

June 17, 2022

FEE PROPOSAL

Jeff Edmonds, PE
Director of Engineering Services
City of Corpus Christi
PO Box 9277
Corpus Christi, Texas 78469-9277

Re: Proposal for London Area Wastewater Collection System Improvements
City Project No. 23036
LJA Proposal No. 22-11286
LJA Project No. C007-21189

Dear Mr. Edmonds:

LJA Engineering, Inc. (LJA) is pleased to provide this proposal for engineering services related to the London Area Wastewater Collection System Improvements. The following scope of services is anticipated to be required.

SCOPE OF SERVICES

LJA will provide engineering services for the design and preparation of construction documents for a master planned lift station and force main(s) to service the London Area. It is anticipated that the lift station and the force main(s) will be designed and sized to accommodate phased growth and development. Master plan and additional information from previous and ongoing efforts, including the existing Phase 1 East London Lift Station, will be reviewed, and incorporated into the design. Design will include the master planned lift station and alignment of the force main(s) from south of the Oso Creek to the Greenwood Wastewater Treatment Plant lift station.

BASIC SERVICES

100 PRELIMINARY PHASE

- Hold Project Kick-Off Meeting with City
- Review pertinent Draft Master Plans prepared by Pape-Dawson Engineers, Inc. for the area to be serviced by the lift station.
- Review as-built plans of the Greenwood Wastewater Treatment Plant for connection to the plant lift station. As-builts to be provided by the City.
- Review as-built plans of the Southside Water Transmission Main. As-builts have been furnished by the City.
- Review available record drawings and other pertinent data as may be available and which may affect the design of the lift station, incoming gravity sewers, and force main(s). Records to be furnished by the City.
- Provide recommended geotechnical investigations scope and coordinate testing with City's geotechnical consultant. Proposed sites shall be approved by the City Project Manager (PM) prior to performing geotechnical investigation. It is assumed that the City will contract directly with a geotechnical consultant for these services.
- The proposed force main(s) are anticipated to be routed within the same existing utility easement that the Southside Water Transmission Main is located within. LJA will investigate and propose one (1) alternative route if TCEQ separation distances

- between water and wastewater cannot be maintained within the existing utility easement due to the number of existing utilities.
- Identify the approximate locations and areas of existing utilities and pipelines that may have a significant potential impact on the proposed facilities construction and for which further investigations utilizing Subsurface Utility Engineering (SUE) may be required during the design phase. These critical locations and their basis of potential impact are to be clearly provided on a layout for the City PM. It is assumed that the City will contract directly with a SUE consultant for these services, if required.
 - Perform flow calculations for lift station sizing based on pertinent Draft Master Plans prepared by Pape-Dawson Engineers, Inc., service basin boundary as reviewed and approved by Engineering Department and Wastewater Department staff, and future land use.
 - Perform lift station sizing calculations utilizing peak flow projections as reviewed and approved by Engineering Department and Wastewater Department staff and prepare preliminary layouts to ascertain dimensions of the new facility.
 - Perform lift station electrical calculations, design, and layout. Electrical engineering to be performed by subconsultant Bath Engineering.
 - Prepare an Engineering Letter Report for the improvements to include a new lift station, odor control system(s), water line to service lift station, and force main(s) routed to the Greenwood Wastewater Treatment Plant lift station with borings beneath FM 43/Weber Road, SH 286/Chapman Ranch Road, and Oso Creek. The new lift station will generally have, but not be limited to, the following features:
 - Electrical and controls will be housed in a prefabricated, climate controlled, walk-in Motor Control Center (MCC).
 - Lift Station Odor Control System(s)
 - 8-ft. Decorative Security Fence (brick, cinder block, or vinyl panel).
 - Homeland Security Gate (no electronic gates, as requested by City).
 - Standby Generator.
 - SCADA Facilities.
 - Landscaping and Irrigation.
 - Reinforced Concrete Wet Well.
 - Submersible Pumps.
 - Above Ground Piping and Valving.
 - Two (2) Bypass Connections.
 - Flow Meter.
 - Water Service adequate to serve lift station, odor control, and irrigation needs.
 - Prepare a preliminary Opinion of Probable Construction Cost for the project.
 - Prepare and submit one electronic file in PDF format and one hard copy of the Draft Engineering Letter Report to the City for review. Upon review by the City, address any comments and resubmit final version of the Engineering Letter Report. Obtain approval from City to proceed with Design Phase.

City Staff will provide electronic copies of the following information (as applicable):

- Electronic index and database of City's Record Drawing and record information.
- Record Drawings and record information of existing facilities and utilities (as available from City Engineering files).
- A copy of pertinent existing studies and plans (as available from City engineering files).
- The preliminary budget, specifying the funds available for construction.
- Copy of Geotechnical Report.
- Copy of SUE Report.

101 DESIGN PHASE:

- Prepare Contract Documents and Specifications to include the following Divisions, Parts, and Subsequent Sections:
 - Bid Form
 - Division 00: Procurement and Contracting Requirements
 - Division 01: General Requirements
 - Part S: Standard Specifications
 - Part T: Technical Specifications
 - Appendix
 - Geotechnical Report
 - SUE Report, if required
- Prepare construction plans in City standard format for the work identified in the approved ELR. City of Corpus Christi detail sheets will be included, as applicable to the Project.
- Provide Quality Assurance/Quality Control (QA/QC) for pre-final review and prepare 90% submittal for the City's Review depicting final complete development of the construction drawings and specifications.
- Address comments received from the City for the pre-final 90% submittal.
- Provide Quality Assurance/Quality Control (QA/QC) for final review and submit one (1) hard copy and one (1) electronic copy of the final sealed contract drawings and specifications to the City for bidding process.
- Update the Opinion of Probable Construction Cost for the project.

102 BID PHASE:

- Participate in the pre-bid conference to discuss scope of work and to answer scope questions.
- Review all questions concerning the bid documents and prepare any revisions to the plans, specifications, and bid form that are necessary.
- Assist with the evaluation of bids; analyze bids and make recommendation concerning award of the contract.
- Assist with the review of Contractor's Statement of Experience and confirm it meets Contract requirements.
- For bids over budget, the A/E will confer with City staff and provide and, if necessary, make such revisions to the bid documents as the City staff deems necessary to re-advertise the Project for bids.
- Provide two (2) hard copy sets and one (1) electronic set of conformed drawings and conformed Contract Documents (PDF and original format [CAD/Word/etc.]) to the City.

The City staff will:

- Advertise the Project for bidding, maintain the list of prospective bidders, issue any addenda, prepare bid tabulation, and conduct the bid opening.
- Coordinate the review of the bids.
- Prepare agenda materials for the City Council concerning bid awards.
- Prepare, review, and provide copies of the Contract for execution between the City and the Contractor.

103 CONSTRUCTION ADMINISTRATION PHASE:

- Participate in pre-construction meeting conference and provide a recommended agenda for critical construction activities and elements impacting the project.
- Review Contractor submittals and operating and maintenance manuals for conformance to Contract Documents.
- If requested by the City, review and interpret field and laboratory tests.

- Provide interpretations and clarifications of the Contract Documents for the Contractor and authorize required changes, which do not affect the Contractor's price and are not contrary to the general interest of the City under the Contract as requested by the Owner's Authorized Representative (OAR).
- Make periodic visits to the site of the Project to confer with the City Project Inspector and Contractor to observe the general progress and quality of work, and to determine, in general, if the work is being done in accordance with the Contract Documents. This will not be confused with the project representative observation or continuous monitoring of the progress of construction.
- Provide interpretations and clarifications of the plans and specifications for the Contractor and recommendations to the City for minor changes which do not affect the Contractor's price and are not contrary to the general interest of the City under the Contract as requested by the OAR.
- When requested by the OAR, assist in addressing Request for Information (RFI) submitted by the Contractor.
- Attend final inspection with City staff, provide punch list items to the City's Construction Engineers for Contractor completion, and provide the City with a Certificate of Completion for the Project upon successful completion of the Project.
- Review Contractor-provided construction "red-line" drawings. Prepare Project Record Drawings and provide a reproducible set and electronic file (both PDF and AutoCAD r.14 or later) within one (1) month of receiving the Contractor's red-line drawings. All drawings shall be CADD drawn using dwg format in AutoCAD, and graphics data will be in .dxf format with each layer being provided in a separate file. Attribute data will be provided in ASCII format in tabular form. All electronic data will be compatible with the City GIS system. The Record Drawings should incorporate the Contractor's red-lines and identify all changes made during construction. The Drawing Cover and each sheet should be clearly identified as the Record Drawing and should indicate the basis and date.

The City staff will:

- Prepare applications/estimates for payments to Contractor.
- Conduct the final inspection with the Engineer.

ADDITIONAL SERVICES

200 PERMIT PREPARATION

Furnish the City all engineering data and documentation necessary for all required permits. The A/E will prepare this documentation for all required signatures. The A/E will prepare and submit identified permits as applicable to the appropriate local, state, and federal authorities, including:

- TxDOT utility and environmental permits, multiple use agreements
 - Prepare all engineering data and documentation necessary to submit a UIR on the City's behalf for the installation of the proposed force main(s) in TxDOT R.O.W. Coordinate with TxDOT Engineering Staff as necessary to devise a final design acceptable to that Department. Coordinate with TxDOT as required to obtain approved permit.
- Texas General Land Office (TGLO)

201 TOPOGRAPHIC AND RIGHT-OF-WAY (ROW) SURVEY

All work must comply with Category 1-A, Condition I specifications of the Texas Society of Professional Surveyors' Manual of Practice for Land Surveying in the State of Texas, latest edition. All work must be tied to and in conformance with the City's Global Positioning System (GPS) control network. All work must comply with all TxDOT requirements as applicable.

Include references tying Control Points to a minimum of two (2) registered NGS Benchmark Monuments in the vicinity of the Project that will not be disturbed by construction. Survey sheets shall be sealed, provided to the City and included in the bid document plan set.

- Establish Horizontal and Vertical Control.
- Establish both primary and secondary horizontal/vertical control.
- Set project control points for Horizontal and Vertical Control outside the limits of area that will be disturbed by construction.
- Horizontal control will be based on NAD 83 State plane coordinates (South Zone), and the data will have no adjustment factor applied – i.e. – the coordinate data will remain in grid.
- Vertical control will be based on NAVD 88.
- All control work will be established using conventional (non-GPS) methods. Perform topographic surveys to gather existing condition information.
- Locate proposed soil/pavement core holes as drilled by the City's Geotechnical Engineering Consultant.
- Obtain x, y, and z coordinates of all accessible existing wastewater, storm water, water, IT and gas lines as well as any other lines owned by third-parties and locate all visible utilities, wells and signs within the apparent ROW width along project limits. Survey shall include utility marking from the Texas 811 request.
- Open accessible manholes and inlets to obtain information on structure invert, type, and size, and all related pipe size, type, invert, orientation, and flow direction.
- Everything up to and including Level C subsurface engineering (SUE) is to be included in Topographic Survey. Surveying services related to Level B SUE (locating utilities with electronic equipment) and Level A SUE are not included in Topographic and ROW Survey services but shall be provided as part of the scope of work for SUE, if required.
- Locate existing features within the apparent ROW.
- Locate and identify trees, at least five inches in diameter, and areas of significant landscape or shrubs within the apparent ROW.
- Generate electronic planimetric base map for use in project design and provide the electronic planimetric base map to the SUE A/E if required.
- Obtain finished floor elevations of critical and habitable structures along the roadway corridor as needed to certify drainage design criteria are met.
- The survey should not stop at the property line but should extend beyond the property line as needed to pick up features and surface flow patterns in the vicinity of the Project that could potentially impact the design or be impacted by the construction. This includes features such as existing swales or ditches, foundations, loading docks/overhead doors, driveways, parking lots, etc.
- Research plats, ROW maps, deed, easements, and survey for fence corners, monuments, and iron pins within the existing ROW and analyze to establish existing apparent ROW.
- Provide a preliminary base map containing apparent ROW, which will be used by the A/E to develop the proposed alignment and its position relative to the existing and proposed ROW. This preliminary base map must show lot or property lines, addresses, and significant business/facility names.

