



## AGENDA ITEM SUMMARY FORM

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**MEETING DATE:** June 11, 2024

**PREPARED BY:** Chris Whittaker

**AGENDA CONTENT:**

Lift Station #8 Sanitary Sewer Collection System Rehabilitation Project

**AGENDA ITEM SECTION:** Regular Agenda

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**BUDGETED AMOUNT:**

**FUNDS REQUESTED:**

\$215,140.00

**FUND:**

**EXECUTIVE SUMMARY:**

The City has been approved for a GLO-MIT grant (\$1.7 million). This project includes the rehabilitation of several sanitary sewer line segments in the Lift Station #8 service area. These segments have been identified by staff as high priority due to the likelihood of inflow and infiltration (I/I) based on proximity to drainage channels and historical maintenance records. This project includes trenchless rehabilitation of approximately 15,000 linear feet of sewer line ranging from 6-inch to 15-inch and cementitious wall lining of approximately 60 sanitary sewer manholes. Please find the attached exhibits that identify the rehabilitation limits for this project.

This proposal is for HDR to perform Design, Bid, and Construction Phase Services for these Improvements.

**RECOMMENDATION:** Council to approve HDR for an amount of \$215,140.00 to perform Lift Station #8 Sanitary Sewer Collection System Rehabilitation Project.



June 4, 2024

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 Lift Station #8 Sanitary Sewer Collection System Rehabilitation Project

Dear Mr. Whittaker:

HDR Engineering, Inc. (HDR) is pleased to submit this proposal to perform design, bid, and construction phase services for the above referenced project. The proposal is based on our understanding of the project from discussions with staff and project information previously submitted to the GLO. 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 has been approved for a GLO-MIT grant. This project includes the rehabilitation of several sanitary sewer line segments in the Lift Station #8 service area. These segments have been identified by staff as high priority due to the likelihood of inflow and infiltration (I/I) based on proximity to drainage channels and historical maintenance records. This project includes trenchless rehabilitation of approximately 15,000 linear feet of sewer line ranging from 6-inch to 15-inch and cementitious wall lining of approximately 60 sanitary sewer manholes. Please find the attached exhibits that identify the rehabilitation limits for this project.

The opinions of probable construction cost for the above-described improvements is approximately \$1,434,320.00.

### **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 utilizing existing GIS data (no topographical survey will be performed as part of this project).
- Perform site visit to identify any surface features and other information that could potentially impact design and construction. Perform a visual inspection of sanitary sewer manholes to identify and record manhole material and condition, sewer pipe material, and record depths. Sewer pipe material will be identified by visual observation with downhole mirror. All sewer pipe material to be confirmed by Contractor prior to construction.
- Prepare design plans for trenchless rehabilitation of the sanitary sewer lines and manholes as identified on the attached exhibits.
- Prepare specifications 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
- Submit one (1) set of 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 final plans, specifications, and bidding documents associated with the design of the project in accordance with the design standards of the City and GLO requirements.
- Prepare a final opinion of probable construction cost for the proposed improvements.

- Submit plans to private utility companies for approval and signatures.
- Provide two (2) sets of plans to the City for use during construction.

#### **B. Special Design Phase Services**

- **Traffic Control Plan**

Prepare traffic control plans for the project. This plan will include details for one-lane flagging operations during construction.

#### **C. Bid Phase Services**

HDR will enter into this phase after the acceptance of the Design Phase documents. Bid Phase Services shall include the following:

- 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.
- Respond to RFI's from potential bidders and issue any addendum to the bid contract documents that are required.
- 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 Administration Phase Services**

HDR will enter into this phase after the City accepts the bids and awards the contract to a contractor. Construction Administration Phase Services shall include the following:

- Prepare agenda, hold a pre-construction meeting, document meeting, and issue meeting minutes.
- Review and approve submittals for project materials.
- Review, process, and make recommendation of contractor's pay estimates.
- Log receipt and review pre-construction television tapes of the sanitary sewer. Prepare memorandum of review comments to be provided to the contractor prior to rehabilitation.
- Act as the City's Project Representative during the construction phase.
- Review and respond accordingly to all 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 Administration 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.
- Log receipt and review post-construction television tapes of the sanitary sewer. Prepare memorandum of review comments to be provided to the contractor.
- 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**

<b>Design Phase Services</b>	
Basic Design Services (Lump Sum):	\$ 119,940.00
Traffic Control Plan (Lump Sum):	\$ 3,000.00
<b>Total Design Fee:</b>	<b>\$ 122,940.00</b>
<b>Bid Phase Services (Lump Sum):</b>	<b>\$ 9,600.00</b>
<b>Construction Management Phase Services (Lump Sum):</b>	<b>\$ 82,600.00</b>
<b>TOTAL FEE:</b>	<b>\$ 215,140.00</b>

**SCHEDULE**

It is estimated that the schedule to accomplish the complete design phase is approximately four (4) 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 six (6) 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: \_\_\_\_\_



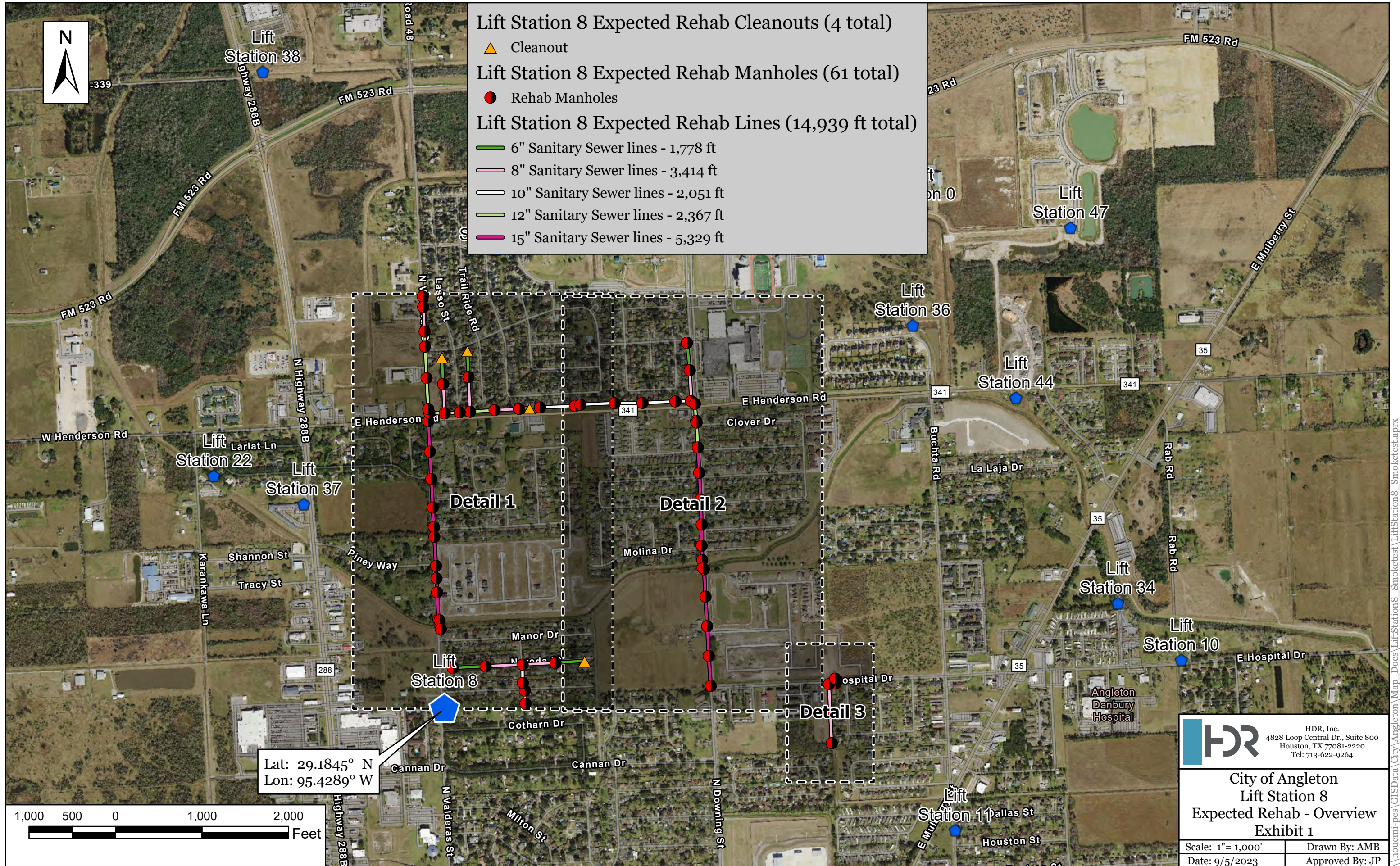
**Lift Station 8 Expected Rehab Cleanouts (4 total)**  
 ▲ Cleanout

**Lift Station 8 Expected Rehab Manholes (61 total)**  
 ● Rehab Manholes

**Lift Station 8 Expected Rehab Lines (14,939 ft total)**

- 6" Sanitary Sewer lines - 1,778 ft
- 8" Sanitary Sewer lines - 3,414 ft
- 10" Sanitary Sewer lines - 2,051 ft
- 12" Sanitary Sewer lines - 2,367 ft
- 15" Sanitary Sewer lines - 5,329 ft

Lat: 29.1845° N  
 Lon: 95.4289° W



**HDR** HDR, Inc.  
 4828 Loop Central Dr., Suite 800  
 Houston, TX 77081-2220  
 Tel: 713-622-9264

**City of Angleton**  
**Lift Station 8**  
**Expected Rehab - Overview**  
**Exhibit 1**

Scale: 1"= 1,000'	Drawn By: AMB
Date: 9/5/2023	Approved By: JP

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### Lift Station 8 Expected Rehab Cleanouts (4 total)

▲ Cleanout

### Lift Station 8 Expected Rehab Manholes (61 total)

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### Lift Station 8 Expected Rehab Lines (14,939 ft total)

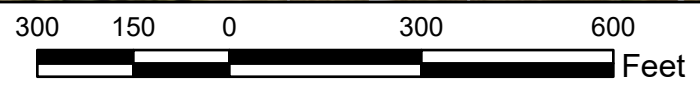
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**City of Angleton**  
Lift Station 8  
Expected Rehab - Detail 1  
Exhibit 1.a

Scale: 1" = 300'	Drawn By: AMB
Date: 9/5/2023	Approved By: JP

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**Lift Station 8 Expected Rehab Cleanouts (4 total)**

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**City of Angleton**  
**Lift Station 8**  
**Expected Rehab - Detail 2**  
**Exhibit 1.b**

Scale: 1" = 300'	Drawn By: AMB
Date: 9/5/2023	Approved By: JP

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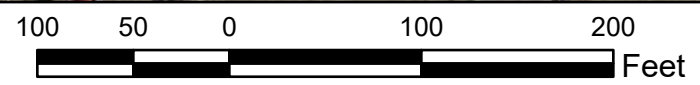
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**City of Angleton**  
**Lift Station 8**  
**Expected Rehab - Detail 3**  
**Exhibit 1.c**

Scale: 1"= 100'	Drawn By: AMB
Date: 9/5/2023	Approved By: JP

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