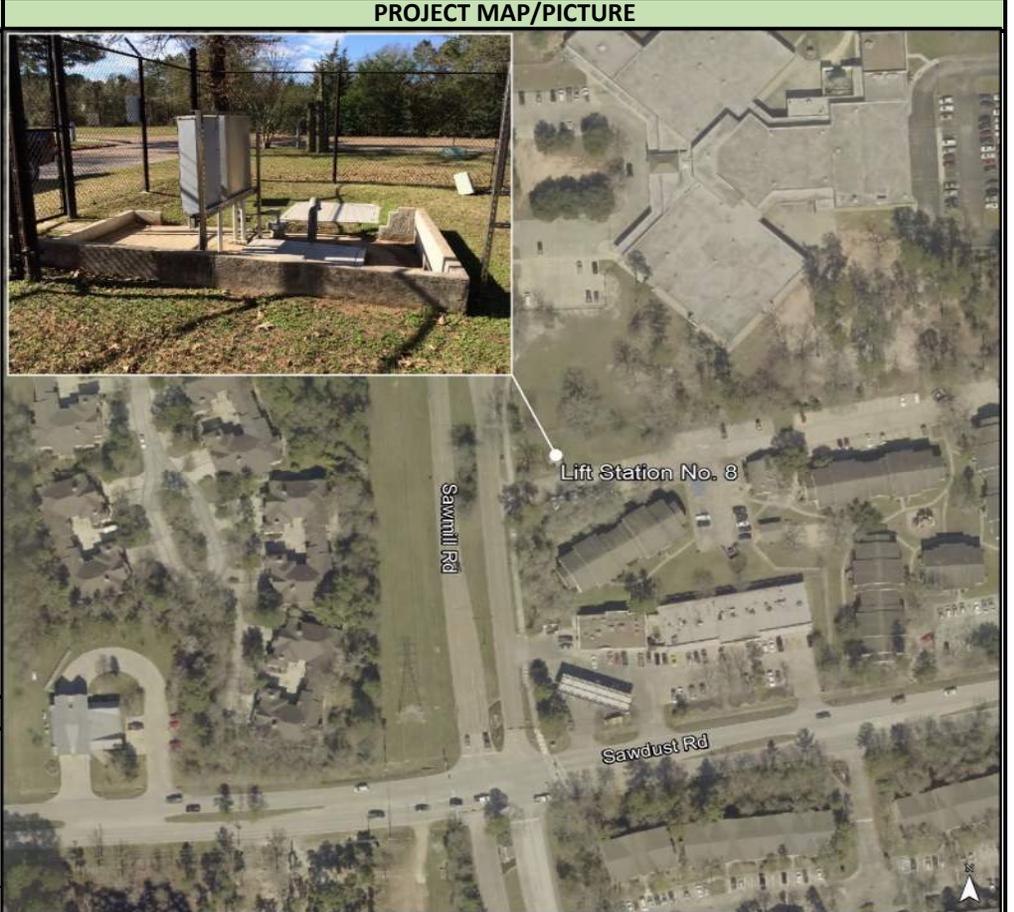
* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION																	
Lift Station No. 3 Expansion				WWLS03		2027-2028			Woodlands																	
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE																				
<p>To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 3 is needed. This project includes the expansion of Lift Station 3 firm pumping capacity from 0.30 MGD to 0.43 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.</p>																										
PROJECT SCHEDULE				DELIVERY		FUNDING																				
Initiate Cons. Selection		2027		<input type="checkbox"/> DBB		<input type="checkbox"/> O&M																				
PSA/WO Issued:		2027		<input type="checkbox"/> CMAR		<input type="checkbox"/> Bonds																				
Final Proposal Docs:		2027		<input checked="" type="checkbox"/> CSP		<input checked="" type="checkbox"/> R&R																				
Proposals/Bids Received:		2028		<input type="checkbox"/> Other		<input type="checkbox"/> Other																				
Const. Contract to Board:		2028																								
Substantial Completion:		2028		<input checked="" type="checkbox"/> Capitalized		<input type="checkbox"/> Expensed																				
BUDGET *												TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
Planning/Permitting/PER												\$ 33,000													\$ 33,000	
Engineering/Design												\$ 33,000													\$ 33,000	
Construction												\$ 334,000														\$ 334,000
CPS, CM&I, and CMT												\$ 33,000													\$ 33,000	
Land Acquisition																										
Equipment Purchase																										
Total												\$ 433,000	\$ -	\$ 66,000	\$ 367,000											

* Budget includes contingency

PROJECT NAME	Project ID	FISCAL YEAR	DIVISION
Lift Station No. 8 Expansion	WWLS08	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:
 To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 8 is needed. This project includes the expansion of Lift Station 8 firm pumping capacity from 0.21 MGD to 0.36 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.



PROJECT SCHEDULE	DELIVERY	FUNDING
Initiate Cons. Selection	2027	<input type="checkbox"/> DBB <input type="checkbox"/> O&M
PSA/WO Issued:	2027	<input type="checkbox"/> CMAR <input type="checkbox"/> Bonds
Final Proposal Docs:	2027	<input checked="" type="checkbox"/> CSP <input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2028	<input type="checkbox"/> Other <input type="checkbox"/> Other
Const. Contract to Board:	2028	
Substantial Completion:	2028	<input checked="" type="checkbox"/> Capitalized <input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 32,000										\$ 32,000	
Engineering/Design	\$ 32,000										\$ 32,000	
Construction	\$ 322,000											\$ 322,000
CPS, CM&I, and CMT	\$ 32,000											\$ 32,000
Land Acquisition												
Equipment Purchase												
Total	\$ 418,000	\$ -	\$ 64,000	\$ 354,000								

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Tertiary Filter Improvements (3rd Filter)	WW02F3	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, conversion of the existing sand filter to a cloth media filter is needed at Wastewater Treatment Facility (WWTF) No. 2.

The project includes the demolition, rehabilitation, and installation of a new cloth media filter to replace the existing sand filter.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	2027	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds
Final Proposal Docs:	2027	<input checked="" type="checkbox"/> CSP	<input checked="" type="checkbox"/> R&R
Proposals/Bids Received:	2028	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	2028		
Substantial Completion:	2029	<input checked="" type="checkbox"/> Capitalized	<input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 328,000										\$ 328,000	
Engineering/Design	\$ 328,000										\$ 328,000	
Construction	\$ 3,277,000											\$ 3,277,000
CPS, CM&I, and CMT	\$ 328,000											\$ 328,000
Land Acquisition												
Equipment Purchase												
Total	\$ 4,261,000	\$ -	\$ 656,000	\$ 3,605,000								

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION										
WWTF No. 1 Solids Processing				WPSP1		2015 - 2018			Woodlands										
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE													
<p>A comprehensive evaluation of Wastewater Treatment Facility (WWTF) No. 1 was completed in 2014. The evaluation recommended replacement of the solids processing building due to very poor structural condition as well as the replacement of the belt press with new sludge dewatering equipment. The existing belt press, installed in 1988, is nearing the end of its useful life and requires replacement.</p> <p>A Preliminary Engineering Report was conducted in 2015 for replacement of the solids processing building, replacement of the belt press, and associated civil, mechanical, architectural, structural, electrical & control work.</p> <p>The project was combined with the WWTF No. 1 Additional Sludge Dewatering Unit (WT1DW) project funded through Future Facilities. The combined projects will include the installation of two belt presses for redundancy and to meet future capacity needs.</p>																			
													PROJECT SCHEDULE			DELIVERY		FUNDING	
													Initiate Cons. Selection	Completed	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M			
PSA/WO Issued:	Completed	<input type="checkbox"/> CMAR	<input checked="" type="checkbox"/> Bonds																
Final Proposal Docs:	October 2017	<input checked="" type="checkbox"/> CSP	<input type="checkbox"/> R&R																
Proposals/Bids Received:	February 2018	<input type="checkbox"/> Other	<input type="checkbox"/> Other																
Const. Contract to Board:	April 2018	<input checked="" type="checkbox"/> Capitalized <input type="checkbox"/> Expensed																	
Substantial Completion:	June 2019																		
BUDGET *																			
	TOTAL	PREVIOUS	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027							
Planning/Permitting/PER																			
Engineering/Design																			
Construction	\$ 5,017,000	\$ 5,017,000																	
CPS, CM&I, and CMT	\$ 502,000	\$ 502,000																	
Land Acquisition																			
Equipment Purchase																			
Total	\$ 5,519,000	\$ 5,519,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							