202 LIFT STATION SITE & ACCESS ROW/EASEMENT ACQUISITION SURVEY & PARCEL DESCRIPTIONS

ROW/easement acquisition will be required for the proposed lift station site and permanent utility/access easements. Temporary construction easements may be required to construct the proposed lift station and force main(s). All work must be tied to and conform with the City's Global Positioning System (GPS) control network and comply with Category 6, Condition I specifications of the Texas Society of Professional Surveyors' Manual of Practice for Land Surveying in the State of Texas, latest edition.

- Set property corners and prepare right of way strip parcel map depicting all parcels proposed for acquisition. Metes and bounds descriptions must indicate parent tract areas based on the most accurate information available. Strip map will show entire parent tracts at a representative scale and for information only. All existing easements within the parcels to be acquired and those within adjacent parcels must be shown.
- Prepare Metes and Bound Instrument with supporting exhibits as required and agreed upon, subsequent to ELR acceptance for ROW parcels, utility easements and temporary construction easements.
- Prepare individual signed and sealed parcel maps and legal descriptions for the required right of way acquisition for parcels and easements. A strip map showing all parcels required will be submitted along with parcel descriptions. If boundary conflicts between Owners are identified, additional fees may be authorized if needed. A/E shall submit parcel maps and legal descriptions prior to the 90% submittal.
- A/E must obtain Preliminary Title Reports from a local title company and provide copies of the title reports to the City. Preliminary Title Report shall identify title ownership and any title encumbrances to all right-of-way to be acquired.

203 FORCE MAIN ROUTE ROW/EASEMENT ACQUISITION SURVEY & PARCEL DESCRIPTIONS (TBD)

ROW/easement acquisition may be required for the proposed force main if an alternate route or additional easement width is required. Temporary construction easements may be required to construct the proposed force main(s).

All work must be tied to and conform with the City's Global Positioning System (GPS) control network and comply with Category 6, Condition I specifications of the Texas Society of Professional Surveyors' Manual of Practice for Land Surveying in the State of Texas, latest edition.

- Set property corners and prepare right of way strip parcel map depicting all parcels proposed for acquisition. Metes and bounds descriptions must indicate parent tract areas based on the most accurate information available. Strip map will show entire parent tracts at a representative scale and for information only. All existing easements within the parcels to be acquired and those within adjacent parcels must be shown.
- Prepare Metes and Bound Instrument with supporting exhibits as required and agreed upon, subsequent to ELR acceptance for ROW parcels, utility easements and temporary construction easements.
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- A/E must obtain Preliminary Title Reports from a local title company and provide copies of the title reports to the City. Preliminary Title Report shall identify title ownership and any title encumbrances to all right-of-way to be acquired.

Should this service be required, a Contract Amendment will be prepared by the A/E for City Staff to review prior to commencing work.

204 ENVIRONMENTAL ISSUES (TBD)

Identify and develop a scope of work for any testing, handling and disposal of hazardous materials and/or contaminated soils that may be discovered during construction.

Should this service be required, a Contract Amendment will be prepared by the A/E for City Staff to review prior to commencing work.

205 START-UP SERVICES

Provide on-site services and verification for all start-up procedures during actual start-up of major project components, systems, and related appurtenances if needed and required.

206 WARRANTY PHASE

Provide a maintenance guaranty inspection toward the end of the one-year period after acceptance of the Project. Note defects requiring contractor action to maintain, repair, fix, restore, patch, or replace improvement under the maintenance guaranty terms of the contract. Document the condition and prepare a report for the City staff of the locations and conditions requiring action, with its recommendation for the method or action to best correct defective conditions and submit to City Staff. Complete the inspection and prepare the report no later than sixty (60) days prior to the end of the maintenance guaranty period.

207 PROVIDE SCADA DOCUMENTATION

Provide standardized SCADA documentation, which will include PFDs, P&IDs' loop sheets, logics, SCADA architecture, DCS I/O lists, instrument lists, tie-in lists, piping lists, equipment lists, and instrumentation specification sheets.

ASSUMPTIONS

- City will contract directly with a geotechnical consultant for geotechnical investigation, recommendations, and materials testing.
- City will contract directly with a Subsurface Utility Engineering (SUE) consultant for SUE services.
- This proposal does not include the design of the master planned 30" gravity wastewater line from County Road 43 to the proposed lift station site.

Should these services be required, a Contract Amendment will be prepared by the A/E for City Staff to review prior to commencing work.

ITEMS TO BE PROVIDED BY THE CITY

- Record drawings, record information of existing facilities and utilities (as available from City Engineering files).
- A copy of pertinent existing studies and plans (as available from City Engineering files).
- A copy of pertinent master plans, service basin boundary, and future land use.
- Copy of Current Standard Bid and Contract Documents
- Copy of Current Standard and Technical Specifications
- Copy of Current Standard Construction Details
- Reproduction
- Bid Advertisement
- Pre-Bid Meeting Administration
- Bid Opening Administration
- Award Contract Administration

SCHEDULE

Date	Activity
To Be Determined	Notice to Proceed (NTP)
1 Months After NTP	Draft ELR Submittal
2 Weeks After NTP	City Review
2 Months after NTP	Final ELR Submittal
4 Months after NTP	90% Design Submittal
2 Weeks after NTP	City Review
6 Months after NTP	Final Sealed Design Submittal

SCHEDULE (Cont'd)

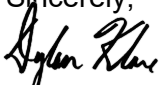

Date	Activity
1 Week after NTP	City Review
TBD	Advertise for Bids
TBD	Pre-Bid Conference
TBD	Receive Bids
TBD	Contract Award
TBD	Begin Construction
TBD	Complete Construction

FEE ANALYSIS

We propose to provide these services for a fixed fee of **\$1,510,500.00** and as summarized in the Table below.

PHASE	TASK	FEE
BASIC SERVICES		
100	Preliminary Phase	\$205,000.00
101	Design Phase	\$955,000.00
102	Bid Phase	\$31,000.00
103	Construction Administration Phase	\$144,000.00
Subtotal Basic Services		\$1,335,000.00
ADDITIONAL SERVICES		
200	Permit Preparation	\$25,800.00
201	Topographic and Right-of-Way (ROW) Survey	\$125,500.00
202	Lift Station Site and Access ROW/Easement Acquisition Survey and Parcel Descriptions	\$10,000.00
203	Force Main Route ROW/Easement Acquisition Survey and Parcel Descriptions (TBD)	TBD
204	Environmental Issues (TBD)	TBD
205	Start-Up Services	\$5,550.00
206	Warranty Phase	\$5,550.00
207	Provide SCADA Documentation	\$3,100.00
Subtotal Additional Services		\$175,500.00
TOTAL BASIC & ADDITIONAL SERVICES		\$1,510,500.00

If this proposal meets with your approval, your signature below will be sufficient authorization to commence the work. We appreciate the opportunity to submit this proposal and look forward to working with you on completion of this project. If you have any questions, please feel free to contact us at any time at 361.991.8550 or by email at dklare@lja.com and jcoym@lja.com.

Sincerely,

 Dylan Klare, PE
 Project Manager

 Jeff Coym, PE
 Vice President

Accepted By: CITY OF CORPUS CHRISTI

By: _____

Name: _____

Title: _____

Date: _____

JC/ar

Attachment