

To: Mayor and City Council members

Update on multiple roadway improvements under one contract including the Pearland Pkwy traffic circle. Chip shortage continues to impact availability of traffic signal components. Traffic Control Plan at Pearland Pkwy implemented after schools closed for summer is working well. - Trent

Pearland Parkway Traffic Improvements
Pearland Parkway Traffic Circle Modifications

# Intersection Improvements-Winward Bay at Broadway

Is it in Budget?		Is it on Schedule for the Current Phase per the Contract?		Community Benefit
	□ No	⊠Yes	□ No	Sound
		Project Phase?		Infrastructure
		Construction		

#### Highlights:

This report provides progress information on three projects that were bid together to produce economies of scale. A single contractor is performing all the work at all three project locations.

# Pearland Parkway Traffic Improvements (Traffic Signal at Forest Park Lane/Summit Springs and Pearland Parkway)

- This project has experienced heavy delays in the manufacturing of the traffic signal control cabinet. Due to the nationwide chip shortage, the internal controls for the signal cabinets have not been able to be manufactured and delivered to the site. This is a nation-wide issue and has impacted TxDoT signals on their roadways as well. We have stopped time for this project until the cabinets are able to be delivered and installed.
- Substantial Completion walkthrough has taken place. The traffic signal cabinets and fiber terminations are the only items remaining to be completed per above conditions.

#### **Pearland Parkway Traffic Circle Modifications:**

- All new pavement approaches to the original traffic circle and to the new roundabout have been poured and are awaiting final connection through the existing traffic circle
- The southbound right turn lane at Hidden Glen Lane, south of the traffic circle has been poured.
- The sidewalk on the southwest side leading to Hidden Glen has been poured.
- The southbound sidewalk leading away from UHCL has been poured and connected to the existing sidewalk along the north side of McHard.
- The subgrade has been installed for the sidewalk on the eastern side of Pearland Parkway, and sidewalk has been formed and reinforcing steel has been placed and tied.
- All electrical conduit for lighting throughout the new roundabout has been installed and CenterPoint inspections are complete and passed.
- With the help of the City's Communications Department, a phased lane closure package for the roundabout work has been put in place and sent out for public information. U.H.C.L, P.I.S.D., have been informed of the coming traffic switch. This traffic plan is now in operation and working with minimal complaints
- Lane closures were timed to take place after the closing of the 2021/2022 school year. The work was coordinated with PISD and UHCL-Pearland Campus.
- A Change Order for an improved Traffic Control Plan has been processed for \$17,450 and an additional 15 days have been added to the original contract to account for additional traffic control.



# Intersection Improvements- Pearland Parkway at Oakridge Drive & Dixie Farm Road near Long Oak Drive

• Substantial Completion walkthrough inspections have taken place and punch lists have been completed.

#### **Intersection Improvements-Winward Bay at Broadway**

- This project has experienced heavy delays in the manufacturing of the traffic signal control cabinet.
   Due to the nationwide chip shortage, the internal controls for the signal cabinets have not been able to be manufactured and delivered to the site. We have stopped time for this project until the cabinets are able to be delivered and installed.
- Substantial Completion walkthrough has taken place. The traffic signal cabinets are the only items remaining to be completed per above conditions.

#### **Budget Info:**

Pearland Parkway Traffic Improvements

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
General Obligation Bonds	2020 PIB	974,000		974,000
General Obligation Bonds				-
W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		974,000	-	974,000

Expenditures	To Date	Future	Total
PER			-
Land			-
Design	128,006		128,006
Construction	627,156		627,156
Construction Management/Inspection			-
Construction Materials Testing	20,288		20,288
FF&E			-
Total Expenditures	775,451	-	775,451

Project Contingency	2%	15,000
Project Balance		183,549

Staff will be requesting to reduce the project budget

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
General Obligation Bonds	2020	1,272,000		1,272,000
General Obligation Bonds	2021	1,000,000		1,000,000
General Obligation Bonds	TBS 2022	1,000,000		1,000,000
W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources				-
<b>Total Funding Sources</b>		3,272,000	-	3,272,000

Expenditures	To Date	Future	Total
PER			-
Land			-
Design	389,404		389,404
Construction	2,725,942		2,725,942
Construction Management/Inspection			-
Construction Materials Testing	83,125		83,125
FF&E			-
Total Expenditures	3,198,471	-	3,198,471

