

6/25/2019

To: Mayor and City

Council members

Update on the new water tank, a third, going in on FM 521. Pictures depict the intricate work required. Clay



# FM 521 Ground Storage Tank Expansion

**Scope:** The proposed project includes the installation of a third ground storage tank, related piping, upgrade of existing pumps, and controls to provide additional storage and increased firm capacity at the FM 521 Water Pressurization Facility. The Project includes a 2,000' run of conduit and fiber to connect the plant to the fiber located on Shadow Creek Parkway and provide continuity with the conduit run from Broadway along the FM 521 Waterline.

**Justification:** The City is in the process of extending both the FM 521 Waterline, and the McHard Road Waterline. The FM 521 Waterline is intended to transfer water from the City's planned Surface Water Treatment Plant.

**Project Manager:** Jameson Appel

**Construction Manager:** Ronnie Hart

**Designer:** Costello, Inc.

**Contractor:** DN Tanks

**Budget Info:**



Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
W/S Revenue Bonds	2017C	152,525		152,525
W/S Revenue Bonds	TBS	2,759,975		2,759,975
Impact Fee - Debt	TBS			-
Impact Fee - Cash		2,759,975		2,759,975
Other Funding Sources (Fund Balance)		152,525		152,525
<b>Total Funding Sources</b>		<b>5,825,000</b>	-	<b>5,825,000</b>

Expenditures	To Date	Future	Total
PER			-
Land			-
Design	515,602		515,602
Construction	2,935,915		2,935,915
Construction - Phase 2		1,569,000	1,569,000
Construction Materials Testing		29,000	29,000
FF&E			-
<b>Total Expenditures</b>	<b>3,451,517</b>	<b>1,598,000</b>	<b>5,049,517</b>

<b>Project Balance/Contingency</b>	<b>775,483</b>
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**Schedule:**

<b>Phase I</b>	<b>Base Line</b>	<b>Current</b>
<b>Design Start</b>	September-17	January-18
<b>Proposed Bid Start</b>	October-18	September-18
<b>Proposed Construction Start</b>	January-19	January-19
<b>Proposed Construction Completion</b>	January-20	January-20

<b>Phase II</b>	<b>Base Line</b>	<b>Current</b>
<b>Design Start</b>	March-19	March-19
<b>Proposed Bid Start</b>	July-19	
<b>Proposed Construction Start</b>	September-19	
<b>Proposed Construction Completion</b>	June-20	

**Phase I:** The initial phase of construction which is confined to the pre-cast concrete tank work.

**Phase II:** The design for pumping and controls which was separated due to the specialty of the electrical and plant control work not belonging with the tank and piping construction.

**Rain Days: 10**

**Phase I Highlights:**

- Completed the select fill tank pad.
- Installed tank pad rebar over the filter fabric and pea gravel.
- Form and pour concrete tank pad 280 yds placed.
- Relocate hydro tank
- Wet cure tank pad concrete.
- Pour casting beds for tank walls.
- Build scaffold in the tank center for working on the tank.
- Mobilize crane to the site for setting tank walls.
- Hanging of panel tank walls week of June 18<sup>th</sup>.

**Upcoming Phase I Work Items:**

- Start Wire wind of the wall panels.
- Hang Dome panels
- Form and pour Dome slots

**Phase II Highlights:**

- Electrical and Control Design contract award was presented to City Council for consideration and approval on February 25, 2019. The awarded contract to Costello, Inc. is in the amount of \$278,502.
- The design was established on an accelerated schedule due to the need to have phase II construction mobilize prior to the completion of the tank currently underway.
- City Review of 90% plans/specs completed.

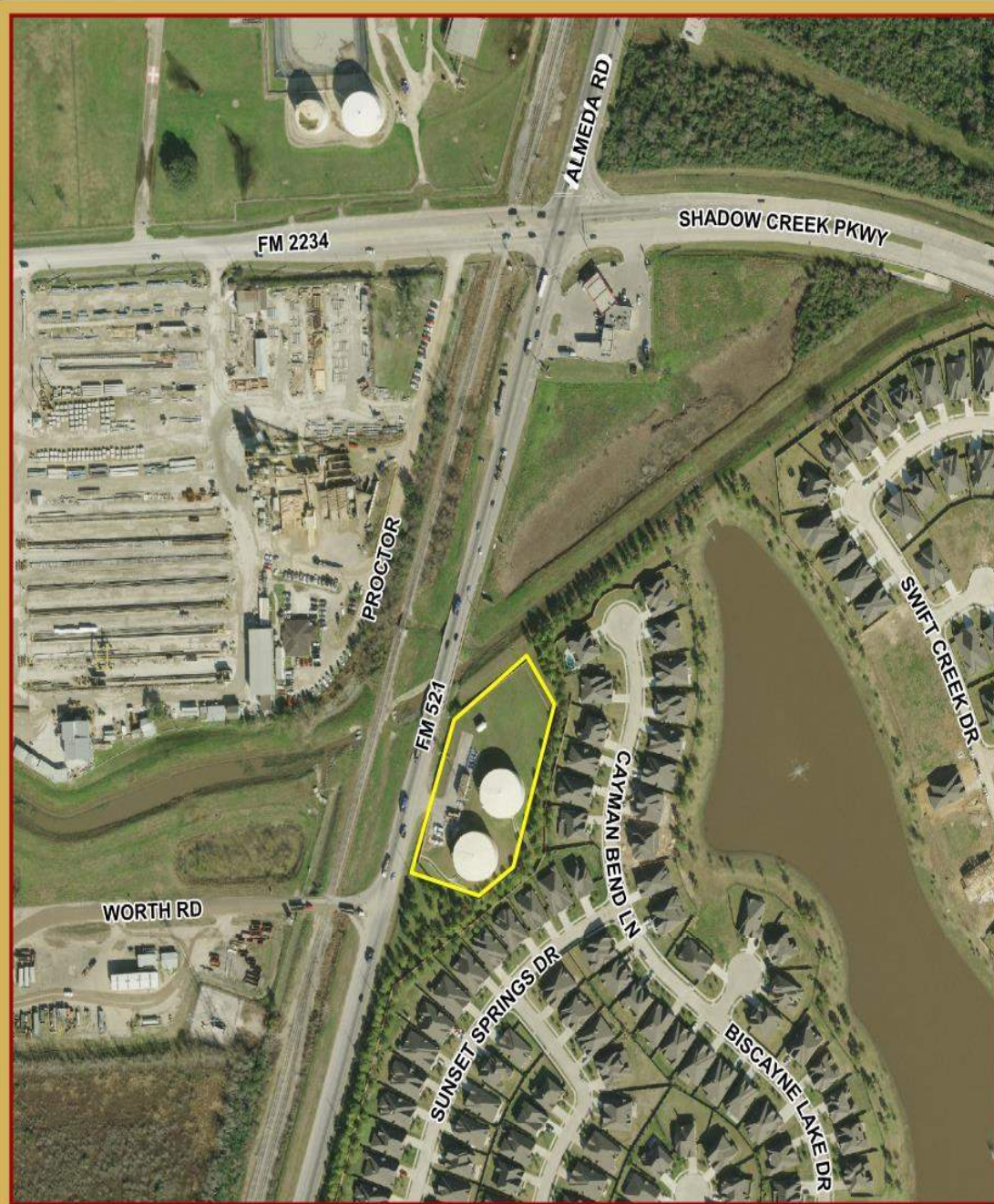
- 90% plans/specs submitted for required TCEQ 60 day review process (submitted 5.9.19).

**Upcoming Phase II Work Items:**

- Completion of TCEQ review and subsequent addressing of comments.
- 95% Technical Review Committee.
- Finalization of plans/specs.


**Previous Memos:** 10/26/2017, 6/28/2018, 11/08/2018, 2/07/2019, 4/18/19

Project Location Map:



CITY OF PEARLAND

FM 521  
Water Plant

 Property Line



This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

1 inch = 300 feet

JUNE 2018  
GIS DEPARTMENT



**Construction Photos:**

Tank pad built with select fill pea gravel



Pump Station tie-in



Steel for the tank pad



## Concrete Placement





Water curing the tank pad.



## Scaffolding



Pre-cast wall panels



Panel Erection



