

4/13/2023

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To: Mayor and City Council

Update on the Mykawa Road project. Upcoming design contract amendment to adapt to changed conditions regarding the bridge at Clear Creek not being replaced as part of the creek project and pipeline crossing impacts to the storm sewer. All still within budget at this point. Additionally, will need to update the survey before going to construction. Next step is starting land acquisition.

Memo

To: Trent Epperson, Interim City Manager

From: Lap Trinh, Senior Project Manager

CC: Rajendra Shrestha, P.E., Interim Director of Engineering & Capital Projects

Jameson Appel, Assistant Director of Capital Projects

Date: April 13, 2023

Re: Pre-Award Memo for Design Phase Services Amendment of the Mykawa

Road Widening Project

Purpose

This memo provides information about the proposed award of a design phase services amendment for two pedestrian bridges, storm sewer mains crossing gas pipelines, project survey, and retaining wall to the Mykawa Road Widening Project with Lockwood, Andrews & Newnam, Inc. This contract is scheduled for presentation to Council on the May 8, 2023, meeting agenda.

Background

In 2015, the Houston Galveston Area Council (H-GAC) Transportation Policy Council (TPC) approved the City's Mykawa Road Expansion application for funding in the 2015-2018 Transportation Improvement Program (TIP). The project was included in the 2015-2019 CIP Budget, with funding for the design in FY 2017 and construction scheduled in FY 2018. Subsequently, staff requested the Texas Department of Transportation (TxDOT) prepare the project's Advanced Funding Agreement (AFA).

In May 2017 (Resolution No. R2017–94), the City entered into an AFA with TxDOT to share the design, right-of-way, and construction costs for all authorized expenditures on an 80/20% basis up to the maximum amount of \$31,641,226.00 per the AFA funding agreement. Per the AFA, the City is responsible for performing the architectural and engineering services, obtaining Environmental clearance (Finding of No Significant Impact) and mitigation/remediation of any environmental issues, and utility relocation. TxDOT will be responsible for advertising for construction, receiving and tabulating bids, and awarding and administering the construction contract. The City will be responsible for 20% of the construction costs up to the agreed AFA amount of \$8,027,580.00.

On March 26, 2018 (Resolution No. R2018–56), the City awarded a professional services contract to Lockwood, Andrew & Newnam, Inc. (LAN) to prepare Plans, Specifications, and Estimates (PS&E) for the Mykawa Road Widening Project from Farm to Market 518 (FM 518) to the westbound frontage road of Beltway 8 south in the amount of \$2,987,697.11.

Upcoming Contract Amendment

Two prior amendments for LAN added tasks to identify & delineate waters of the United States, including wetlands, due to additional stormwater detention area required for the project and updating the biological technical documentation for the TxDOT's environmental approval.

The current amendment is for the design of pedestrian bridges at Hickory Slough and Clear Creek; storm sewer mains crossing over existing 16–inch pipes owned by Enterprise Crude Pipeline, LLC (Enterprise) near Shank Road and Clear Creek, and 24 & 30–inch pipes owned by Kinder Morgan Crude & Condensate Pipeline LLC (Kinder Morgan) near Clear Creek; and retaining walls on the west side between Hickory Slough to Scott Lane and Lila Street to Isla Street, which will lessen the extent of land required during acquisition.

In 2014 Harris County Flood Control District (HCFCD) informed the City that they plan to realign and increase capacity for Clear Creek from Cullen Parkway to Dixie Farm Road based on the General Re–Evaluation Report (GRR). As a result, the existing roadway bridges between Cullen Parkway and Dixie Farm Road would be replaced and raised to meet new criteria. Thus, Mykawa Road bridge at Clear Creek was to be replaced as part of GRR. The City was to partner with HCFCD to replace the Mykawa Road bridge at Clear Creek to ensure adequate sidewalk width in design for in the new bridge. However, HCFCD has changed the scope of the GRR to now realigning and widening Clear Creek to increase capacity due to cost escalation and budgetary constraints. Therefore, the Mykawa Road bridge at Clear Creek will not be replaced since the bridge is in fair condition according to the 2021 TxDOT's Bridge Inventory, Inspection, and Appraisal Program (BRINSAP). The same report also gave a fair condition rating for the Mykawa Road bridge at Hickory Slough. Per the federal funding received for the Mykawa Road Widening project, a 10–feet wide share used path is required to be constructed as part of this project. The existing sidewalk at both bridges is currently 6–feet wide. Thus, a separate pedestrian bridge to accommodate a 10–feet wide sidewalk will be required to be constructed at Hickory Slough and Clear Creek respectively.

During initial data gathering, both Enterprise and Kinder Morgan provided elevation information of their existing pipelines under Mykawa Road from record drawings. However, upon further investigation by Enterprise and Kinder Morgan in relation to the proposed storm sewer system for Mykawa Road Widening project, the previously provided elevation information is incorrect. The actual vertical separation between the existing pipelines and the proposed storm sewer mains in the field is between 9–12 inches. The Texas Administrative Code requires a minimum of 2–feet separation between the pipes. In addition, the original survey of the project was completed in 2018 and is out of date. A new survey will have to be conducted to account for any changes in the field that may have occurred since 2018.

LAN has drafted a proposed amendment to account for the design changes needed in the amount of \$488,390.21 The breakdown of the contract amendment fees is as follows:

Field Surveying		\$158,085.00
Roadway Design Controls		\$ 42,973.32
Drainage Design		\$ 84,715.20
Miscellaneous		
Retaining Walls Design		\$ 50,099.94
Bridge Design		\$ 79,055.76
Project Coordination		<u>\$ 73,460.89</u>
	Total Contract Amendment	\$488,390.11

A review of the proposal by Engineering and Projects Staff has determined that the proposal is complete and reasonable and will provide the effort needed to complete this project through the design and construction support phases. The City is funding this contract amendment, and it will not be part of the 80/20 with TxDOT

Current Status

The 60% design plan submission was received in June 2020 and reviewed with staff from Engineering and Public Works Department (EPW) and TxDOT in July 2020. Coordination with Brazoria Drainage District No. 4 (BDD #4) and HCFCD is ongoing for stormwater discharge to Hickory Slough and Clear Creek and pedestrian bridges crossing the same locations. However, the design has been on hold due to HCFCD having no engineering design plan to realign and widen Clear Creek between Cullen Parkway and Pearland Parkway including at Mykawa Road since 2020. In the summer of 2022, the City and TxDOT decided to move forward with the design and informed HCFCD of the decision since the TxDOT funding for this project has a time limitation to disburse the funding. The pedestrian bridge design at Clear Creek will mirror the existing vehicular bridge regarding the location of the bridge supports and abutments.

The Notice Affording an Opportunity for a Public Hearing (NAOPH) was posted in November 2022, and the City of Brookside Village requested a public meeting to update the project status. The project team and TxDOT attended the City of Brookside Village council meeting on March 16, 2023.

Next Steps

Upon acceptance by Council, LAN will implement these changes and submit 90% plan and construction cost estimates.

The City is waiting for TxDOT to concur that the NAOPH is complete with the project team's attendance at the City of Brookside Village council meeting on March 16, 2023, and a Finding of No Significant Impact (FONSI) is expected to be issued for the project. ROW acquisition will commence upon issue of the FONSI and is expected to take up to twenty–four months to complete. Franchise utilities relocation will commence once ROW acquisition is complete with an anticipated 12 months construction duration. 100% plans, specifications, and estimates will be finalized once the ROW acquisition is complete. TxDOT anticipates letting the project in August 2026, with construction to start in the first quarter of 2027.

Budget Info

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash		2,000		2,000
	Prior			
Certificates of Obligation	2008	108,723		108,723
	TBS			
Certificates of Obligation	2023	8,803,680		
General Obligation Bonds	2017	1,036,639		1,036,639
General Obligation Bonds	2018	2,240,720		2,240,720
General Obligation Bonds	2022	4,777,600		4,777,600
	TBS			
General Obligation Bonds	2023	551,900		551,900
W/S Revenue Bonds				-
HGAC- TIP		2,237,680		
Other Funding Sources		5,361		5,361
Total Funding Sources		19,764,303	-	19,764,303

Expenditures	To Date	Future	Total
PER	108,723		108,723
Land	9,100	7,680,900	7,690,000
Design	3,031,878	488,391	3,520,269
Construction		8,027,580	8,027,580
Construction Management/Inspection			-
Construction Materials Testing			-
FF&E			-
Total Expenditures	3,149,701	16,196,871	19,346,572

Project Contingency	2%	417,731
Project Balance		(0)



	Base Line	Current
Design Start	August 2017	May 2018
Bid Start (TxDOT lead)	August 2020	August 2026
Construction Start (TxDOT lead)	January 2020	January 2027
Proposed Construction Completion	June 2022	January 2029

Rain Days: N/A

Recommendation

Staff will recommend Council to approve the design contract amendment to Lockwood, Andrew & Newnam, Inc., in the amount of \$488,390.11 at the April 24th, 2023, City Council meeting.



VICINITY MAP