* Budget includes contingency

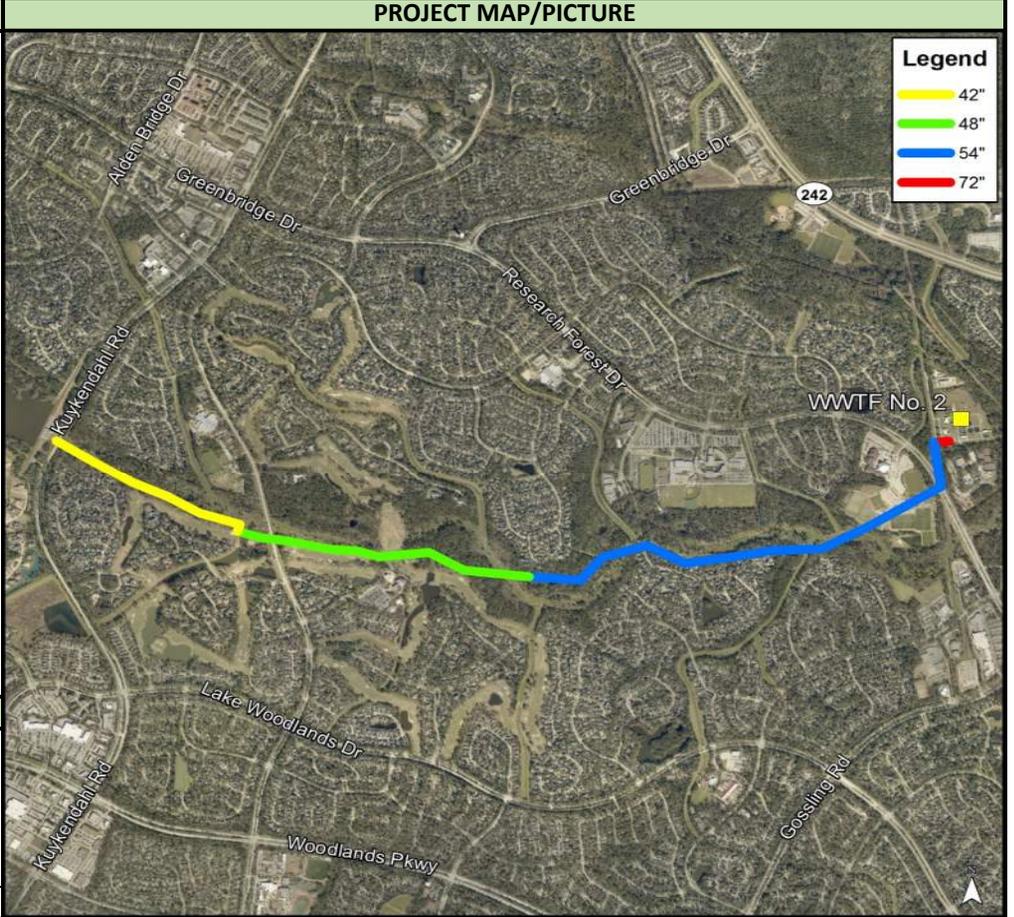
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Bear Branch Gravity Main	WWBBGM	2017 - 2019	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The aging collection system has been in service for over 40 years requires rehabilitation or replacement to avoid collection system failure, sanitary sewer overflows and permit violations. The Bear Branch Gravity Main was constructed in 1985. Specific line segments were studied in 2012 using televising and laser profiling. This included approximately 2,400 linear feet of 48-inch pipe, 7,700 linear feet of 54-inch pipe, and 300 feet of 72-inch pipe. All pipe to be rehabilitated or replaced is reinforced concrete pipe. Pipe deterioration with a reduction in wall thickness and exposed reinforcing steel was noted.

A manned entry evaluation was conducted in 2015, which revealed additional deterioration of pipe and manholes. The evaluation also included wall thickness testing and visual inspection of the pipe material and determined the remaining useful life of different pipe segments.

The potential rehabilitation/replacement methods to be evaluated include cured-in-place pipe (CIPP), sliplining and pipe bursting.



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	Completed	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M
PSA/WO Issued:	Completed	<input type="checkbox"/> CMAR	<input checked="" type="checkbox"/> Bonds
Final Proposal Docs:	October 2018	<input checked="" type="checkbox"/> CSP	<input type="checkbox"/> R&R
Proposals/Bids Received:	January 2019	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Const. Contract to Board:	March 2019		
Substantial Completion:	2020	<input type="checkbox"/> Capitalized	<input checked="" type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ -	\$ -										
Engineering/Design	\$ 1,482,000	\$ 1,482,000										
Construction	\$ 14,817,000		\$ 14,817,000									
CPS, CM&I, and CMT	\$ 1,482,000		\$ 1,482,000									
Land Acquisition												
Equipment Purchase												
Total	\$ 17,781,000	\$ 1,482,000	\$ 16,299,000	\$ -								

* Budget includes contingency

PROJECT NAME			PROJECT ID	FISCAL YEAR	DIVISION								
WWTF No. 1 Replacement of Aeration Basin Nos. 1 and 2			WWF1AB	2018 - 2019	Woodlands								
PROJECT DESCRIPTION/JUSTIFICATION:				PROJECT MAP/PICTURE									
<p>Aeration Basin Nos. 1 and 2 at Wastewater Treatment Facility (WWTF) No. 1 were part of the original plant construction in 1974. Aeration Basin 1 is currently not in operation due to poor condition, and the current treatment capacity of Aeration Basin 2 is limited due to aeration limitations. A comprehensive evaluation of WWTF No. 1 was performed in 2014. The evaluation recommended that Aeration Basin Nos. 1 and 2 be repaired or replaced and that both basins be upgraded to a more efficient fine bubble diffused aeration system. Due to structural concerns, it is envisioned that the basins will be replaced rather than repaired, therefore the proposed cost estimate is based on the replacement option.</p> <p>Continued growth within The Woodlands will require these basins to be operational in the future in order to meet Texas Commission on Environmental Quality (TCEQ) discharge permit requirements.</p>													
PROJECT SCHEDULE			DELIVERY										FUNDING
Initiate Cons. Selection	October 2017	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M										
PSA/WO Issued:	January 2018	<input type="checkbox"/> CMAR	<input checked="" type="checkbox"/> Bonds										
Final Proposal Docs:	February 2019	<input checked="" type="checkbox"/> CSP	<input type="checkbox"/> R&R										
Proposals/Bids Received:	April 2019	<input type="checkbox"/> Other	<input type="checkbox"/> Other										
Const. Contract to Board:	June 2019	<input checked="" type="checkbox"/> Capitalized <input type="checkbox"/> Expensed											
Substantial Completion:	July 2020												
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Planning/Permitting/PER	\$ 654,000	\$ 654,000											
Engineering/Design	\$ 537,000	\$ 537,000											
Construction	\$ 4,799,000		\$ 4,799,000										
CPS, CM&I, and CMT	\$ 480,000		\$ 480,000										
Land Acquisition													
Equipment Purchase													
Total	\$ 6,470,000	\$ 1,191,000	\$ 5,279,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

* Budget includes contingency

PROJECT NAME			PROJECT ID	FISCAL YEAR	DIVISION							
WWTF No. 1 Additional Sludge Dewatering Unit			WT1DW	2015 - 2018	Woodlands							
PROJECT DESCRIPTION/JUSTIFICATION:					PROJECT MAP/PICTURE							
<p>Based on a 2014 comprehensive evaluation of Wastewater Treatment Facility (WWTF) No. 1, this project consists of an additional sludge dewatering unit (belt press), piping and associated appurtenances. The additional unit is required to comply with Texas Commission on Environmental Quality (TCEQ) 30 TAC (Texas Administrative Code) regulations for redundancy. The current sludge dewatering process is unable to treat projected future flows. During the PER phase of the project, a structural analysis of the current dewatering building lead to a recommendation to replace the building due to deterioration. The replacement building and replacement belt press are included in the R&R funded project WSP1.</p>												
PROJECT SCHEDULE			DELIVERY	FUNDING								
Initiate Cons. Selection	Completed	<input type="checkbox"/> DBB	<input type="checkbox"/> O&M									
PSA/WO Issued:	Completed	<input type="checkbox"/> CMAR	<input type="checkbox"/> Bonds									
Final Proposal Docs:	October 2017	<input checked="" type="checkbox"/> CSP	<input type="checkbox"/> R&R									
Proposals/Bids Received:	February 2018	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Other Capacity									
Const. Contract to Board:	April 2018	<input checked="" type="checkbox"/> Capitalized <input type="checkbox"/> Expensed										
Substantial Completion:	June 2019											
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER												
Engineering/Design	\$ -	\$ -										
Construction	\$ 1,133,000	\$ 1,133,000										
CPS, CM&I, and CMT	\$ 57,000	\$ 57,000										
Land Acquisition												
Equipment Purchase												
Total	\$ 1,190,000	\$ 1,190,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

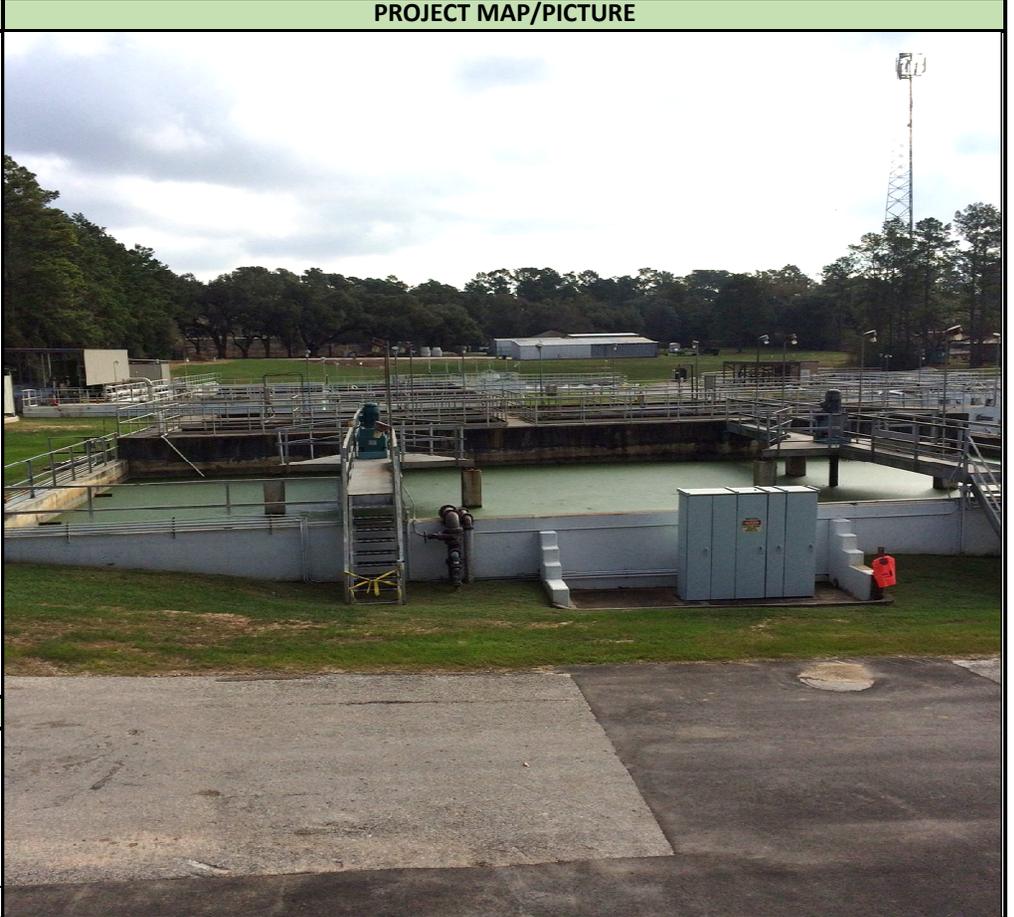
* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Aeration Basin Nos. 1 and 2 Capacity Increase	WW1AB	2018 - 2019	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Aeration Basin Nos. 1 and 2 at Wastewater Treatment Facility (WWTF) No. 1 were part of the original plant construction in 1974. Aeration Basin 1 is currently not in operation due to poor condition, and the current treatment capacity of Aeration Basin 2 is limited due to aeration limitations. A comprehensive evaluation of WWTF No. 1 was performed in 2014. The evaluation recommended that Aeration Basins 1 and 2 be repaired or replaced and that both basins be upgraded to a more efficient fine bubble diffused aeration system. Due to structural concerns, it is envisioned that the basins will be replaced rather than repaired, therefore the proposed cost estimate is based on the replacement option.

Continued growth within The Woodlands will require these basins to be operational in the future in order to meet Texas Commission on Environmental Quality (TCEQ) discharge permit requirements.



PROJECT SCHEDULE	DELIVERY	FUNDING
Initiate Cons. Selection	October 2017	<input type="checkbox"/> DBB <input type="checkbox"/> O&M
PSA/WO Issued:	January 2018	<input type="checkbox"/> CMAR <input type="checkbox"/> Bonds
Final Proposal Docs:	February 2019	<input checked="" type="checkbox"/> CSP <input type="checkbox"/> R&R
Proposals/Bids Received:	April 2019	<input type="checkbox"/> Other <input checked="" type="checkbox"/> Other Capacity
Const. Contract to Board:	June 2019	
Substantial Completion:	July 2020	<input checked="" type="checkbox"/> Capitalized <input type="checkbox"/> Expensed

BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER												
Engineering/Design	\$ 117,000	\$ 117,000										
Construction	\$ 1,745,000		\$ 1,745,000									
CPS, CM&I, and CMT	\$ 175,000		\$ 175,000									
Land Acquisition												
Equipment Purchase												
Total	\$ 2,037,000	\$ 117,000	\$ 1,920,000	\$ -								

* Budget includes contingency

PROJECT NAME				PROJECT ID		FISCAL YEAR			DIVISION			
Water Plant No. 4 Ground Storage Tank No. 2				WA4GT2		2019 - 2020			Woodlands			
PROJECT DESCRIPTION/JUSTIFICATION:						PROJECT MAP/PICTURE						
<p>An additional Ground Storage Tank (GST) will be required at Water Plant No. 4 to provide additional storage capability. Water plants with only one tank cannot be kept in operation if the tank is out of service. Building a second tank will allow for continuous use of the water plant when maintenance or repairs are being made to either tank. Water model analysis demonstrates a critical need for continuous operation of Water Plant No. 4. If the plant is not operational, large areas within the upper and middle pressure planes would be without water.</p> <p>Proposed GST No. 2 shall have a storage capacity of 2.0 million gallons, equal to GST No. 1. Two equally sized tanks will be sufficient to meet peak day demands, will simplify control settings, and will minimize call-to-run for surface water and ground water supplies, providing less wear on the supply facilities.</p>												
PROJECT SCHEDULE				DELIVERY								
Initiate Cons. Selection		October 2018		<input type="checkbox"/> DBB		<input type="checkbox"/> O&M						
PSA/WO Issued:		January 2019		<input type="checkbox"/> CMAR		<input type="checkbox"/> Bonds						
Final Proposal Docs:		July 2019		<input checked="" type="checkbox"/> CSP		<input type="checkbox"/> R&R						
Proposals/Bids Received:		2020		<input type="checkbox"/> Other		<input checked="" type="checkbox"/> Other Capacity						
Const. Contract to Board:		October 2019										
Substantial Completion:		December 2020		<input checked="" type="checkbox"/> Capitalized		<input type="checkbox"/> Expensed						
BUDGET *	TOTAL	PREVIOUS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Planning/Permitting/PER	\$ 310,000		\$ 310,000									
Engineering/Design	\$ 310,000		\$ 310,000									
Construction	\$ 3,103,000			\$ 3,103,000								
CPS, CM&I, and CMT	\$ 310,000			\$ 310,000								
Land Acquisition												
Equipment Purchase												
Total	\$ 4,033,000	\$ -	\$ 620,000	\$ 3,413,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

* Budget includes contingency