Project Contingency	2%	73,529
Project Balance		0

# Intersection Improvements-Winward Bay at Broadway

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation	2018	755,001		755,001
Certificates of Obligation	2020A	-		-
Certificates of Obligation				-
General Obligation Bonds				-
General Obligation Bonds				-
W/S Revenue Bonds				-
Impact Fee - Debt				-
Fund Balance - Fund 501 balance		220,000		220,000
Total Funding Sources		975,001	-	975,001

Expenditures	To Date	Future	Total
PER			-
Land			-
Design	127,206		127,206
Construction	707,709		707,709
Construction Management/Inspection			-
Construction Materials Testing	21,183		21,183
FF&E			-
Total Expenditures	856,098	•	856,098

ŀ	Project Contingency	2%	20,000
	Project Balance		98,903

Staff will be requesting to reduce the project budget

#### Schedule Info:

Pearland Parkway Traffic Improvements

	Base Line	Current
Design Start	July-19	July-19
Bid Start	December-19	October-20
Construction Start	January-21	March-21
Construction Completion	December-21	July-22

#### Pearland Parkway Traffic Circle Modification

	Base Line	Current
Design Start	July-19	July-19
Bid Start	January-20	October-20
Construction Start	January-21	March-21
Construction Completion	July-22	

Intersection Improvements-Winward Bay at Broadway

	Base Line	Current
Design Start	July-18	September-18
Bid Start	March-19	October-20
Construction Start	January-21	March-21
Construction Completion	December-21	July-22

#### **Upcoming Work Items:**

- The approved Traffic Control Plan has been put in place as of Friday May 27,2022, and the temporary
  construction traffic pattern has been initiated. During the final stages of construction additional traffic
  control measures will be taken which include the reduction of speed during this stage of the project.
- Demolition of the original roundabout will begin on the North and South side of the traffic circle.
- The subgrade of the Northern and Southern portions of the traffic circle will be graded, forms set in place, steel tied, and concrete will be poured.
- Once the North and South sides are completed the Contractor will have signage and striping in place to then open the Roundabout for Southbound traffic and close the West side of the Roundabout for removal and connection.
- The sidewalk on the eastern side of Pearland Parkway will be poured.
- CenterPoint will have all lighting installed and operational.
- The traffic control cabinets are currently scheduled to ship June 6,2022 and are scheduled to be delivered to the contractor by June 13, 2022. This date has potential to change pending further manufacturing delays.

Project Manager: Jennifer Lee

Construction Manager: Michael Collins

#### Scope:

The Pearland Parkway Traffic Improvements: project consists of the installation of a traffic signal at the intersection of Pearland Parkway and Forrest Park Lane/Summit Springs Lane. Directional pedestrian ramps will be included along with two left turn bays.

**Pearland Parkway Traffic Circle Modification**: is a reconfiguration of the existing rotary traffic to a round-about. After construction, higher speed traffic flow will be managed by an outside turning lane designed for higher-speed right turn movements.

**Intersection Improvements-Winward Bay at Broadway:** The project will provide the installation of a traffic signal located at the intersection of Windward Bay and Broadway.

#### Justification:

The Pearland Parkway Traffic Circle Modification project is designed to improve the existing rotary traffic circle at the int Accident reports dating back to 2013 indicated the need for the reduction of uncontrolled left turn movements along the entire corridor. The installation of a signal at this complex intersection will reduce the incidence of unprotected left turn movements and consequently reduce the number of conflicting left turn movements. Alliance Transportation Group was selected through the City's Qualification Based selection process based on their familiarity with Pearland Parkway traffic issues and historic consultation on potential solutions and the proximity of this signal installation to the modifications to the traffic circle. Council approved the design contract for Alliance Transportation Group in July 2019 and the plans and specifications (bid documents) were completed in October 2020. The project was advertised and bid in November this year in conjunction with the above and below two projects as a means of gaining economies of scale. In addition, this allows for the contractor to manage both projects eliminating the need for additional outside coordination.

Accident reports dating back to 2013 indicated the need for the reduction of uncontrolled left turn movements along the entire corridor. These modifications provide the reduction of unprotected left turn movements and will reduce the number of entering left turns. The Pearland Parkway Traffic Improvements consists of the installation of traffic signals and improvements at the intersection of Pearland Parkway and Forest Park Lane/ Summit Springs Lane. Directional pedestrian ramps and cross walks across Pearland Parkway will be included. Left turn bays on the minor street approaches will be striped.

During the speed study that was conducted along Broadway, an analysis of vehicular crash data was reviewed at the intersection. In addition, a traffic signal study was conducted. It was determined that a signal was warranted at Winward Bay to assist in providing safe vehicular movement.

#### **Previous Memos:**

Pearland Parkway Traffic Improvements- 10.31.19, 1.23.20, 5.27.21,12.16.21

Pearland Parkway Traffic Circle Modifications- 11.27.19, 7.30.20, 2.20.20, 1.07.21, 5.27.21, 12.16.21

Intersection Improvements-Winward Bay at Broadway: 08.39.18, 11.07.19, 1.30.20, 5.27.21, 12.16.21



**Project Phases and Detours:** 

### **Road Closure Notice**

Phase 1: 5/27

**Duration: 3 - 4 weeks** 

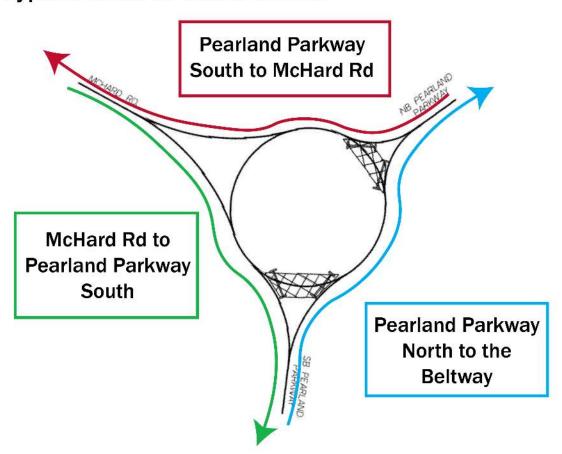
#### Impacted Routes:

Pearland Pkwy North to McHard Rd West

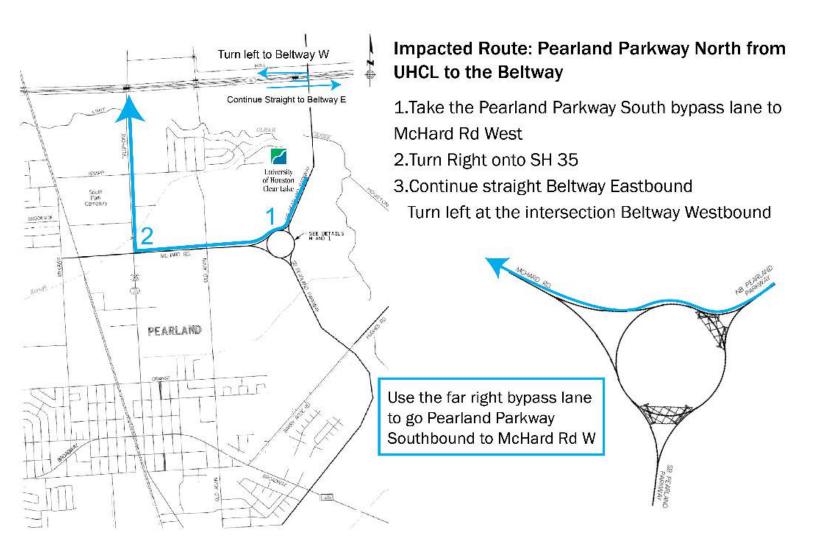
McHard Rd East to Pearland Pkwy



The following routes will NOT be impacted by traffic circle closures. Continue to use the far right bypass lanes on these routes.











# Impacted Route: McHard Rd East to Pearland Pkwy North

- 1. Head South on SH 35
- 2. Turn left onto Broadway
- 3. Turn left onto Pearland Parkway North



### **Pearland Parkway Traffic Improvements**

# VICINITY MAP



Addition of Traffic Signals and Improvement of Left Turn Lanes





# **Pearland Parkway Traffic Circle Modifications**





### Intersection Improvements Windward Bay/Pearland Parkway/Dixie Farm

# VICINITY MAP



Addition of Traffic Signals and Improvement of Left Turn Lanes





# Intersection Improvements Windward Bay/Pearland Parkway/Dixie Farm

# VICINITY MAP



Addition of Left Turn Lane





# Intersection Improvements Windward Bay/Pearland Parkway/Dixie Farm

# VICINITY MAP



Addition of Left Turn Lane and Hooded Left Turn Lane





# Project Photos:



**Aerial Photo of Current Project Status** 



All Concrete Inside Existing Circle has been Poured





Sidewalk on Eastern Side of Pearland Parkway has been Poured



New Concrete Ready to be Tied into Each Other Once TCP is Implemented (North Side)







New Concrete Ready to be Tied into Each Other Once TCP is Implemented (West Side McHard)