

Memo

To: Clay Pearson, City Manager

From: Fatema Weekly, Project Manager

CC: Trent Epperson, Assistant City Manager

Robert Upton, P.E., Director of Engineering & Capital Projects

Skipper Jones, Assistant Director of Capital Projects

Clarence Wittwer, Director of Public Works

Date: February 6, 2020

Sleepy Hollow Street Reconstruction Re:

Purpose

This memo provides information regarding the proposed contract award for professional engineering services for the Sleepy Hollow Street Reconstruction project. This contract is scheduled for presentation to City Council on the February 24, 2020 meeting agenda.

Background

The City conducted an assessment of all streets within the city limits in 2015. This assessment produced a database of street condition information assigning a numeric rating to all assets within the Right of Way. This database ranks each street according to its condition assessment and provides Staff with the information to identify individual streets requiring one of several methods of preservative attention ranging from joint sealing to panel replacement to total street replacement. The results of the Rights of Way Assessment Program Study were presented to Council in 2015. The assessment was updated and presented to staff in 2018, after Hurricane Harvey, to revised the assessment of the asphalt streets and to update the information due to the activities that have been conducted by Public Works previously. Overall, the City scored 76 out of 100 Pavement Condition Index (PCI). However, this fairly high score is skewed by the number of new concrete streets making up a large percentage of the City's inventory. Older concrete and asphalt pavement streets generally scored lower requiring immediate attention. This program is aimed at preserving a city-wide acceptable score for street condition by focusing on timely restorative efforts on those streets most in need of improvement.

Maintaining the overall City Pavement Condition Index (PCI) of 76 requires an annual citywide investment of \$4.6 million (2018 dollars) for maintenance activities such as asphalt overlay, concrete panel replacement, street leveling, etc. The maintenance program is not for complete street replacement and when the street PCI is in the poor range and no further maintenance activities are cost effective then the street is considered for reconstruction through the Capital Improvement Program.

The 2019 Bond Program included funds for the reconstruction of concrete neighborhood streets throughout Pearland base on their PCI. The Right of Way Assessment Program identified the streets within the Sleepy Hollow subdivision as having a current PCI ranging between 47 and 55 with evidence of sub-grade failure resulting in major cracking and panel dislocation requiring full pavement replacement due to the advanced deteriorated condition. As drainage system condition and

2/6/2020

To: Mayor and City Council members

Existing neighborhood street reinvestment -- Sleepy Hollow. Coming to you for design award consideration. Construction in

2021. Clay

performance is a major factor in pavement performance and life, drainage systems within these areas will also be assessed to identify necessary improvements.

The streets in the Sleepy Hollow subdivision ranked as one of the lowest rated scores for concrete streets and has been prioritized for improvements with funds allocated in FY20-21. The existing roadway within this area is an approximate twenty-two foot (22') wide residential concrete roadway. The drainage system consists of roughly 3,380 linear feet of road side ditches. The proposed project will replace the concrete roadway by matching the existing width and will maintain a rural cross-section. Because this area is impacted by rising water from Clear Creek installation of an underground system with curb and gutter will not improve the drainage system performance. The existing roadside ditches will be cleaned and will be improved where necessary.

An initial assessment of the project area indicates several large mature trees that could be potentially impacted by construction efforts on this project. To minimize this concern, the services of an Urban Forestry consultant will be provided for tree preservation.

Current Status

HDR Engineering, Inc. was selected by Staff's Qualification Based Selection Process for the engineering services and submitted a proposal for professional engineering services associated with the project based upon scoping meetings with Staff and the City's Public Works department. The scope of work includes design deliverables of 30%, 60% & 90% plans and preparation of bid-ready contract documents. Additional Services identified for this project include full right-of-way topographical survey, Geotechnical investigation and analysis, tree preservation/protection and sanitary sewer TV services to determine the condition of the sewer system

Bid Phase and Construction Phase services are also incorporated to the contract and include conducting a pre-bid conference, responding to requests for information (RFI's), preparing addendums, reviewing bid tabulations for irregularities, preparing construction award letter of recommendation and attending regular progress meetings and reviewing/commenting on construction submittals.

The fees proposed for HDR's services are broken out in three components (Paving, Water, Sewer) and are as following:

Paving and Drainage:

•	Basic Design Phase Services (lump sum)	\$165,100.00
•	BID Phase Services (Hourly Not to Exceed)	\$ 4,350.00
•	Construction Phase Services (Hourly Not to Exceed)	\$ 30,600.00
•	Additional Services (Hourly Not to Exceed)	\$ 25,609.64
•	Reimbursable Expenses (Hourly Not to Exceed)	<u>\$ 1,650.00</u>
	Total	\$227,309.64

Water:

•	Basic Design Phase Services (Lump Sum)	\$31,260.00
•	BID Phase Services (Hourly Not to Exceed)	\$ 870.00
•	Construction Phase Services (Hourly Not to Exceed)	\$ 6,120.00
•	Additional Services (Hourly Not to Exceed)	\$ 5,121.94
•	Reimbursable Expenses (Hourly Not to Exceed)	\$ 330.00
	Total	\$43,701.94

Sanitary Sewer:

•	Basic Design Phase Services (Lump Sum)	\$20,340.00
•	BID Phase Services (Hourly Not to Exceed)	\$ 580.00
•	Construction Phase Services (Hourly Not to Exceed)	\$ 4,080.00
•	Additional Services (Hourly Not to Exceed)	\$14,579.62
•	Reimbursable Expenses (Hourly Not to Exceed)	\$ 220.00
	Total	\$39,799.62

HDR's Total Engineering Services for the combined components is \$310,811.20.

Next Steps

Staff will present the HDR proposal for engineering services for street replacement in Sleepy Hollow to Council at the February 24th Council Meeting. Upon approval of the contract by Council, Staff plans to issue a Notice to Proceed (NTP) to HDR in March 2020 to begin the design phase. Design is expected to commence immediately upon receipt of the NTP with bid ready documents expected to be completed in 9 months. Construction is anticipated to have a 10-month duration period for the project.

Budget Info – Project is funded from three CIP projects (Streets, Water, & Sewer)

Street Reconstruction (Sleepy Hollow)

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
General Obligation Bonds	TBS	845,000		845,000
General Obligation Bonds			2,330,000	2,330,000
W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		845,000	2,330,000	3,175,000

Expenditures	To Date	Future	Total
PER			-
Land			-

	277,310	277,310
	2,320,000	2,320,000
		-
		-
		-
-	2,597,310	2,597,310
	<u>-</u>	2,320,000

Project Balance/Contingency	577,690
Project balance/ contingency	377,030

Sleepy Hollow Dr / Washington Irving / Rip Van Winkle Dr Water Line Replacement

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
General Obligation Bonds				-
System Revenue - Cash		60,000	420,000	480,000
W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		60,000	420,000	480,000

Expenditures	To Date	Future	Total
PER			-
Land			-
Design		43,702	43,702
Construction		350,000	350,000
Construction Management/Inspection			-
Construction Materials Testing			-
FF&E			-
Total Expenditures	-	393,702	393,702

Project Balance/Contingency	86,298

Sleepy Hollow Sanitary Sewer Rehabilitation

Funding Sources	Series	To Date	Future	Total Budget
General Revenue - Cash				-
Certificates of Obligation				-
Certificates of Obligation				-
General Obligation Bonds				-
System Revenue - Cash		40,000	270,000	310,000
W/S Revenue Bonds				-
Impact Fee - Debt				-
Other Funding Sources				-
Total Funding Sources		40,000	270,000	310,000

Expenditures	To Date	Future	Total
PER			-
Land			-
Design		39,800	39,800
Construction		225,000	225,000
Construction Management/Inspection			-
Construction Materials Testing			-
FF&E			-
Total Expenditures	-	264,800	264,800

Project Balance/Contingency	45,200

Schedule Info

	Base Line	Current
Design Start	February-20	
Bid Start	October-20	
Construction Start	January-21	
Proposed Construction Completion	October-21	

Recommendation

Staff will recommend Council approve a contract with HDR Engineering, Inc. for the engineering design services for the Sleepy Hollow Street Reconstruction project in the amount of \$310,810.20, at its February 24, 2020 meeting.

