

10/31/2019

To: Mayor and City Council members

Progressing with design for improvements at existing intersection of Pearland Parkway with Summit Springs Lane and Forest Park Lane, to add a new traffic signal. Looking to bid in December. Clay



Pearland Parkway Traffic Improvements

Scope: The project scope consists of the installation of a traffic signal and intersection improvements at the intersection of Pearland Parkway and Forest Park Lane/Summit Springs Lane. Directional pedestrian ramps and crosswalks across Pearland Parkway will be included. Left turn bays on the minor-street approaches will be striped. A fiber optic line will be installed from Old Alvin Road to Barry Rose along Pearland Parkway to connect the new signal and the signal at Barry Rose to the Traffic Management System.



Justification: 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.

Project Manager: Fatema Weekly

Designer: Alliance Transportation Group, Inc.

Contractor: N/A

Budget Info:

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
General Obligation Bonds	TBS	1,124,000		1,124,000
General Obligation Bonds W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		1,124,000	-	1,124,000

Expenditures	To Date	Future	Total
PER			-
Land			-
Design	125,581		125,581
Construction		918,965	918,965
Construction Management/Inspection			-
Construction Materials Testing		10,000	10,000
FF&E			-
Total Expenditures	125,581	928,965	1,054,546

Project Balance/Contingency	69,454
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Schedule Info:

	Base Line	Current
Design Start	July-19	July-19
Bid Start	December-19	
Construction Start	February-20	
Construction Completion	January-21	

Rain Days: N/A

Highlights:

- The Design Engineer has completed a safety and traffic analysis to evaluate crash history at the Pearland Parkway intersection. An operational analysis is being developed to determine optimum signal timing aimed at reducing vehicular crashes (62 reported from 2016 to 2018) while improving overall intersection operations.
- All intersection approaches are being designed to operate at recommended Levels of Service (LOS) in both AM and PM peak hours. The criterion for minimum acceptable LOS for future conditions of the intersection is D; average control delay of >35 and <55 seconds per vehicle or better. Traffic signal criteria is based on the average control delay per vehicle which include deceleration and acceleration delay, queue move-up times, and stopped delay.
- Preliminary topographic and utility survey has been completed for ROW and conflict identification; all utilities have been located none represent major conflicts.
- 60% construction drawings for the traffic signal and fiber installations are complete and were submitted to Staff on October 1, 2019 for review and comments;
- City comments were returned to design consultant on October 21, 2019.

Upcoming Work Items:

- The design consultant will finalize the engineering traffic?? study and prepare for submission to City Staff for review and comment.
- The consultant to conclude utility and Right Of Way (ROW) research and finalize the topographic survey.
- Staff has directed the Engineer to review and respond to 60% design comments and continue development of 90% PS&E for the traffic signal and fiber installation.

Previous Memos: 6/20/19

Project Location:

VICINITY MAP



Legend/Notes

Addresses

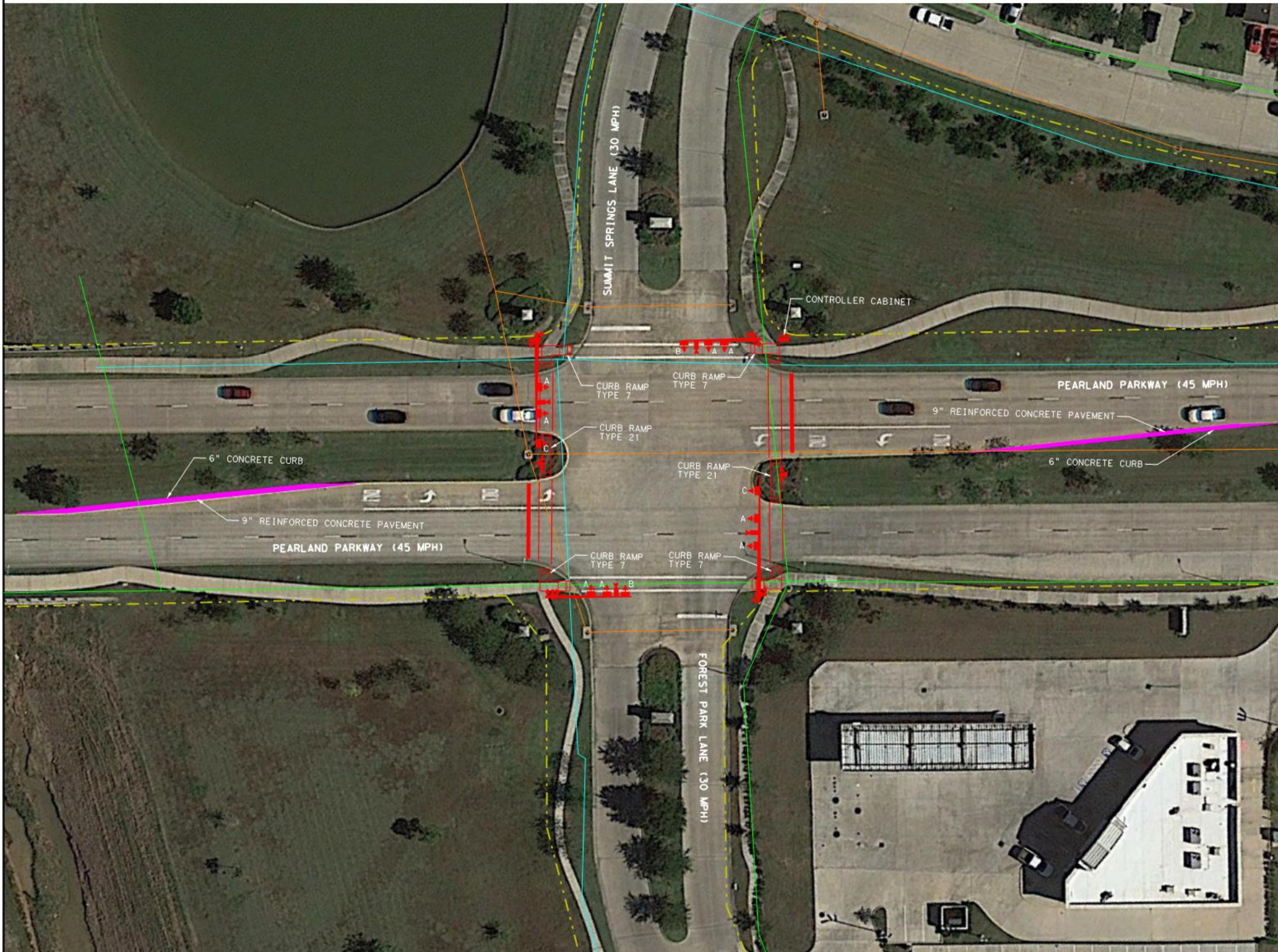


1:1,492
1 inch = 124 feet



NORTH
This product is for informational purposes only and may not be prepared or be suitable for legal, engineering, or surveying purposes.

MFP PREPARED: OCTOBER 26, 2019



- LEGEND**
- PROPOSED REINFORCED CONCRETE PAVEMENT
 - PROPOSED CONTROLLER W/ CABINET & BBU
 - PROPOSED SIGNAL POLE W/ MAST ARM
 - PROPOSED PEDESTRIAN SIGNAL POLE
 - ◀ PROPOSED VEHICLE SIGNAL HEAD
 - ◀ PROPOSED PEDESTRIAN SIGNAL HEAD
 - ◀ PROPOSED VIVDS VEHICLE DETECTOR
 - EXISTING WATER LINE
 - EXISTING STORM SEWER LINE
 - EXISTING SANITARY SEWER LINE
 - - - EXISTING RIGHT-OF-WAY

PROPOSED SIGNAL HEADS

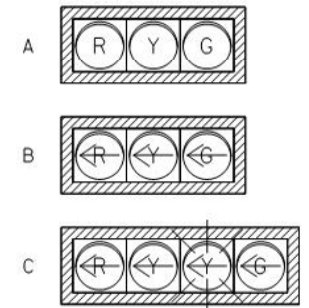


FIGURE 1

ALLIANCE
TRANSPORTATION GROUP

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Houston, TX 77056
Phone 713-457-9319 Fax 512-821-2085
TBPB Firm Registration No. F-812

**PEARLAND PARKWAY AT
FOREST PARK LN/SUMMIT SPRINGS LN**

**TRAFFIC SIGNAL
CONCEPTUAL LAYOUT**

SCALE : 1" = 50'		PROJECT NO.	
DWN: MAG	CKD: ES	TR1801	
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY