

# AGENDA ITEM SUMMARY FORM

MEETING DATE: October 10, 2023

**PREPARED BY:** Chris Whittaker

**AGENDA CONTENT:** Street Bond Project – Package III

**AGENDA ITEM SECTION: Regular Agenda** 

BUDGETED AMOUNT: FUNDS REQUESTED:

NA \$351,480.00

FUND:NA

#### **EXECUTIVE SUMMARY:**

The City had requested HDR provide a proposal for the third package for the Street Bond Project. This project includes lower the roadway and installing curb and gutter on Parish Street (including sidewalk) from Live Oak to SH 35 and replacing the existing asphalt roadway on the western half of Silver Saddle from 205 Silver Saddle to Bronco Bend. The proposal includes survey, geotechnical, design plans and details, traffic control, storm water pollution prevention plan, tree protection plan, townhall meeting, TxDOT coordination and permitting, and Texas department of license and regulations sidewalk registration and inspection.

RECOMMENDATION: Council to award the above-mentioned service to HDR for a not to exceed amount of \$351,480.00.



October 3, 2023

Mr. Chris Whittaker City Manager City of Angleton 121 S. Velasco Angleton, Texas 77515

Re: Proposal for Engineering services for Design, Bid, and Construction Phase Services for the Street Bond Projects Phase III

Dear Mr. Whittaker:

HDR Engineering, Inc. (HDR) is pleased to submit this proposal for performing design, bidding, and construction phase services for the above referenced project. The proposal is based on our conversations held with the City. The tasks include design, bid, and construction management phase services. For your convenience, this proposal consists of Project Understanding, Scope of Services, Fee Summary, and Schedule.

# PROJECT UNDERSTANDING

The City requested that the following two sections of streets be included in the above referenced project:

# <u>Silver Saddle Drive – East side of 205 Silver Saddle to Bronco Bend (Approximately 750 LF)</u>

This project will include the replacement the existing elevated asphalt roadway that is narrow and deteriorated on the west side of Silver Saddle, from the east side of 205 Silver Saddle to Bronco Bend (only half of the total roadway). This half of the pavement will be widened to match the east half of the pavement (approximately 18 foot wide). It is also proposed that drainage improvements consisting of open ditches and driveway culverts be included to drain runoff away from the roadway and increase the life expectance of the pavement. It should be noted that the existing drainage is very limited and the Silver Saddle outfall at Bronco Bend is shallow. As previously discussed with City staff, due to the lack of potential depth, the proposed drainage improvements may only provide positive drainage for the right-of-way and may not be sized to convey the City's standard storm event. HDR will also investigate the depth of the outfall at Bronco Bend and SH 288B to determine if the possibility of increasing the depth that would provide benefits for the proposed drainage on Silver Saddle.

# Parrish Street – Live Oak to SH 35 (Approximately 1,600 LF)

The existing roadway cross-section consists of an elevated asphalt roadway with open ditches and driveway culverts. The proposed roadway cross-section will consist of the City's standard of 28-foot wide concrete street and a closed storm sewer system sized to a City standard storm event. HDR will investigate the available depth of the street's outfall at State Highway 35 to determine if it can accommodate the lowering of the roadway cross-section to a depressed roadway section that allows for sheet flow from the residents' property into the street. If there is sufficient depth at the outfall, the proposed concrete roadway cross-section will be a depressed curb and gutter roadway with associated storm sewer. If there is not sufficient depth, the proposed concrete roadway will be an elevated concrete roadway with storm sewers including inlets located in the right-of-way to provide drainage to the area (similar to the roadway cross-section on Southside Drive). Also included in the proposed improvements, is a 5-foot wide sidewalk to be installed on the east side of the right-of-way to accommodate pedestrian traffic in the area and provide increased access to the public transportation pick up/drop off locations.

# **SCOPE OF SERVICES**

#### I. DESIGN PHASE SERVICES

# A. Basic Design Services

- Hold "kick-off" meeting with City staff to finalize the requirements for the project.
- Gather and review available historical information (record drawings, reports/studies, GIS data).
- Coordinate with the City staff during the design phase.
- Research and gather information on private utilities (i.e., gas, electrical, telephone, pipelines, etc.) along the project alignment.
- Prepare background drawings in CADD from information obtained during survey.
- Perform site visit to verify survey and identify any other information that would impact design and construction.

- Examine geotechnical information to determine potential soil conditions, ground water conditions, and potential impact on construction methodology and construction costs.
- Evaluate available outfall depths on Silver Saddle and Parrish Street obtained by topographic survey.
- Perform 30% design on Parrish Street of either a depressed concrete curb and gutter if outfall depth is adequate or elevated concrete roadway cross-section. If outfall depth is not adequate, include the associated drainage system configuration, a 5-foot wide sidewalk, and driveway replacement.
- Perform 30% paving design on the west half of Silver Saddle from 205 Silver Saddle to Bronco Bend with 18-foot wide pavement to match the paving width on the east half of Silver Saddle.
- Perform 30% design of drainage improvements on the west half of Silver Saddle from 205 Silver Saddle to Bronco Bend evaluating two possible outfall locations; 1) at Silver Saddle and Bronco Bend and 2) at Bronco Bend and State Highway 288B.
- Submit 30% design plans and Opinion of Probable Construction Cost.
- Conduct a meeting with the City staff to discuss the contents of the 30% design plans and review comments provided by the City staff.
- Incorporate the City's comments and proceed forward with final design.
- Develop typical cross sections, street grade lines, and street elevations.
- Develop a drainage area map of the project area.
- Prepare specification and contract documents.
- Prepare the engineer's opinion of probable construction costs. Any opinions of probable construction cost provided are made on the basis of information available to HDR and on the basis of HDR's experience and qualifications and represents its judgment as an experienced and qualified professional engineer. However, since HDR has no control over the cost of labor, materials, equipment, or services furnished by others, or over the construction contractor(s') methods of determining prices, or over competitive bidding or market conditions, HDR does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable construction cost HDR prepares.

- Submit 75% design plans and specifications for review by the City.
- Conduct a meeting with the City staff to discuss the contents of the 75% design plans and specifications and review comments provided by the City staff.
- Incorporate the City's 75% review comments.
- Prepare contract documents including plans, specifications, and bidding documents associated with the design of the project in accordance with the design standards of the City.
- Prepare a final opinion of probable construction cost for the proposed improvements.
- Submit plans to private utility companies for approval and signatures.

# **B.** Special Design Phase Services

# 1. Survey Services

- Baker and Lawson, Inc. will be performing the survey Parrish Street from Live Oak to State Highway 35 and on Silver Saddle Drive from 205 Silver Saddle to Bronco Bend and Bronco Bend to State Highway 288B. This will include 100feet past the project extents at each intersection.
- One Call will be performed to identify private utility companies' location in the field and collect with the survey data.
- Survey will provide a full topographic survey with 100-foot cross sections and all features along the right-of-way and 15-feet outside of it.
- All sizes, materials, and flow line elevations of all crossing sewers (sanitary and storm). All water valves shall be identified including a measure down to the top of the nut.

# 2. Geotechnical Investigation Services

- Terracon Consultants, Inc. will perform the geotechnical investigation services for the project.
- Boring locations shall be spaced at an approximate spacing of 500-foot intervals for a total of six (6) bores for a total of ninety (90) vertical feet (four on Parrish Street and two on Silver Saddle Drive).

• The information provided in the geotechnical report will include boring logs and test data, ground water conditions, pavement design recommendations, bedding and backfill recommendations, and general earthwork recommendations.

# 3. Traffic Control Plan

 Prepare traffic control plans for the project. This plan will include phasing, detours, and required signs and lane closures to complete the proposed improvements.

#### 4. Storm Water Pollution Prevention Plan

 Prepare drawings for the required Storm Water Pollution Prevention Plan (SWPPP), in accordance with the Texas National Pollutant Discharge Elimination System (TPDES) General Permit for Storm Water Discharge from construction sites.

#### 5. Tree Protection Plans

• HDR will utilize a subcontractor, C.N. Koehl Urban Forestry, Inc. to provide tree protection plans. The plans will include trees species, size and current condition. The plans will also include tree protection measure to protect existing trees in the project area.

# 6. Townhall Meetings

• HDR will attend one (1) public townhall meeting with residents to preview the project. HDR will aid the City in addressing the concerns from the citizens. HDR will provide information such as traffic detouring, scheduling, construction drawings of the project to discuss with those in attendance of these meetings and will stay after meeting to answer questions with individuals.

# 7. Texas Department of Transportation (TxDOT) Coordination

- The proposed roadway reconstruction will require coordination with TxDOT for traffic control and construction phasing during construction for both projects.
- No costs have been included in this proposal for permit fees associated with the coordination with TxDOT. The City shall pay all fees associated with TxDOT permitting.
- No cost has been included for hydraulic modeling, hydraulic impacts or mitigation efforts for the improvements. If TxDOT requires task for permit

approval, HDR will submit an amendment to this contract to the City for these efforts.

# 8. TDLR Review, Inspection, and Filing

• HDR will utilize a subconsultant to register the project with the state, and for review and approval to verify the project is in compliance with ADA requirements and to inspect the work at the completion of the project.

#### C. Bid Phase Services

HDR will enter into this phase after the acceptance of the Design Phase documents. The following tasks will be performed:

- Assist the City in obtaining bids for the project. The City will advertise the project and will absorb all related advertising costs. HDR will coordinate with the City and will assist in developing the wording of the advertisement.
- HDR will post project plans and specifications on CivCast to generate interest for the project during the bidding process, provide information to and answer questions from potential bidders concerning the Project's construction documents and prepare addendums as necessary. The City will absorb costs associated to posting on CivCast.
- Conduct a pre-bid conference for potential bidders, including the preparation of the meeting agenda and preparing a meeting minutes summary.
- Evaluate the bids and the qualifications of the apparent low bidder and advise the City as to the acceptability of the apparent low bidder.
- Prepare a letter of recommendation and advise the City as to the acceptability of the apparent low bidder.
- Attend a City Council Meeting to award construction project.

# D. Construction Management Phase Services

HDR will enter into this phase after the City accepts the bids and awards the contract to a contractor. The following tasks will be performed:

- Prepare agenda, hold a pre-construction meeting, document meeting, and issue meeting minutes.
- Conduct monthly progress meeting and issue meeting minutes.
- Review, process and make recommendation of contractor's pay estimates.
- Act as the City's Project Representative during the construction phase.
- Review and respond accordingly to all submittals and request for information (RFI) as required by the contract specifications.
- Prepare change orders necessitated by field conditions for review and approval by the City prior to issuing to contractor.
- Visit the site at various stages of construction to observe the progress and quality of executed work and to determine in general if such work is proceeding in accordance with the Contract Documents. Full or Part time site representation is not included as part of the Construction Management phase tasks.
- HDR will not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by the Contractor(s). HDR's effort will be directed toward providing a greater degree of confidence for the City that the completed work of Contractor(s) will conform to the Contract Documents, but HDR will not be responsible for the failure of Contractor(s) to perform the work in accordance with the Contract Documents. During site visits, HDR will keep the City informed of the progress of the work, will endeavor to guard the City against defects and deficiencies in such work and may disapprove or reject work failing to conform to the Contract Documents.
- Conduct a final inspection of the Project and create a punch list to close out construction.
  - Make a recommendation for Final Payment on the Project.
- HDR will prepare Record Drawings utilizing the as-built drawings provided by the Contractor.
- One (1) electronic copy of the Record drawings, scanned in PDF format, and placed on a disk will be provided to the City.

#### ADDITIONAL SERVICES

- Additional Services shall only be performed when directed by the City to HDR. These services are not considered normal or customary engineering services.
- Services resulting from significant changes in the extent of the project or its design including but not limited to changes in size, complexity, the City's schedule, or character of construction or method of financing; and revising previously accepted studies, reports design documents or Contract Documents when such revisions are due to causes beyond HDR's control.
- Preparing documents for alternate bids outside of the original scope requested by the City or documents for out of sequence work.
- Preparing to serve or serving as a consultant or witness for the City in any litigation, public hearing or other legal or administrative proceeding involving the Project.
- HDR will endeavor to appraise the City of any potential additional or extended services that may result from the above listed items, prior to HDR's expenditure of time on such services. As previously noted, any such extended or additional services shall only be performed when directed by the City to HDR.

# **FEE SUMMARY**

**TOTAL FEE:** 

Basic Design Services (Lump Sum):	\$ 210,500.00
Surveying Services (Subconsultant's cost plus 10%):	\$ 19,500.00
Geotechnical Services (Subconsultant's cost plus 10%):	\$ 11,440.00
Traffic Control Plan (Lump Sum):	\$ 14,700.00
Storm Water Pollution Prevention Plan (Lump Sum):	\$ 6,000.00
Tree Protection Plans (Subconsultant's cost plus 10%):	\$ 7,500.00
Townhall Meeting (Lump Sum):	\$ 7,800.00
TxDOT Coordination (Hourly):	\$ 12,000.00
TDLR Review, Inspection, and Filing (Subconsultant's cost plus 10%):	\$ 1,540.00
<b>Total Design Fee:</b>	\$ 290,980.00
Bid Phase Services (Lump Sum):	\$ 8,500.00
Construction Management Phase Services (Lump Sum):	\$ 52,000.00

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\$ 351,480.00

# **SCHEDULE**

It is estimated that the schedule to accomplish the complete design phase for is approximately eight (8) months from the date of authorization to proceed. Bid phase will be one (1) month, execution of the contract documents will be one (1) month, and construction will take approximately ten (10) months.

# **INVOICES**

HDR will submit monthly invoices for all engineering work completed to invoice date. The invoices for lump sum work will be based on a percentage of completion of each phase applied to the lump sum fee and based on the appropriate fee cost for work from our subconsultants. Time and materials charges and additional services beyond those described in the Scope of Services will be invoiced on the basis of direct labor costs times a factor of 3.18 and direct cost plus 10%. Mileage will be charged at prevailing IRS rates.

HDR appreciates the opportunity to submit this proposal and we look forward to continuing our work with the City.

Sincerely,

HDR ENGINEERING, INC.

David Weston
Vice President/Area Manager

Approved:

Authorized signature on behalf of the City of Angleton:

Printed Name:

Title:

Date: