6/22/2023
To: Mayor and City Council
Construction progressing well to have the Magnolia and
Bailey water wells back in service this fall.
-Trent

Bailey Water Treatment Plant Improvements & Bailey Sewer Line (Veterans to Bailey Water Plant)

Is it in Budget?		Is it on schedule for the Current Phase per the Contract?		Community Benefit
⊠ Yes	□ No		□ No	Improved Water Quality
		Project Phase?		
		Construction		

Highlights:

- The construction is 83% complete in 72% of the contract time.
- The 5 aeralator structures are all erected, welded, and tested, and the interior painting has been completed.
- The pumps and piping from the aeralators to the backwash pond are installed and tested.
- The wastewater piping from the building to manhole and from the manhole to the new lift station has been installed and tested.
- The Motor Control Center (MCC) building is erected, including the metal roof, drywall framing, and exterior brick work.
- Overhead door is installed, and interior doors are delivered for installation at MCC.
- The underground utilities, to include electrical duct banks, are complete at Bailey WTP and site paving
 is to begin.
- Site drainage is complete. A section of sidewalk that surrounds the Bailey WTP site is to be replaced via a change order to address a low spot that is causing ponding & will connect to the site drainage.
- Generators are installed and plumbed at both the Bailey and lift station sites. Gas meters are ordered
 and pending installation by CenterPoint Energy.

Budget Info:

WA1901 - Bailey Water Plant:

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
W/S Revenue Bonds	2018B	620,000		620,000
W/S Revenue Bonds	2019B	4,240,000		4,240,000
W/S Certificates of Obligation	2022C	9,580,000		9,580,000
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		14,440,000	-	14,440,000

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Expenditures	To Date	Future	Total
PER			-
Land	45	3,500	3,545
Design	742,031		742,031
Construction (Tank)	1,596,570		1,596,570
Construction (Pretreatment)	11,803,491		11,803,491
Construction Materials Testing	180,723		180,723
FF&E			-
Total Expenditures	14,322,859	3,500	14,326,359

Project Contingency	1%	113,641
Project Balance		(0)

WW2007 - Bailey Sewer Line:

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
System Revenue - Cash		30,000		30,000
W/S Revenue Bonds	2021B	600,000		600,000
W/S Certificates of Obligation	2022C	912,000		912,000
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		1,542,000	-	1,542,000

Expenditures	To Date	Future	Total
PER			-
Land	3,500		3,500
Design	50,438		50,438
Construction	1,401,112		1,401,112
Construction Management/Inspection			-
Construction Materials Testing	48,505		48,505
FF&E			-
Total Expenditures	1,503,555	-	1,503,555

Project Contingency	2%	38,445
Project Balance		0



Schedule Info:

	Base Line	Current
Design Start	December-18	January-19
Bid Start	April-21	November-21
Construction Start	January-22	May-22
Construction Completion	October-23	October-23

Rain Days: 28

Upcoming Work Items:

- Complete exterior painting of aeralators, pumps, and discharge piping.
- Excavation of backwash pond. Once dug, the gravity line from the backwash pond to a new manhole within Bailey WTP will be installed and tested.
- Continue installation of vaults and inlets within the Bailey site.
- Complete paving and flex base road installation at the lift station.
- Installation of PVC chemical lines.
- Complete the exterior and interior architectural finishes for the MCC building.

Project Manager: Morgan R. Early

Construction Manager: Michael Collins

Designer: Enprotec/Hibbs & Todd (eHT)

Contractor: LEM Construction Company, Inc.

Scope:

Bailey Water Plant Improvements: Elevated levels of organic manganese and iron cause taste, odor, and appearance issues though the water product itself remains safe for consumption. Phase 1 of this project is the installation of a new 1 MG concrete Ground Storage Tank to replace the existing welded steel tank. Phase 2 of this project will be the construction of a Water Treatment Plant and the installation of a waterline to transport water from the Magnolia Water Plant to the Treatment Plant. **Bailey Sewer Line (Veterans to Bailey Water Plant):** Construct approximately 2,700 LF of sanitary sewer from the Natatorium to the Bailey WTP site to transfer waste to the City's sanitary sewer system and plan for the construction of Fire Station #7.

Justification:

Bailey Water Plant Improvements: The 2,000 gallon per minute well is critical to provide system water quality maintenance and provisions for drought contingency. The City of Pearland has maintained a log of customer complaints regarding water quality. Complaints regarding brown/rusty colored water indicate problems with iron and manganese have been occurring in the winter months. **Bailey Sewer Line (Veterans to Bailey Water Plant):** This project includes the construction of a new lift station and sewer line to discharge backwash from the aeralater treatment system, The Natatorium, and future Fire Station 7.

Previous Memos: 11/08/18, 08/08/19, 11/07/19, 01/30/20, 04/02/20, 08/06/20, 01/14/21, 05/06/21, 09/16/21, 2/17/22, 11/17/22, 03/30/23



Project Location Map:







Pumps and piping for the aeralators that treat the water from Magnolia Well



Exterior painting on all 5 aeralators underway





Installation of gravity line to backwash pond



Interior of Motor Control Center Building