



16 November 2022
 TO: Mayor and City Council members
 Update on the big McHard Road extension that will provide major east-west mobility connection. As noted here, looking to try opening section between Stone and Garden by mid-December. Clay

McHard Road Extension (Mykawa to Cullen)

Is it in Budget?		Is it on Schedule for the Current Phase per the Contract?		Community Benefit
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Project Phase				
Construction				

Highlights:

- **Drainage system installation.**
 - All drainage boxes and piping has been installed.
 - The installation of inlets is complete.
 - Ditch regrading is complete between Cullen and Max Rd.
 - Work has started on the overflow channels on Hickory Slough Ponds 1 and 2.
 - Slope paving has been placed at Hickory Slough Pond 2.
 - Slope paving around the inlets at Mykawa Rd. is complete.
 - October 20th the project team, including the drainage engineer, met with a property owner on Harkey to discuss drainage system concerns along their lot.
 - The drainage system includes two 4x2 boxes with SETs that could create a maintenance issue for the residents.
 - The engineering team is currently working on a solution to address the residents' concerns.
 - **Staff is working with BDD4 and addressing any concerns that they have from their inspections**
- **Paving.**
 - **The days allotted in the construction contract has been amended from November 2022 to January 2023 due to impact to the critical path.**
 - **The paving schedule was delayed due to several conflicts during the installation of the drainage boxes.**
 - The waterline at each of the five intersections conflicted with the installation of the main line drainage boxes.
 - On Roy and Hatfield, residential gas lines and meters conflicted with the drainage.
 - The contractor exercised several workarounds, but the critical path was still impacted.
 - Asphalt paving work is complete at the intersections.
 - All driveways have been poured.
 - Pavement striping scheduled to begin in mid-November.
- **The fiber optics subcontractor has completed the conduit installation and has pulled approximately 75% of the cabling within the project limits of Cullen to Mykawa.**



- Ongoing work includes:
 - The traffic signal sub-contractor is completing the installation of the traffic signals
 - Signal heads have been installed.
 - Gridsmart cameras have been installed.
 - All signals (Max Rd., Roy Rd., O'Day Rd., Garden Rd., and Hatfield Rd.) were inspected on November 1.
 - Two signals were incorrectly grounded and had to be corrected and re-inspected.
 - All signals have been green tagged as of November 11.
 - Staff requested the ESID numbers for all signals.
 - Upon receipt of the ESID numbers a work order will be issued to CenterPoint Electric to energize the signals.
 - The target date for energizing is November 23.
 - This date is dependent on CenterPoint schedule and weather conditions.
 - Continue coordination with Traffic Operations Division.
 - Continue coordination with IT.
 - CenterPoint Energy has approved the street light layout and submitted the cost to the city. Staff is preparing to have the cost proposal on the November 21, 2022, agenda for Council consideration.

Outstanding Items:

- Continued coordination with BDD4.
 - The details in the plans are not the current BDD4 outfall details.
 - BDD4 changed their details in 2012, but the McHard Rd. drawings did not incorporate the new details on sheets, and the District Engineer approved the drawings.
 - The BDD4 approval is good for one year, therefore the BDD4 inspector is requesting that the project use the current outfall details for the detention ponds.
 - Staff has requested the contractor provide a proposal to remove placed infrastructure and install corrections to match the details.
 - The work corrections will include:
 - Saw cut and remove sections of RCP that tie into the two of ponds.
 - Saw cut and remove sections of the slope pavement.
 - Cast in place a transition from the RCP to the slope paving at the toe.
- City staff will meet with the drainage design engineer to develop a resolution to a drainage issue on Hatfield.
 - Drainage boxes and inlets were designed too high to drain properly.
 - The design will need to be adjusted to correct the drainage north and south of the McHard and Hatfield intersection.



- The project team has asked the contractor to complete sections of the roadway, including striping and landscaping to open sections before the substantial completion date.
 - The team is working to open the section between Stone Rd. and Garden Road in mid to late December.
 - The lane striping and landscaping should be complete before the road is opened to avoid lane closures after opening.
 - Traffic signals should be operational before the road is opened.

Budget Info:

Funding Sources	Series	To Date	Future	Total Budget
Certificates of Obligation	2022A	3,468,428		3,468,428
General Obligation Bonds	2014	531,488		531,488
General Obligation Bonds	2015	238,566		238,566
General Obligation Bonds	2016A	222,627		222,627
General Obligation Bonds	2017	1,725,637		1,725,637
General Obligation Bonds	2020	7,850,000		7,850,000
General Revenue - Cash				-
HGAC TIP		32,380,531		32,380,531
Other Funding Sources - (Old Alvin 2017)		1,016,382		1,016,382
Other Funding Sources - Fund 506 Balance		413,341		413,341
Total Funding Sources		47,847,000	-	47,847,000

Expenditures	To Date	Future	Total
PER			-
Land	6,677,189	243,364	6,920,553
Design	4,545,300	90,000	4,635,300
Construction Contract	30,410,491	1,714,998	32,125,489
Construction Management/Inspection	2,480,193		2,480,193
Construction Materials Testing	425,289	20,000	445,289
FF&E			-
Total Expenditures	44,538,462	2,068,362	46,606,824

Project Contingency	3%	1,240,176
Project Balance		(0)

Project balance includes TIP funds associated with the project.

Schedule Info:

	<i>Base Line</i>	<i>Current</i>
<i>Design Start</i>	August-14	August-14
<i>Bid Start</i>	April-17	January-20
<i>Construction Start</i>	June-20	September-20
Construction Completion	September-22	January-23



Upcoming Work Items:

- The contractor will continue paving through the greenfield and at the intersections.
- The contractor will continue installing the irrigation system.
 - Landscaping installation should begin in late November.
- The subcontractor will continue installing fiber optic in the conduits and make connections to the signals.
- All of the detention ponds have been rough excavated.
 - Pilot channels need to be installed.
 - Outfalls need to be installed.
- Staff will present to City Council on November 21, 2022 a construction contract for an tying the fiber optics lines beyond the project limits back to the City's existing fiber optic lines.
 - The McHard Rd. project included the installation of fiber optics conduit and cabling within the project limits – Cullen Blvd. to Mykawa Rd.
 - The contract to extend fiber from the West Pearland Community Center along Country Place Pkwy to McHard Rd. and along McHard Rd. to Cullen Blvd. plus along McHard Rd. from Mykawa Rd. to SH 35 was advertised and bid in October.
 - The McHard Rd. fiber optics and the new fiber optics project will complete the fiber optics system throughout the McHard Rd. corridor.

Project Manager: Jennifer Lee

Designer: Freese and Nichols, Inc.

Contractor: James Construction Group

Construction Manager: HDR, Inc.

Scope:

The McHard Road project will extend from the intersection of Mykawa and McHard Rd. west to tie into the existing roadway at Cullen Blvd. It will include the construction of approximately 3.5 miles of four lane divided concrete curb and gutter roadway with signalized intersections (Max Rd., Roy Rd., O'Day Rd., Garden Rd., and Hatfield Rd.). Also included in the road design is grading, paving, mixed use sidewalks, drainage, detention ponds, signage, pavement markings, illumination, traffic control, storm water pollution prevention and landscaping/irrigation.

Justification:

This project is in accordance with the City's Thoroughfare Plan to alleviate traffic on FM 518 by providing an alternate east/west route between SH 288 and SH 35. The project was selected by H-GAC to receive 80% federal funding for design and construction through the 2016 TIP.

Previous Memos: 04.01.2015, 07.15.2015, 10.14.2015, 02.04.2016, 10.06.2016, 01.26.2017, 05.04.2017, 09.07.2017, 05.31.2018, 01.24.2019, 09.26.2019, 06.04.2020, 11.19.2020, 02.04.2021, 04.15.2021, 06.24.21, 9.30.21, 03.03.22, 9.1.22



Project Location Map:





Project Photos:



Cullen at McHard Rd. intersection, looking west.



McHard Rd. at Max Rd.



Garden Rd. intersection looking west.



The intersection of Hatfield Rd, looking west.



Hickory Slough Detention Pond 1 channel.



Hickory Slough Pond on the far right.